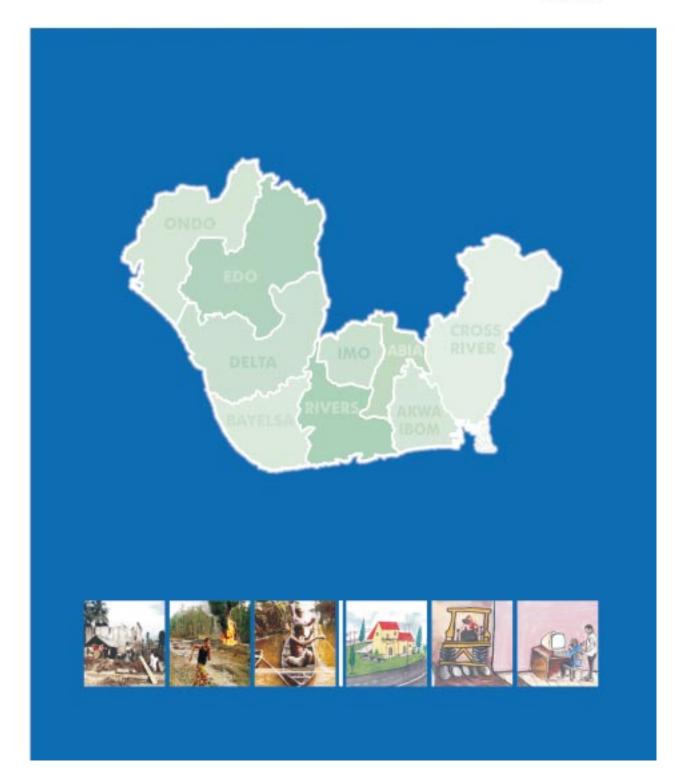
# NIGER DELTA HUMAN DEVELOPMENT REPORT







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Over the past four decades, the issues confronting the Niger Delta region have caused increasing national and international concern. The region produces immense oil wealth and has become the engine of Nigeria's economy. But it also presents a paradox, because these vast revenues have barely touched the Niger Delta's own pervasive local poverty. Today, there are formidable challenges to sustainable human development in the region. The manifestations of these challenges include the conflicts over resources among communities, and between communities and oil companies.

The delta's human development dilemma raises the question of why abundant human and natural resources have had so little impact on poverty. This conundrum serves as the driving force for preparing this human development report, the first for the Niger Delta. The report is a component of an integrated development programme for the delta region. The programme's overall objective is to promote sustainable poverty reduction by strengthening local governance and participatory planning, ensuring sustainable use of renewable natural resources and constructing social infrastructure. The report analyses the various dimensions of the human development challenges in the region, with a particular focus on women and youth, proposes a people-centred and development agenda grounded in the region's natural, human and social capital.

The imperative for a new development agenda arises from the fact that past development planning efforts have failed to adequately address the region's needs. In spite of the efforts of federal and state governments, the Niger Delta Development Commission (NDDC) and oil companies to enhance the well-being of people in the delta, wide disparities in development outcomes persist. In many cases, the conditions of rural communities where crude oil is produced are deplorable, with severe environmental degradation, and no access to safe drinking water, electricity and roads. Consequently, analyses of poverty and human development paint a dismal picture, particularly when the region is compared with other oil-producing regions in the world. In the Niger Delta, the results of poor development have been disillusionment, frustration among the people about their increasing deprivation and deep-rooted mistrust.

This report recommends a new development paradigm to address these concerns. In a seven-point development agenda, it proposes using the region's vast oil wealth to create an environment that allows people to flourish, live valued and dignified lives, overcome poverty, enjoy a peaceful atmosphere and sustain their environment. The agenda is a people-centred and sustainable framework requiring the involvement of all stakeholders, including local, state and federal governments, the NDDC, the oil companies and the entire private sector, civil society organizations, the people of the region and development partners. The highlights include the following:

#### Agenda One:

Promote peace as the foundation for development.

There cannot be any meaningful human development without peace. A peace agenda must include education, easier access to justice and a more equitable distribution of resources.

#### Agenda Two: Make local governance effective and responsive to the needs of the people.

Governance is very central to achieving

meaningful development outcomes. The effectiveness of governance, especially at the local government level, is an issue of serious concern. At the core of promoting effective governance is the urgent need to institutionalize the practices of accountability, transparency and integrity to guide the flow of development resources at all levels.

#### Agenda Three: Improve and diversify the economy.

The Niger Delta region, with its stock of natural and human resources, offers immense opportunities for developing a diversified and growing economy. A diversified economy would reduce dependence on oil and gas, jumpstart new industries and provide sustainable livelihoods. A growth pole strategy would forge closer links between industries and the production of agricultural and mineral products, and galvanize local economies.

#### Agenda Four:

### Promote social inclusion and improved access to social services.

A major concern is the region's longstanding exclusion from the mainstream of Nigeria's socioeconomic and political activities. The majority of the people in the delta live on the margins. Reducing exclusion and achieving more evenhanded development will depend on the empowerment of socially marginalized groups and individuals, stronger social institutions and infrastructure, and the development of the capacity of existing local groups.

#### Agenda Five:

Promote environmental sustainability to preserve the means of people's

#### sustainable livelihoods.

The mainstreaming of environmental sustainability into all development activities must be complemented by proactive steps to conserve natural resources; to reduce pollution, especially from oil spills and gas flares; and to set and achieve adequate targets for clean air and water and soil fertility. These should be backed by rigorous enforcement of environmental laws and standards.

#### Agenda Six:

## Take an integrated approach to HIV&AIDS.

Strong advocacy from top policy makers should be coupled with public awareness campaigns on the multidimensional nature of HIV&AIDS and public education on the laws against some risky traditional practices. State and local governments, the NDDC, oil companies, other private sector enterprises, NGOs and donors should collectively improve the quality and accessibility of health care and HIV&AIDS facilities and equipment, and institute actions to curb the epidemic.

#### Agenda Seven:

Build sustainable partnerships for the advancement of human development.

Many stakeholders must work together to achieve meaningful change. All levels of government and the NDDC, the oil companies, the organized private sector, civil society organizations and development agencies should form partnerships around plans for sustainable development and the attainment of the Millennium Development Goals (MDGs).



Alfred S. Fawundu Officer-In-Charge

The analysis and policy recommendations of this report do not necessarily reflect the views of the United Nations Development Programme (UNDP) or its Executive Board. It is an independent report commissioned by UNDP, Nigeria. The report is an outcome of a survey on human development outcomes in the Niger Delta region under the leadership of a research institute led by people from the region.



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AU	African Union
CPED	Centre for Population and Environmental Development
DFID	Department for International Development
ECOWAS	Economic Community of West African States
ERML	Environmental Resources Management Limited
FGM	Female Genital Mutilation
GDI	Gender-related Development Index
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
HDI	Human Development Index
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency
	Syndrome
HPI-1	Human Development Index for developing countries
HPI-2	Human Development Index for selected OECD countries
ILO	International Labour Organization
IMF	International Monetary Fund
LEEDS	Local Economic Empowerment and Development Strategy
LGA	Local Government Area
MDGs	Millennium Development Goals
NDBDA	Niger Delta Basin Development Authority
NDDB	Niger Delta Development Board
NDDC	Niger Delta Development Commission
NDES	Niger Delta Environmental Survey
NDHS	National Demographic and Health Survey
NEDECO	The Netherlands Electrical Company
NEEDS	National Economic Empowerment and Development Strategy
NEPAD	New Partnership for African Development
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Co-operation and Development

Oil Mineral Producing Areas Development Commission
Organization of Petroleum Exporting Countries
Ondo State Oil Producing Areas Development Commission
Purchasing Power Parity
State Economic Empowerment and Development Strategy
Shell Petroleum Development Company
Sexually Transmitted Disease
Sexually Transmitted Infection
United Arab Emirates
United Nations Joint Programme on HIV and AIDS
United Nations Development Programme
United Nations Environment Programme
United Nations Population Fund
United Nations Children's Fund
United Nations Industrial Development Organization
United States Agency for International Development
World Health Organization
World Trade Organization



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#### Background

The Niger Delta produces the oil wealth that accounts for the bulk of Nigeria's foreign earnings. Paradoxically, however, these vast revenues from an international industry have barely touched the Niger Delta's own pervasive local poverty. This has spurred formidable challenges to sustainable human development in the region, particularly as conflicts over resources tighten their often vicious grip.

Development experts and policy makers have engaged in many debates about the delta's human development dilemma, questioning why abundant human and natural resources have had so little impact on poverty. Why do conflict and youth restiveness simmer despite years of development interventions? What should be done to calm the situation? How can environmental sustainability and poverty reduction be achieved given continued extraction of oil and gas resources? What path leads towards sustainable human development?

These questions, among others, constitute the driving force for preparing this Human Development Report, the first for the Niger Delta. It analyses the various dimensions of the human development challenges in the region, with a particular focus on women and youth, and proposes a peoplecentred development agenda grounded in the region's natural and human capital.

The imperative for a new development agenda arises from the fact that past development planning efforts have failed to adequately address the region's needs. The result has been disillusionment and frustration among the people about their increasing deprivation. They have seen one government-sponsored development agency after another, without any significant changes. Instead, their physical environment has been deteriorating at an alarming rate, which hinders economic prospects and harms human well-being.

Local people in the delta are acutely aware of how much wealth oil can produce. Oil and gas alone have generated 40 per cent of Nigeria's national GDP over recent decades. Between 2000 and 2004, oil accounted for about 79.5 per cent of total government revenues and about 97 per cent of foreign exchange revenues. Within the delta, a few oil companies and individuals appear to be flush with cash.

But for most people, progress and hope, much less prosperity, remain out of reach. Instead, misdirected resources, inappropriate policy frameworks and a poor 'visioning' of what development should look like have destabilized their societies, and stoked deep and proliferating concerns. If unaddressed, these do not bode well for the future of Nigeria or an oil-hungry world.

#### The Human Development Situation

The Niger Delta region, as covered in this report, includes all nine oil-producing states in Nigeria (Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers states) with a total land area of about 75,000 square kilometres and 185 local government areas. The region contains the world's third largest wetland, with the most extensive freshwater swamp forest and rich biological diversity. Over half of the area is criss-crossed with creeks and dotted with small islands, while the remainder is a lowland rainforest zone.

Difficult topography encourages people to gather in small communities—of the estimated 13,329 settlements in the region, 94 per cent have populations of less than 5,000. These are rural communities, which Vast resources from an international industry have barely touched pervasive local poverty.

The imperative for a new development agenda for the Niger Delta arises from the failure of past development planning to meet the needs of the people.

Instability in the Niger Delta does not bode well for the future of Nigeria or an oil-hungry world Analyses of poverty and human development paint a dismal picture, particularly when the delta is compared with other oil-producing regions of the world.

Social instability, poor local governance, competition for economic resources and environmental degradation have taken a toll.

The delta today is a place of frustrated expectations and deep-rooted mistrust. offer very limited economic opportunities. Infrastructure and social services are generally deplorable, and vastly inadequate for an estimated regional population of nearly 30 million people.

While many development agencies and private sector organizations, including oil companies, have sought to transform the region socially and economically, analyses of poverty and human development paint a dismal picture. The region's human development index (HDI) score, a measure of well-being encompassing the longevity of life, knowledge and a decent standard of living, remains at a low value of 0.564 (with 1 being the highest score). While these ratings put the Niger Delta at a slightly higher level than Nigeria's overall HDI of 0.453, the area rates far below countries or regions with similar oil and gas resources. For example, the HDI for Saudi Arabia in 2000 stood at 0.800, while in 2003 the United Arab Emirates, Kuwait, Libya, Venezuela and Indonesia achieved scores of 0.849, 0.844, 0.799, 0.772 and 0.697, respectively.

A further disaggregation of the HDI score at the local government level in the Niger Delta clearly shows that regional and state scores mask inequalities in human development among oil-producing communities. In spite of the efforts of oil companies to enhance the well-being of the communities where they operate through several development initiatives, particularly in social infrastructure, there is still wide disparity in the performances of local government areas. The report discovers that most of the best performing local government areas on the HDI are the urban ones, while the majority of the poorly performing ones are those based in rural areas. The local government areas without oil facilities appear to fare better on the poverty index than those with oil facilities; an indication of unequal distribution of oil revenues. The poor outcomes of development interventions of oil companies are, to some extent, due to lack of a systematic link to government development plans.

The delta's appalling human development situation cannot be completely captured by the HDI, as some essential issues in the region are not reflected in the computation of the index, such as the dire state of infrastructure. The lack of data also distorts the calculation of the index to some extent. Nevertheless, available data point to the fact that the region is not faring well. The poor marks suggest the delta may struggle to achieve the MDGs. It is only close in one area—school enrolments—and is not likely to meet the other goals by the target date of 2015 or anytime soon after.

Behind the delta's poor performance on human development is a complex brew of economic, social, political and environmental factors. Social instability, poor local governance, competition for economic resources and environmental degradation have taken a toll. The general neglect of infrastructure, often rationalized by the difficulty of the delta's terrain, has worsened people's access to fundamental services such as electricity, safe drinking water, roads and health facilities that are taken for granted in many other parts of Nigeria. Other elements include the negative impacts of the oil industry, a constricted land area, a delicately balanced environment and extreme economic deprivation.

The delta today is a place of frustrated expectations and deep-rooted mistrust. Unprecedented restiveness at times erupts in violence. Long years of neglect and conflict have fostered a siege mentality, especially among youths who feel they are condemned to a future without hope, and see conflict as a strategy to escape deprivation. Persistent conflict, while in part a response to poor human development, has also entrenched it, serving as a consistent drag on the region's economic performance and expectations for advancement.

The sabotage of oil production hurts the economy through the loss of sorely needed foreign exchange to finance national development. Blown pipelines interrupt the supply of crude to refineries and produce shortages that cause sudden spikes in oil prices. Hostage-taking is not only a stress on foreign captives, their families and the companies they work for, but also presents a challenge to international diplomacy and foreign direct investment.

But the disruption also has adverse effects on the local people, as ensuing violence threatens individuals and communities. Lives are lost, and investments drop along with the availability of jobs. The response to violence has at times meant further violence is unleashed randomly on unsuspecting communities or oil workers. Whole villages have been destroyed and their populace displaced because of disputes that could have been amicably resolved. The human development implications extend to the harm done to the life chances of children unable to go to school and the further constraints on human and social capital.

There is a general concern that some people, particularly unscrupulous politicians and political organizations, benefit from violence, and that they sponsor some of the youth gangs in the region. Arms merchants along with police and military personnel have supplied weapons to various gangs, and the increased incidence of oil theft has been linked to the need for foreign exchange to purchase arms.

While turmoil in the delta has many sources and motivations, the preeminent underlying cause is the historical failure of governance at all levels. Declining economic performance leading to rising unemployment or underemployment; the lack of access to basic necessities of life like water, shelter, food and clothing; discriminatory policies that deny access to positions of authority and prevent people from participating in shaping the rules that govern their lives-these all indicate that governance over time has fallen short. Corruption aggravates feelings of being cheated, especially when the rulers live like kings amid extreme want. In spite of the substantial flow of oil money to state and local governments, many communities see no sign of government presence in terms of development projects. This intensifies a sense of hopelessness and mistrust that for the most aggrieved people leads to a call to arms.

Among the delta's many problems, some

of the most serious relate to environmental sustainability, which is fundamental to people's well-being and development. Wideranging and usually destructive environmental changes have stemmed from oil and gas extraction, industrialization and urbanization. Oil spills and gas flares in particular have destroyed natural resources central to local livelihoods. The alienation of people from their land and resources has led to the inefficient use of remaining resources and poor or inequitable land-use practices.

Local people have ended up frustrated both with the oil and multinational companies doing business in the region, and the government agencies that fail to rigorously regulate them. For years, local people have expected protection from successive federal and state governments that never arrived. Attempts to fight back have compounded the environmental challenges in some cases, such as when the sabotage of oil pipelines results in more oil pollution, in addition to the frequent loss of lives and property.

Economically, the Niger Delta region is heavily invested in the oil and gas industry, but despite the fact that this is a nonrenewable resource. economic diversification has been limited. Local people often cannot tap directly into oil industry benefits, including employment, because they lack skills or capital resources or both. The once rich agricultural enterprises developed in the mid-20th century, which generated substantial foreign exchange earnings in the 1960s and 1970s, have mostly been abandoned. For 85 per cent of the population, informal enterprises are the primary source of a livelihood, but these are characterized by low productivity and wages. Not surprisingly, women, who face a double marginalization due to gender, are particularly active in this sector.

A majority of the people lacks information and technical abilities, and unemployment and underemployment rates are high. The tension in the region has prompted some local people, especially youths, to prefer quick and profitable gains from conflict over longer term—and frequently In spite of the substantial flow of oil money to state and local governments, service delivery and development projects have been disappointing, especially at the local government level.

Local people often cannot tap directly into oil industry benefits, including employment, because they lack skills or capital resources. People should be able to live valued and dignified lives, in peace and free from poverty. unavailable—investments in education and training. Available data show that limited employment correlates with the highest incidences of youth restiveness.

The Niger Delta's unstable social, economic and political situation has helped to open the door to HIV&AIDS, a devastating force reversing decades of human development and perhaps the biggest obstacle to reaching the MDGs in the Niger Delta. The prevalence rate in the delta is among the highest in Nigeria. Social instability and decaying social values have encouraged the spread of risky behaviours, while incorrect information about HIV&AIDS, traditional practices and poor economic conditions compound the chance of exposure to HIV. As people die in large numbers, society loses much needed human capital, productivity declines and dependency rates skyrocket.

Making matters worse is the poor quality and accessibility of basic health care services—prevention, care, support and treatment programmes are simply not available. Many people turn to unqualified but locally available caregivers. Other factors include the region's oil exploratory activities, which produce men with easy money who engage in risky sexual behaviour with girls driven into prostitution by poverty. In general, women's low economic status hinders their ability to negotiate sex and other family planning issues, even with their husbands.

#### A Human Development Agenda

Addressing the Niger Delta region's many development challenges begins with using its vast oil wealth to create an environment in which most people can flourish. People should be able to live valued and dignified lives, overcome poverty, enjoy a peaceful atmosphere and expect a sustainable environment. For development to be meaningful, people-centred and sustainable, this report proposes a seven-point human development agenda. It is rooted in images of the future identified by people through focus group discussions held as part of the preparation of this report, and the scenarios presented in the Niger Delta Development Commission (NDDC) Regional Master Plan.

# $1^{Promote}$ peace as the foundation for development

Without peace, there will be no human development in the Niger Delta. Conflicts have now escalated to the point where the balance could tip towards outright warfare, which will be even more difficult to control. Brokering peace can only be achieved through a closely coordinated domestic strategy that addresses oil theft, money laundering and illegal arms. International cooperation can help create a climate where this strategy will have a realistic chance of success. The specific activities of a regional blueprint for peace should encompass renewing peace-building initiatives; promoting the rule of law and easier access to justice; ensuring the integrity of the electoral process and other leadership selection mechanisms; promoting equitable distribution of the benefits from mineral resources; encouraging demilitarization (including disarmament); and ensuring effective law enforcement and policing.

Key issues first need to be identified and addressed to manage the current conflict and security situation. A priority would be the disarmament and demobilization of militia groups. Programmes could be initiated to foster a climate of peace, while cross-cultural awareness campaigns could reorient people towards human coexistence, harmony and mutual partnerships. Rehabilitation efforts should reach out to youths who have become largely unemployable or unwilling to develop themselves.

Overall, the region should embark on a realistic and mutually agreed long-term development agenda that can be rigorously monitored by stakeholders. Strategies to improve the quality of governance should focus on enhanced service delivery, checks on corruption and the engagement of people in shaping policies for their wellbeing. Finally, existing compensation to communities for oil production and pollution needs to be examined. The debate over the derivation policy, which determines the sharing of oil revenues,

A peace agenda must include education, easier access to justice and a more equitable distribution of resources. should be resolved. An oil trust fund could ensure that revenues reach local communities where oil is being drilled.

# $2^{\it Make}$ local governance effective and responsive to the needs of the people

The effectiveness of governance, especially at the local government level, is an issue warranting concern. For both state and local governments, accountability, transparency and integrity have not necessarily kept up with the increased flow of resources in the delta. Politicians and local officials flaunting ill-gotten gains in fact help to fuel conflicts. Bad local governance is also a major cause of endemic poverty and the poor quality of human development.

Local development depends on committed and effective local governments capable of providing infrastructure and services that meet local needs. Public policies and mechanisms should ensure that good governance principles are upheld, especially in state and sub-national interactions. Since they are close to the people, local governments are in the best position to involve everyone, especially poor and marginalized people, in planning, implementing and monitoring development activities. The worsening poverty in the Niger Delta and the limited involvement of the poor in poverty interventions go hand in hand, and require urgent actions by governments at all levels. Priority strategies should include the following.

- Local governments should enhance their capacity to conceive and implement policies that deliver development to their constituents.
- Local communication systems should be institutionalized to provide information about local development activities and resources. The local monitoring of public funds should be encouraged. Non-governmental organizations (NGOs) and civil society groups could model the process of questioning people in authority and holding them accountable

without fear or favour.

- State and local governments need frameworks to cooperate on development, and local governments should receive their due allocations from the Federation Account and also from the states in line with extant laws.
- Democratic decentralization should devolve decision-making to communities. This will encourage the participation of civil society organizations in the management of local development.

#### **3** Improve and diversify the economy

From its stock of natural and human resources, the Niger Delta region offers immense opportunities for developing a diversified and growing economy. Using existing assets, including oil and other natural resources, a diversified economy would reduce the heavy focus on oil and gas-a non-renewable resource-while providing a basis for growth clusters within the region. Pro-poor economic growth would expand the employment, productivity and incomes of poor people; unleash human and institutional capacities; eradicate poverty through improved livelihoods; and stimulate industrial development through increased access to basic public goods.

Of prime importance is the promotion of sustainable livelihoods. Fortunately, the delta has many opportunities to diversify and grow its economy in ways that would encourage livelihoods drawing upon the region's considerable human, social, natural and other assets. Initiatives to cultivate people's skills and capacities so that they may participate in productive economic activities will be imperative.

Many agricultural and mineral products can be produced or found in the delta. These can be linked to industries that can galvanize the local economy. Such 'propulsive' industries are referred to as 'growth poles' because they act like magnets, drawing other industries to their localities, along with the requisite labour, social facilities and services. They can help attract desperately needed infrastructural developments. Accountability, transparency and integrity must guide the use of development resources at all levels.

A diversified economy would reduce dependence on oil and gas, jumpstarting new industries and sustainable liveliboods. The growth pole strategy is particularly relevant in the delta because of the preponderance of small settlements, the low purchasing power of most of the people, and the dominance of the informal sector. Expanding the capacity of informal businesses through connections to new industries would do much to reduce both poverty and gender disparities. Key to this process, however, is that informal sector entrepreneurs need to learn new and modern ways of doing business to avoid displacement and marginalization.

Improving rural competitiveness in nontraditional agricultural products through value-added export could be one major source of economic diversification. The region can readily produce rice, sugar, cocoa, roots and tubers, citrus fruits, plantains, rubber and rubber products, and is blessed with many resources for aquaculture and forestry. Cultivation of industries related to these products deserves the active support of the various governments, oil and gas companies and other stakeholders. Training and skills acquisition, especially tied to modern technology; seed multiplication centres; access to credit and affordable modern storage facilities are all important.

Synergy between agriculture and industry could come from establishing industries that use agricultural products. For instance, linking agriculture with the energy industry around the production of alternative fuels such as ethanol from sugarcane and cassava shows great promise and could benefit both sectors. There is also the need to rapidly expand such service industries as information technology and communication, re-exports through the creation of free-trade zones and ports, tourism, water transportation and finance.

Some traditional occupations that could absorb many labourers, such as agriculture, need to be improved to attract youths. But increased local involvement in the oil sector is worth pursuing as well. Oil companies can adopt programmes to encourage the development of skilled and qualified persons from host communities. Social and labour policies and programmes could address this issue through affirmative action. One good example of promoting the local content initiative, a form of affirmative action, in the country is the proposed US \$350 million Local Content Fund of the Federal Government, which would support local entrepreneurs in delivering quality service at competitive rates to the oil industry.

Several underlying conditions will determine the success of the drive towards economic prosperity in the delta. Many youths need to change their mindset from one dependent on the syndrome of 'settlement' or 'standby' money into one that embraces a more meaningful and productive life heavy investments in education are required. More broadly, aligning business objectives with overall human development will require massive investments in human capital, access to resources and functional infrastructure.

# **4** Promote social inclusion and improved access to social services

The Niger Delta Region has historically felt excluded from mainstream development in Nigeria. Within the delta, some groups have been further marginalized. Social exclusion is always an obstacle to development, but particularly when most of the population lives on the margins, where there are few if any development opportunities, and economic, social and health benefits are minimal.

In studying how to engage everyone in the delta in securing a sustainable future, this report concludes that resources should be targeted towards enhancing access to opportunities, goods, services and facilities for all stakeholders, and developing capacities to overcome obstacles and engage in activities necessary for sustainable livelihoods. This requires empowering socially marginalized groups and individuals, strengthening social and infrastructural institutions, and developing the capacity of existing local groups. Fully participatory approaches to the planning and implementation of development interventions are essential; partnerships can go far in removing the barriers to social inclusion. Interventions tailored to localities or groups will meet their unique needs.

Full participation in development planning will ensure that everyone has a stake in the Delta's future. Social cohesiveness could also be advanced through the establishment of local development funds that garner contributions from various stakeholders, including the Federal Government and oil companies, but are managed locally.

#### 5 Promote environmental sustainability to preserve the means of people's sustainable livelihoods.

This report traces the many intricate links between the environment and sustainable livelihoods, demonstrating that environmental degradation and poverty are mutually reinforcing. This underscores the urgency of proactive steps to conserve natural resources, reduce pollution especially from oil spills and gas flares, and reach adequate targets for clean air and water, and soil fertility. There is a need to raise environmental awareness including through the provision of information based on the collection of credible data. Other necessary steps include instituting the polluter-pays principle, passing and enforcing environmental laws, institutionalizing equitable compensation regimes for oil and gas-related activities, ensuring environmental considerations in budgets across different sectors, and bolstering existing environmental institutions. Overall, environmental sustainability should be mainstreamed in all development activities.

Environmental laws should protect the rights of citizens, establish mandatory environmental standards for the oil and gas business that are not below average global standards, and provide easier access to judicial redress when either the government or businesses violate people's rights.

### 6 Take an integrated approach to HIV&AIDS

Any human development agenda must factor in the burdens imposed by HIV&AIDS. The Niger Delta now has HIV prevalence rates that are among the highest in Nigeria. Since HIV&AIDS is much more than a health issue, dealing with it requires an integrated approach involving federal, state and local governments, the NDDC and other government agencies, the private sector, civil society groups and international organizations. Strong leadership is needed at all levels to push for meaningful results. Policies need to focus not only on the control of the HIV virus, but also on coping mechanisms for the large number of infected people in the region.

Potential strategies include strong advocacy among top-level policy makers coupled with public awareness campaigns on the multidimensional nature of HIV&AIDS, including in terms of high-risk behaviour. All forms of gender discrimination should be discouraged, and people should be educated on the laws against some risky traditional practices. Employers should establish work-place policies on HIV&AIDS, and oil companies should integrate HIV&AIDS assistance into their social responsibility and community development activities.

State and local governments and the NDDC should institutionalize their responses to HIV&AIDS. Governments, oil companies, other private sector enterprises, NGOs and donors should collectively improve the quality and accessibility of health care and HIV&AIDS facilities and equipment.

#### Build sustainable partnerships for the advancement of human development.

The development of the Niger Delta region cannot be the responsibility of any one level of government alone. While the Federal Government can take the lead on overarching issues influencing development in the region, it has to work with many stakeholders and partners if change is going to be sustainable and meaningful.

The different levels and branches of government should form partnerships around plans for sustainable development and the attainment of the MDGs; accountability and transparency in the use of available resources; the creation and sustenance of the right environment for meaningful development; the promotion of investment; social inclusion and popular participation in decision-making; broad-based consultations for peace-building; the deliberate empowerment of women and youth groups; and resource mobilization for deEnvironmental sustainability should be mainstreamed in all development activities.

Public awareness campaigns should recognize that HIV&AIDS is much more than a health issue. velopment.

Many stakeholders must work together if change is going to be meaningful. For their part, organized private sector operators have already committed themselves to certain corporate social responsibilities, particularly those that improve their operating environment. They can now align themselves with a human development agenda in the delta by promoting good neighbourliness and mutual coexistence with host communities; shunning unscrupulous business practices and the abuse of the environment; embracing consultative processes and popular participation; providing mentoring programmes and scholarships to aid the development of critical industrial competencies; and exhibiting good faith in abiding by international best practices in compensation payments and their general operations.

Community-based organizations and civil society groups can build partnerships to uphold legitimate avenues for redress such as consultation and negotiation—for injustices and discontent arising from strained relationships among the government, communities and the oil industry. Community groups can promote local acceptance and ownership of socio-economic development reforms, and civic, voter and peace education for the acculturation of democratic tenets. They can motivate and mobilize youth to engage in political, social and economic processes, and act as pressure groups backing sustainable democracy.

Finally, bilateral and multilateral donors can support the spirit of partnership by setting their development priorities in line with the guidelines and oversight functions of the Nigerian Government, and working consistently to achieve development symmetry through the harmonization of individual agency efforts and the avoidance of unnecessary duplication. Agencies such as the United Nations Development Programme (UNDP) can call upon all partners to buy into a human development agenda, which will be the only guarantee of peace and prosperity for all concerned.



#### **AMAZING PARADOXES**

Some amazing paradoxes have come from the development of the Niger Delta region. Ordinarily, the Niger Delta should be a gigantic economic reservoir of national and international importance. Its rich endowments of oil and gas resources feed methodically into the international economic system, in exchange for massive revenues that carry the promise of rapid socio-economic transformation within the delta itself. In reality, the Niger Delta is a region suffering from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth and squalor, and endemic conflict.

Enormous possibilities for industrial development abound in terms of the abundance of raw materials in the region, but these remain unrealized. Beyond vast oil and gas deposits, the delta is blessed with good agricultural land, extensive forests, excellent fisheries, and a large labour force. But juxtaposed against the potential for economic growth and sustainable development are deteriorating economic and social conditions that have been largely

#### Box 1.1: Oil—A Double-Edged Sword

ignored by contemporary policies and actions (Jonathan 2004: 20-21). With local inhabitants subjected to abject poverty and suffering in the midst of plenty, some view the oil and gas endowments as a curse and a double-edged sword (see box 1.1).

The data presented in this report reveal some troubling findings and deep ironies. Life expectancy is falling in an age of blockbuster oil prices. Energy availability is poor in a region that provides one-fifth of the energy needs of the United States. The delta needs to import fuel despite producing over two million barrels of crude oil per day. There is an almost total lack of roads in a region whose wealth is funding gigantic infrastructural development in other parts of Nigeria and expensive peacekeeping activities in other parts of Africa. The delta accounts for upwards of 80 per cent of Nigeria's foreign exchange earnings and about 70 per cent of government revenues.

This report analyses the various dimensions of the dismal human development situation in the Niger Delta, with a view to fostering a people-centred development agenda that can unleash the region's enormous natural and human capacities. Social and economic deterioration, ignored by policy makers, undercuts enormous possibilities for development.

The Niger Delta is a region suffering from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth and squalor, and endemic conflict.

The positive blessings of oil derive mainly from the huge financial resources it generates for producing countries. As an internationally traded commodity that attracts foreign exchange, oil is a quick source of capital accumulation or foreign direct investment for developing countries faced with capital constraints. Countries without oil face a struggle to overcome capital shortages, a major developmental inhibition.

Huge revenues are realized from the wide differential between unit production costs and economic rents, royalties, petroleum taxes, oil exports, etc. Between 2000 and 2002, total oil revenues to members of the Organization of the Petroleum Exporting Countries (OPEC) were US \$606 billion (OPEC Revenues Fact Sheet, June 2003). If management of oil-related revenues could be based on transparency, accountability and fairness, oil revenues will become a source of substantial benefit for the populations of these countries (Gary and Karl 2003).

Negative development trends are similarly associated with oil and mineral production in general. There tends to be an inverse relationship between economic growth and natural resource abundance, and sustained poor performance on such social indicators as education and health. These outcomes have been dubbed the oil resource curse.

#### **CONCEPTUAL FRAMEWORK**

Development that ventures beyond the calculus of economic growth enlarges human choices across all economic, social, cultural and political dimensions.

Development has to be designed to capture what the people themselves perceive to be their interests and needs.

"Sustainable human development is development that is propoor, pro-nature, projobs, and pro-women." In recent years, development programming has been focused on the overriding issues of *equity and equality* in the distribution of the gains from development efforts. A lot of concern has been expressed about the predicament of the rural poor and the imperatives of several baseline requirements for human development. These include access to land and water resources; agricultural inputs and services, including extension and research facilities; and participatory development strategies to tackle rural poverty, with social equity and civil participation viewed as essential to wellrounded socio-economic development.

This relatively new orientation has produced concepts such as 'people-centred development', 'participatory development' and 'sustainable human development'. The concept of people-centred development states that meaningful development must be people-based or human-centred, since development entails the full utilization of a nation's human and material resources for the satisfaction of various (human) needs. In more specific terms, a development programme that is peoplecentred is expected to achieve the following objectives (Chinsman 1995):

- enable people to realize their potential, build self-confidence and lead lives of dignity and fulfilment;
- free people from poverty, ignorance, filth, squalor, deprivation and exploitation, recognizing that underdevelopment has wider social consequences; and
- correct for existing economic, social or political injustices and oppression.

The notion of 'participatory development' bridges the interrelated goals of development and the empowerment of people. Development has to be designed to capture what the people themselves perceive to be their interests and needs. Participatory development, sometimes interchangeably called popular participation, is "a process by which people take an active and influential part in shaping decisions that affect their lives" (OECD 1995: 8). People or communities that enjoy active participation in decision-making over issues that concern their livelihood and interests should be able to realize their human potential, build self-confidence, and lead lives of dignity and fulfilment. Participatory development builds civil society and the economy by empowering social groups, communities and organizations to influence public policy and demand accountability. The process links democratic institutions with human development motivations (OECD 1995; Bass 1972: 212-216).

More recently, the United Nations has popularized the multidimensional term 'sustainable human development' (see box 1.2). This is defined as: "Development that not only generates economic growth but distributes its benefits equitably; that regenerates the environment rather than destroys it; that empowers people rather than marginalizing them. It gives priority to the poor, enlarging their choices and opportunities, and provides for their participation in decisions affecting them" (James Speth, former UNDP Administrator). Speth says further that "sustainable human development is development that is pro-poor, pro-nature, pro-jobs, and pro-women. It stresses growth, but growth with employment, growth with environmental friendliness, growth with empowerment, and growth with equity."

# Box 1.2: The Tenets of Human Development

Indeed, defining people's well-being as the end of development and treating economic growth as a means have been central messages of the annual Human Development Reports published since 1990.

Source: Fukuda-Parr and Shiva Kumar 2003: p. vii.

This report takes a human development approach to the situation in the Niger Delta. This approach questions the presumption of an automatic link between expanding income and expanding human choices, and places people at the centre of development. A people-oriented approach correspondingly shifts the emphasis, for example, from how much a nation or region is producing, economically and in the aggregate, to how its peoples are faring in terms of quality of life and general social well-being. This means venturing beyond the calculus of economic growth and considering how to enlarge human choices across all economic, social, cultural and political dimensions.

#### RATIONALE FOR A HUMAN DEVELOPMENT APPROACH TO THE NIGER DELTA

Since 1996, UNDP has produced four national human development reports on Nigeria (in 1996, 1998, 2000/2001 and 2004). This report is the first on one of Nigeria's six sub-national geopolitical regions, the Niger Delta. The attention to the delta should be explained.

One of the main conclusions of the Nigerian Human Development Report 1996 (UNDP 1996) was that "wide regional disparities are Nigeria's Achille's heel-the primary source of its perennial conflict, political instability and social unrest." Since 1996, with the degeneration in the Niger Delta, it is obvious that the regional disparities remain. It is also evident that in spite of ongoing reform programmes, inequities in the allocation of resources from oil and gas and the degradation of the Niger Delta environment by oil spills and gas flares continue to adversely affect human development conditions. The inequities fan increasingly intense and frequent conflicts.

The potentially adverse impacts of the Niger Delta crisis on Nigeria, and on Africa as a whole, make the focus of this report on the delta imperative and timely. The report serves as an instrument to review the multidimensional nature of the problem and its history, as well as the consequences on the income, education and life expectancy of the people who live in the delta, and on environmental sustainability.

Early concerns about the plight of the Niger Delta region referred to the part now sometimes called the 'core' Niger Delta, comprising Bayelsa, southern Delta and Rivers states. The present definition and composition of the Niger Delta region is a pragmatic one that brings together all oilproducing states in the Nigerian Federation, because they have common ecological and socio-economic problems. The following sub-section briefly reviews some of the causal factors behind the poor state of human development in the delta, including the pitfalls of traditional development planning, revenue allocation problems and the failure of governance.

#### Pitfalls of Traditional Development Planning

Development planning in Nigeria, in the modern sense, dates back to the formative 10-year national development plan for 1946-1955 prepared by the colonial administration. After political independence in 1960, successive post-colonial governments initially prepared mostly medium-term development plans, namely 1962-1968, 1970-1974, 1975-1980 and 1981-1985. A series of two-year rolling plans followed between 1990 and 1998. These efforts were often associated with the income-centred development paradigm. Short term and based on official convictions, they lacked essential civil society and grass-roots inputs or participation. They failed to be sufficiently far-reaching, longitudinal or symmetrical enough in scope and coverage to pursue the inclusive goals of human development. In most cases, traditional planning efforts amounted to ends in themselves. They ended up either not being implemented or, at best, being largely unimplemented.

Since the colonial era, some policies and programmes within national development plans have been formulated to address the minority status, agitations and perceived marginalization of the people of the delta. But the recurring feeling in the region is that it is often pushed aside within the Nigerian Federation. This is particularly true for minority ethnic groups. The first major attempt to address these grievances was in 1957, when the colonial administration set up the Willink's Commission of Inquiry to investigate the fears of minorities and how to allay them. The Commission reported in 958 that "the needs of those who live in the creeks and swamps of the Niger Delta are very different from those of the interior."

The Commission also noted that "it is not easy for a government or legislature operating from the inland to concern itself or even fully understand the problems of a territory where communications are so Inequities fan increasingly intense and frequent conflicts that threaten Nigeria as a whole, and Africa at large.

Top-down development plans have made little impact on the real lives of people in the delta or on their perception that development planning is little more than an imposition by the Federal Government.

Inequities in the allocation of resources from oil and gas and the degradation of the Niger Delta environment by oil spills and gas flares continue to adversely affect human development conditions.

The needs of those who live in the creeks and swamps of the Niger Delta are very different from those of the interior. There were no available data for planning purposes, such as the crude oil production quota by state. OMPADEC had no means to cope with the volume of demands given decades of physical neglect and deprivation. And funding was inadequate. difficult, building so expensive and education so scanty in a country which is unlikely ever to be developed." Perhaps more importantly, the Commission concluded that "a feeling of neglect and a lack of understanding was widespread ... a case has been made out for special treatment of this area. This is a matter that requires special effort because (the area) is poor, backward and neglected." That conclusion is as true in the Niger Delta today as it was in 1957. Be that as it may, the immediate post-independence Government eventually responded to the Willink's Report by setting up the Niger Delta Development Board (NDDB) in 1961.

The NDDB could not solve the problems of the Niger Delta enunciated in the Willink's Report. Subsequent bodies included the Niger Delta Basin Development Authority (NDBDA) set up in 1976, and the Oil Mineral Producing Development Commission Areas (OMPADEC) set up in 1992. But they also failed woefully. In the case of the NDBDA, organizational problems bedevilled it from inception. None of the board members appointed by the Federal Government to run the Authority came from the Niger Delta. During the civilian administration of Shehu Shagari, 11 river basin development authorities were created; several now have jurisdiction in the delta, including the Niger River Basin Development Authority, the Anambra-Imo River Basin Development Authority, the Benin-Owena River Basin Development Authority, the Niger Delta Basin Development Authority and the Cross River Basin Development Authority. But these authorities also have had very little impact. For one thing, their boards often comprise politicians who have regarded their tenures as opportunities to reap the 'dividends of democracy'. They have often been viewed as drains on the nation's finances.

OMPADEC was established in July 1992 and given the statutory responsibility to receive and administer, in accordance with the confirmed ratio of oil production in each state, the monthly allocation of the Federation Account. This is set aside for the rehabilitation and development of the mineral producing areas and for tackling ecological problems that have arisen from the exploration of oil minerals. Between 1993 and 1997, OMPADEC collected about N17.42 billion, a little over US \$135 million. At first, OMPADEC was allocated three per cent of the Federation Account, but this was raised to 6 per cent in 1995.

The Commission did not make any meaningful impact on the lives and environment of the Niger Delta people. It was noted for its profligacy and extravagance. Contracts were awarded in anticipation of funds, with the result that contracts worth billions of naira were awarded that were not eventually backed with cash. At the time it folded, the Commission owed its contractors billions of naira and left the Niger Delta with numerous abandoned projects.

The Chief Executive of OMPADEC had identified three pressing problems at the Commission. There were no available data for planning purposes, such as the crude oil production quota by state. The Commission had no means to cope with the volume of demands given decades of physical neglect and deprivation. And funding was inadequate. While the decree establishing OMPADEC stipulated that it should receive three per cent of the Federation Account, the Commission claimed that what it actually got was three per cent of net revenues from the Federation Account.

When the present federal administration came into power in 1999, it constituted a new body, the Niger Delta Development Commission (NDDC) to take over from OMPADEC. At the inauguration of its pioneer board, in December 2000, the President of the Federal Republic of Nigeria noted that the NDDC has the potential to offer a lasting solution to the socio-economic difficulties of the Niger Delta, which successive governments have grappled with even before independence. To achieve its mandate, the NDDC board identified areas of focus including:

- development of social and physical infrastructures
- technology
- economic/environmental remediation and stability
- human development
- pursuit of a peaceful environment

that allows tourism to thrive and supports a buoyant culture

As a development agency, the NDDC quickly identified the need for a master plan as part of its overall strategy, which has now been completed. In the interim, the NDDC board elaborated a plan involving the construction of roads, shoreline protection, rural and urban water supply schemes, and the rehabilitation of schools and health centres. This is in addition to human capacity development in new centres that help people acquire skills and build sustainable livelihoods.

By November 2002, the board had reported awarding contracts for more than 650 projects worth over N35 billion or US \$271.3 million in the nine states of the delta region. The NDDC funding structure includes contributions from the Federal Government, the oil companies operating in the region, the Ecological Fund and member states in the delta. The Federal Government accounted for 78.03 per cent of the N44 billion or US \$341.1 million that was disbursed to the Commission between 2001 and 2004. Annual federation allocations to the NDDC from 2000 to 2004 are, respectively, N0.944 billion (US \$7.3 million), N10.0 billion (US \$77.5 million), N13.9 billion (US \$107.8 million), N9.0 billion (US \$69.8 million) and N14.0 billion (US \$108.5 million). Member states have yet to contribute directly to the Commission, and there is continued wrangling over the contributions from oil companies. In spite of the provisions of the NDDC Act on financing (see box 1.3), the NDDC is facing some of the same problems with funding that plagued OMPADEC.

It is probably premature to assess the achievements of either the NDDC or similar state initiatives (see box 1.4). With the production of a Regional Master Plan for the Niger Delta, however, the NDDC is at least poised for positive action on its founding objectives. Earlier bodies had never managed or bothered to produce a plan, whether at regional or sectoral levels. But the NDDC does not seem to have made any positive impression on the peoples of the Niger Delta. Comments by participants at focus group discussions and stakeholders' meetings indicate that people still see the NDDC as an imposition from the Federal Government, and a top-down approach to development planning and implementation. The local people had no say in determining its composition; it primarily comprises appointees of the Federal Government. As far as ordinary people are concerned, the loyalty of the NDDC is not to the Niger Delta but to the Federal Government and the oil companies that provide the bulk of its budget.

#### **Revenue Allocation**

The politics and dynamics of revenue allocation have also manifested in attempts to address the peculiar development challenges of the Niger Delta as an oil-producing region. At the root of the amalgamation of the Southern and Northern Protectorates by Lord Lugard in 1914 was the issue of cross-subsidization-the richer South would subsidize development endeavours in the poorer North. The level of cross-subsidization was not clearly specified. The first attempt to write down the basis and levels of sharing revenues among the component units (or regions, as they were then called) of the Nigerian Federation was in 1946, when the Phillipson Fiscal Commission, set up by the Colonial Administration, proposed the derivation principle as a basis for fiscal federalism. The idea was that revenue should be shared, among other things, in proportion to the contribution each region made to the common purse or central government. Derivation became the only criterion used to allocate revenues among the regions in the 1948-1949 and 1951-1952 fiscal years.

In the period shortly before independence in 1960, the disparity in allocation largely reflected the degrees of enterprise and levels of production in the regions. This meant that, by merely looking at the levels of allocations, one could easily discern the regions with high levels of economic activities in areas such as cash crop production (e.g., cocoa, rubber, palm oil, cotton, hides and skins, groundnuts, etc), earnings from export and excise duties, etc. The incentives embedded in the revenue allocation inevitably encouraged competition among the regions, with each striving to contribute more in order to get more from the centrally allocated revenues.

The central control of petroleum resources has denied local people the right to benefit from the land on which they live.

People still see the NDDC as an imposition from the Federal Government, and a top-down approach to development planning and implementation. The local people had no say in determining its composition; it primarily comprises appointees of the Federal Government. Between 1946 and 1960, the derivation principle was maintained at 50 per cent. After independence, it continued at the same level until 1967, when the Nigerian civil war started (see box 1.5). The 1960 and 1963 constitutions affirmed the 50 per cent rate. Section 140 of both documents stipulated that for the sharing of the proceeds of minerals, including mineral oil, "there shall be paid by the Federal Government to a Region, a sum equal to 50 per cent of the proceeds of any royalty received by the Federation in respect of

#### Box 1.3: Financial Provisions in the NDDC Act, 2000

- (1) The Commission shall establish and maintain a fund from which shall be defrayed all expenditure incurred by the Commission.
- (2) There shall be paid and credited to the fund established pursuant to subsection (1) of this section
  - a. From the Federal Government, the equivalent of 15 per cent of the total monthly statutory allocations due to member States of the Commission from the Federation Account; this being the contribution of the Federal Government to the Commission;
  - b. 3 per cent of the total annual budget of any oil-producing company operating, on shore and off shore, in the Niger-Delta area; including gas-processing companies;
  - c. 50 per cent of monies due to member States of the Commission from the Ecological Fund;
  - d. Such monies as may, from time to time, be granted or lent to or deposited with the Commission by the Federal or a State Government, any other body or institution whether local or foreign;
  - e. All moneys raised for the purposes of the Commission by way of gifts, loans, grants-in-aid, testamentary disposition or otherwise; and
  - f. Proceeds from all other assets that may, from time to time, accrue to the Commission.
- (3) The fund shall be managed in accordance with the rules made by the Board, and without prejudice to the generality of the power to make rules under this subsection, the rules shall in particular contain provisions
  - a. Specifying the manner in which the assets or the funds of the Commission are to be held, and regulating the making of payments into and out of the fund; and
  - b. Requiring the keeping of proper accounts and records for the purpose of the fund in such form as may be specified in the rules.

Source: Niger-Delta Development Commission

#### BOX 1.4: State Initiative on Development Challenges: The Functions of the Ondo State Oil-Producing Areas Development Commission (OSOPADEC)

OSOPADEC was established by law on October 29, 2001 as an interventionist agency to cater for the development of the oil-producing areas of the state. It was created as an institutional framework for the development of that part of the state. It was inaugurated in November 2001. Its functions, as spelt out in its enabling law, are:

- (a) To receive and administer exclusively 40 per cent of the 13 per cent Oil Derivation Fund accruing to the state government:
  - *(i)* For the rehabilitation and development of oil-producing areas in the state; and
  - (ii) Other development projects as may be determined from time to time by the commission;
- (b) To release a sum of 5 per cent of the 40 per cent accruing to the commission to the host local government of the oil-producing areas;
- (c) To liaise with the relevant federal and state government authorities on the control and effective methods of tackling the problems of coastal erosion and oil spillages in the state;
- (d) To ensure fair and equitable distribution of development projects in the oil-producing areas of the state;
- (e) To ensure judicious utilisation of the fund accruing to the commission; and
- (f) To execute other works or projects and perform such other functions which in the opinion of the commission are geared towards the development of the oil-producing areas of the state.

Source: African Network for Environment and Economic Justice 2004.

any mineral extracted in that region and any mining rents derived by the Federal Government from within the region." To summarize, 50 per cent of the proceeds from minerals, including mineral oil, went to the region from where they were extracted; 30 per cent went into a pool for distribution to all regions, including the producing regions; and 20 per cent went to the Federal Government.

The 50 per cent derivation formula changed in varying ways during the military and civilian administration eras. After the civil war led to the political and fiscal centralization of the federal system, the military administration of General Yakubu Gowon promulgated Petroleum Decree No. 51 in 1969. This put the ownership and control of all petroleum resources in, under or upon any land in Nigeria under the control of the Federal Government. It meant that individuals, communities, local governments and even states with land containing minerals were denied their rights to the minerals. Between 1969 and 1971, the military government, fighting an expensive civil war, expropriated five per cent from the 50 per cent meant for the producing states, thereby bringing the Distributable Pool Amount to 55 per cent, while 45 per cent was for the producing states. During the administration of General Olusegun Obasanjo (as he was then), from 1976 to 1979, a distinction was made between onshore and offshore proceeds, with all offshore proceeds going into the Distributable Pool Amount. In addition, the share of the onshore proceeds in the pool was raised to 80 per cent, while producing states were allocated the balance of 20 per cent. Between 1982 and 1992, derivation accounted for merely 1.5 per cent of oil proceeds.

Under the military regime of General Sani Abacha, from 1993 to 1998, derivation was raised to three per cent as an interim palliative, pending the determination of an appropriate derivation formula by the Constitutional Conference called to resolve the political crisis created by the annulment of democratic presidential elections of June 1993. The Conference recommended a 13 per cent Derivation Fund, which was accepted by Abacha's Government, but not really implemented until General Abdulsalami Abubakar replaced him as head of state. At the inception of the current democratic regime in 1999, nonimplementation of the 13 per cent derivation formula was a source of much agitation, bringing the governors of the region into closer alliance with the 'resource control' agitators and into conflict with federal authorities.

The reason for the change in the size of the derivation formula was the onset of the civil war, which was to lead to the political and fiscal centralization of the federal system

Years	Producing state (per cent)	Distributable Pool Amount or Federation Account (per cent)
1960-67	50	50
1967-69	50	50
1969-71	45	55
1971-75	45 minus offshore proceeds	55 plus offshore proceeds
1975-79	20 minus offshore proceeds	80 plus offshore proceeds
1979-81	-	100
1982-92	1.5	98.5
1992-99	3	97
1999-	13	87

#### Box 1.5: Federal and State Shares of Petroleum Proceeds

Source: Modification of Sagay 2001.

cent derivation formula appears not to have assuaged feelings in the region much. Political mobilization to win elections during the transition from military to democratic rule justifiably raised expectations of rapid socio-economic development in the region and enhanced opportunities for individual well-being. The failure to meet these expectations, together with the apparent increased wealth and extravagance of some government and NDDC officials in the region, inflamed feelings of neglect and deprivation. These found expression at the National Political Reform Conference held in 2005. The Conference recommended an upward review of the derivation percentage to 17 per cent, but this was unacceptable to the Niger Delta delegates, who insisted on a minimum of 25 per cent with a phased review to 50 per cent. Other delegates did not agree, leading to the

The failure to meet people's expectations of rapid socio-economic development, together with the extravagance of some government and NDDC officials in the region, have inflamed feelings of neglect and deprivation. Corruption, mismanagement, rampant human rights abuses, and inadequate access to justice and human security heighten alienation from government and other authority structures.

Human development deprivations are traceable to asymmetrical planning at the national level, and maladministration and inefficiencies at the state and local government levels.

Numerous armed rebellions bave disrupted oil production, attracting international attention and contributing to rising crude oil prices. collapse of the Conference and further political polarization along oil-producing/ non-oil-producing lines.

Many citizens of the Niger Delta may be forgiven for believing that, if the mineral oil was found in the areas of the major ethnic groups rather than in the minority areas, the derivation story may have been different. The pros and cons of this argument notwithstanding, the bottom line is that a credible and equitable revenue allocation formula represents a viable way of lessening the tension, agitations and perceptions of unfairness, if not total disillusionment, in the Niger Delta. Correspondingly, the implementation of a viable programme for rapid human development would be a lot easier to achieve with a revenue allocation formula that the peoples of the delta could consider equitable and acceptable.

#### The Failure of Governance

The foregoing sections support the new global thinking that an income-centered development paradigm cannot capture the multifaceted development challenges of any country, region or peoples, including the Niger Delta. Given the frustration and disillusionment with the present development failures in the delta, a more focused effort on human development is clearly desirable.

The delta's water-logged, flood-prone terrain is the most difficult in Nigeria. Many of the region's vast development needs are attributable in part to the complexities of the physical landscape. But human development deprivations are equally traceable to asymmetrical planning at the national level, and maladministration and inefficiencies at the state and local government levels. Even the political measures intended to decentralize responsibility for development and provide more resources to states and local leaders have not achieved as much as they should have. Some of these measures include the creation of more states and local governments, as well as increases in revenues going to these tiers of government. The potential value of such policies was undermined, however, by the authoritarian style and insensitivity of successive military rulers in the region and

the local leaders they appointed to administer the localities. A return to civil democratic rule should have led to more responsive and participatory governance at both the state and local levels, but appropriate reforms have been slow to take hold.

The enormous revenue assignments to the states and local governments in the region, from the Federation Account, Derivation Fund and the OMPADEC (now replaced by the NDDC) fund did not have their desired impact largely because the development agenda of these authorities have not been people-centred and participatory. Corruption, mismanagement, rampant human rights abuses, inadequate access to justice and human security, and the vulnerabilities of most of the population heighten frustration and alienation from all levels of government and other authority structures. The expectations of positive or effective governance-in terms of basic city and country planning, improved human livelihoods, general utility satisfaction, quality of life, employment generation, the management of biodiversity and the environment, and the development of infrastructure and modern communications, all within the scope of sustainable human development-have remained largely unfulfilled. The contribution of poor governance to the abject poverty of the Niger Delta region is highlighted in chapter three of this report.

#### A History of Resistance

As a source of the global energy supply, the Niger Delta is also important within the wider context of the international economic and political system. Since the 19<sup>th</sup> century, a complex interplay of factors has provoked sometimes volatile responses to the pressures for the control and distribution of resources. Underlying this volatility has been a feeling, among the peoples of the delta, of injustice and inequity. The following instances illustrate this point. From 1894 to 1895, King William Koko of Nembe resisted the Royal Niger Company's attempts to shut out the Nembe people from the lucrative trade in palm oil. Isaac Adaka Boro in 1966 and Ken Saro-Wiwa from 1993 to 1995

put up similar resistance, but this time mostly over petroleum. In total, the Niger Delta has witnessed six major rebellions in the last two centuries. Besides the three mentioned, the others included struggles sparked by King Nana of Itsekiri (1896) and Oba Overanmi of Benin (1897), and the numerous events leading to the Kaiama Declaration of 1998-2000. To these must be added the numerous armed rebellions of youths in the last 10 years or so, which have disrupted oil exploration, while also attracting international attention and contributing to the rise of crude oil prices. Conflicts in the region, including the recent spate of hostage-taking, are further discussed in chapter five.

Events in the Niger Delta should concern or appeal to all Nigerians. The development problems and needs of the region are very relevant to other regions and communities, as fallouts of the generic experience of bad governance, particularly in the postindependence period. The potential for a disaster arising from the Niger Delta and producing a conflagration across the country should not be underestimated.

Some administrative measures were taken in the past to ameliorate the restiveness of the region. These culminated in the production of numerous reports and plans by governments (federal, state and local), oil companies, NGOs, and bilateral and multilateral agencies. Unfortunately, such interventions and outputs appear to have mostly addressed the economic and environmental components of the problem. They should have been more humancentred, concentrating on people rather than developmental artefacts (innovations, industries, social and physical infrastructures, etc.). They should have sought to widen people's choices and open additional opportunities in productive sectors apart from oil. This approach would favour more sustainable solutions to the delta's development problems.

One significant intervention was the establishment of the Federal Environmental Protection Agency in 1988 to enforce environmental regulations and ameliorate environmental degradation. Laudable as this was, its effectiveness was limited by a narrow focus on environmental impact assessments, which soon became routine to the point of being a charade.

## A Regime of Reforms and Strategies: NEEDS, SEEDS and LEEDS

The embrace of the human development approach used in this study could result in a deeper understanding of the development needs of the region and the adoption of a more down-to-earth approach to development planning and implementation. A people-centred, bottom-up strategy is in tune with existing priorities, including the attainment of the MDGs, as listed in box 1.6. Also targeting the MDGs is the National Economic Empowerment and Development Strategy (NEEDS), which draws from strategic planning techniques to stimulate sustainable development. NEEDS is aimed at economic growth, human development and improvements in service delivery in Nigeria, especially through positive governance, zero tolerance for social corruption, the reform of public service, and improvements in financial planning and control (see National Planning Commission 2005).

# Box 1.6: Millennium Development Goals

- 1. Eradication of extreme poverty and hunger
- 2. Achievement of universal primary education
- 3. Promotion of gender equality and the empowerment of women
- 4. Reduction of child mortality
- 5. Improvement of maternal health
- 6. Combating HIV & AIDS, malaria and other diseases
- 7. Ensuring environmental sustainability
- 8. Developing a global partnership for development

Source: UNDP/National Planning Commission

The Federal Government has encouraged state and local governments to develop and implement their own economic empowerment and development strategies-SEEDS and LEEDS. The underlying strategy is the cohesive coordination of development process, through the adoption of bottom-up approaches and the inclusiveness of all stakeholders in development. The application of the human development approach in the Niger Delta could provide new insights into development planning by recognizing that the real wealth of the delta is its people.

Government interventions should have been more humancentred, concentrating on people rather than developmental artefacts. Human-centred steps to calm the restiveness of the region would include new opportunities in productive sectors apart from oil. The new development strategy accords with the tenets of the human development paradigm in the following ways:

- It promotes local participation in development management.
- It effectively discontinues the top down approach of development management and upholds the bottomup approach.
- It ensures value for money in service delivery.
- It makes development peoplecentered, with people being the means and end of true development.

The human development paradigm is also relevant to the Federal Government strategy because it embodies the following concerns:

- Development must put people at the centre.
- The purpose of development isto enlarge all human choices, not just income. People must have the freedom to do what they want to do and be what they want to be.
- Human development is concerned with both building human capabilities through investment in people and utilizing these capabilities fully for growth and employment.
- Human development emphasizes equality, sustainability, productivity and empowerment. Issues such as gender inequality, regional inequality, social and political exclusion, participation, human rights, the rule of law and basic freedoms must be addressed.
- Human development defines the ends of development and analyses sensible options for achieving them.

The application of the human development approach in the Niger Delta could provide new insights into development planning for that region. Among other things, by recognizing that the real wealth of the Niger Delta is its people, the right environment will be created for policies that go beyond sheer economic preoccupations and gains in order to enrich people's lives.

The section that follows elaborates the analytical framework of the report, starting with a description of the practical tools and approaches of the preparatory process.

#### METHODOLOGY

#### **Data Collection**

The data for this study came from both primary and secondary sources. It was, however, difficult to obtain all the data required through these sources. To resolve the problems created by this dearth of data, standard techniques for interpolating missing data were used, some of which are presented in the report. Data were collected from local and state governments.

#### Secondary Sources

Before data collection began, the report team carried out an extensive literature review and search for existing records. Sources comprised local government offices, relevant ministries, parastatals and companies; books on development issues in the Niger Delta; reports by nongovernmental and community-based organizations; annual reports of oil companies and corporate organizations; public institutions such as the Independent National Electoral Commission, state independent electoral commissions, the NDDC and the Niger Delta Environmental Survey (NDES); and the Internet. Other national human development reports prepared by UNDP and outputs by various human rights organizations, including Human Rights Watch, were consulted as baseline resource materials.

Following an exhaustive search for existing secondary data on the indicators of interest, however, the data gaps were daunting. For many of the indicators, data were either not available at all at both the state and local level, or available at the state level only. Very few of the indicators had data at the local level. To solve this problem, primary sources were utilized.

#### **Primary Sources**

Primary data were obtained through surveys and focus group discussions. One hundred and fifty questionnaires (50 in each senatorial district) were administered in each of the nine states of the Niger Delta, amounting to 1,350 collected from the region overall. Specific information (especially on the perceptions of research subjects) was obtained from the nine states of the Niger Delta on issues including governance, poverty, sustainable livelihoods, gender relationships, conflicts and HIV&AIDS. The information sources included women, men, youth and opinion leaders in communities.

Focus group discussions were also conducted to obtain information on knowledge about poverty, the role of government, the level of infrastructure development, gender relationships, conflict, HIV&AIDS, etc. Eight discussions were conducted in each of the Niger Delta states. This amounts to 72 focus group discussions. They took into consideration the age, gender, cultural, socio-political and other diversities and complexities of the area. Participants were carefully selected to avoid bias. They covered all segments of society, including opinion leaders, church leaders, traditional authorities, community leaders, youths, women's groups, academics, civil society representatives, etc.

#### A General Data Problem

While official data sources exist in Nigeria, their data are often hardly disaggregated according to vital demographics, including at the state, local government and ward (or community) levels. Where data sources exist, there are often confusing discrepancies between various sources, to the extent that official databases are rendered unusable by structural inconsistencies and systematic compilation errors that threaten data reliability and validity. Due to the unavailability of data on some indicators at the local government level, realistic proxies were used to fill the gaps. This does not in any way affect the reliability of the data.

#### WHERE IS THE NIGER DELTA?

#### Geography

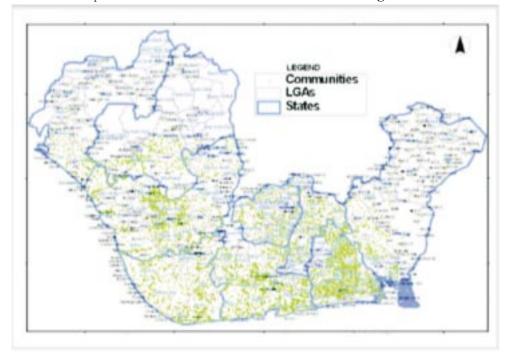
For practical purposes, the Niger Delta region is defined as comprising the area covered by the natural delta of the Niger River and the areas to the east and west, which also produce oil. The natural limits of the Niger River Delta can be defined by its geology and hydrology. Its approximate northern boundaries are located close to the bifurcation of the Niger River at Aboh, while the western and eastern boundaries are around the Benin River and the Imo River, respectively. The area covers approximately 25,900 square kilometres (ERML 1997). The broader Niger Delta region, which includes all oilproducing areas and others considered relevant for reasons of administrative convenience, political expedience and development objectives, extends the land area to 75,000 square kilometres. It is this definition that is used by the NDDC and in this report. Defined in this way, the Niger Delta consists of nine states (Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers) and 185 local governments. Map 1.1 shows the Niger Delta and its constituent states.

## Geology, Relief, Drainage and Ecological Zones

The natural delta of the Niger River is a vast sedimentary basin. The deltaic deposits comprise mainly medium to coarse unconsolidated sands, silt, clay, shale and peat. The delta is mostly a flat, low-lying swampy basin criss-crossed by a dense network of meandering rivers and creeks. There are four broad ecological zones in the region defined by both relief and hydrological characteristics. These are, from the coast inland, the coastal sandy barrier ridge zone, the mangrove swamp zone, the freshwater swamp zone and the lowland rainforest zone.

The coastal sandy barrier zone, as the name suggests, is made up of a chain of sandy barrier islands, which are separated by numerous estuaries and inlets. The islands are generally less than one metre above the sea level at high tide. They extend along the outer coastline from the Benin River to the Imo River. Typically, they are 16 to 20 kilometres wide. Because of their relatively higher topography, which keeps them from the tidal influence of the marine and brackish waters, the coastal barrier islands support freshwater forests and associated fauna. These islands are also often flooded during the year when rainfall is heavy.

Moving inland, the mangrove swamp zone occurs immediately after the barrier islands. It is the swampiest of the ecological zones, being essentially a massive swamp dotted with islands of dry land covering about 10,240 square kilometres (Mosunmolu 1998). Most of the zone is at elevations of less than one metre, and it is generally muddy and under tidal influence. Within the zone are feeder channels that move tidal waters into the swamp, connecting channels and inter-fluves.



Map 1.1: States and Local Governments of the Niger Delta

The freshwater swamp zone is characterized by seasonal flooding. It is during the rainy season that its swampy characteristics are vividly obvious. It has the most distinct subdivisions, is most diverse in terms of biology and supports a similar ecology to the one in the coastal barrier islands. The zone's three subdivisions are the flood forest zone or 'upper delta', the marsh forest zone and the eastern flank. The flood forest subdivision has large sand river channels, permanent creeks and seasonal flood creeks, and is inundated annually by the Niger River flood. Flood-free levees are common, while back swamps and cane forests help give the zone a highly diverse habitat. The marsh forest subdivision is also referred to as the transition zone. It is permanently swampy and under flooding from freshwater. Muddy swamp channels and raffia swamps can be found in the zone, and its species of wildlife are usually different from those of the flood forest zone. The eastern flank is thought to have been a flood forest when the Orashi River was a major tributary of the Niger Delta (Powell 1995).

The lowland rainforest zone is in the northern part of the Niger Delta region, beyond the areas of dense river and creek networks. It is not considered within the area defined by the natural limits of the Niger Delta, but falls within the broader Niger Delta area. This is the least swampy part of the region. It has a varied geology and terrain, but sedimentary rock formations, mostly sandstone with some shale and limestone, underlie most areas. The rock formations present a ridge and valley topography. In some areas of Akwa Ibom, Cross River and Ondo states, the terrain is characterized by advanced gully erosion. In Edo, Cross River and Ondo states, there are areas of old, crystalline basement complex rocks, mainly granites, gneisses and granodiorite. These areas are characterized by rugged, rocky terrain with massive rock domes and inselbergs.

Apart from the Niger River, the other major rivers in the region include the Cross, Imo, Qua Iboe and Orashi in the east; and the Benin, Oluwa and Siluko in the West.

#### Climate

The Niger Delta has a semi-hot, humid equatorial climate with wide variations from one part of the region to another. This is a place of uniformly high temperatures throughout the year, high relative humidity and intense rainfall, which occurs almost year round in the core delta, but becomes markedly seasonal further inland with increasing distance from the ocean. Copious rainfall coupled with the low relief and high water table produce frequent flooding (see box 1.7).

#### Box 1.7: Climate

The Niger Delta has a humid, semi-hot equatorial climate. The region experiences heavy rainfall, leading to floods in urban areas and communities along the rivers. Due to the heavy and frequent rainfalls, soils consisting mainly of silt and clay become saturated, reducing infiltration to the barest minimum and encouraging run-off. Rainfall induced run-off is directed mainly to the back swamps in the upper and middle parts of the delta. In the coastal zone, there is an even smaller topographic gradient that makes run-off difficult. Precipitation frequently results in flooding.

On average, about 10 per cent of the total annual rainfall occurs during the dry season months of November to March.

Rainfall Distrib Community	ution in Selected Co Number of years covered	ommunities Average total annual rainfall (mm)	Average number of rain days		
Nembe	5	3419	128		
Ahoada	4	1989	121		
Ndele	5	2285	124		
Port-Harcourt	31	2286	180		
Calabar	63	2651	190		
Warri	64	2842	183		
Source: NDDC 2003.					

The mean annual rainfall in the Niger Delta region varies from 4,000 millimetres in the coastal towns of Bonny (Rivers State) and Brass (Bayelsa State), to about 3,000 millimetres in the central Niger Delta towns of Ahoada (Rivers), Yenagoa (Bayelsa) and Warri (Delta), and about 2,400 millimetres in the northern Abia and Imo states. In the more interior locations in the northern parts of Cross River and Ondo states, mean annual rainfall is much less, ranging from 2,000 millimetres nearer the coast to 1,500 millimetres farther inland.

Temperatures are high and fairly constant throughout the year. Average monthly temperatures for the warmest months (February to April) range from 28 degrees Celsius to 33 degrees Celsius, while the average monthly temperatures for the coolest months, June to September, range from 21 degrees Celsius to 23 degrees Celsius.

#### The People

The Niger Delta region is extremely heterogeneous with respect to culture and ethnicity. The five major linguistic and cultural groups-the Ijoid, Edoid, Delta Cross, Yoruboid and Igboid-are each composed of numerous sub-groups. The Ijoid, who are said to have the longest settlement history in the Niger Delta, are the most complex linguistically. Each of the numerous clans of this group has some linguistic and cultural distinctiveness. In certain cases, villages in the same clan have linguistic differences. This group, which occupies virtually the whole of Bayelsa State, is also found in Rivers, Akwa Ibom, Delta, Edo and Ondo states.

The Edoid group is made up mainly of the Isoko and Urhobo of Delta State, the Edo of Edo State, the Engenni and Apie-Atissa of Bayelsa State, and the Degema of Rivers State. Even within these groups, several sub-groups exist; many claim to have their own individual identity. The groups

A long bistory of close interaction between different groups has not prevented an intense competition for resources. Without oil and gas, there may have been far fewer conflicts.

Development should reach people without recourse to forced relocation or agglomeration of settlements.

There are 13,329 settlements in the region, and 94 per cent of these have populations of less than 5,000. Limited space explains the prevalence of small settlements. within the Urhobo are good examples. Typical cases are the Okpe and Uvbie. Among the Edoid groups, the Urhobo is the largest. Although the Edo is a larger group overall, most of them are found outside the Niger Delta region. The Edoid groups in Bayelsa and Rivers states are considered largely within the Ijoid group because of the cultural impact the latter has had on the former.

The Delta Cross comprises mainly the Ogoni, Ogba, Abua, Odual and Obolo/ Andoni in Rivers State and the Ibibio, Oron and Ibeno of Akwa Ibom State. The Ibibio is the largest of these groups. The most well known, especially internationally, is the Ogoni because of its agitation for resource control and autonomy. The ethno-cultural complexity of the Niger Delta region is vividly illustrated by the fact that even a small ethnic group like the Ogoni (about 500,000 people) is made up of at least four cultural groups: the Khana, Gokama, Tai and Eleme.

In spite of the fact that the Yoruba and the Igbos are two of the largest ethnic groups in Nigeria, the related groups in the Niger Delta are some of the smallest there. The main Yoruboid groups are the Itsekiri of Delta State, and the Ilaje and Ikale in the borderlands of Ondo State. The main Igboid groups are the Ikwerre, Ndoni, Egbema, Ogba and Ekpeye in Rivers State and the Ukuwani in Delta State.

Before modern times, there was considerable interaction among the groups of the Niger Delta region, especially those of the core Niger Delta. This interaction has always been in terms of trade and intergroup marriages. One major system of exchange is the trade between the Ijaws, who fish, and the agricultural Urhobos. Until recently, Itsekiri female traders were important facilitators of this trade. Intergroup marriages have been so significant, particularly among the Urhobo, Itsekiri and Western Ijaws, that a large proportion of families in some areas are multicultural.

Given such interactions, it is curious that inter-ethnic conflicts have been common in the Niger Delta. But the competition for resources, especially land in this land-short region, has been intense. The emergence of petroleum on the scene seems to have accentuated such conflicts. There is no doubt that the incidence of conflicts may have been considerably less if there had been no oil and gas in the region. The development challenge is how to manage these conflicts so that the business of promoting human development can go on without interruption.

#### Settlement Patterns

Settlement patterns in the delta are influenced by topography and drainage. In the coastal beach ridge zone, dry land is readily available, though in narrow strips. Settlements in this area typically stretch along the coast with little breadth. Various wide estuaries separate settled areas. A number of sizeable settlements, such as Bonny, Akassa and New Forcados, are located here.

Given the fact that the mangrove swamp zone is a massive swamp with scattered islands, population is sparsely distributed. The swamp is virtually uninhabited except for fishing camps; some settlements exist on dry islands. Settlement size is dependent on the size of a given island. Large settlements include Buguma, Nembe and Burutu.

Land is more or less continuous in the freshwater swamp region, save for the numerous creeks. Since much of the land is swampy, habitation is usually in areas of high land. The levees along the rivers and creeks are the favoured sites, and often densely populated. Other areas are very sparsely settled. Major settlements include Sagbama, Oleh and Patani.

Of all the zones, the lowland rainforest zone provides the best places for settlement. Most of the large settlements are found here, although the largest towns in the Niger Delta-Port Harcourt and Warri-are found in the transition zone between swampland and the more solid land of the lowland rainforests.

#### Size Distribution of Settlements

Small settlements with less than 1,000 people (table 1.1) dominate in the Niger Delta, followed by settlements in the range of 1,000 to 5,000 people. The NDDC Regional Master Plan determined that there are 13,329 settlements in the region, and

94 per cent of these have populations of less than 5,000. Only 98 settlements, or one per cent, can be regarded as urban centres based on population size. The prevalence of small settlements is explained by a number of factors. First, the environment provides limited space for human settlement, given the fragmentation of land into islands and the occurrence of dry land in isolated pockets. Most settlements are small and dispersed. Second, fishing communities all over the world characteristically dwell in small fishing villages close to their fishing grounds. Third, as indicated above, the Niger Delta is home to many small minority groups, each of which is composed of numerous clans. Each clan cherishes its own private space.

organizations require a certain minimum support threshold to exist. All of these factors point to large settlements, which are universally accepted as engines of human and economic development (see Abumere 2000 2004; Mabogunje 1965). Unfortunately, this phenomenon has often fostered inequality in development between urban and rural areas. This is especially true in Nigeria, where many of the cities are parasites that absorb resources without spreading development to surrounding rural areas. In particular, large settlements with populations of 20,000 or more are few in the Niger Delta (see table 1.1). Only Delta, Rivers, Ondo, Abia and Edo States have reasonable numbers of such settlements.

NDDC states	Less than 1,000	1,000-5,000	5,000-20,000	20,000 people	
	people	people	people	and above	
Abia	393	494	52	11	
Akwa Ibom	1,236	1,098	46	7	
Bayelsa	290	317	85	4	
Cross River	117	500	56	8	
Delta	1,016	307	104	22	
Edo	903	264	70	11	
Imo	788	925	81	2	
Ondo	1,463	278	57	16	
Rivers	428	598	213	17	
Niger Delta	7,686	4,781	764	98	

Source: Centre for Population and Environment Development (CPED), 2003, p.236.

Given this preponderance of small settlements, the task of promoting sustainable human development in the Niger Delta is that much harder. Size plays an important role in the promotion of development, whether human or economic. In many parts of the world, the human development agenda has revolved mainly around large settlements. Developmental artefacts usually involve large capital outlays and great elements of risk, and are therefore more likely to be located in areas where the risks are low and profit or potential use can be maximized. Many products can only be produced economically at a certain scale; many innovations are adoptable by production units of a certain size; and many The distribution of settlements by size is of considerable interest, therefore, in the articulation of a viable human development agenda for the Niger Delta region. This agenda should take development to the people of the region, without any recourse to forced relocation and agglomeration of settlements. Naturally, over time, some settlements are bound to emerge as 'growth centres' that-due to an advantageous location or the existence of some employment-generating economic activities and/or the provision of social facilities-are able to draw population from the surrounding areas. Given the historical background of the region, any agenda that includes forced relocation and agglomeration of settlements will only

Small settlements, topography and a swampy landscape make the task of promoting sustainable human development in the Niger Delta harder. exacerbate the volatile atmosphere, rather than promoting the needed transformation.

#### Population and Demographic Characteristics Population size and density

A youthful demographic structure means many people remain outside of the working age bracket and are in their formative years, when social investment is beaviest.

Although life expectancy in the region is similar to that in the rest of the country, it has tended to be lower in the more economically deprived communities. In the 1991 census, the total population of all nine states of the Niger Delta was 20.5 million (see table 1.2). This was made up of 10.133 million males and 10.329 million females. The projected total population for 2005 is 28.9 million, rising to 39.2 million by 2015 and 45.7 million by 2020. The states with the highest population sizes are Rivers, Delta, Akwa Ibom and Imo. With the possible exception of Bayelsa and Cross River states, there are probably no significant differences in population sizes among the states. Differences do show up in population densities. The overall population density for the Niger Delta region based on the 1991 population is 182 persons per square kilometre. But some states have densities far above this-e.g. Abia State (478 per square kilometre), Akwa Ibom (354 per square kilometre), Imo (481 per square kilometre) and Rivers (307 per square kilometre). Population distribution within each state is uneven, particularly in the states in the core Niger Delta, where the fragmented, swampy landscape constrains human settlements.

#### Age-sex composition

Based on the 1991 census, there is almost an even distribution of population between men and women in the Niger Delta region. In some states (Abia, Akwa Ibom, Delta, Edo and Imo), there are more females than males (see table 1.3). This has implications for development planning especially in a situation where gender disparity has been a major problem. The NDDC Regional Master Plan, however, reports that there are more males (54 per cent) than females (46 per cent) in the Niger Delta region. If this is confirmed by the 2006 National Census, then things may have turned around. What may not have changed is the male domination of traditional Nigerian society.

Available information on the age structure of the population of states in the Niger Delta region depicts a large segment of young people below 30 years of age. This group comprises 62.1 per cent of the population of the region, compared with 35.8 per cent of adults in the 30- to 69year age bracket. This demographic feature has various implications for development planning and the financing of social services. A youthful age structure implies that many people remain outside of the working age bracket. In the formative years, social investment rather than economic investment is required. This creates an additional dependency burden for the average family or the economically active population, and states in the Niger Delta. The magnitude of such a burden tends to be greater for impoverished families or population units that are either unemployed, under-employed or lack the benefit of full employment. A comparatively high proportion of people below the working age also tends to reduce labour input per capita and income per capita.

#### Fertility, life expectancy and mortality

Available household survey data for 2004 put the average crude birth rate for the Niger Delta region at 45.8 per 1,000 people. The corresponding average natural growth rate of 3.1 per cent per annum across the region is, thus, higher than the rate of 2.5 per cent often used by the Government for estimating the growth rate of rural population in the country.

There is little empirical data on life expectancy in the delta. But the best national estimates, citing figures from 2000, indicate that average life expectancy is 46.8 years. The present figure may have dropped to about 43 years because of the economic deprivations of the intervening years and the cumulative impact of HIV&AIDS. It is assumed that life expectancy in the region is similar to that in the rest of the country. Nevertheless, even in the best of times, life expectancy has tended to be lower in the more economically deprived communities, such as those in the most swampy and least accessible parts of the core Niger Delta. Although hard longitudinal data are also generally lacking on specific maternal and infant mortality rates, the crude death rate for the Niger Delta region was 14.7 per 1,000 people in 2003 (CPED 2003). Low life expectancy, of course, is also a reflection of high mortality rates. For instance, against the life expectancy index of 0.78 for Saudi Arabia and 0.70 for Indonesia in 2003 (UNDP 2005), the oil producing LGAs of Bakassi in Cross River state had 0.392, while Burutu of Delta state, Brass of Bayelsa state, and Bonny of Rivers state had 0.433, 0.458, and 0.471, respectively.

As a nation, Nigeria has one of the worst child survival rates in the world. Child mortality is as high as 178 per 1,000. According to the United Nations Children's Fund (UNICEF), about one out of five Nigerian children die before the age of five years. Child infant mortality rates are 105 per 1,000 live births. Nigeria also has one of the world's highest maternal death rates, between 704 to 1,000 deaths per 100,000 women.

#### Fishing and agriculture are the two major traditional occupations of the Niger Delta peoples. During the colonial era, forestry was introduced as the third major economic activity in the region. Today, agriculture, fishing and forestry still account for about 44 per cent of employment (see chart 1.1). All three economic activities have declined since the ascendancy of the oil industry, however. Rubber plantations that once covered thousands of hectares of land in Edo and Delta states were cleared as the oil boom took hold. Many palm oil and cocoa plantations were abandoned and allowed to revert to bush. Fortunately, since the 1990s, there have been renewed efforts to resuscitate the agricultural sector. New

The ascendancy of the oil industry has meant the decline of traditional economic activities. Oil wealth needs to be channelled into revamping the rural economy.

#### Economy

Table 1.2: Projected Population of Niger Delta States	
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	nd area (kms)	Male	Female	Both	1996	2002	2005	2010	2015	2020
Abia	4,877	1,123,754	1,210,013	2,333,567	2,667,762	3,026,623	3,230,000	3,763,000	4,383,000	6,106,000
Akwa Ibom	6,806	1,167,829	1,241,784	2,409,613	2,746,748	3,131,230	3,343,000	3,895,000	4,537,000	6,285,000
Bayelsa	11,007	584,117	537,576	1,121,693	1,327,488	1,571,540	1,710,000	1,992,000	2,320,000	2,703,000
Cross River	21,930	956,136	955,159	1,911,295	2,206,105	2,546,388	2,736,000	3,187,000	3,712,000	4,325,000
Delta	17,163	1,271,932	1,318,569	2,590,491	2,952,900	3,365,881	3,694,000	4,186,000	4,877,000	5,681,000
Edo	19,698	1,085,156	1,086,849	2,172,005	2,475,352	2,826,004	3,018,000	3,516,000	4,096,000	4,871,000
Imo	5,165	1,166,448	1,319,187	2,485,636	2,798,238	3,150,050	3,342,000	3,894,000	4,535,000	5,283,000
Ondo	15,086	1,121,898	1,127,650	2,249,548	2,532,535	2,851,293	3,025,000	3,524,000	4,105,000	4,782,000
Rivers	10,378	1,655,441	1,532,423	3,187,864	3,772,738	4,466,293	4,858,000	5,659,000	6,592,000	7,679,000
Niger Delta	112,110	10,132,711	10,329,200	20,461,711	23,469,866	26,934,302	28,856,000	33,616.000	39,157,000	45,715,000
Source: CEI	PD, 2003, p	.339.								

State	Male	Female							
Abia	48.2	51.8							
Akwa Ibom	48.5	51.5							
Bayelsa	52.1	47.9							
Cross River	50.0	50.0							
Delta	49.1	50.9							
Edo	50.0	50.0							
Imo	46.9	53.1							
Ondo	49.9	48.1							
Rivers	51.9	48.1							
Niger Delta	49.5	50.5							
Source: National Population Census	1991.	Source: National Population Census 1991.							

Table 1.3:	Sex Distribution	of <b>Population</b>	, 1991 (per cent)	
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Rubber plantations that once covered thousands of hectares of land in Edo and Delta states were cleared as the oil boom took hold. Many palm oil and cocoa plantations were abandoned and allowed torevert to bush.

Links between oil companies' operations and human deprivation in some areas of the delta has raised local expectations that the oil companies should contribute to physical and human development in affected communities. rubber plantations are being established; cocoa and oil palm farms are being rehabilitated. Also, there is increased activity in arable crop cultivation, particularly of cassava for commercial purposes.

The urban sector, with its concentration of informal sector activities, plays a growing role in the economy of the Niger Delta region. Trading (17.4 per cent), services (9.8 per cent) and miscellaneous activities (11.1 per cent) are the most important areas of employment, after agriculture, fishing and forestry overall. But a strong informal sector economic base is also growing in rural areas.

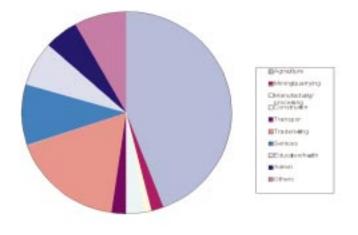
One major contemporary challenge facing the region's economy may be how to revamp the rural economy by optimizing and modernizing agriculture as well as fishing. Oil wealth can be put to good use in this regard. The people of the Niger Delta Region would feel that they have gained something substantial to make up for all the miseries associated with past neglect.

The Niger Delta Region has been particularly attractive to major international oil companies, including Shell, Chevron, Mobil, Elf, Agip and Texaco, among others, which have been involved in joint ventures with the Federal Government in connection with oil exploration, exploitation and production. Links between their operations and human deprivation in some areas of the delta has local raised expectations that the oil companies should contribute to physical and human development in affected communities. Other expectations include the monitoring and promotion of respect for human rights, compliance with environmental standards for exploration and exploitation, and, where necessary, restitution for damages. For their part, oil companies expect the provision of security for the oil facilities, the prevention of damage to their facilities and environment and the protection of their personnel.

Oil company operations have included some externalities. For example, oil production has often damaged the environment in the region. This dimension is further elaborated in chapter three of this report. The perennial conflicts between the oil companies and the local communities are discussed in chapter five.

It is also true that oil production and oilbased industrial expansion by the multinational oil companies have transformed the local economy of the region. Some communities have greatly benefited from oil production, through attractive wages for full-time employment or specialized contractual services, although underemployment and unemployment are also rife. Development spending by the oil companies has brought appreciable social services, utilities and other infrastructure

# Chart 1: Percentage Distribution of Employed Household Members by Industry of Employment (Niger Delta)



Source: NDDC Master Plan 2003/2004.

to pockets of the region, in the absence of what the government could have provided.

#### Infrastructure and Social Services

In general, the available social development indicators in the Niger Delta region point to inadequate, unavailable and poor quality infrastructure and social services, from water to telecommunications. The historical neglect of the region's development poses a steep barrier to attaining socio-economic transformation and poverty alleviation.

## Water supply

A vivid account of the water supply situation was provided in the focus group discussions held to prepare this report: "*Have you seen any taps here?* ... *Water used to*  run in public taps, but that had stopped some 20 years ago. We basically drink from the river and creeks. Then, this rainy season is also a blessing because we fetch water easily from God. Lack of water has led some people to sink boreholes where water is produced and sold...the cheapest is N5.00 per 20 litres...hygiene is secondary."

Data from the Federal Office of Statistics, now the National Bureau of Statistics, reveal that water in the majority of Niger Delta states comes from unsafe supply facilities, including rivers, lakes or ponds, unprotected wells and boreholes (see chart 1.2). The Bureau classifies available sources of potable water for household consumption as: pipe borne, untreated pipe, borehole, protected well, unprotected well, river/lake/pond, vendor trucks and other categories (see table A1.1 in the appendix). In five of the nine states in the region-Akwa Oil companies' activities have transformed the local economy of a few parts of the region through attractive wages and the provision of social services. But unemployment is also rife.

Inadequate infrastructure in the delta is the result of historical neglect

Water in the majority of

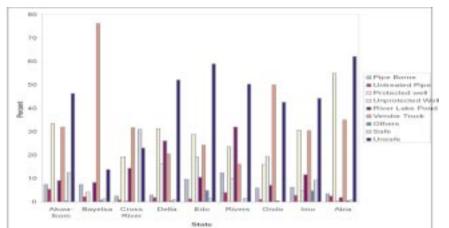
Niger Delta states comes

from unsafe supply

facilities, including rivers, lakes or ponds, unprotected wells and

boreboles.

Chart 1.2: Sources of Potable Water



Source: National Bureau of Statistics 2005.

About 20 per cent to 24 per cent of rural communities and 45 per cent to 50 per cent of urban communities bave access to safe drinking water. Ibom, Bayelsa, Cross River, Ondo and Imo-water problems are very acute and result in supplies of unsafe water in more than 50 per cent of the cases.

An NDES Report (2000) covering the states of the Niger Delta region, except Cross River State, also found that most settlements depend on untreated surface water and wells, which leads to health problems from waterborne diseases. It was estimated that only 20 per cent to 24 per cent of rural communities and 45 per cent to 50 per cent of urban communities have access to safe drinking water.

Poor access to adequate drinking water has had serious implications for the general health, environment, economic activity and sustainable livelihoods in the Niger Delta region. The lack of potable water in rural areas, as well as severe shortages of pipeborne water in urban centres, necessitates new policies that favour community involvement and participation in devising and managing water supply systems in a sustainable fashion.

# Transport

Field research for this report revealed that the delta's roads are mostly bad. Focus group participants described them as being impassable during the rainy season. Efforts by local government authorities to repair the roads have worsened them and left the local people with more hardship. Although urban road transportation development has recently been accorded some priority attention, less regard has been shown for rural transportation, especially water transport, which the majority of the rural populace depend on. Focus group participants referred to transport and communication in the area as a source of misery, requiring people to trek long and excruciating distances due to the high cost of motorcycle transport, a popular means of transport. Some roads have so many death traps that motorists avoid them. One participant said that the only vehicle-worthy road linking her community to the local government headquarters is in a deplorable state of disrepair.



A common mode of transportation in the Niger Delta

Most rural dwellers see transport and communication as a source of misery. They often trek long distances trekking due to the high cost of motorcycle transport



Housing pattern in a typical Niger Delta village

#### Telecommunication

The dearth of telecommunication infrastructure in the Niger Delta region stifles the advancement of information technology and the development as well as technical empowerment of the populace. Most rural communities are largely unconnected and completely unable to take advantage of modern trends in telecommunications and technology as tools for accelerated rural development. Available data show that the number of telephone lines in the Niger Delta works out at about 38 per 1,000 people. Growth in the number of land lines has stalled in the last few years due to the introduction of the global system of mobile communication.

#### Power and fuel

Data from the Federal Office of Statistics (see chart 1.3) show that across the region, on average, only 34 per cent of people use electrical lighting; 61 per cent use kerosene or a lantern. Less popular sources of lighting are gas (1.2 per cent on average), a generator (1.5 per cent), batteries (0.2 per cent), candles (0.6 per cent), firewood (1.8 per cent) and others (1.2 per cent). The general sources of household fuel are firewood, charcoal, kerosene, gas, electricity, crop residues, animal waste and others (see chart 1.4) The modal fuel or primary energy source in the region is firewood (a mean of 73 per cent), followed by kerosene (24.8 per cent) and gas (1.2 per cent).

#### Housing

Housing in the Niger Delta region is predominantly of poor quality, especially in the swamps and creeks where dwellings are made up largely of mud walls, and stilt or strip foundations. A survey of 40 locations that included Warri, Port Harcourt and Sapele by the NDES revealed that 30.4 per cent of houses had mud walls, 53.8 per cent had corrugated-iron sheet roofing, and 46.6 per cent had a strip foundation. Flooring materials vary widely, but are predominantly concrete followed by mud.

Data from the National Bureau of Statistics (2005) largely confirm the findings of the NDES survey, but the lumping together of data for rural and urban centres distorts the picture of housing conditions in the core Niger Delta states, where small settlements

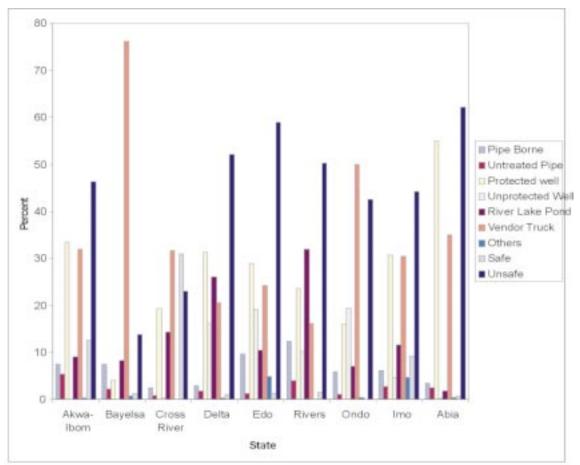


Chart 1.3: Percentage Distribution of Lighting Sources Housing

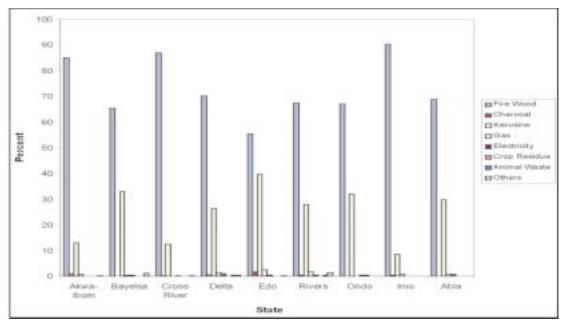


Chart 1.4 : Sources of Fuel (Energy)

Source: National Bureau of Statistics 2005.

Source: National Bureau of Statistics 2005.

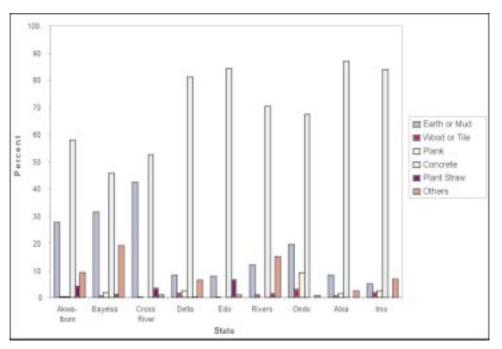
and camps predominate. Charts 1.5 and 1.6 are based on the National Bureau of Statistics data (see also table A1:4 and chart 1.7). Although the charts indicate that concrete walls predominate, it is also true that mud houses constitute a high proportion of housing in Akwa Ibom, Bayelsa and Cross River states.

# Waste management

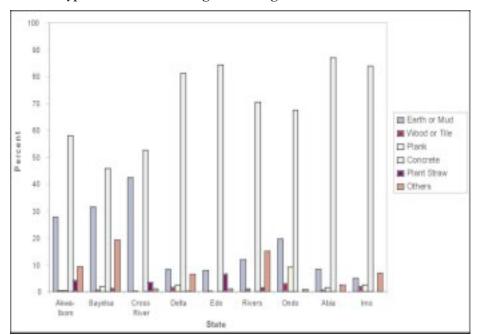
The Niger Delta region is laden with problems related to waste management. These are the combined effects of environmental pollution from oil, gas and industrial activities, as well as the implicit population/settlement issues in the semi-

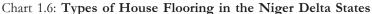
Chart 1.5: Types of Housing in the Niger Delta Region

Revamping the rural economy by optimizing and modernizing agriculture and fishing would empower people in rural areas.



Source: National Bureau of Statistics 2005.





Source: National Bureau of Statistics 2005.

urban and urban areas. Drawing from data from the National Bureau of Statistics (2005), the most widespread methods of waste or refuse disposal are disposal within household compounds (an average of 56.9 per cent) and disposal in authorized heaps (34 per cent). Other methods are through collection by government (3.3 per cent), collection by private service providers (2.7 per cent), the use of government disposal bins (1.4 per cent) and others (2.7 per cent). See also chart 1.7 for data on the distribution of household toilet facilities. Recent ecological studies have shown that the adverse consequences of waste generation and improper disposal have been severe on both people and the environment. These effects have also influenced the stagnation of human livelihoods and the region's economy. In increasing the misery and impoverishment of the populace, they have exacerbated political tension, acrimony, outright conflicts and violence.

## Education

Statistical estimates have put the proportion of children attending primary school at 80 per cent (which compares favourably with the estimated national average of 54 per cent). But across the region, nearly all school facilities are in a state of extreme disrepair, requiring major rehabilitation. The secondary school system has been seriously afflicted by shortages of quality teachers, a regional pattern that is becoming increasingly acute due in large part to discordance between investments in infrastructure outside a well-coordinated planning process.

Revealing the immense challenge to development and provision of social amenities for sustainable livelihood, an NDES report (2000) noted that in the Niger Delta states, covering some 30,000 square kilometres and with over 3,800 settlements and an estimated eight million people, there were only 2,169 primary schools and 545 secondary schools. For primary schools, this implied one school per 3,700 people serving an area of 14 square kilometres, and one school for every two settlements. For secondary schools, the ratio is one school per 14,679 people serving an area of 55 square kilometres, and one school for every seven settlements.

### Health and health service delivery

Dismal health and health service delivery pitals, clinics and primary health centres; and a lack of effective operational plans for holistic health management. The majority of Niger Delta communities living in isolated areas lack the most basic modern medical care, including first aid, given the absence of formal health services in much of the hinterland (for the various dimensions of infrastructure and social services in the region, see the NDDC Regional Master Plan, 2003/2004, chapter one, pp. 1-19).

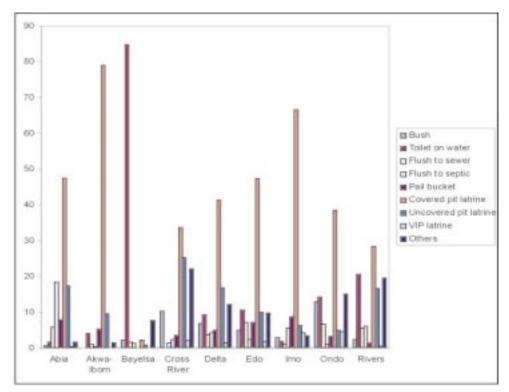
The focus groups provided corroborative evidence on the status of health in the region, affirming that modern health care facilities are largely absent. The few existing public health care centers are all in critical need of repair. Villagers described them as moribund and offering little or no assistance. The centers lack doctors, nurses, and critical supplies such as drugs, syringes and sterilizers. There were a few privately run clinics, but focus group members said services there cost exorbitant amounts. Community members resort to local and traditional remedies to deal with their health conditions.

According to the NDES (1997), communities have identified health as a major issue that must be addressed to improve their quality of life. In addition to a range of diseases such as malaria, gastroenteritis, respiratory track infections, measles, worm infestation, anaemia and heart diseases, malnutrition was seen as a major problem, especially among children, with about 10 per cent to 12 per cent severely malnourished, 18 per cent to 23 per cent moderately so, and 30 per cent to 40 per cent mildly malnourished. Fuelling this problem is a perceived lack of correct breastfeeding methods and household food insecurity.

According to an NDES (2000) report on primary health care, there is a ratio of only one health care facility for every 9,805 people, with the average facility serving an area of 44 square kilometres. There is one facility for approximately every 43 settlements. The numbers worsen for secondary health care. There is only one facility for every 131,174 people, serving Dismal bealth and bealth care service delivery manifests in poor bygiene; little or no bealth information and education; a grossly inadequate capacity for service delivery; inadequate provision of bospitals, clinics and primary bealth centres; and a lack of effective operational plans for bolistic bealth management.

Nearly all school facilities are in a state of extreme disrepair, requiring major rehabilitation. The secondary school system in particular has been seriously afflicted by shortages of quality teachers.

Chart 1.7: Types of Household Toilet Facilities



Source: National Demographic and Health Survey 2003.

an area of 583 square kilometres. A single facility serves an average of 48 settlements. Poor access to health care reduces people's quality of life and increases their poverty.

# CONCLUSION AND PREVIEW OF THE REPORT

This chapter has clearly shown that an income-centred development paradigm would be grossly inadequate to deal with the varied and complex development challenges facing the peoples of the Niger Delta. In failing to address the human development needs of the region, past development planning efforts have resulted in disillusionment and frustration about deepening socio-economic deprivation and environmental devastation. The peoples of the Niger Delta have seen one governmentsponsored development agency after another come and go, without any significant changes in their lives or in the quality of their delicate physical environment. There is clearly a need for a new development paradigm that makes people the centre of all development goals and actions.

A people-centred or participatory approach

to development planning and management involves people's active participation in decision-making on issues that pertain to their livelihoods and interests. This helps people to realize their potential and play an active role in the social and economic transformation of their different communities. А people-centred development paradigm would help not only to achieve the goals of physical and socioeconomic development, but also to empower the local people, who are undoubtedly the most important factor in the development process in the Niger Delta.

Chapter two of this report provides an account of the human development status of the Niger Delta region. It examines poverty scenarios, with the aid of associated metrics and graphics-including the human development index (HDI), the human poverty index for developing countries (HPI-1), the gender-related development index (GDI) and the gender empowerment measure (GEM)-and looks at disparities in the incidence of poverty by location and group. The chapter also assesses the region's progress towards achieving the MDGs.

The focus of chapter three is the

environment-development nexus. The chapter analyses the wide-ranging changes in the Niger Delta environment, attributed to the impacts of oil and gas exploration and exploitation, industrialization and urbanization. The negative social impacts of the environmental problems are highlighted, including the frustrations of the local people with both the oil companies and multinational corporations on the one hand, and the three tiers of government and the environment regulatory agencies on the other hand.

Chapter four dwells on HIV&AIDS, prevailing social vices and the compounding effects of the impoverishment of women and young people. It explores the connections to human development concerns, and advocates for a multisectoral and multi-stakeholder approach to the management of HIV&AIDS.

In chapter five, conflicts and peace-making in the Niger Delta are considered, given their ramifications for the inclusive goals of human development. The origins, incidences and political economy of conflicts are discussed. The chapter also elaborates the requirements for sustainable peace and political stability, as grounds for harnessing the benefits of development in the region. Chapter six looks at the future possibilities for promoting sustainable livelihoods in the Niger Delta. The possible expansion of the economic base of the region, and consequently the institutional labour market framework, would ideally increase opportunities for employment in both the modern and traditional sectors, as well as expand people's occupational or career choices in the pursuit of social and economic activities that offer self-fulfilment and quality of life.

Finally, chapter seven is about development programming and its practical implementation in the Niger Delta. The chapter suggests a seven-point agenda and action strategy to achieve human development. The seven points are peace, governance, economic diversification, promotion of social inclusion, environmentally sustainable development, an integrated approach to HIV&AIDS and partnerships for progress. These, more or less, appear to constitute the necessary building blocks for laying a solid foundation for sustainable human development, and the future of the Niger Delta region.



In line with the people-centred approach to development described in chapter one, this chapter uses several human development indices to assess the Niger Delta region. The analysis highlights empirical deprivation overall, and outlines the disparities between different areas and socio-economic groups. It begins by depicting the nature, extent and spatial patterns of poverty and socio-economic deprivation, underscoring the dismal performance of governments at all levels in addressing critical human development needs.

# POVERTY IN THE NIGER DELTA

The incidence of poverty in Nigeria has increased since 1980 (see table 2.1). According to the Federal Office of Statistics (1999), while poverty incidence was 28.1 per cent in 1980, it rose to 46.3 per cent in 1985. It declined slightly to 42.7 per cent in 1992, before soaring dramatically to 65.6 per cent in 1996. Estimates from the Central Bank of Nigeria (1999) were even higher, with the Bank putting the overall

poverty rate for the country at 69 per cent in 1997. Aigbokhan (1998), using the food energy intake measure, determined the incidence of national poverty as 38 per cent in 1985, 43 per cent in 1992 and 47 per cent in 1996. Evidence from the National Bureau of Statistics suggests that using the food energy intake measure yields a figure of 34.9 per cent in 2004. The relative poverty1 trend reveals that the incidence rose from 28.1 per cent in 1980 to 46.3 per cent in 1985, but declined to 42.7 per cent in 1992. It later rose to 65.6 per cent in 1996 before declining to 54.4 per cent in 2004 (National Bureau of Statistics 2005).

In the Niger Delta, the situation is similar to that at the national level. Except for Rivers and Bayelsa states, where poverty incidence seems to have stabilized at around 44 per cent after an initial jump from seven per cent, the poverty level increased between 1980 and 1996 (see table 2.1). In line with the national estimate, poverty incidence declined between 1996 and 2004.<sup>2</sup> A critical issue in the delta is not only the increasing incidence of poverty, but also the intense feeling among people that they ought to do far better given the enormous resources flowing from their region.

	1980	1985	1992	1996	2004
Nigeria	28.1	46.3	42.7	65.6	54.4
Edo/Delta	19.8	52.4	33.9	56.1	Delta 45.35
					Edo 33.09
Cross River	10.2	41.9	45.5	66.9	41.61
Imo/Abia	14.4	33.1	49.9	56.2	Imo 27.39
					Abia 22.27
Ondo	24.9	47.3	46.6	71.6	42.15
Rivers/Bayelsa	7.2	44.4	43.4	44.3	Rivers 29.09
					Bayelsa 19.98

Source: National Bureau of Statistics 2004.

<sup>1</sup> Relative poverty refers to people living below two-thirds of the average weighted household income.

High prices and the earnings of some workers tied to the oil industry erode the purchasing power of the ordinary person, making poverty more pervasive than conventional measurements reveal. Poverty has become a way of life due to economic stagnation, unemployment, poor quality of life due to shortages of essential goods and facilities, an unbealthy environment and government insensitivity. The critical issue in the Niger Delta is not only the increasing incidence of poverty, but also the intense feeling among the people of the region that they ought to do far better. This is based on the considerable level of resources in their midst, and the brazen display and celebration of illgotten wealth in Nigeria, most of which derives from crude oil wealth. This to a large extent explains why there is so much frustration and indignation in the region. The poverty rate based on self-assessment (or a perception index) is much higher than the data indicate-74.8 per cent in the South-South zone, for example. The perception of what poverty means is reflected by the responses of various participants in the focus group discussions conducted for this report (see box 2.1). The World Bank's definition of poverty more or less confirms people's views (see box 2.2).

Even if poverty is measured as living on less than US \$1 a day, the true levels of

## Box 2.1: Definition of Poverty by the People of the Niger Delta

Among the numerous descriptions of poverty offered by discussants in the focus groups conducted to prepare this report, the following descriptions are typical:

- (a). "The poor person is one who cannot pay school fees for his children; cannot meet any needs, including food; has no farm land and cannot farm well; cannot take part in age-grade activities (responsibilities that are specifically designated to some age groups in communities); cannot afford to send his children to school; wears tattered clothes; is very lean; and has no house to live in. In short, a poor person is one who has nothing. Consequently, he 'has no voice' in the community."
- (b). "When you wake up hopeless as to where the next meal is coming from... when you cannot attend certain functions because you don't have clothes ...when your roof leaks and you cannot change it...when you cannot travel because the transport fares are high...and when the school fees and allied demands are too much to bear.... Then poverty is the cause."

Source: ERML fieldwork 2005.

poverty in the region will still be underestimated. During the preparation of this report, focus groups maintained that poverty had become very prevalent in their localities and gave their opinions on the reasons behind this trend. One discussion made clear that poverty has become a way of life due to economic stagnation; agricultural underdevelopment from soil infertility; unemployment; poor quality of life due to shortages of essential goods, facilities and money; isolation and poor communication; government insensitivity; and an unhealthy environment spreading disease and malnutrition. Such conditions influence most members of the affected communities. It is not only income poverty that is the problem, therefore, but also the lack of access to social and physical infrastructure. When poverty is measured

# Box 2.2: Poverty as Defined by a Multilateral Organization

Poverty is hunger. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is about powerlessness, lack of representation in decision making in the society and lack of freedom to express oneself.

Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action—for the poor and the wealthy alike—a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities.

Source: The World Bank 2006, Poverty Net (http://web.worldbank.org/)

 $<sup>^{2}</sup>$  The outcome of the poverty survey has been seriously debated, with the main thrust of the debate being that the evidence does not reflect the reality on the ground. Besides, given the enormous resources that have been generated from the region, there was no reason for it to experience even an iota of poverty.

in terms of this access, the level in the Niger Delta is high.

While discussing poverty in this region, it is important to appreciate that price regimes for goods and services can be different from those of most other regions. Prices are often higher in remote oil-producing communities, where they are tied to the pricing of services in the oil and gas industry and the much higher earnings of oil sector workers. This erodes the purchasing power of the ordinary person, heightening inflation in the costs of basic needs such as housing, transportation, health care, education and food products. In the absence of commodities and services price surveys for various regions and towns, it is imperative to look at the gross earnings of people in the region beyond the nominal statement of mean income or the proportion of those living on less than US \$1 a day. If tied to purchasing power, the actual poverty level could be much higher.

A critical and realistic assessment of poverty in the Niger Delta region should focus attention on key considerations such as access to health care, education, water, transportation and other basic amenities of life, as well as the extent to which people are involved in decisions that affect them. The facts revealed in chapter one about water supply, housing and education, for instance, point to the immense challenges facing development and the provision of social amenities as a critical support for sustainable livelihoods. In addition, the oil and gas industry has damaged farmlands and fishing grounds, which has harmed traditional occupations such as fishing, farming, lumbering, crafts and small-scale agro-based activities. But these livelihoods have also become unattractive because of weak earnings relative to the oil sector. There is a need not only to revive the traditional forms of work, given the transient nature of the oil industry, but also to give a wider spectrum of people opportunities for survival through a more diverse economy.

Poverty is a cross-cutting issue with numerous dimensions. While it may be measured in terms of the income or resources of an individual, many of the conditions that perpetuate or alleviate poverty are at the communal or societal level. Poverty in the Niger Delta region encompasses the issues of discrimination, neglect and the lack of a voice. Another dimension is that the people of this region have been excluded from tapping into modern infrastructure, even as the resources for transforming other parts of the country have poured out of the Niger Delta.

While poverty may seem to cause deprivation and hinder individual development, it is also the consequence of a number of social and national factors, such as poor governance and the exclusion of particular social groups, including minority ethnic groups, women and youth, from participation in decision-making on matters relating to their welfare. Other issues include poor environmental quality and high levels of pollution, conflict and lack of security, threats to health and well-being including HIV&AIDS, and unsustainable livelihoods and unemployment. A realistic assessment of poverty in the delta needs to include access to bealth care, education, water and other basic amenities, as well as people's involvement in the decisions that affect their lives.

Poverty in the Niger Delta region encompasses the issues of discrimination, neglect and the lack of a voice.



A man scooping water from a shallow well, a typical source of water in the Niger Delta

# THE REVENUE BASE OF HU-MAN DEVELOPMENT

Oil wealth derived from the Niger Delta region sustains the Nigerian Federation. Oil revenues, in the form of crude oil and gas exports, petroleum profits taxes and royalties, and domestic crude oil sales accounted for an average of 79.52 per cent of the total revenues of the Federation

Oil wealth enriches Nigeria as a country, but it has not alleviated the grinding poverty, neglect and deprivation in the region that produces it. from 2000 to 2004. During the same period, the contribution of oil to total export earnings was 79.53 per cent (computed from Central Bank of Nigeria 2004). The role of oil revenues in the statutory allocations cannot be overemphasized. Yet the problem of grinding poverty, neglect and deprivation in the region that produces

Table 2.2 (a):	Revenues	and	Expenditures	of	the	Federal	Government	and	States	in	the	Niger	Delta
Region, 1999													

Fed Govt./ states	Total revenues (N'mn)	<b>Revenues</b> Statutory allocation (N'mn)	Share of statutory allocation in total revenues (%)	Total expenditures (N'mn)	Expenditure Recurrent expenditures (N'mn)	<b>s</b> Capital expenditures (N'mn)	Share of capital ex- penditures in total (%)
Federal Govt.	662,585.3	218,874.5	33.0	947,690.0	449,662.4	498,027.6	52.5
Abia	3,458.3	2,268.5	65.5	3,544.9	2,245.2	1,299.7	36.6
Akwa Ibom	5,389.6	3,161.1	58.6	5,389.6	3,377.3	1,889.3	35.0
Bayelsa	3,938.8	2,666.4	67.6	3,923.5	2,708.4	1,215.1	30.9
Cross River	3,824.9	2,786.4	72.8	3,948.6	2,302.4	1,546.2	39.1
Delta	6,690.1	3,382.8	50.5	7,145.5	4,431.2	2,714.3	37.9
Edo	5,127.2	2,644.2	51.5	5,027.7	3,179.8	1,847.9	36.7
Imo	3,540.5	2,526.5	71.3	3,474.2	2,071.9	1,402.3	40.3
Ondo	4,049.6	2,621.1	64.7	3,941.8	2,681.3	1,260.5	31.9
Rivers	8,379.4	3,196.5	38.1	7,579.2	4,002.6	3,576.6	47.1

Source: Central Bank of Nigeria 1999.

Bad governance and corruption have played essential roles in perpetuating low levels of human development. Tables 2.2a and 2.2b show huge increases in revenues accruing to the Federal and Niger Delta state governments between 1999 and 2003. Statutory allocations from the Federation Account constitute a substantial part of the total (see column 4 in table 2.2b).

"Poverty is caused by poor management and governance. If government manages our resources very well . . . to build hospitals, schools, good roads, poverty will be reduced. When children go to good schools and there are cheaper drugs in our hospitals, everyone will cater for his health and thus reduce the impact of poverty. So our government is causing poverty on the people because they have refused to carry people along."

Source: Focus group discussant, ERML fieldwork 2005.

the nation's oil wealth has remained a daunting reality. The tables show that capital expenditures to provide a basis for rapid progress on human development are low compared to recurrent expenditures on personnel and overheads. While total expenditures increased sharply between 1999 and 2003, the quality of such spending was invariably low, considering the already low level of human development. Bad governance and corruption perpetuated these patterns.

## **GOVERNANCE AND POVERTY**

Given the abject poverty in the Niger Delta, there is a strong basis for people's demands for a greater share of the region's vast oil revenues, particularly as they bear the full burden of environmental degradation caused by the oil industry. Agitation to achieve this goal has spawned various youth groups determined to use violence to claim a share of the wealth they believe to be theirs by right. As shown in chapter one, the revenue allocation system has been contentious, with the oil-producing states shortchanged since the beginning of military rule. Successive governments progressively reduced the derivation percentage from 50 per cent until it was zero during the military era.

The agitation for the control of resources has achieved much in drawing government



Common toilet house found in most riverine communities in the Niger Delta

Table 2.2 (b): Revenues and Expenditures of the Federal Government, States and the NDDC in the Niger Delta Region, 2003

Fed Govt./ states/NDDC	Total revenues (N'mn)	<b>Revenues</b> Statutory allocation (N'mn)	Share of statutory allocation in total revenues (%)	Total expenditures (N'mn)	<b>Expenditure</b> Recurrent expenditures (N'mn)	Capital expenditures (N'mn)	Share of capital ex- penditures in total
Fed Govt.	1,023,241.2	889,197.8	86.9	1,225,965.9	984,277.6	241,688.3	19.7
Abia	17,496.0	12,846.8	73.5	17,022.4	8,562.8	5,588.9	32.8
Akwa Ibom	39,906.5	30,655.5	76.8	56,737.0	34,000.0	20,633.0	36.4
Bayelsa	38,716.0	34,741.9	89.7	27,982.2	13,853.1	10,250.9	36.6
Cross River	17,466.9	12,436.8	71.2	14,542.6	8,225.8	3,300.0	22.7
Delta	65,057.0	51,191.8	78.7	67,148.6	40,858.6	25,410.2	37.8
Edo	17,242.0	11,891.5	69.0	17,292.0	12,564.4	2,169.7	12.5
Imo	18,337.9	13,889.3	75.7	35,175.1	20,922.2	7,277.1	20.7
Ondo	30,528.0	15,114.5	49.5	38,834.4	16,252.3	21,719.0	55.9
Rivers	73,415.0	41,984.1	57.2	70,233.6	36,699.0	28,779.5	41.0
NDDC* ONE	n.a.	9,044.5		n.a.	n.a.	n.a.	

Note: \*The revenue of the NDDC for the years 2000, 2001 and 2003 was N19,988.9 million. *Source: Central Bank of Nigeria 2003.* 

attention to poverty in the Niger Delta and in ensuring that more revenues are assigned to the area. The derivation percentage was raised from three per cent to 13 per cent in 1999, although this still does not satisfy local demands. The National Political Reform Conference held in 2005 was willing to recommend an increase to 17 per cent,

# A low level of physical development points to the fact that the region suffers from poor governance.

Infrastructural development, social amenities and facilities are unduly concentrated in a few cities, without much regard for development in other parts.

Strong-arm tactics characterize electioneering, with thugs often used to terrorize opponents, and prevent free and fair access to the electorate. This erodes public confidence in electoral outcomes, which in turn leads to the declining legitimacy of elected officials and their institutions but this was not enough for regional delegates. Delegates from other regions, however, could not accommodate the demand for an immediate increase to 25 per cent and a programmed increase to 50 per cent in the medium term.

The stalemate brought the conference to an abrupt end and resulted in heightened tension. Militant youths stepped up activities such as hostage-taking and the disruption of oil prospecting and production activities to pressure authorities to make further concessions. The subsequent arrest and detention of some leaders from the core Niger Delta states appeared to be exacerbating the feeling of political marginalization.

While the Niger Delta region deserves much greater attention and revenues to deal with poverty and infrastructure needs, it is also important to acknowledge that, even though the percentage allocated to the delta from the Federation Account appears small, in real terms it amounts to substantial sums of money, enough to significantly improve the well-being of citizens through better service delivery and access to utilities. The fact that the level of physical development in the region has not improved underscores that it also suffers from poor governance. That the Federal Government has had to intervene from time to time to create regional bodies like the OMPADEC and the NDDC to plan for and implement development projects in the region is itself evidence of the failure of state and local governments to carry out their responsibilities to the people. The absence of government in many communities is behind the provision of socio-economic infrastructures by some oil companies.

As in other parts of Nigeria, the Niger Delta region has been split into more states in order to create more centres of growth and administration, and to spread development more evenly across the region. But the benefits of this state creation exercise are not obvious—the states simply have failed to perform. In the core Niger Delta states of Delta, Rivers and Bayelsa, infrastructural development, social amenities and facilities are unduly concentrated in a few cities, notably the state capitals and older administrative headquarters, without much regard for development in other parts of these states.

In a region that produces so much fuel, for example, the electricity supply is very sporadic—Bayelsa State is not even linked to the national electric power grid. The Niger Delta could be served with thermal power stations strategically located to serve the needs of every part of the region. But this is not the case.

Similarly, the delta has a dense network of freshwater distributaries and vast reserves of groundwater, but no part of the region can boast of a regular supply of potable water. And while the watery terrain across the region greatly increases the cost of road building and construction of all types, the vast amounts of money going into the states should have produced a steady increase in the road network over time. Again, this has not been the case. Nor have improvements been made to health and educational facilities, which are in a deplorable state of neglect in many areas outside the state capitals.

Part of the problem of poor service delivery is traceable to the absence of an



A primary school building in one of the riverine villages.

effective machinery to hold elected officials accountable to the electorate. Several years of military rule have left their mark on the culture of governance, with rulers not acknowledging any obligation to be accountable to citizens. Civil democratic rule has not changed the situation much because elections are flawed in several ways. Evidence from focus group discussions revealed that strong-arm tactics characterize electioneering. Those with ample funds employ thugs to terrorize opponents, and prevent free and fair access to the electorate. Federal and state elections are usually rigged and not a reflection of voter preferences, while local elections, conducted by state electoral commissions, are even less related to local wishes. Election administrators and security agencies condone and or abet the perpetration of electoral malpractices, thereby eroding public confidence in electoral outcomes, which in turn leads to the declining legitimacy of elected officials and their institutions.

"If government is to make life better for the citizenry, then there is no government here. Governance here seems to be a god's appointed time for political office occupants to wreck the state treasury without any intention to serve the people. That's why you see heads of council and councillors leaving their areas to make their homes in urban centres." (Focus group participant)

In a stakeholders meeting held in Port Harcourt in February 2006, which drew people from all the states in the region as part of the preparation of this report, one participant said: "In 2003, no election took place in (our state). The State Governor simply allocated figures and put the people he liked in the House of Assembly." Election tribunals in a number of cases have confirmed that elections have been rigged through political manipulation and the connivance of officials.

The insinuation is that most state parliamentarians are not true representatives of the people, and do not owe any allegiance to the electorate but only to the powers that be. Thus, the elected state assemblies in the region do not provide the necessary check on the executive branch in the way money is allocated and spent. There is a very strong belief in the delta that the state governors divert most of the fiscal allocations from the Federation Account and Derivation Fund to their states for their own private use. The mismatch between allocations and the low level of infrastructural development and service delivery seems to lend credence to such a claim. If a particular state gets at least a N6 billion (about \$46.5 million) allocation every month, that should translate into tangible physical developments. The fact that it does not give rise to the legitimate question: Where does all that money go? If it does not give rise to this expected question, another question arises - why is nobody asking?

"...worst of all are the local government officials, who upon electoral success and eventual swearingin, leave the community and reside in the state capital only to be visiting the Council (mainly the Secretariat)...all roads here were last done some 25 years ago...the local government has not graded roads nor tarred them. We have not felt the government impact here." (Focus group participant)

Local governments are even more problematic. This tier of government is closest to the people; it should be the most democratic and responsive to the needs and yearnings of the grass-roots. But non-performance is even worse than at the state level. Local government chairpersons see themselves as 'executive' overlords. They are not responsible to the local council or to the people because their revenues come directly from the Federal Government and not from the locality.

It does not matter what a chairperson does or fails to do—the monthly allocations from the Federation Account will come. Many a chairperson rides roughshod over the local councillors, most of whom are mere puppets willing to do anything to please the chairperson, from whose hands they all, literally, eat. In some of the core delta states, it is an 'open secret' that local officials do not reside in the locality and hardly visit their offices at all for months on end. Yet they collect and disburse the monthly allocations from the Federation Account. No poverty alleviation programme can be implemented in an atIn some of the core Niger Delta states, it is obvious that local officials do not reside in the locality and hardly visit their offices at all for months. Yet they collect and disburse the monthly allocations from the Federation Account.

Part of the problem of poor service delivery is that elected officials are not accountable to the electorate. mosphere of such gross and barefaced official corruption. Still, in the midst of the rot, there are a few good examples that can serve as role models.

"At any point the youths collect themselves into a group, the elders with eyes on elective positions merely hijack us and use us as political thugs with good promises upon political success. But, when they are sworn-in, they become distanced from us and brand us as miscreants. We are aware that youths elsewhere are vanguards of development but it would be difficult here because the basic needs of life are hardly met...so contributing to the society is thus a near impossibility." (Focus group participant)

Although there is no concrete evidence to back it up, it is generally believed that some wealthy politicians within the region fund youth gangs to intimidate opponents and harass oil companies as a deliberate strategy for political power and economic relevance. The conclusion that can be drawn from this is that some of the politicians may be exploiting the low socio-economic status of the Niger Delta youths to serve their own private agenda and in the process further compounding the problems of the region.

The youth question is explored in greater detail in chapter five of this report. Suffice it to say here that the traditional authorities in the Niger Delta have lost much of their clout and respect with the local people, particularly youths. As described in chapter three, many once acted as 'benefit captors', who pocketed compensation money from the oil companies on behalf of landowners and communities. Today, their political influence has declined even as that of the local government chairpersons has risen. Most traditional rulers, chiefs and elders now spend most of their time currying the favour of the local political elite. They are virtually powerless to help lift their people out of their misery.

The conflicts in the region, the disappearance of traditional authority structures and the phenomenon of absentee local officials mean that there is really no effective local government in many areas. As a result, people have developed a siege mentality, with a general sense of insecurity hindering economic activities. People who fish and farm are afraid of the dark because of the risk of being attacked by the numerous armed groups, including hijackers, oil bunkerers, hostage takers, youth gangs and the like. Fishers and farmers wait until it is broad daylight before they go out to work, and they also return before it gets dark. On top of all this, there is the risk of being caught in the crossfire between different militant groups and, much more, between the militant groups and patrolling government law enforcement agents.

### THE CHALLENGES OF ATTAIN-ING THE MDGS

In view of the deplorable level of poverty and the gross failure of governance in the Niger Delta region, it is important to examine the MDGs and the prospects for attaining them, in part as a baseline for future progress. As indicated above, with the mineral and oil derivation share of only 13 per cent since 1999, most of the oilproducing states receive higher revenue allocations than others in the Nigerian Federation. This should mean that the Niger Delta states are in a better position than other states to meet the MDGs.

But a fundamental structural problem remains the much higher costs of meeting the goals in the delta region. As a result of the difficult terrain, the costs of providing residential housing, hospitals, schools, roads, water supplies, etc. are much higher than in most other parts of Nigeria. Chief D.S.P. Alamieyeseigha (2005), the former Governor of Bayelsa State, reported that it cost the Bayelsa State Government about N500 million merely to reclaim the land for the 500-bed state hospital. This is only one example of the daunting challenges to achieving the MDGs.

#### **Assessing Progress**

Assessing whether or not the Niger Delta states are on their way to attaining the MDGs is inherently constrained by the lack of credible data. Even for a basic issue such as poverty, the best measurement indicators have often been controversial. In Nigeria, one debate in the press has been

With high revenues, the Niger Delta states should be in a good position to meet the MDGs, although difficult terrain will make the costs higher than in other areas.

S/N	MDGs	TARGETS	INDICATORS
1.	Eradicate extreme poverty and hunger	<ul> <li>a) Halve, between 1990 and 2015, the population whose income is less than US \$1 per day.</li> </ul>	<ul> <li>Proportion of population below US \$1 per day</li> <li>Poverty gap ratio</li> <li>Share of poorest quintile in national consumption</li> </ul>
		<ul> <li>Halve, between 1990 and 2015, the proportion of people who suffer from hunger.</li> </ul>	<ul> <li>Prevalence of underweight children (under five years of age)</li> <li>Proportion of population below minimum level of dietary energy consumption</li> </ul>
2.	Achieve universal primary education	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	<ul> <li>Net enrolment in primary education</li> <li>Proportion of pupils starting grade I</li> <li>Literacy rate of 15-24 year olds</li> </ul>
3.	Promote gender equality and empower women	Eliminate gender disparities in primary and secondary education, preferably by 2005, and at all levels of education not later than 2015.	<ul> <li>Ratio of girls to boys in primary, secondary and tertiary education</li> <li>Ratio of literate females to males for 15-24 year-olds</li> <li>Share of women in wage employment in the non- agricultural sector.</li> <li>Proportion of seats held by women in national parliament</li> </ul>
4.	Reduce child mortality	Reduce under-five mortality by two-thirds by 2015.	<ul> <li>Under -five mortality rate</li> <li>Infant mortality rate</li> <li>Percentage of one-year-olds fully immunized against measles</li> </ul>
5.	Improve maternal health	Reduce the maternal mortality ratio by three-quarters between 1990 and 2015.	<ul> <li>Maternal mortality ratio</li> <li>Proportion of births attended to by skilled health personnel</li> </ul>
6.	Combat HIV&AIDS, malana and other diseases	<ul> <li>a) Have halted by 2015 and begun to reverse the spread of HIV&amp;AIDS.</li> </ul>	<ul> <li>HIV prevalence among 15- 24 year-old pregnant women</li> <li>Contraceptive prevalence rate</li> <li>Number of children orphaneo by AIDS</li> </ul>
		<li>b) Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.</li>	<ul> <li>Prevalence and death rates associated with malaria</li> <li>Prevalence and death rates associated with tuberculosis</li> </ul>

# Table 2.3: Millennium Development Goals

7.	Ensure envi ronmental sustainability	<ul> <li>(a) Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.</li> </ul>	<ul> <li>Proportion of land area covered by forest</li> <li>Ratio of area protected to maintain biological diversity to surface area</li> <li>Energy use (kg of oil equivalent) per US \$ GDP (PPP)</li> <li>Carbon dioxide emissions per capita and consumption of ozone-depleting chlorofluorocarbons</li> <li>Proportion of population using solid fuels</li> </ul>
		(b) Halve by 2015 the proportion of people with out sustainable access to safe drinking water and sanitation.	<ul> <li>Proportion of population with sustainable access to an improved water source, urban and rural</li> <li>Proportion of population with access to improved sanitation, urban and rural</li> </ul>
		(c) By 2020, achieve a significant improvement in the lives of at least 100 million slum dwellers.	<ul> <li>Proportion of households with access to secure tenure.</li> </ul>
8	Develop a global partnership for development	<ul> <li>a) Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.</li> </ul>	<ul> <li>Debt service as a percentage of exports of goods and services</li> <li>Proportion of ODA provided as debt relief</li> </ul>
		<ul> <li>b) Address the special needs of the least developed countries, including through more generous ODA (official development aid) for countnes committed to poverty reduction.</li> </ul>	Share of ODA in GDP
		<ul> <li>c) In cooperation with the private sector, make available the benefits of new technologies especially for information and communic ations.</li> </ul>	<ul> <li>Telephone lines per 1,000 people</li> <li>Personal computers per 1,000 people</li> </ul>

Source: Millionian Development Goals Report, Negeria, 2004 and 2005

whether the overall level of poverty is around 70 per cent as claimed by many experts and multilateral agencies or about 54.4 per cent as suggested by the Federal Government (according to the *Sunday Vanguard*, 13 March 2005, p. 11).

An MDG assessment done within the limitations on data availability and reliability, however, can still be a useful exercise to help frame a call to take action.

# Areas of concern under the MDGs

There are eight major areas of concern covered by the MDGs, with objectives, targets to be achieved and indicators of performance (see table 2.3). Each area is briefly discussed in the following sections.

Table 2.4:	Poverty in the	e Niger Delta I	Measured by	Income and	Food Intake
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States	Per cent poverty level		Food poverty le by 2,900 calorie	vels as measured s, 2004
	1996	2004	Per cent with calorie intake below 2,900	Per cent above 2900 calories
Abia	58.6	29.95	22.03	77.17
Akwa Ibom	72.3	39.86	31.60	68.40
Bayelsa	44.3	25.64	20.77	79.23
Cross River	61.4	52.60	42.30	57.70
Delta	61.9	41.88	35.57	64.43
Edo	53.3	41.40	35.24	64.76
Imo	53.6	24.80	12.75	87.25
Ondo	71.6	88.84	21.21	78.79
Rivers	44,3	40.65	37.56	62.44
Niger Delta	57.9	42.85	28.78	71.22
Nigeria	65.0	56.90	36.04	63.96

Source: Federal Office of Statistics 2004: 78, 81.

# Table 2.5: Net Enrolment Ratios in Primary and Secondary Schools in the Niger Delta

States	_	ary school enr 4) per cent	rolment	Net secondary enrolment ratio (2004) per cent			
	Male	Female	Total	Male	Female	Total	
Abia	98.1	98.08	98.10	97.05	98.85	97.75	
Akwa Ibom	99.56	93.06	96.31	99.66	98.48	99.07	
Bayelsa	95.68	96.46	96.07	99.58	98.86	99.22	
Cross River	93.92	92.35	93.13	95.77	100.00	97.89	
Delta	93.88	96.88	95.38	99.05	98.76	98.90	
Edo	97.35	96.43	96.89	99.52	100.0	99.76	
Imo	98.33	98.25	98.29	99.29	98.95	99.12	
Ondo	98.48	100.00	99.24	100.00	100.00	100.00	
Rivers	97.47	97.92	97.69	98.55	100.00	99.28	
Niger Delta	97.0	96.6	96.8	98.72	99.32	99.02	
Nigeria	82.21	60.17	81.19	88.51	83.59	86.07	

Source: Federal Office of Statistics 2004: 86-87.

#### 1. Eradicate extreme poverty and hunger

The targets of this MDG include halving the proportions of people whose income is less than US \$1 per day and who suffer from hunger. The overall poverty level in the Niger Delta fell from 57.9 per cent in 1996 to 42.85 per cent in 2004 (see table 2.4). This relative reduction is nowhere near halving poverty, but it may be argued that 2015 is still far off, and there is still the chance that the MDG may be attained. This is doubtful, however, because a drop in the poverty level from 57.9 per cent to 42.85 per cent in eight years represents less than one percentage point annually. At that rate, it will be well beyond 2015 before poverty can be reduced considerably, let alone halved.

As for meeting the target of halving the proportion of people suffering from hunger, this is clearly more difficult to assess for the Niger Delta states given the lack of data. Table 2.4 shows that food poverty as measured by a daily calorie intake of 2,900 calories averaged 28.78 per cent by 2004. Time series data do not exist, however, so it is difficult to measure progress. The Niger Delta states have done better than the national performance level of 36.04 per cent. Only Cross River and Rivers states have done worse than the national average.

#### 2. Achieve universal primary education

The data to assess progress in net enrolment in primary education are readily available. From tables 2.5 and 2.6, there is real hope that the Niger Delta states may just be able to meet the MDG target for universal primary education by 2015 or a little beyond. Net enrolment ratios in both primary and secondary education are very encouraging, with the Niger Delta states outperforming the national scores by considerable margins. This suggests the delta may meet the target of universal education overall. A cautionary note is in order, however, since the other indicators for measuring universal primary education, such as the proportions starting first grade and the levels of preparatory schooling, were not considered because no data are available.

#### 3. Promote gender equality and empower women

There are a number of possible indicators for measuring the MDG targets, as indicated in table 2.3. Table 2.6 presents a comparison of the male and female school enrolment ratios in the Niger Delta. The

States	Primary	Secondary	Tertiary
	education	education	education
Abia	0.999	1.019	0.806
Akwa Ibom	0.935	0.988	0.801
Bayelsa	1.008	0.993	0.599
Cross River	0.983	1.044	0.622
Delta	1.032	0.997	0.696
Edo	0.991	1.005	0.599
Imo	0.999	0.997	0.932
Ondo	1.015	1.000	0.481
Rivers	1.005	1.015	0.738
Niger Delta	0.996	1.006	0.697
Nigeria	0.975	0.944	0.665

<sup>3</sup> This refers to money paid to youths by oil companies for staying at home instead of working in their organizations or for persuading youths not to disturb their operations.

available data suggest that females have equal opportunities for education. The MDG targets on gender equality in primary, secondary and tertiary enrolment have either already been attained or are attainable by 2015.

In some states, a higher proportion of girls than boys are in primary and secondary schools. There is a serious concern, however, that many boys of secondary school age have abandoned their formal education to go into business activities, rather than completing their education. This is particularly common in Abia and Imo states. If not properly addressed, this phenomenon could spread to other parts of the region. 'Standby money'<sup>3</sup> also cuts into enrolment rates at higher school levels.

For tertiary education, the story is a little different. Gender equality is far away in some states, although it could be achieved by 2015. Table 2.6 shows that a few states are already very close.

Although an appreciable number of women are appointed as directors general in state public services, the situation is not the same for political positions. Looking at gender equality as measured by parliamentary seats held by women, many states do not have a single female representative in the National Parliament. This scenario repeats itself in legislatures across the country.

#### 4. Reduce child mortality

Assessing progress in reducing child mortality requires data on such indicators as under-five and infant mortality rates, and the percentage of one-year-olds fully immunized against measles. In the estimates derived from the Nigeria Demographic and Health Survey (NDHS) for 1999, conducted by the National Population Commission, the infant and child mortality rates for the Niger Delta region were estimated at about 48 and 35 per 1,000, respectively, compared with national rates of 71 and 67 per 1,000, respectively. Table 2.7 presents a vivid picture of the situation as of 2003. The Niger Delta region performed very poorly on neonatal, postneonatal and infant mortality, with the worst post-neonatal mortality rate in Nigeria. Even where it performed moderately well, the achievement is not commensurate with the resources generated by the region.

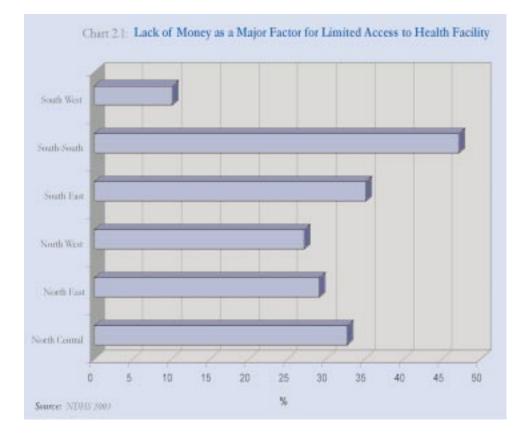
As for immunization against measles, available data show that the proportions of fully immunized under-one-year-olds are 61.5 per cent for males and 49.5 per cent for females. Evidence from the 2003 NDHS reveals that only 20.8 per cent of the children between 12 and 23 months had been vaccinated against the killer diseases as opposed to 32.5 per cent and 44.6 per cent in the South-West and South-East regions of Nigeria, respectively. In addition, only 25.1 per cent of children with acute respiratory infections and fever sought treatment from health providers, as against 52.6 per cent and 49.5 per cent in the South-West and North-Central regions, respectively (see NDHS 2003: 132). Since no time-series data are available, it is extremely

Nationally, 30.4 per cent of women say they cannot afford health care. In the delta, the figure is 47.1 per cent.

		·	2	0	0
	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under-five mortality
National	53	56	109	121	217
North-Central	53	49	103	70	165
North-East	61	65	125	154	260
North-West	55	59	114	176	269
South-East	34	32	66	40	103
South- South	53	68	120	63	103
South-West	39	30	69	47	113

Table 2.7: Child and Infant Mortality Rates by the Regions of Nigeria

Source: NDHS 2003.



The highest incidence of risky sexual behaviour was recorded in the Niger Delta region.

difficult to measure progress on reducing child mortality.

#### 5. Improve maternal health

Estimates derived from the 2003 NDHS suggest a national maternal mortality rate of 22 per 1,000. The proportion of births attended by skilled health personnel (doctors and midwives in a hospital setting) was 74.5 per cent in 1999, but declined substantially to 55.8 per cent in 2003. The South-South zone had the largest proportion of births attended by traditional attendants in 2003-32.2 per cent against three per cent, 6.1 per cent and nine per cent in the South-East, North-Central and South-West regions, respectively (NDHS 2003). Reasons for the poor performance on maternal mortality are limited health facilities and the costs of services. The figures on births attended by unskilled medical personnel are much higher for urban than for rural areas and for educated than for uneducated women.

Nothing can be said about progress being made on maternal health in the Niger Delta since the required time-series data are not available. But in general, the region has very limited access to health care relative to other parts of the country. For instance, 13.8 per cent of the women from the delta sampled in the 2003 NDHS indicated that they did not know where to go for treatment, whereas only 2.5 per cent of the women in the South-West, 5.2 per cent in the North-Central area and 13.7 per cent nationally identified that factor as a problem. The Niger Delta also had the largest proportion (34.8 per cent) indicating that the distance between their residence and the location of health facilities is a major problem. This compares to a national average of 24.4 per cent, and to 5.6 per cent in the South-West, 18.6 per cent in the North-Central area and 21.8 per cent in the North-East. Chart 2.1 clearly shows poverty is a major factor in accessing health facilities. Nationally, 30.4 per cent of women indicate that lack of money inhibits access to health care. In the Niger Delta, the figure is 47.1 per cent.

# 6. Combat HIV&AIDS, malaria and other diseases

HIV&AIDS prevalence in the Niger Delta is among the highest in the country. This report deals extensively with the topic of

Environmental quality ranks among the top priorities in the Niger Delta; environmental degradation is arguably a major source of agitation. HIV&AIDS in chapter four, so it will only be discussed briefly here. Prevalence rates rose in the Niger Delta and nationally between 1999 and 2001, but declined in 2003. This could indicate that the spread of the disease is being curtailed, as the MDGs stipulate. Although there is some indication that current efforts are having some positive impact, the Niger Delta region recorded one of the smallest declines, from 7.7 per cent in 2001 to 5.8 per cent in 2003. The South-West declined from four per cent to 2.3 per cent.

A careful examination of the Niger Delta states reveals that much effort is still needed to fully contain the spread of HIV&AIDS. Cultural factors may have to be seriously considered for much progress to occur. For instance, evidence from the 2003 NDHS reveals that people in the region are the most sexually active of any group in the country's six zones (67 per cent of men have never married, compared to nine per cent in the North-West and 22 per cent in the South-East). Condom use is limited. The survey also reported that the region has the largest number of people who affirmed that they had sex with prostitutes during the previous 12 months and the highest incidence of risky sex.

The incidence of death associated with malaria and tuberculosis in the Niger Delta is still considerably high and will probably remain so by 2015 if current efforts are not stepped up. Estimates by CPED (2004) show that malaria accounts for over 71.2 per cent of the sickness in the Niger Delta. Evidence from the 2003 NDHS reveals that 30 per cent of the children sampled in the region had fever or convulsion compared to 18 per cent in the South-West, 23.6 per cent in the South-East and 24.2 per cent in the North-Central region.

#### 7. Ensuring environmental sustainability

Chapter three of this report is entirely devoted to an analysis of the environmental problems in the Niger Delta, and the social and economic repercussions of industrial activities. Although it is difficult to assess the progress being made towards the attainment of the MDG targets on environmental sustainability, environmental quality ranks among the top priorities of the Niger Delta. Environmental degradation is arguably a major source of the agitation in the region.

The numerous oil spills and the gas flaring in much of the delta have taken an enormous toll on the environment. Pollution has greatly affected the air, water, soils, vegetation and even physical structures. Perhaps more troubling are problems related to limited access to safe drinking water and electricity supply, poor environmental sanitation and waste management, and the lack of security of land and property tenure as highlighted in both chapters one and three. These are all part of the MDG indicators for measuring progress on environmental sustainability.

# 8. Develop a global partnership for development

Many of the MDG targets are better handled at national rather than sub-national levels. Nigeria gives high attention to global and regional partnerships as key instruments for achieving development. It belongs to regional initiatives such as the African Union (AU) and the Economic Community of West African States (ECOWAS). Nigeria is also a key player in global organizations such as the United Nations and its agencies, the World Trade Organization (WTO), the World Bank and the International Monetary Fund (IMF). At home, Nigeria partners with the private sector and civil society in several areas of development.

In the Niger Delta, the issue of partnership for the attainment of not just the MDGs but also overall human development is critically important. Partnerships with oil companies, NGOs, and bilateral and multilateral agencies will be required to carry forward the human development agenda and to attain many of the MDG targets.

The indicators that can easily be measured for the eighth MDG are telephone lines per 1,000 people and personal computers per 1,000 people. As stated in chapter one, available data show that the number of fixed telephone lines in the Niger Delta Most indicators used to compute the HDI do not include the items that the Niger Delta states badly need, such as roads, water, electricity and appropriate waste management, among others. works out at about 38 per 1,000. The growth in these land lines has stalled in the last few years, with the introduction of the global system of mobile communication. Due to this, Nigeria probably already exceeds the target for telephones. The Niger Delta ratio is predicted to be better than Nigeria's, perhaps being one per 20 people.

The story is completely different with respect to the distribution of personal computers. Nigeria's 2004 MDG Report estimates that the number of computers per 1,000 persons remained at 4.1 in 1995 and 1996, rising to 6.6 by 2000. The number of computers must have increased considerably by 2005, but no hard data support this.

# THE HUMAN DEVELOPMENT INDICES

Given the social, economic and political conditions just described, it is of considerable interest to see how the Niger Delta region fares on the human development indices. These include the human development index (HDI), the human poverty index for developing countries (HPI-1), the human poverty index for selected countries in the Organisation for Economic Cooperation and Development (HPI-2), the gender-related development index (GDI) and the gender empowerment measure (GEM). Each of these is a composite index; many indicators go into their calculation (see boxes 2.3, 2.4 and 2.5 for the computations). The indices have been calculated for the nine states of the Niger Delta as well as for the 185 local governments.

In interpreting the results, it is important to note that the human development situation in Nigeria as a whole is deplorable. The use of relative terms-better, higher, worse and lower-should not be misconstrued. The mere fact that a region, state or local government has a higher score on an index than another does not necessarily mean that the human development situation in that region, state or locality is good. As will be clear in subsequent sections of this report, the HDI for the Niger Delta region as a whole is unacceptable considering that it has produced the wealth fuelling development in other parts of the country.



Elume Spill Fire



Gas Flare at Umuchem

State	Life	Adult	Mean	Educational	Real GDP	Adjusted	HD
	expectancy	literacy	years of	attainment	per capita	real GDP	
	at birth (years)	(%)	schooling	(%)	(PPP\$)	per capita (PPP\$)	
Bendel	53.7	65.6	4.00	45.07	5,003.4	5,003.3	0.63
Rivers	50.2	51.9	3.84	35.88	4,860.7	4,860.7	0.53
Cross River	57.8	69.4	3.27	47.36	2,626.0	2,626.0	0.51
Lagos	61.4	65.0	3.92	44.64	2,034.7	2,034.7	0.48
Imo	60.0	75.6	3.80	51.67	1,341.1	1,341.1	0.46
Gongola	57.8	26.0	2.15	18.05	665.1	665.1	0.21
Ondo	49.4	50.6	3.29	34.83	422.9	422.9	0.21
Оуо	51.3	40.4	3.11	27.97	678.1	678.1	0.21
Niger	54.9	16.0	1.04	11.01	1,262.0	1,262.0	0.19
Benue	53.5	27.0	1.91	18.64	809.5	809.5	0.18
Kwara	45.9	40.0	3.00	27.67	1,020.1	1,020.1	0.18
Anambra	44.9	43.1	2.91	29.70	860.1	860.1	0.17
Kano	57.1	12.1	0.73	8.31	692.6	692.6	0.16
Plateau	39.5	36.7	2.18	25.19	1,224.1	1,2241	0.14
Sokoto	49.2	2.7	0.43	1.94	1,246.2	1,246.2	0.12
Bauchi	36.7	39.8	2.03	27.2 1	762.2	762.2	0.12
Ogun	37.4	41.8	2.81	28.80	619.3	619.3	0.12
Kaduna	36.6	30.8	1.52	21.04	876.4	876.4	0.10
Borno	37.0	10.0	0.55	6.85	957.8	957.8	0.04
HDI of 1993	51.5	50.7	1.20	34.20	1,215.0	1,215.0	0.24

#### Box 2.3: The Parameters of the Human Development Indices

#### HDI

- A long and healthy life (measured as life expectancy)
- Knowledge (measured as adult literacy rate and gross enrolment ratio)
- Decent standard of living (measured as GDP per capita, adjusted by PPP US \$)

# HPI-1

- A long and healthy life (measured as probability at birth of not surviving to age 40)
- Knowledge (measured as adult illiteracy rate)
- Decent standard of living (measured as percentage of population not using improved water sources and percentage of children under five who are underweight)

#### HPI-2

- A long and healthy life (measured as probability at birth of not surviving to age 60)
- Knowledge (measured as percentage of adults lacking functional literacy skills)
- Decent standard of living (measured as percentage of people living below the poverty line)
- Social exclusion (measured as long-term unemployment rate)

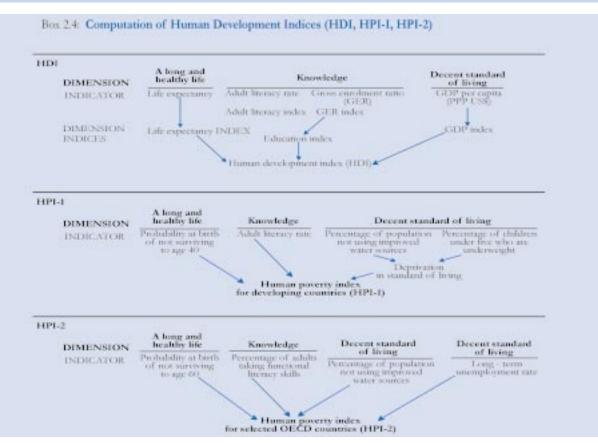
#### GDI

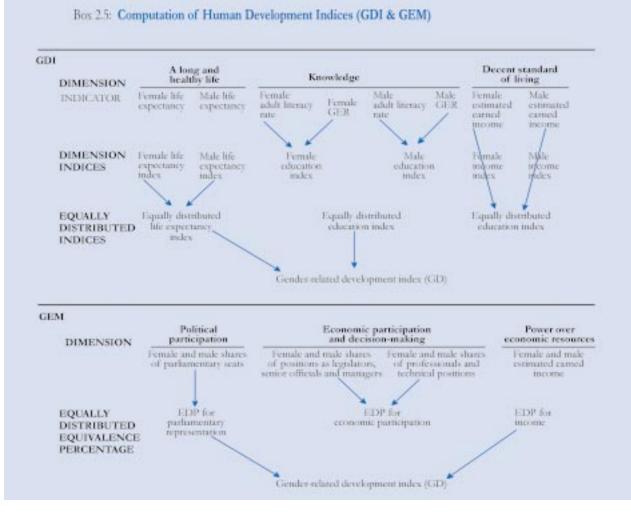
- A long and healthy life (measured as female life expectancy and male life expectancy)
- Knowledge (measured by female adult literacy rate and male adult literacy rate)
- Decent standard of living (measured as female estimated earned income and male estimated earned income)

# GEM

- Political participation (measured as female and male shares of parliamentary seats)
- Economic participation and decision-making (measured as female and male shares of positions as legislators, senior officials and managers, and female and male shares of professional and technical positions)
- Power over economic resources (measured as female and male estimated earned income)

#### Source: UNDP 2004 and 2005





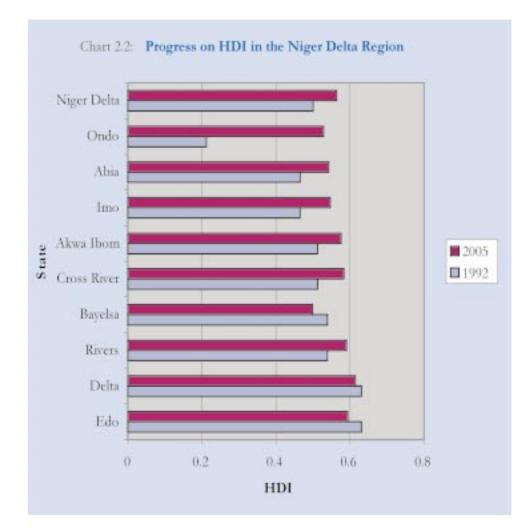
#### The HDI for the Niger Delta Region

In 1996, UNDP computed the first HDI for Nigerian states, for the year 1992. As table 2.8 shows, the Niger Delta states of Bendel (now Delta and Edo states), Rivers (now Bayelsa and Rivers) and Cross River (now Akwa Ibom and Cross River) obtained the highest HDI scores in Nigeria, outperforming even Lagos State. The HDI scores were 0.631 for Bendel, 0.539 for Rivers and 0.513 for Cross River. UNDP (1996) argued that, on the basis of their HDI scores, these three states "would easily have qualified in 1990 as middle human development countries occupying positions 79th, 91st and 96th respectively in the World."

The relative positions of the states seem to have been maintained in 1996, when UNDP again calculated the index and concluded: "A ranking of the Nigerian States by HDI puts, for example, the Edo and Delta States (formerly Bendel State) on the top, with an HDI of 0.666. Were Edo and Delta States constituted into a separate sovereign country, their 'nation' would rank 90<sup>th</sup> in the world—relatively high among the medium-level human development countries." Even now, the situation has not changed. The main concern is the significance of the achievement relative to what has been accomplished in other oil-producing regions.

There are sometimes wide variations among the various local governments in the Niger Delta. In Cross River State, for instance, the Bakassi local government, despite oil drilling, has the poorest HDI in the state—0.36, compared to 0.501 in Calabar, the state's capital. Life expectancy and education indices follow this pattern. The situation in Ilaje, an oil-producing area in Ondo State, is similar.

In Bayelsa State, one of the major oil-producing states, the HDI ranged between 0.255 and 0.422. This is extremely low



# Table 2.9: HDI for the Niger Delta States, 2005

State	Life	Education	GDP index	HDI
	expectancy	index		
Abia	0.492	0.578	0.560	0.543
Akwa Ibom	0.506	0.683	0.540	0.576
Bayelsa	0.455	0.523	0.520	0.499
Cross River	0.556	0.630	0.565	0.584
Delta	0.587	0.636	0.621	0.615
Edo	0.579	0.602	0.600	0.594
Imo	0.503	0.546	0.591	0.547
Ondo	0.501	0.575	0.512	0.529
Rivers	0.563	0.590	0.620	0.591
Niger Delta	0.527	0.596	0.570	0.564

Source: ERML fieldsurvey 2005.

NIGER DELTA HUMAN DEVELOPMENT REPORT

Table 2.10: Trends in Human Development for Nigeria, 1975 - 2005

YEAR	HDI	HPI-1	GEM	GDI			
1975	0.324	-	-	-			
1980	0.385	-	-	-			
1985	0.401	-	-	-			
1990	0.430	-	-	-			
1995	0.455	-	-	-			
2000	-	-	-	-			
2002	0.466	35.1	-	0.458			
2005	0.453	38.8	-	0.439			
Source: UNDP 2004 and 2005.							

The human development situation in Nigeria as a whole, as measured by the HDI, has declined, although the drop off appears to be steeper for the Niger Delta states than for the rest of the country.

Table 2.11: Comparative Analysis of Human Development Indices, 2005	Table 2.11:	Comparative	Analysis of	Human	Development	t Indices, 20	05
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HDI	HPI-1	GDI
0.453	38.8	0.439
0.791	11.4	0.781
0.281	64.4	0.271
0.963	3.6	0.960
$158^{th}$ out of	$75^{th}$ out of	$123^{rd}$ out of
177 countries	103 countries	140 countries
	0.453 0.791 0.281 0.963 158 <sup>th</sup> out of	0.453         38.8           0.791         11.4           0.281         64.4           0.963         3.6           158 <sup>th</sup> out of         75 <sup>th</sup> out of

\*The GEM could not be computed for Nigeria due to data problems.

Source: UNDP 2005, Country Fact Sheets.

compared to the neighbouring Rivers and Delta states. It is a clear indication of unequal development, often because local governments are not using resources generated from oil to improve the lives of local inhabitants.

Table 2.8 may not convey the entire picture on ground. A number of the Niger Delta states, including Bendel, Rivers and Cross River, have higher (sometimes significantly) levels of adult literacy than some western states, such as Oyo, Ondo and Ogun. Historically, the western states had earlier access to education, and their Action Group governments emphasized free education in the 1950s and 1960s. As a result of low educational ratings, the three Niger Delta states above are classified as 'educationally disadvantaged'. Therefore, the gulf between the HDI of 0.539 for Rivers State and 0.126 for Ogun State does not appear to reflect the actual quality of human development in the two states over time.

For 2005, Table 2.9 shows the average HDI for the Niger Delta states as 0.564. The average in 1992 was 0.472, with Bendel (now Delta and Edo states) the highest performing at 0.631. In table 2.8, the highest performing state, Delta, has

An important limitation of the HDI in the Niger Delta region is that the income data used to compute the per capita GDP component include oil revenue, much of which is not retained within the region. an HDI of 0.615, which represents a slight drop. In the 2002 global HDI ranking of countries, Delta would have ranked in the 125<sup>th</sup> position with Morocco, a big drop from the position of 90<sup>th</sup> in 1996. Clearly, the relative human development situation in the Niger Delta has declined. It is also important to note the gulf between what people have defined as indicators of poverty in the region (see box 2.1) and the HDI (and HPI) indicators. The former appear to be more in accord with the real quality of life issues and infrastructural challenges in the region.

Evidence from Chart 2.2 reveals that while some states made appreciable progress between 1992 and 2005, most states from the Niger Delta region, especially the South-South geo-political zone, performed poorly. Edo, Delta, and Bayelsa showed some retrogressive trends, while Ondo, Abia, Akwa Ibom, Cross River, and Rivers and Imo states achieved some progress.

For Nigeria as a whole, the average HDI rose from 0.324 in 1975 through 0.430 in 1990 to 0.466 in 2002 (table 2.10). It then fell to 0.453 in 2005. This suggests that the human development situation in Nigeria as a whole, as measured by the HDI, has declined, although the drop off appears to be steeper for the Niger Delta states than for the rest of the country. In general, Nigeria's performance on the HDI is not disappointing, but the improvement has been modest compared to other developing countries, and poor compared to the best performing countries in sub-Saharan Africa and the rest of the world (table 2.11).

The Niger Delta states will appear relatively high on the HDI indicators of life expectancy, knowledge and GDP per capita. These, unfortunately, do not include the items that the Niger Delta states badly need, such as roads, water, electricity, appropriate waste management and so on. It will therefore be necessary to look beyond the HDI for an effective assessment of the delta's problems.

The well-known limitations of the HDI in the region have to be borne in mind. For instance, the data on income used to compute the per capita GDP component include oil revenue, much of which is not retained within the Niger Delta region. The HDI also does not adequately capture severe environmental degradation and poor infrastructural provision because of the nature of its measurement parameters. The Niger Delta states do rank relatively high on the HDI indicators of life expectancy, knowledge and GDP per capita values. Unfortunately, these do not include the items the states badly need, such as roads, water, electricity, appropriate waste management and so on. There is a sharp contrast between the quantitative indicators and the real quality of life of the people in the region. It is necessary to look beyond the HDI for an effective assessment of the problems of the Niger Delta.

To start, the poverty and human development situation in the region should be viewed in terms of what is happening in comparable oil-producing regions of the world. If the various governments in Nigeria and in the Niger Delta region are not doing this, the local people are making these comparisons and genuinely feel that they should fare much better than they are at present. In contrast to the poor human development situation in Nigeria generally, and the Niger Delta region in particular, Saudi Arabia, the world's leading oil-producing country, has been doing rather well. According to the 2003 global Human Development Report, the HDI for Saudi Arabia was 0.800. The country was rated 0.792 on life expectancy, 0.838 on educational attainment (with literacy at 0.790 and the enrolment ratio at 0.858) and 0.721 on per capita income (see chart 2.3). It is easy to see that the oil wealth of Saudi Arabia has served the country well in terms of enhanced human development.

Indonesia is another oil-producing country that is almost at the same level of development as Nigeria. Even there, the human development situation is slightly better than in the Niger Delta. Indonesia's HDI for 2002 was 0.658, which is higher than the Niger Delta average of 0.564. Life expectancy in Indonesia was rated at 0.662, compared with 0.527 for the Niger Delta; adult literacy was at 0.895, compared with 0.673 on the education index for the Niger Delta; and real per capita consumption was at 0.592 compared with the Niger Delta's GDP index of 0.570. Chart 2.4 provides a good illustration of the human development progress in the Niger Delta region compared to other oil-producing countries. From this, it is clear that the delta could have reached a different outcome had the region's wealth been used judiciously. Countries such as Libya and Venezuela have also performed better than both Nigeria as a whole and the Niger Delta region in particular.

#### The HPI-1 for the Niger Delta Region

The human poverty index, compared with the HDI, focuses on more fundamental parameters of human development. Rather than using gross measures such as life expectancy and GDP per capita, the HPI-1 addresses issues of survivorship, access to improved water supply and the nutritional level of children under the age of five. Table 2.12 shows the average HPI-1 for the Niger Delta states is 28.8 per cent for 2005, compared with 38.8 per cent for Nigeria as a whole. This again means that the Niger Delta states have outperformed the rest of the country. But the Niger Delta average HPI-1 of 28.8 per cent is far worse than that of Saudi Arabia (14.9 per cent), Indonesia (17.8 per cent) or Venezuela (8.8 per cent).

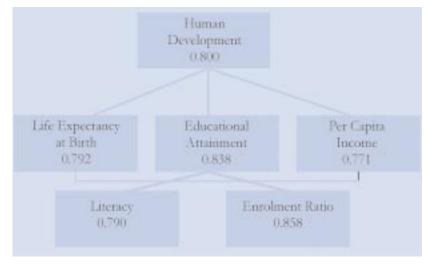
The best performing states in the Niger Delta are Delta at 22.4 per cent and Edo at 23.4 per cent. The worst performers are Ondo at 35.4 per cent and Bayelsa at 33.8 per cent. If Delta, the best performing state, were to be a nation, its world ranking on the HPI-1 would have been 43<sup>rd</sup>, placing it high among the mediumranking developing countries.

# Gender Disparities in Human Development

The term gender refers to socially constructed roles and social expectations of individuals, based on their sex as male or female. Using the biological differences of men and women, society erects institutions, rules and regulations that determine what is expected of individuals, what their rights and privileges are, what resources they can access, whether or not they can participate in societal decision-making, and so on.

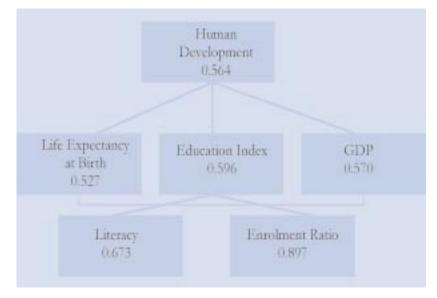
# Chart 2.3: Comparative Human Development Indices Between Saudi Arabia and Nigeria (Niger Delta Region)

#### a. Saudi Arabia



Source: Government of Saudi Arabia 2000.

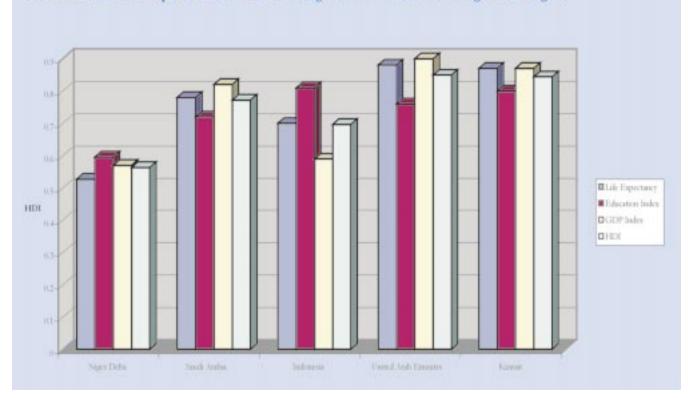
#### b. Niger Delta





In other words, the power of an individual derives from the society in which he or she resides, temporarily or otherwise, and the way gender is constructed in that society.

Like other categories of differentiation, such as ethnicity, race, class and language, gender can determine a person's life chances, and shape their ability to participate in the socio-economic and political life of a community or society. While some categories of differentiation are ab-



# Chart 2.4: Human Development Index in Oil Producing Countries Relative to the Niger Delta Region

sent in some societies (for example, race is not a normal category in Nigeria), all countries of the world, albeit to different degrees, experience gender disparities.

These present themselves as different forms of asymmetries between men and women that ensure that one sex is favoured at the expense of the other. Gender brings about such disparities as unequal opportunities in employment, unequal rewards for similar work, unequal access to various kinds of productive resources, and an unequal capacity to participate in and influence decisions that shape the development process. Closing gender gaps is generally attractive, not only because it improves the lives of women and tends to raise their relative status, but also because

## Table 2.12: HPI-1 Index and Its Parameters for the Niger Delta Region

State	Probability at birth of not surviving to age 40	Adult illiteracy rate	Unweighted average	HPI-1
Abia	26	26	34	29.169
Akwa Ibom	27	28	35.5	30.649
Bayelsa	30	31	39	33.826
Cross River	26	28	33	29.3
Delta	20	18	27	22.355
Edo	22	18	28	23.399
Imo	25	29	32	28.949
Ondo	30	31	42.5	35.442
Rivers	24	24	30.5	26.53
Niger Delta Source: ERML 2005.	25.556	25.889	33.4	28.847

gender equity improves human development.

The gender gap must be narrowed in the Niger Delta for two main reasons. First, Nigeria is going through a democratization process. All efforts should be made to include and involve all citizens in governance and in the development decisionmaking process in the Niger Delta. Secondly, development goals and aspirations have a much greater chance of success if all citizens participate in the process of achieving them. A more inclusive participatory process at the local, state and regional levels would allow the Niger Delta to benefit from new priorities and perspectives brought in by talented women. For example, a process including more women in strategic decision-making might find a way to reduce the negative externalities from oil production.

In narrowing the gender gap, with the objective of eventual elimination, extra attention must be paid to citizens whose needs have been neglected for a long time. A more equitable and gender-balanced society would help achieve this, leading to improved economic and social trends overall, and the attainment of truly sustainable development.

Table 2.13: GDI for Niger Delta States, 2005							
	Equally	Equally	Equally				
	distributed	distributed	distributed				
	life expectancy	educational	income index				
State	index	index		GDI			
Abia	0.443	0.492	0.339	0.425			
Akwa Ibom	0.504	0.518	0.151	0.391			
Bayelsa	0.450	0.652	0.227	0.443			
Cross River	0.480	0.621	0.342	0.481			
Delta	0.530	0.614	0.168	0.437			
Edo	0.486	0.682	0.301	0.490			
Imo	0.503	0.615	0.162	0.427			
Ondo	0.462	0.568	0.327	0.452			
Rivers	0.480	0.609	0.273	0.454			
Niger Delta	0.482	0.597	0.254	0.444			
Source: ERML 2005.							

Table 2.13: GDI for Niger Delta States, 2005

# Table 2.14: GEM for Niger Delta States, 2005

State	Equally distributed equivalent percentage			
	(EDEP)	EDEP economic	EDEP for	
	parliamentary	participation	income	GEM
Abia	0.211	0.878	0.032	0.374
Akwa Ibom	0.222	0.870	0.063	0.385
Bayelsa	0.142	0.906	0.050	0.366
Cross River	0.207	0.875	0.057	0.380
Delta	0.077	0.813	0.084	0.325
Edo	0.207	0.949	0.085	0.413
Imo	0.041	0.923	0.062	0.342
Ondo	0.707	0.918	0.066	0.564
Rivers	0.317	0.916	0.092	0.441
Niger Delta	0.237	0.894	0.066	0.399
Source: ERML fieldn	vork. 2005.			

#### The GDI for the Niger Delta Region

#### The GEM for the Niger Delta Region

There is a paucity of data at the local government level, including information on fiscal operations.

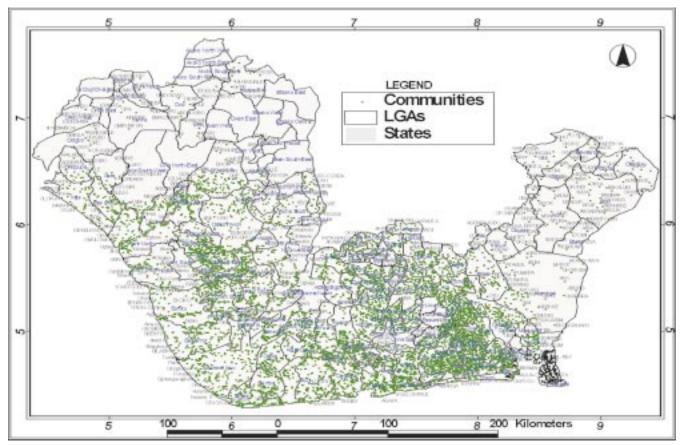
While the HDI measures average achievement, the GDI adjusts this average achievement to reflect the inequalities between men and women. For the Niger Delta states, the average GDI for 2005 was 0.444, compared to 0.439 for Nigeria (see table 2.13). This indicates that the Niger Delta states have outperformed the national average, although such states as Abia, Delta and Imo have performed below the average. The delta region has done comparatively well with respect to gender equality in education, as measured by the equally distributed educational index, and in terms of life expectancy. The states have done badly, however, on gender equality and income, particularly Akwa Ibom, Delta and Imo states.

The delta's GDI score fares poorly in comparison with the scores of other oilproducing countries. In 2003, Oman scored 0.759, Venezuela 0.765, Saudi Arabia 0.749 and Indonesia 0.691 (UNDP, 2005). Gender equality in the Niger Delta still clearly remains an important development challenge. The GEM measures that extent to which women are excluded from opportunities in a given country. The average GEM for the Niger Delta states is 0.399 (see table 2.13). In the human development reports on Nigeria produced so far, the GEM could not be calculated because of data problems. This is the same case for many sub-Saharan countries.

Compared with the lowest GEM performers in the world—Yemen (0.123), Saudi Arabia (0.207) and Iran (0.318)—the Niger Delta is not doing too badly, but efforts need to be stepped up. While all the states performed very well on participation, the income index is quite low. In Imo, Delta and Bayelsa states, women's participation in parliamentary activities is very low relative to other states (see table 2.14).

# Human Development at the Local Level

Map 2.1 contains the spatial distribution of local government areas in the region. Capturing spatial inequalities in human



Map 2.1: Administrative Map of the Niger Delta Region of Nigeria Showing Local Government Areas.

development in the Niger Delta region requires data and analysis on the local level. But there are little or no data available, including on fiscal operations. Data are generally not available for life expectancy, the probabilities of not living to age 40 or 60 years, or male and female estimated earned incomes.

Across Nigeria, no local data on GDP per capita exist because local contributions to GDP have never been measured, although this issue is currently being addressed. GDP per capita has instead been calculated as the internally generated revenue of local governments per capita. This serves as a proxy for measuring local economic activities. Some reservations crop up in using this calculation to measure GDP, however, because it often does not reflect the real lives of local people or local economic potentials, given the high levels of both misappropriated funds and tax evasion.

To calculate the human development indices for this report, the missing data were interpolated using standard spatial interpolation techniques. In some cases, state scores were used as benchmarks and local scores were derived by weighting the state score with the overall local scores on the indicators with available data.

For the HDI, HPI-1, GDI and GEM, data have been mapped to show the spatial pattern of each index across the Niger Delta region. In order to highlight the disparity in the human development indices between the drier and the more swampy zones, maps were produced to reclassify localities into dry land and swamp land, and to show links between ecology and human development. The swamp land comprises the freshwater swamp forest, mangrove swamp forest and barrier island ecological zones; the dry land includes the lowland rainforest ecological zone and the areas outside the core Niger Delta.

In order to track the influence of oil operations (Map 2.2), the indices were also linked to the distribution of oil facilities. Overall, the human development scores have been broken into high, medium and low categories.

# The HDI for Local Government Areas

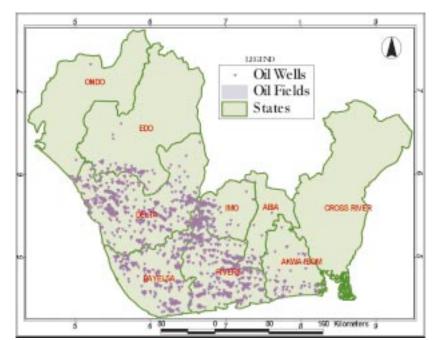
Local HDIs are comparatively lower than state rankings. This is partly a result of using internally generated revenue as a surrogate for GDP in the calculation of the HDI. But the HDI values are still useful in showing the variations in human development across each state.

The best performing local government areas are Udu in Delta State (0.579); followed by Aniocha South in Delta State (0.561); Port Harcourt in Rivers State (0.557); Warri North (0.555), Burutu (0.551), Oshimili South (0.529), Ethiope West (0. 526), Warri South (0.525), Ndokwa West (0.522) and Oshimili North (0.522), all of which are in Delta State; and Aba South in Abia State (0.518) (appendix A2.1). Just as Delta State is the best performing state on the HDI, nine of these 11 best performing localities are in Delta State. Out of 19 local government areas with an HDI of 0.5 and above, 14 are in Delta State. Two are in Rivers State, and one each are in Cross River, Abia and Akwa Ibom states.

The worst performing localities are Ifedore (0.229), Ese Odo (0.240) and Akoko South East (0.243), all of which are in Ondo State; Opobo/Nkoro in Rivers State (0.253); Onna (0.254) and Orukanam

Six out of the eight local government areas in Bayelsa State scored less than 0.3 on the HDI, partly as a result of the difficult terrain or neglect from different tiers of government.

There is a wide disparity in local performances on the HDI. Urban localities tend to perform best. The most poorly performing areas are rural



Map 2.2: Administrative Map of the Niger Delta Region of Nigeria Showing Oil Wells and Oil Fields

Only a few local governments with high HDI scores are in the swamp land zone-mainly in areas with extensive oil production.

Bayelsa State is wholly in the swamp land zone. It has suffered neglect from successive administrations at the local, state and federal government levels. (0.257) in Akwa Ibom State; and Obio Ngwa in Abia State (0.256) (appendix A2.1). While no locality scored less than 0.3 in Cross River State, the corresponding number of the local government councils for other states is Delta (1), Imo (2), Rivers (3), Abia (5), Bayelsa (6), Ondo (7) and Akwa Ibom (11). Six out of the eight local government areas in Bayelsa State scored less than 0.3 on the HDI, partly as a result of the difficult terrain and neglect by the different tiers of government.

When the local HDIs are compared with the national average, 37 localities scored above the national HDI of 0.453 for 2005, while 62 have HDIs of 0.400 or above. Thirty-nine scored below 0.300. This demonstrates a wide gap. A graphic account of the comparative performance of the Niger Delta states (and, by implication, the component localities) appears in maps 2.2 to 2.9.

The data suggest that ecology, GDP, and, to some extent, the location of oil facilities best explain the high HDI levels in certain parts of the Niger Delta region. Most of the best performing local governments are urban; the poorest performers are mostly rural. Ondo State has more of the worst performing local governments, while Delta State has more of the best performing. This suggests that a human development agenda for the Niger Delta region must pay special attention to the varying needs of different locations. Map 2.3 makes clear that ecology plays a role in HDI scores, but is not the only factors behind the variations. Only a few local government areas with high HDI scores are in the swamp land zone, such as Burutu, Warri North and Warri South-West)—mainly in areas with extensive oil production. Oil companies have contributed appreciably to putting infrastructure in place in some of these communities.

Bayelsa State localities, with one exception, have low HDI scores. The state has suffered neglect from successive administrations at the local, state and federal government levels, presumably for three main reasons. First, the number of oil facilities is low. Second, the entire state is within the difficult mangrove swamp zone. Third, there is no major urban area, such as Warri or Port Harcourt, to act as a 'growth centre'. One of the reasons for carving out the state from the old Rivers State was to bring development to the people in the area. Nine years after Bayelsa State's creation, however, development remains elusive.

Map 2.4 shows the relationship between the distribution of oil facilities and HDI scores. The map reveals some correspondence between areas with oil facilities and high HDI scores. This is true particularly in Delta State, which receives the highest revenue allocation in the region and indeed in Nigeria (see chart 2.5). But many localities with oil facilities still rate low on the

Chart 2.5: Revenue Allocation to Niger Delta States (May 1999-October 2005)

In Bayelsa State, most local government areas with oil facilities score low on education. HDI, particularly in Bayelsa and Rivers states. Poor planning and coordination of development activities between oil companies and governments help account for why development initiatives have not translated into meaningful development outcomes.

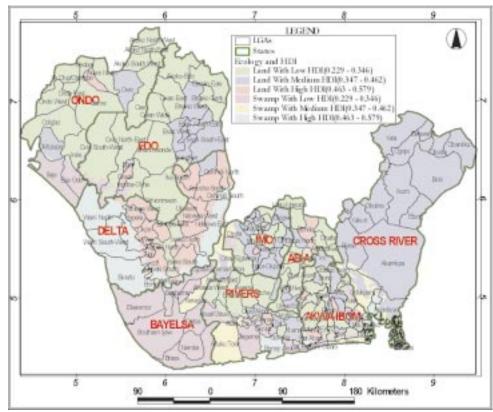
An analysis of HDI trends in terms of dry and swamp lands reveals some interesting tendencies for the components of the HDI. Of the few areas in the swamp zone with high HDI scores, only Warri North and Warri South-West have high life expectancies (see map 2.5). Burutu, Ughelli South, Patani and Ndokwa East (Delta State), Bonny (Rivers State) and Ikot Abasi (Akwa Ibom State) all have low to medium life expectancies.

Map 2.6 displays patterns in education. All localities with high HDI scores fare only low to medium on educational performance. A measure of the high degree of deprivation in Bayelsa State, as a whole, is the fact that its educational index is also low.

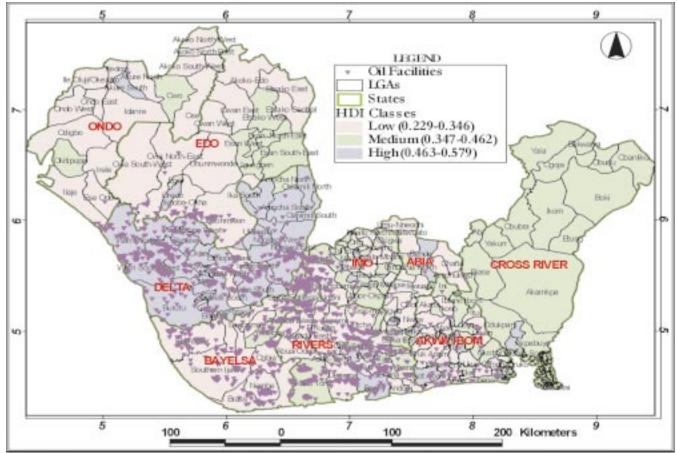
Maps 2.7 and 2.8 show that most local governments in the state fall in the category

of places with oil facilities and a low educational index. In Cross River State, Bakassi has the largest oil well and facilities, but it has the lowest educational index in the state. A similar situation is observed for Ukwa East in Abia State; Ohrionwon and Ikopa Oka in Edo State; Ilaje and Ese Odo in Ondo State; and Mbo, Ikot Abasi and Mkpat Enin in Akwa Ibom state. Other localities with an inverse relationship between the presence of oil wells and educational achievement are Isoko South, Oshimili North and Oshimili South in Delta State, and Degema, Obia/Akpor, Oyibo and Ogba/Egbema/Ndoini in Rivers State.

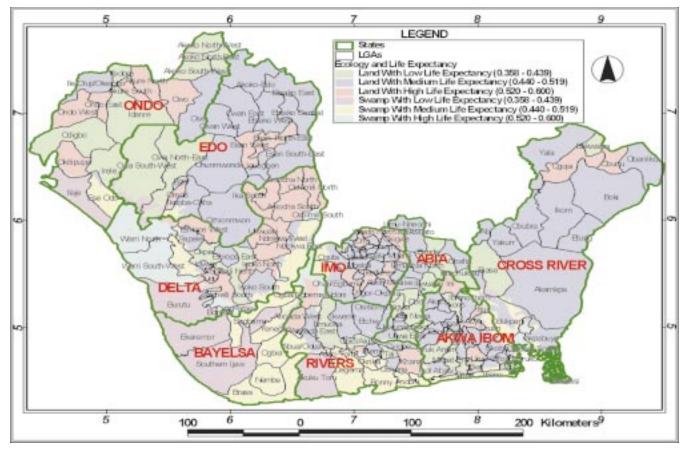
A noticeable feature of the HDI mapping is that urban areas—such as Port Harcourt and Eleme in Rivers State, Oredo in Edo State, Owerri in Imo State and Akure North in Ondo State—have high HDI scores and rate high or medium on the individual parameters of life expectancy and education. Some urban areas with high HDI scores do not have oil facilities. This suggests that urban centres have socio-economic infrastructure allowing greater access to education, health and economic opportunities than their rural counterparts.



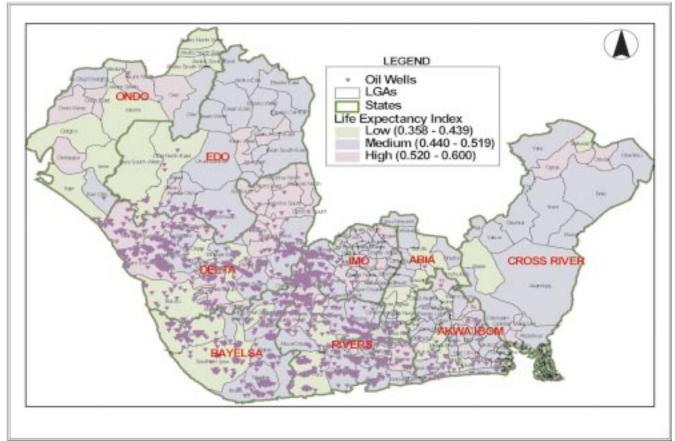
Map 2.3: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and HDI Classes



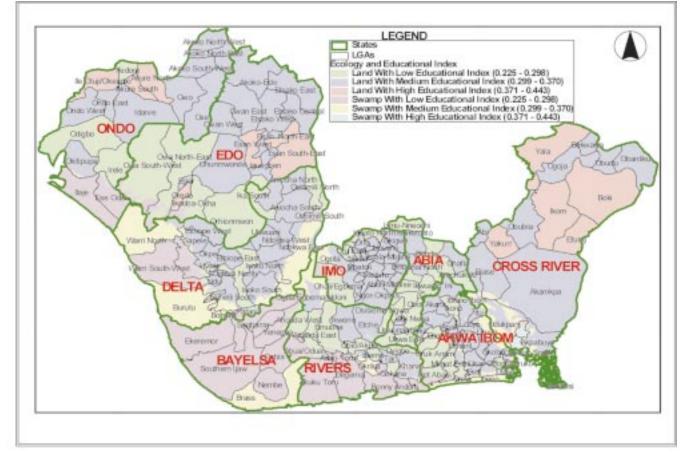
Map 2.4: Map of the Niger Delta Region Showing the Spatial Correspondence Between Oil Facilities and HDI



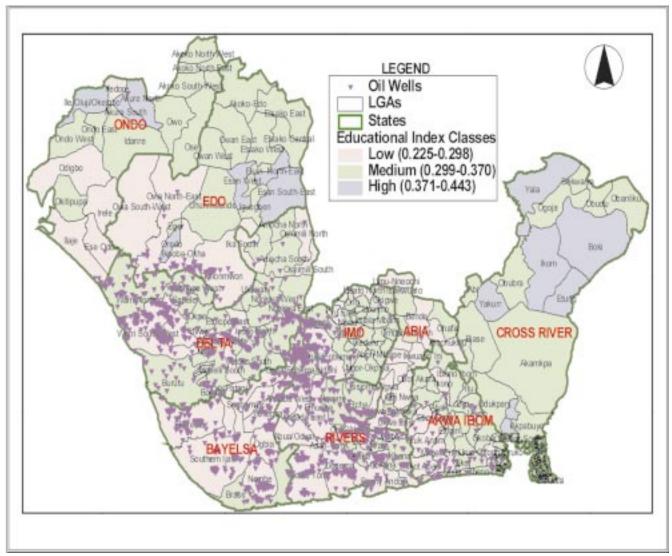
Map 2.5: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and Life Expectancy Index



Map 2.6: Map of the Niger Delta Region Showing the Spatial Correspondence Between Oil Facilities and Life Expectancy Index



Map 2.7: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and Educational Index



Map 2.8: Map of the Niger Delta Region Showing the Spatial Correspondence Between Oil Facilities and Educational Index

The medium HPI-1 score for six of the eight local government areas in Bayelsa State shows that benefits derived from oil have not transformed people's lives. Yenagoa and Brass, the state's most developed areas, have high incidences of poverty.

## The HPI-1 for Local Government Areas

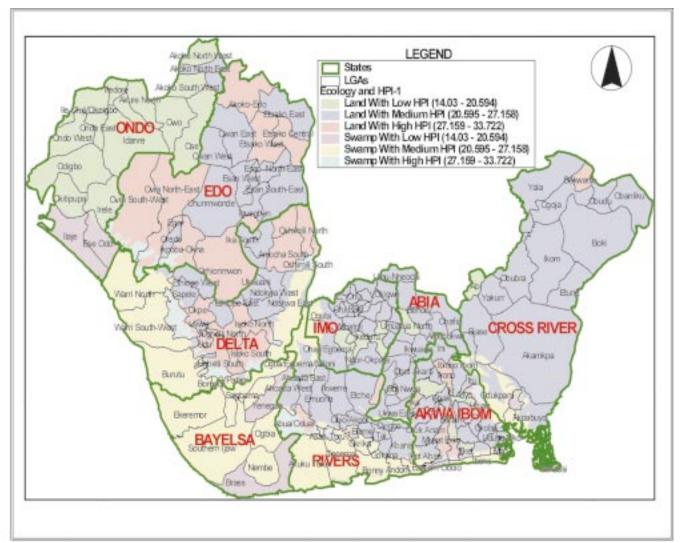
The best performing local government area on the HPI-1 is Oshimili North in Delta State at 15.794 per cent, while the worst performing is Odigbo in Ondo State at 33.722 per cent. Considering that the national HPI-1 is 38.8 per cent, this would mean that even the worst performing locality in the Niger Delta has surpassed the national average. But the best score is still worse than the 11.4 per cent score for Mauritius, the top country on the HPI-1 in sub-Saharan Africa.

HPI-1 performances vary widely across the region. Delta State has the lowest level of disparity, while Edo State has the widest variation. Against the regional average of 32.065 per cent, five states (Delta, Rivers, Bayelsa, Imo and Ondo) rank better, while four states (Cross River, Abia, Akwa Ibom and Edo) rank worse (table 2.14).

There are relatively few localities that perform well on the HPI-1 in both the dry and swamp land areas (map 2.9). Most of the better-off areas are in Edo and Delta states (table 2.15). In the swamp land zone, it is difficult to locate any locality with a low level of poverty. Across the Niger Delta region, only 31 local government areas, or 20 per cent of the total, have low poverty levels. Those with low HPI-1 scores also have high or medium scores on the HDI, which is as it should be. Some rated high on the HDI, such as Burutu, Warri North and Warri South-West, only have medium HPI-1 scores, which further buttresses the fact that poverty levels can be high even in the midst of oil wealth.

Table 2.14: Dis	parities in the H	HPI-1		
HPI-1	High	Low	Disparity	Rank
Cross River	28.232	18.860	33.196	6th
Abia	32.862	21.686	34.009	7th
Edo	26.230	14.030	46.512	9th
Ondo	33.337	23.284	30.156	5th
Akwa Ibom	29.075	18.564	36.151	8th
Bayelsa	31.138	22.428	27.972	3rd
Delta	24.710	18.787	23.970	1st
Imo	29.261	20.871	28.673	4th
Rivers	28.137	20.275	27.942	2nd
Niger Delta				
Average	29.220	19.865	32.065	

Source: Computed from the field survey conducted for this report.



Map 2.9: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and HPI-1 Index

HPI-1	Number of lo	cal government areas	Total number	
	Low (less	Medium (20.595	High (27.159	
	than 20.595)	to 27.158)	and above)	
Cross River	2	14	2	18
Abia	-	14	3	17
Edo	10	8	-	18
Ondo	-	2-	18	20
Akwa Ibom	5	21	5	31
Bayelsa	-	6	2	8
Delta	11	14	-	25
Imo	-	22	5	27
Rivers	3	19	1	23
Niger Delta	31	116	36	187

## Table 2.15: Categorization of Local Governments by HPI-1 Performance

Source: Computed from the fieldsurvey conducted for this report.

Areas without oil facilities appear to fare better on the poverty index than those with oil facilities—another indication of the unequal distribution of oil resources. Map 2.10 shows the HPI-1 scores in relation to the distribution of oil facilities. As is the case with the HDI, localities with oil facilities could be assumed to attract more social and economic activities and to score better. Unfortunately, this is not quite the case—most areas with oil facilities have high or medium scores, indicating pervasive poverty. Areas without oil facilities appear to fare better than those with oil facilities—another indication of the unequal distribution of oil resources.

The high scores on the HPI-1 in those areas without oil facilities are not easy to explain by looking at the individual parameters that make up the index. In Abia, Akwa Ibom, Cross River, Delta, Edo, Imo and Rivers states, most localities with a high or medium HPI-1 score also rate high or medium on the life expectancy index. The same is true but to a lesser extent in the correlation between the HPI-1 and the educational index. A few localities with a high HPI-1 score low ratings on both the life expectancy and educational indices, particularly in Edo State (e.g., Ovia North-East, Ovia South-West and Orhiomwon), Abia State (e.g., Ikwuano, Ngwa, Ukwa East, etc.) and Akwa Ibom State (e.g., Mkpat Enin).

All but two of the local government areas in Ondo State (Akoko North West and Akoko South East) have high HPI-1 scores. Cases of low HPI-1 ratings indicate that the Niger Delta region has resources beyond oil and gas that can generate sustained economic growth and development. The Niger Delta is so richly endowed that all that needs to be done is to harness, in a more coordinated manner, the diverse possibilities within the region.

## The GDI for Local Government Areas

In terms of gender, many localities did relatively well on the equally distributed education index, but poorly on the equally distributed income index. The best performers on the GDI are Ondo East (0.556) and Ondo West (0.553) in Ondo State, Oredo in Edo State (0.544), Port Harcourt in Rivers State (0.543) and Calabar Municipal in Cross River State (0.543). The worst performing local government areas include Mkpat Enin in Akwa Ibom State (0.295), Burutu in Delta State (0.307) and Mbo in Akwa Ibom State (0.310). These scores may be compared with the national GDI of 0.439 as well as the GDI for the worst performing country in subSaharan Africa, the Niger Republic, which is 0.271.

The GDI rankings for the Niger Delta localities suggest they have done well overall. As with the HDI and HPI-1, however, the disparities are wide. The difference between the best and worst performers is 0.261, with the worst performer scoring less than half the value for the best performer.

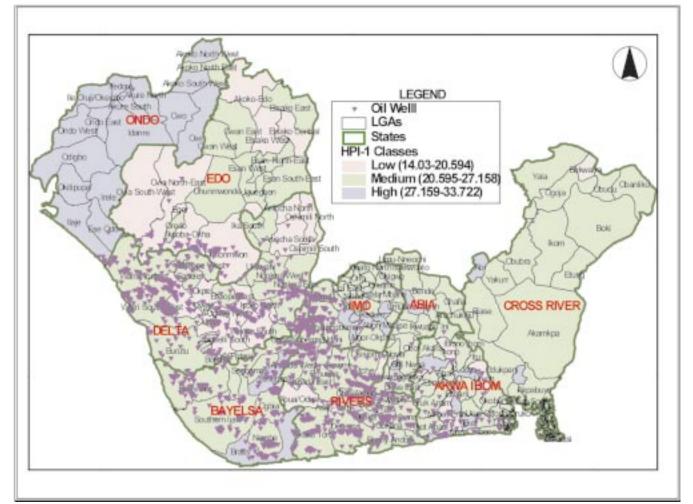
Maps 2.11 displays the GDI scores in relation to the ecological zones. In the dry land zone, most low-scoring localities are in Akwa Ibom State. In the swamp land zone, Ilaje and Ese Odo in Ondo State and Burutu in Delta State rank low. Medium GDI scores predominate in both states. Most areas in Edo and Cross River states fall in the high GDI category.

GDI scores in relation to the distribution of oil facilities appear on map 2.12. High

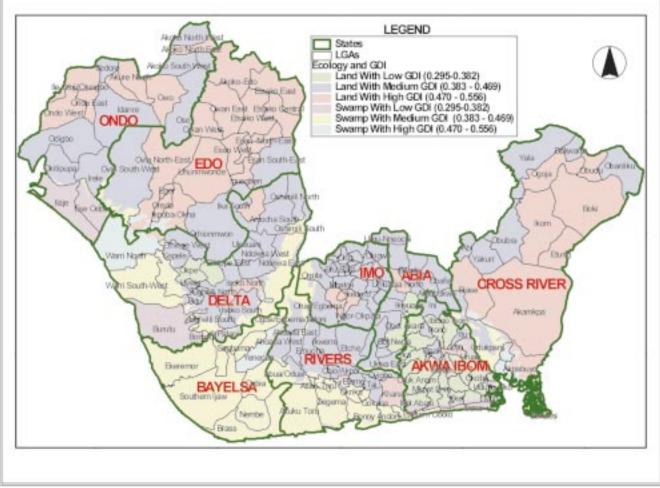
and medium scores closely correlate with the presence of oil facilities in Abia, Bayelsa, Delta, Edo and Rivers states. A few isolated local governments with oil facilities have low GDI scores. Akwa Ibom deserves special mention and attention because it is almost exclusively an area of low GDI performance, irrespective of whether or not there are oil facilities.

# The GEM for Local Government Areas

Almost all local government areas have performed poorly on women's representation in the National Assembly, which drags down scores on the GEM. The best performing area is Ovia North East in Edo State (0.349), followed by Ovia South West (0.348). The worst performing areas are Isoko North (0.264) and Isoko South (0.264) in Delta State. Unlike on the HDI and HPI-1, where Delta State areas did very well, many fared poorly on the GEM.



Map 2.10: Map of the Niger Delta Region Showing the Spatial Correspondence Between Oil Facilities and HPI-1 Index



Map 2.11: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and GDI Index

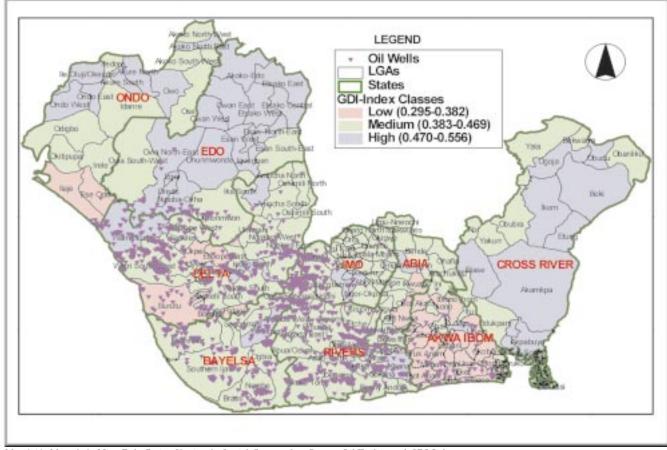
Map 2.13 shows the spatial pattern of GEM scores in relation to the ecological zones. In the dry land zone, localities in Edo, Imo and Ondo states have predominantly high GEM scores; those in Abia, Akwa Ibom and Cross River states have medium scores: those in Delta State are mostly in the low GEM class. In the swamp land zone, local government areas in Rivers State tend to have high GEM scores; Bayelsa's localities are in the medium category; those in Delta South are in the low GEM category. The scores appear to reflect administrative (state) subdivisions rather than ecological zones, evidence of differences in relevant policies and activities between states.

Map 2.14 shows the relationship between oil facilities and the GEM. Imo and Rivers states show a strong correspondence between the presence of oil facilities and high GEM scores. The reverse is the case in Delta State, while Bayelsa is somewhere in between. This indicates that oil facilities do not guarantee higher levels of gender empowerment.

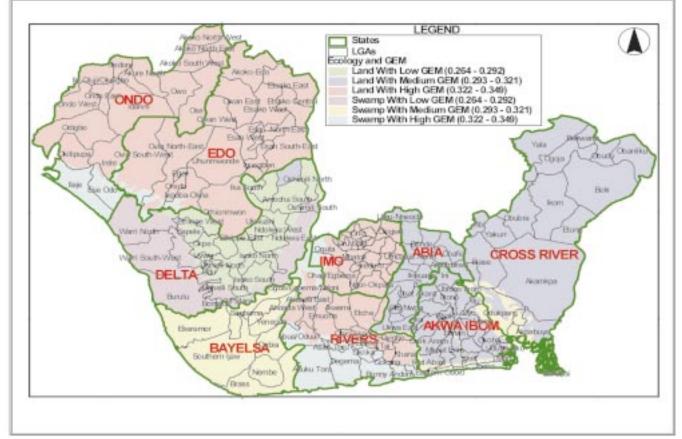
### CONCLUSION

It has not been easy to come up with consistently accurate and valid data to analyse poverty trends in the Niger Delta. Available data from different sources are sometimes contradictory. The accuracy of most is in doubt, as they do not seem to reflect the obvious realities on the ground. Still, the foregoing analyses of poverty and the human development situation in the Niger Delta clearly paint a grim picture reflecting the almost total failure of governance at all levels.

Poverty is multidimensional, but some of the more important dimensions relevant to the Niger Delta do not feature among those usually included in the computation of human development indices. Therefore, analysis based on these indices does not tell the whole story of the region's human development. In subsequent chapters of this report, every effort is made to address the social, political, economic and environmental issues of greatest concern



Map 2.12: Map of the Niger Delta Region Showing the Spatial Correspondence Between Oil Facilities and GDI Index



Map 2.13: Map of the Niger Delta Region Showing the Spatial Correspondence Between Ecology and GEM Index

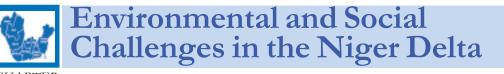
to people at all levels of development.

With few exceptions, the Niger Delta states appear to be better off on most human development indices than Nigeria as a whole, although not in the case of such states as Lagos, Kaduna and the Federal Capital Territory, which have clearly benefited from infrastructure paid for by oil. While the gap between the Niger Delta states and the rest of the country has narrowed progressively over the years, this is only because the indices for the rest of the country have risen, while those for the delta region have remained virtually unchanged. This lends credence to the general belief in the Niger Delta of neglect by successive national administrations, and underscores the failure of state and local governments and development agencies to address developmental problems. The lack of progress is patently unacceptable given the resources generated from the region.

Spatial disparities in human development are blurred at the state level, but they become pronounced at the local level. In general, local governments in the drier interior parts of the region are better off

than those in the swamp zone, which clearly shows the adverse effect of the difficult core Niger Delta environment on physical and socio-economic development. While some local governments in difficult places that have oil wells or facilities appear to have performed much better on the HDI than those without oil operations, this performance fizzles on poverty measures. Some local governments with oil facilities also perform poorly on overall life expectancy, education and equally distributed life expectancy. It is sad that the oil industry appears to have such a limited impact. Local frustration with the industry and governments in general is understandable.

In a situation of general socio-economic deprivation such as the one in the Niger Delta region, minority or underprivileged groups such as youths and women suffer more than others. The foregoing discussions have highlighted some of the problems from gender disparities. Youth restiveness is discussed in subsequent chapters of this report. Both issues must be addressed in any human development agenda for the region.



## POVERTY AND ENVIRONMEN-TAL SUSTAINABILITY

THREE

The environmental degradation resulting from oil and gas production in the Niger Delta has attracted the attention of environmentalists and other experts, who look at the region within the larger context of globalization. The implications for livelihoods in the delta have been a major bone of contention, with quite intense fallout in localities where oil exploration takes place. Many arguments revolve around who is responsible for most of the ills of oil exploration—the government, oil companies, youths who vandalize pipelines, or the global community?

The world today recognizes the importance of environmental sustainability to the development of nations. Goal 7 of the MDGs—"Ensure environmental sustainability"—seeks to reduce environmental degradation arising from natural and manmade causes as well as inefficient use of resources, and to improve environmental management through private sector participation and environmentally friendly technologies.

For the Niger Delta people, as for many poor rural and urban populations, environmental sustainability is fundamental to their overall well-being and development. The environment is important to people living in poverty not only because their existence to a large extent relies on subsistence endeavours, which depend on natural resources, but also because they perceive their well-being as tied to their environment in terms of livelihoods, health, vulnerability and the ability to control their lives. Poorer people are more vulnerable to changes in the environment, in part because social, political and economic exclusion means they almost always have fewer choices about where they live. They bear the brunt of natural hazards, biodiversity loss and the depletion of forests, pollution (air, water and soil), and the negative impacts of industrial activities.

Oil and gas extraction has had a severe impact on the Niger Delta's environment—and on poor rural and urban communities. For them, environmental sustainability is fundamental to wellbeing.

Over sixty percent of the people in the region depend on the natural environment—living and non-living—for liveliboods.

#### Box 3.1: Invading the Environmental Resources of Indigenous People-The Case of Brazil

Today in Brazil, indigenous people account for only 0.2 per cent of the total population, and their lands make up about 12 per cent of the national territory. During the past few years, their existence has become ever more precarious as a result of the increasing invasion of their territory by people ready to confiscate land and exploit natural resources. The invaders are mostly displaced marginal workers who engage in illicit activities, such as illegally mining gold or extracting luxury woods including mahogany, cherry and cedar. Their numbers are estimated at 45,000. Another type of invasion is by the public sector, which is building highways, hydroelectric power plants and other infrastructure projects.

The number of invasions nearly doubled in 1996, affecting around 43 per cent of the indigenous population. More than two-fifths of the invasions were motivated by illegal exploration for and theft of timber, mostly in the states of Amazon and Para. But illegal logging activity on indigenous land was also carried out in more than half the Brazilian states. In Rondonia, 40 per cent of indigenous lands were subject to illegal activities. In Maranhao, about 37 per cent of the territories were invaded by loggers, and in the states of Para and Mato Grosso, there was exploration for luxury hardwoods on 33 per cent of indigenous lands.

Cases of environmental damage on indigenous land increased eightfold in 1996. They involved the degradation of natural resources, the devastation of vegetation, contamination from mining and agriculture, and endangered fish species. Nearly 33 per cent of all illness in the localities was linked to environmental degradation. The invasion of indigenous territory in Brazil has aggravated the survival conditions of nearly a third of the country's indigenous population.

Source: Culled from Readings in Human Development edited by Sakiko Fukuda-Parr & A.K. Shiva Kumar. (New York: OUP), 2003

Without appropriate environmental management initiatives, both the rural and urban poor suffer from the three key dimensions of human poverty insufficient livelihoods, poor health and vulnerability.

The lack of land makes settlement difficult and costly, forcing some communities to engage in uncontrolled land reclamation.

A delicate balance exists between the human population in the Niger Delta and its fragile ecosystem. There is a strong feeling in the region that the rate of environmental degradation is pushing the region towards ecological disaster. Although direct and measurable links between poverty and the environment are sometimes difficult to recognize, there is abundant empirical information to establish that poverty is both a major cause and a result of environmental problems (see box 3.1). Several studies on the povertyenvironment nexus (e.g., World Bank 1999, Arnold and Bird 1999 and DIFID 2002) demonstrate that poor people are usually the worst hit by environmental problems. Environmental factors are implicated in about 20 per cent of the cases of disease in developing countries, for example. In Nigeria, water-related diseases constitute about 80 per cent of the total disease burden (NDHS 2003). Many of these illnesses are linked to environmental conditions that cause water contamination. When people have inadequate access to safe water, or have to rely on polluted sources to survive, diarrhoea, cholera and vector-borne diseases such as malaria are the inevitable result.

Environmental management issues therefore are highly germane to development and to any poverty reduction strategy for the Niger Delta region, where nearly 60 per cent of the population depends on the natural environment living and non-living—for their livelihoods. Including environmental management in poverty reduction strategies recognizes again that poverty encompasses both income and non-income dimensions of deprivation.

In the Niger Delta, as in many other parts of sub-Saharan Africa, the rural poor are those who lack land sufficient to feed a family, or who have just enough to sustain families but no surplus to enjoy. The poor in urban areas are those without employment, or who work in the urban informal sector. Without appropriate environmental management initiatives, both suffer the three key dimensions of human poverty—insufficient livelihoods, poor health and vulnerability. The connections between poverty and the environment are complex, and will be considered in more detail in chapter six.

# THE STATE OF THE NIGER DELTA ENVIRONMENT

Until the period after World War II, a delicate balance existed between the human

population of the Niger Delta and its fragile ecosystem. The exploitation of natural resources did not go beyond the search for medicinal herbs, fuel, game, fish and construction materials. This was sustainable because the available resources outmatched the needs of the population. Today, the Niger Delta environment has changed and continues to change rapidly. The human population has grown at a high rate. Industrialization, urban development, and oil and gas exploration and exploitation have infringed on the people and their environment, leading to the opening up of previously pristine ecosystems. This has resulted in the alteration of habitats, biodiversity loss, deforestation and pollution (Amakiri 2005). While natural hazards are clearly responsible for some of the environmental impacts, industrial activities have no doubt aggravated the situation. There is a strong feeling in the region that the degree and rate of degradation are pushing the delta towards ecological disaster.

# Environmental Problems Not Related to Industry

The natural terrain and hydrology of the Niger Delta have always caused certain environmental problems, especially flooding, siltation, occlusion, erosion and the shortage of land for development. The local people have lived with these problems for many years and have evolved ways of dealing with them, albeit ineffectively for the most part. These environmental problems are discussed briefly as follows:

Flooding is widespread in the Niger Delta because of low relief, the reduced hydraulic capacities of water channels and high rainfall. Seasonal flooding occurs in the freshwater swamp forest zone during river floods induced by local rains and releases upstream dam from spillways. Communities, roads and farmlands are partially or totally submerged from channels or by water flowing over the levees. In the mangrove swamp forest areas, diurnal tidal movements result in floods exacerbated by rising sea levels, coastal erosion and land subsidence. The floods cause continual modification of river courses in the area, rendering the rivers useless as modes of transportation. This also has significant impacts on the pattern

of human life and economic activities (Olawoye et al. 2003; NDES 2000). Focus group participants claimed that flooding and erosion have destroyed their food and cash crops in addition to destroying arable and fertile farmlands.

Siltation and occlusion happens when silt carried down the Niger River system is deposited as water velocity slackens in the more sluggish waters of the Niger Delta. Siltation reduces channel capacity, narrows creeks and reduces water depths. This increases the rate at which aquatic plants grow on waterways. The weeds occlude the navigable sections of waterways and hamper fishing.

Erosion, both river bank and coastal, is prevalent due to natural and human causes. Communities have been displaced and forced to relocate as a result of it. Public facilities, houses and other economic assets have been lost. In Sagbama and Otuopkoti, many homes were destroyed by river bank erosion in the 1970s before the Rivers State Government of Melford Okilo awarded contracts for control measures (Olokesusi et al. 1993; Ali-Akpajiak and Pyke 2003). While river bank erosion is caused by floods, coastal and brackish water zones are eroded by the combined action of high tides and waves. In some of the larger settlements, there have been attempts to control erosion, but the problem remains acute in many large settlements and in most

small settlements. Coastal erosion poses great threats to coastal communities and their economic activities. In the coastal plains of Ondo and Cross River states, gully erosion is also taking a toll.

A shortage of land for development stems from the scarcity of dry and relatively well-drained land, especially in the barrier island forest, mangrove and freshwater swamp forest zones. This has made housing and settlement development very difficult and costly, and to some extent accounts for neglect of the region by successive governments. The dynamics of flood and tidal movement further reduce available land space, forcing many communities to engage in uncontrolled land reclamation with negative environmental impacts.

## Environmental Problems Related to Oil Operations

Since 1958, when the first oil well was drilled at Oloibiri, over 1,481 oil wells have sprung up, producing from about 159 oilfields. There are more than 7,000 kilometres of pipelines and flow lines, and 275 flow stations operated by 13 oil companies<sup>1</sup> (NNPC and AAPW 2004). The productive and environmental impact of the growing number of smaller operators is likely to increase with time. Although less than five per cent of the land of the region is occupied by the oil industry, the problems associated with its operation

Box 3.2: Environmental Impacts of Dredging in the Niger Delta

Dredging alone affects all parts of the environment, but the impacts are often compounded by the abandonment of the dredged materials on the banks of canals and rivers. This alters the topography and hydrology and causes acidification. The results include water contamination, damage to vegetation, fish kills and changes in land use. Altered topography prevents the natural re-succession of mangroves.

In Louisiana, canal backfilling has been used to mitigate impacts from canal dredging (Neil and Turner, 1987). Turner and Lewis (1997) showed that the restoration of hydrology by removing tidal restrictions and impoundments caused by dredged material restored wetland vegetation. They also acknowledged that the failure of most restoration efforts is usually related to hydrologic parameters, including salinity and tidal flooding patterns, as well as the interaction between topography and channel functions. Natural mangrove recruitment, and the restoration of normal tidal exchanges and residence times, site topography and drainage require freshwater inputs (Kaly and Jones, 1998). This calls for site excavation (and grading to pre-disposal elevation) and backfilling into disused canals (Turner and Streever, 2002). *Source: Ohimain, 2004* 

<sup>1</sup> The major oil companies include Shell Petroleum Development Company of Nigeria (SPDC), ExxonMobil, Total Nigeria, Chevron, Elf, Agip Texaco, Phillip, PAN Ocean and Statoil. The Nigeria Liquidified Natural Gas (NLNG) also plays a major role in the region. Te Nigerian National Petroleum Corporation (NNPC), over the years, have developed series of joint venture activities with the oil majors. Some of the indigenous oil firm that operate in the region include Dubri Oil, Consolidated Oil, and AMNI International Petroleum Company.

The oil industry occupies less than five per cent of the delta's land, but the entire region feels the impacts of its operations.

Coastal erosion threatens coastal communities and their economic activities. In the coastal plains of Ondo and Cross River states, gully erosion is also taking a toll.

Some canals constructed by oil companies have caused saltwater to flow into freshwater zones, destroying freshwater ecological systems. Increased access to new areas has aggravated illegal logging activities. Some canals constructed by oil companies have caused saltwater to flow into freshwater zones, destroying freshwater ecological systems. Increased access to new areas has aggravated illegal logging activities.

Available records show that a total of 6,817 oil spills occurred between 1976 and 2001, with a loss of approximately three million barrels of oil.

The Niger Delta has experienced two major oil spills—the Funiwa oil well blowout in 1980 and the Jones Creek oil spillage in 1998—which led to the greatest mangrove forest devastation ever recorded worldwide. are immense and region-wide. Apart from the more visible impacts, such as the pollution of soil, surface and groundwater, and air, oil and gas exploitation has negatively affected socio-economic conditions.

**Canalization:** In the attempt to shorten travel time and improve access to oilfields and production facilities, oil companies have constructed canals that in some cases have caused saltwater to flow into freshwater zones, destroying freshwater ecological systems. Increased access to new areas has also aggravated illegal logging activities.

Oil companies constantly dredge river channels to facilitate navigation. The material dredged from the canals is often dumped on the channel banks, which disrupts the hydrology of these essentially flat and low-lying coastlands. The elevated banks restrict the free flow of water and create ponds that can be detrimental to vegetation and the local ecology. The dredging of rivers can also create negative environmental impacts downstream, hence the concerns being expressed about the proposed dredging of the River Niger from Baro in the north to Warri (see box 3.2).

**Oil spills:** With the expansion of oil production, the incidence of oil spills has increased considerably in the region. Spills occur accidentally and through the deliberate actions of the local people, who sabotage pipelines in protest against the



An oil spillage in Yaata, Ogoni

operations of the Federal Government and oil companies. Available records show that a total of 6,817 oil spills occurred between 1976 and 2001, with a loss of approximately three million barrels of oil. More than 70 per cent was not recovered. Approximately six per cent spilled on land, 25 per cent in swamps and 69 per cent in offshore environments. In recent times, oil spills appear to be caused more by wilful damage to facilities than by accidents (see chart 3.1 and box 3.3).

The environmental effects of oil pollution are well known. They include the degradation of forests and depletion of aquatic fauna. Long-term impacts are also possible, as in cases where mangrove swamps and groundwater resources are harmed. An impact assessment of the 1983 Oshika oil spill in Rivers State by Powell and White (1985) confirmed the death of floating and submerged aquatic vegetation, especially water lettuce. Dead crabs, fish and birds were also reported. The Niger Delta has experienced two major oil spillsthe Funiwa oil well blowout in 1980 and the Jones Creek oil spillage in 1998. These resulted in the greatest mangrove forest devastation ever recorded worldwide.

The implication of these findings is frightening, given that human health is tied



A team of Fire fighters quenching a fire outbreak

to the web of food. Udoette (1997) reported, for example, that ingestion of hydrocarbon directly or indirectly through contaminated food leads to poisoning. Some researchers, such as Kanoh et al. 1990, and Snyder and Hedlim 1996, have

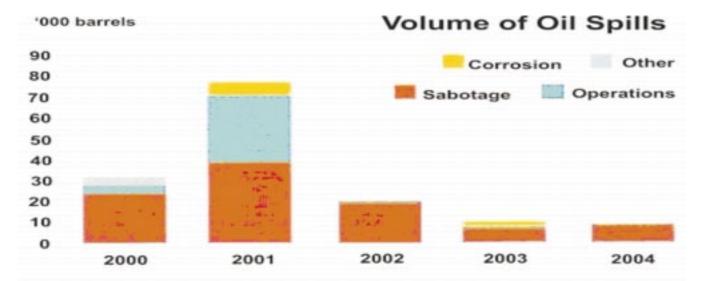
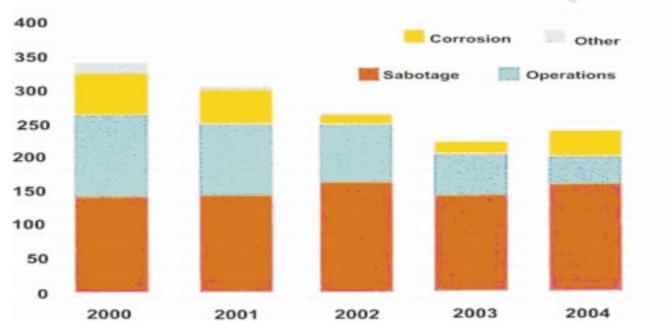


Chart 3.1: Quantities and Causes of Oil Spills from Shell Petroleum Development Company Operations in the Niger Delta, 2000-2004

Number of Oil Spills



Source: Shell Petroleum Development Company Annual Report 2004.

documented the toxic and carcinogenic effects of exposures to high concentrations of hydrocarbons.

On 1 August 2004, there was a spill at Chevron's Ewan oilfield near Ubale Kerere, along the coastline in Ondo State. Although the cause of the spill is not known, some communities, including the Igo, Awoye, Odun-Oyinbo, Ubale Kerere, Ogungbeje and Yoren, were affected. Fishing grounds were devastated. As fishing is the main source of income, the people were compelled to demonstrate in Akure, the state capital, to draw public attention to their plight (Sogbon, 2005). The incessant oil spills and other negative associations with the oil industry continue to be a source of public agitation and concern (see box 3.4).

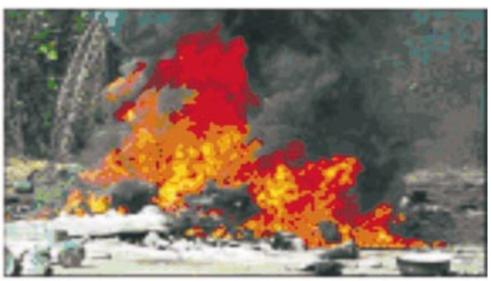
Date	Episode	State	Quantity in barrels
July,1979	Forcados terminal oil spillage	Rivers	570,000
Jan,1980	Funiwa No. 5 well blowout	Rivers	400,000
May,1980	Oyakama oil spillage	Rivers	10,000
Nov,1982	System 2c	Warri-Kaduna	
	pipeline rupture at	Abudu Edo	18,000
August,1983	Oshika oil spill	Rivers	10,000
Jan,1998	Idoho oil spill	Akwa Ibom	40,000
1998	Jones Creek	Delta	21,548
Oct,1998	Jesse oil spill	Delta	10,000
May,2000	Étiama oil spill	Bayelsa	11,000
Dec,2003	Aghada oil spill	Rivers	Unknown
August,2005	Ughelli oil spill	Delta	10,000
August,2004	Ewan oil spill	Ondo	Unknown

Note: The data on oil spills and causal factors could prove to be different from those from the Department of Petroleum Resources if made available.

## Box 3.4: Lamentation by an Edo State Indigenous Person about Oil Industry Activities

Three cases of industrial accidents were recorded during the month of August 2000. They were all fatal. The first one occurred because of a ruptured PPMC pipeline while product was being discharged from a vessel into the depot storage tank, from Calcerico jetty to Calabar depot. About 18 people were killed as the villagers scooped leaked fuel into jerry cans. What ruptured the pipeline could not be immediately ascertained. The second incident occurred when a petrol tanker fell on its side and exploded at Ibilo market in Akoko-Edo, Edo State. Twelve persons were burnt to death, thirty sustained injuries and properties worth millions of naira were destroyed. The third incident occurred during a transfer operation from MV Walvis 11 to MV Walvis 10 at MPNU BOP, located at OML 70, offshore Akwa Ibom State. Source: Department of Petroleum Resources cited in Ekpo 2004.

Until very recently, Nigeria flared about 75 per cent of its gas, a monumentally wasteful practice that also causes pollution and damages biodiversity. **Gas leaks and flares:** There is evidence that gas leaks also occur in parts of the Niger Delta. Bubbling has been observed in certain swamps. This means that an unknown amount of hydrocarbons may be affecting the water organisms and is being emitted into the atmosphere. The World Bank (2005) estimated that Nigeria flares about 75 per cent of the gas it produces due to the lack of a local market and infrastructure. A study of the ambient air pollutants in the Niger Delta region by Oluwole et al. (1996) indicates that the Federal Environmental Protection



A typical example of gas flares in the region

Agency's (1991) environmental standards were exceeded for volatile oxides of carbon, nitrogen oxides, carbon monoxide, sulphur oxide and total particulates. Acid rain has become a major problem. Oluwole et al. (1996), for example, obtained pH values of between 3.35 to 5.58 for sampled rainwater in some of the oil-producing unstudied potential impacts include the effects on the migratory patterns of birds. Major industry operators are embarking on a number of gas-harnessing schemes to eliminate gas flaring before 2008. Appropriate fiscal incentives would also encourage the oil companies to comply with the extant law on gas flaring.



An example of gas flares and oil spillage

communities. The gases contributing to acid rain also emanate from some of the equipment used by the oil companies.

Although appropriate laws have defined flaring standards, the financial penalties have been so low that they hardly constitute a deterrent. Gas flaring amounts to a monumental waste of a valuable resource, on top of the air and thermal pollution that damages biodiversity. Flares cause noise and elevated temperatures. The heat kills vegetation, suppresses the growth and flowering of some plants, and diminishes agricultural production. Plants, animals and humans in the vicinity of the gas flares are perpetually exposed to light with no respite at night. This is harsh for nocturnal animals. The light from flares may also be affecting the endangered marine turtles in the area. Turtles' nesting patterns are influenced by light on their approach to beaches, where they lay their eggs. Additional largely

**Subsidence:** Although the evidence is scanty, there are indications that the extraction of large quantities of oil and gas is continuing to cause land subsidence. This is suspected in Molume in Ondo State and Bonny in Rivers State, and in other parts of the central delta axis. Evidence from other oil-producing areas, such as the Mississippi Delta in the United States, confirms that land subsidence can result from oil and gas extraction.

**Depletion of forest resources:** Apart from the illegal logging brought on by increased accessibility to forests, oil exploitation itself has depleted biodiversity, especially at ramp sites, flow stations and terminals. Extensive deforestation has accentuated the inflow of eroded materials deposited by the major water bodies, disturbing aquatic animals in particular. **Erosion:** Deforestation, canalization and



A canal constructed by an oil company in Awoye, Ondo State, caused saltwater intrusion and the loss of more than 20 hectares of land.

An oil spill leading to depletion of forest resources

land subsidence have worsened erosion. Apart from the riverbank erosion mentioned earlier, coastal erosion is on the increase. This is partly the result of rising sea levels and strong tidal wave currents. But oil and gas activities have also contributed to the increasing menace of erosion through the construction of canals, shore-crossing pipelines, jetties and moles. In Ondo State, for instance, one oil operator constructed a canal in the Awoye area to improve its activities, but because of this disturbance and the ensuing saltwater intrusion, more than 20 hectares of land have been lost. Another oil operator constructed a pipeline from its facility in Delta State to the coast, but the ecological disturbance and ensuing saltwater intrusion have caused serious coastal erosion.

Effluent and waste from oil operations: Like most industrial enterprises in Nigeria, the oil companies lack appropriate waste treatment facilities, and there are no proper landfills. Consequently, the wastes generated by the oil operators are discharged onto land, into mangrove and freshwater swamps, and into the sea. Untreated wastes degrade water quality and the ecology of the receiving environment, and harm human health.

# Other Sources of Environmental Problems:

Oil and gas operations are not the only sources of industrial environmental problems in the Niger Delta. There are numerous other establishments that demand careful consideration.

Large-scale industrial enterprises include

the Aladja Steel mills, the National Fertiliser Company of Nigeria at Onne, and the African Timber and Plywood factory at Sapele. In addition, there are breweries and paint factories in Delta and Rivers states; glass factories in Ondo and Delta states; cement and asbestos factories in Delta, Edo and Rivers states; and rubber and palm oilprocessing factories in Delta and Edo states. There are multiple sawmills and establishments to process food and distil gin.

While some of the wastes generated by these companies are biodegradable, many are not. Some, like asbestos, constitute serious risks to human health. Air pollution from cement and asbestos factories causes lung disease. Heavy metal pollution and hazardous chemicals from steel, fertilizer and brewery operations are of great concern. Quarrying associated with some industries, including cement and glass manufacturing, destroys the land and its vegetation. The devastating impact of sawmills on forests and biodiversity is all too obvious.

## SOCIAL IMPACTS

In the on-going debates about the NigerDelta region, significant emphasis has been placed on the devastation of the environment and ecological balance by oil and gas exploitation, as well as by other industrial activities. People in the region believe strongly that the environmental predicament contributes to social and economic deprivation, further complicating the development situation. The issues at stake include rapid and uncontrolled urbanization, occupational changes, the loss of fishing grounds, the disappearance of livelihoods and land shortages, among

*Extraction of large quantities of oil and gas is continuing to cause land subsidence.* 

others. These changes have in turn threatened cultures, traditional systems and values, and the authority structure in the region.

### The Oil Companies and the People

The oil companies, particularly Shell Petroleum, have operated for over 30 years without appreciable control or environmental regulation to guide their activities. The Federal Environmental Protection Agency did not come into being until 1988, and all the environmental quality standards on emissions and effluent discharge, and the laws requiring an environmental impact assessment for every major project, did not come into effect until the early 1990s. By that time, the Niger Delta environment had suffered much damage at the hands of the oil companies. Even now, it is doubtful whether the Government's environmental monitoring agencies can adequately control the activities of the oil companies. The companies have several advantages over and above all the government regulating agencies. They have better quality and upto-date maps, as well as satellite images and other remote sensing techniques, and sophisticated computer hardware and software for environmental data gathering, analysis and display.

Local people can see clearly how poorly equipped the government regulating agencies are in the face of the superior capabilities of the multinational companies. They often voice contempt at the efforts of the agencies to deal with the companies. Rightly or wrongly, they feel intimidated by the multinationals and do not feel they can count on their government agencies to defend them.

Many of the laws formulated to protect the environment in the Niger Delta prescribe sanctions in the form of fines and imprisonment. Some of the statutes are as follows:

- (a) Mineral Oils (Safety) Regulations 1963
- (b) Oil in Navigable Waters Regulations 1968
- (c) Oil in Navigable Waters Act No. 34 of 1968
- (d) Petroleum Regulations 1967
- (e) Petroleum Decree (Act) 1969
- (f) Petroleum (Drilling & Production) Regulations 1969

- (g) Petroleum (Drilling & Production Amendment) Regulations 1973
- (h) Petroleum Refining Regulation 1974

These laws mandate specific government agencies to regulate and control operations affecting the environment. In the case of the petroleum industry, the Department of Petroleum Resources administers petroleum laws and regulations. But local people complain that they cannot see any evidence of enforcement. A few examples will suffice to understand their point of view.

Table 3.1 depicts the recommended compensation rates for the nation's oil and gas industry by the Oil Producers Trade Section of the Lagos Chamber of Commerce and Industry. There have been fairly regular increases in the rates over time. But more detailed analysis, especially in an inflation-prone country like Nigeria, would reveal that these rates are not equitable. In addition, the rates were determined in Lagos without involving the host communities. There are problems with transparency and objectivity. The Nigeria National Petroleum Corporation belongs to the Oil Producers Trade Section (along with the Department of Petroleum Resources). It is also the majority shareholder in the seven major oil and gas firms that cause the pollution.

The 1991 Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (revised in 2002) outlines in Part VIIIB Sections 4 and 8 what should be done for any mystery oil spill, including in terms of compensation. The guidelines state that a spiller shall be liable for damages. If more than one person is responsible, liability should be joint. Victims of pollution have been poorly compensated for environmental pollution, however. Several cases have dragged on for many years. Table 3.2 shows that more often than not, the awards made by the courts are generally lower than the claims made by the victims. Some experts have argued that the absence of standards of liability for oil pollution and of rules for determining compensation to victims could have contributed to the way cases are delayed and/or decided in favour of the oil companies (Adewale 1988; Fajemirokun 1999; Worika 2002).

Local people see how poorly equipped the government regulating agencies are in the face of the superior capabilities of the multinational oil companies.

Victims of pollution have been poorly compensated, and some lawsuits have dragged on for many years.

Existing laws prescribe that cases against oil companies can only be heard in Federal Courts, which are out of the reach of most rural inhabitants.

Property	Rate/	1994 Mature	Medium	Seedlings	Rate/	1997 Mature	Medium	Seedlings	Rate/	2001 Mature	Medium	Seedlings
	hectare				hectare				hectare			
A. Food crops												
Native beans	5,330	1.30/stand	0.65/stand	0.33/crop	10660	2.60/stand	1.30/stand	0.66/crop	-	22,500	11,250	6,000
Bitter leaf	-	6.50/stand	3.90/stem	2.60/stem	-	13.00/stand	6.50/stem	3.25/stem	-	14,700	7,500	3,750
Cassava	8,840	10.00/plant	5.00/plant	2.50/plant	17,680	20.00/plant	10.00/plant	5.00/plant	-	38,000	18,000	9,000
Garden egg	195	6.50/crop	3.25/crop	1.63/crop	-	13.00/crop	6.50/crop	3.25/crop	-	12,000	6,000	3,000
Gourd	-	7.80/crop	3.90/crop	1.95/crop	-	15.6/crop	7.80/crop	3.90/crop	-	18,000	9,000	4,500
Groundnut	3,250	1.20/crop	0.60/stand	0.30/crop	6500	2.40/crop	1.20/stand	0.60/crop	-	20,000	10,000	5,000
Lemon grass	-	3.90/crop	1.95/crop	0.98/crop	-	7.80/crop	3.90/crop	1.95/crop	-	0.32/stand	0.16/stand	0.08/stand
Maize	3900	3900/hec.	1950./hec	975.00/hec.	7800	7800/hec	3900/hec	1950/hec	-	24,000	12,000	6,000
Melon	5850	3.90/crop	1.95/crop	0.98/crop	11700	7.80/crop	3.90/crop	1.95/crop	-	31,000	16,000	8,000
Okra	-	2.60/stem	1.30/stem	0.65/stem	-	5.20/stem	2.60/stem	1.30/stem	-	15,000	8,000	4,000
Alligator pepper	-	3.90/stem	1.95/stem	0.98/crop	-	7.80/stem	3.90/stem	1.95/stem	-	1.20/stand	0.60/stand	0.30/stand
Hot pepper	4,940	3.90/stem	1.95/stem	0.65/plant	9,880	7.80/stem	3.90/stem	1.95/plant	-	23,000	12,000	6,000
Pineapple	-	10.00/crop	5.00/crop	2.50/crop	-	20.00/crop	10.00/crop	5.00/crop	-	150	75	40
Plantain	-	160/plant	80/plant	40/plant	-	320/plant	160/plant	80/plant	-	750	375	180
Sweet potato	3,250	1.30/plant	0.65/stand	0.33/stand	6500	2.60/plant	1.30/plant	0.65/plant	-	31,000	15,500	7,750
Sugarcane	11,570	0.91/plant	0.46/plant	0.26/plant	23140	1.82/plant	0.92/plant	0.52/plant	-	44,000	22,000	11,000
Tomato	6,500	6.50/stand	2.60/stand	1.30/stand	13,000	13.00/stand	6.50/stand	3.25/stand	-	28,000	14,000	7,000
Yam (regular)	-	20.00/stand	10.00/stand	5.00/stand	4800	40.00/stand	20.00/stand	10.00/stand	-	65,000	32,000	16,000
Water yam	-	-	-	-	-	-	-	-	-	35,000	17,500	8,750

## Table 3.1 The Oil Producers Trade Sections Recommended Compensation Rates for the Oil and Gas industry

Source: Oil Producers Trade Section, Lagos

## Table 3.2: Examples of Compensation Cases, Amounts Claimed and Final Awards

Case	Amount claimed Award		
1. Chief Tuaghaye and others vs. SPDC*(1997)	N61,126,500	N30,000,000	49.0
2. Shell vs. Farah and others (1995)	N26,490,000	N4,621,307	17.5
3. Elf (Nig.) Ltd. vs. Sillo and others (1994)	N1,348,000	N288,000	21.4
4. SPDC vs. Tiebo VII and others (1996)	N64,146,000	N6,000,000	9.4
5. SPDC vs. Joel Amaro and others (2000)	N15,392,889	N30,288,861	196.8
6 SPDC and NPDC** vs. Stephanie Sele and others (2004)	N20,000,000	N18,329,350	91.6

Source: Compiled from Adewale 1988; Fajemirokun 1999; Worika 2002.

\*Shell Petroleum Development Company \*\*Nigerian Petroleum Development Company

		1994			1997			2001	
B. Income-producing trees	Mature	Medium	Seedlings	Mature	Medium	Seedlings	Mature	Medium	Seedlings
Avocado	180	90	45	360	180	90	2400	1200	600
Banana	160	80	40	320	160	80	500	250	125
Breadfruit	80	40	20	160	80	40	1900	950	475
Calabash tree	10	5	3.5	20	10	5	1440	720	360
Cashew	120	60	30	240	120	60	2200	1100	550
Сосоа	500	200	100	1000	500	250	2500	1500	750
Coconut palm	300	150	75	600	300	150	5450	2750	1360
Timber and Mangrove									
Timber (Iroko, Abura, etc (mature)	600	300	150	1200	600	300	34,000	17,000	8,500
Mangrove (per hectare)	1500	750	375	3000	1500	750	-	-	-

C. Land acquisition and loss	1994	1997	2001
Acquisition or permanent land loss			
(urban land)	1.50 square metre	3.00/square metre	Unchanged
Acquisition or permanent Land loss (rural land)	1.00 square metre	2.00/square metre	-Do-
Permanent loss of fishing rights	2.50 square metre	3.00/square metre	-Do-
Fishing ground/tidal basin	6.00 square metre	6.00/square metre	-Do-
Rivers/creeks	6.00 square metre	6.00/square metre	-Do-
Fish trap/animal trap (depending on size)	10.00-50.00/square metre	200.00 - 400.00/ square metre	-Do-
Fish fence/animal fence (depending on size)	32.00/metre run	50.00 metre run	-Do-
Timber canal/fish channel	32.00/square metre	50.00/square metre	-Do-
Agricultural lands (specific items like crops,			
trees and other items destroyed should be			
assessed based on the above rates)	800.00/hectare	800.00/hectare	100,000/hectare
Inhabited area	400.00/hectare	800.00 hectare	100,000/hectare
Other lands	400.00/hectare	400.00 hectare	Compensation to
			be negotiated
			between polluter
			and claimants
Recreation/aesthetic areas	400.00/hectare	-	دد
Loss of earnings from fishing			
as a result of siltation	1.00 Square meter	1.00/square meter	-Do-
Cut traces	1.00 Square meter	5.00/square meter	-Do-

Compensation rates are in Naira (US\$ = N129)

Source: Oil Producers Trade Section, Lagos; Phil Anoza Consultants, Port-Harcourt

The lack of appropriate avenues for redress is one of the major causes of the conflicts in the region. Existing laws prescribe that aggrieved persons can only seek redress against the oil and other big multinational companies engaged in the oil industry in the Federal High Courts. To the local people, this is another case of collusion between the oil companies and the Government. The courts are located only in state capitals, putting them out of the easy reach of most rural inhabitants. The litigation process is fraught with many technicalities, requiring the services of legal practitioners that most people cannot afford. The lack of appropriate avenues for redress is one of the major causes of the conflicts in the region. Other grievances arise from the negative social and economic impacts of oil and industrial activities, as highlighted on the following pages.

### Rapid Uncontrolled Urbanization

One of the most dramatic effects of oil production activities in the Niger Delta was the sudden rise to prominence of certain towns that became centres of oil The phenomenal growth in urbanization has had significant social and environmental impacts, while the heightened pace of construction has created huge demands for land and construction materials

Rapid and uncontrolled mass migration into cities spawned urban sprawl, slum housing, housing congestion, traffic congestion, unemployment and a rise in crime.

People are clamouring for restitution for all the damage that has been done by oil operations; however, compensation rarely reaches all those affected because of the 'benefit captor' syndrome. production or associated industrial activities. Warri and Port Harcourt are the two most important examples. Smaller but equally important towns include Ughelli (Delta State), Bonny (Rivers State) and Eket (Akwa Ibom State). The phenomenal growth in urbanization has had significant social and environmental impacts.

The heightened pace of construction activities in the burgeoning oil and industrial cities created huge and unprecedented demands for land and construction materials such as sand, clay and wood. Local peoples were easily seduced by the lure of easy money in the growing urban centres. The large rubber plantations for which present-day Delta and Edo states were once noted were abandoned and subsequently cleared by local people. They sold the land to speculators in the urban peripheries and to contractors for quarrying sand, clay and other materials for construction. Some local landowners turned into contractors themselves. Thus, the local farmers and landowners mortgaged their future by destroying their land inheritance and throwing away, perhaps forever, their means of livelihood.

This period, especially since the mid-1980s when oil overtly replaced traditional economic activities in oil-producing communities, marked the beginnings of the whittling down of the sense of community and traditional authority in the Niger Delta region. Many of the transformations that took place, including the sale of land, land use changes, occupational changes, etc., were individual rather than communal decisions. With the benefit of hindsight, it is clear why land and territorial disputes between individuals, clans and ethnic groups escalated from the 1970s onward, aside from the other well-known struggle to share the benefits of the oil industry.

Apart from the massive deforestation and destruction of land, the displacement of people from rural economic pursuits coupled with the lure of social amenities in the cities generated a wave of rural-urban and rural-rural migration throughout the Niger Delta region and beyond. Rapid and uncontrolled mass migration into cities spawned urban sprawl, slum housing, housing congestion, traffic congestion, unemployment and under-employment, and a rise in crime, to name only a few consequences.

## Loss of Fishing Grounds

Quarrying activities spurred by the construction boom were not limited to land; the demand for high-quality fine sand also led to the mining of river channels. River sand mining destroys the aquatic habitat and disrupts the hydraulic capacity and relationships in the river channels. Fishing communities suffer as a resulton top of the destruction caused by the oil industry. Fishing has become less productive and profitable in many areas, with reduced catches and lower incomes compared to income from oil-related activities. The efforts of local fishermen to maintain or improve upon their income levels result in over-fishing. Many swamps, rivers and creeks where fish spawn have been destroyed or polluted.

## Land Losses and Shortages

A major socio-political issue in the Niger Delta region today is access to land. Local people complain bitterly about having lost so much land to oil operations. Oil facilities and installations directly took land and waterways away from the people. Indirectly, people have also lost land through pollution, erosion and land despoliation by quarrying activities. The scarcity is compounded by the lack of dry land in the delta.

Land shortage is partly responsible for the loud protest against the Land Use Act, which compensation provides for the appropriation of land-often for oil facilities (see box 3.5). Most local participants at one of the focus group discussions were vehemently opposed to the Act, saying it "has no redeeming feature or value." The Act does not take into account the impacts and negative externalities that transferring land-say for oil purposesmay have on adjoining areas. People are clamouring for restitution for all the damage that has been done by oil operations and associated activities.

Even the compensation that is offered tends to bring only short-lived satisfaction, however. Those who sell their land, more often than not, quickly spend the money and then are left high and dry. Many abandon their traditional occupations and move to other pursuits, usually in the cities, which swells the ranks of the urban poor and informal sector operators.

In many cases, compensation for land rarely reaches all those affected because of the 'benefit captor' syndrome. Benefit captors are those who purportedly represent and receive compensation and other resources on behalf of the communities, who then rarely receive or enjoy the benefits. At best, a small percentage of the communities may derive some benefit. The benefit captor syndrome is partly responsible for the youth revolt against traditional authority in the region.

## Deforestation and Forest Resource Depletion

Traditionally, local people have depended heavily on the non-timber resources of the forests to make a living. They extract a wide variety of forest products for domestic use and for sale in traditional markets. These include fuel wood, fibres, leaves, dyes, fruits and nuts, medicinal plants, barks and roots, spices, palm wine, snails, wild game, etc. The much-reduced forest cover has increased pressure on the remaining forests, which are now suffering from overuse that is further exacerbated by high demand from the expanding towns and cities. It has been well established that wealthier people in urban areas utilize far more forest resource derivatives than the poor who directly depend on them.

People at the grass-roots unfortunately are not benefiting from the increased exploitation of non-timber forest resources. Middlemen package most of the harvest for urban markets, where they make huge gains. Very little returns to the rural economy; in general, there is a net transfer of resources from the rural to the urban areas.

## **Occupational Disorientation**

One of the greatest challenges to human development in the Niger Delta region is how to win people back to the traditional livelihoods that sustained them in the past. As in other parts of the country, younger people have left the rural areas. Fishing and agriculture have suffered so much from environmental problems and social challenges, and from the neglect of successive governments, that it is very difficult to motivate young people to take an interest in these livelihoods. Many youths, even those still residing in rural areas, are more interested in rent-seeking from oil operations in the form of standby money or oil bunkering, hostage-taking and sabotage of oil pipelines.

Boxes 3.4 and 3.5 describe an all too familiar incident in the running battle between the oil companies and the aggrieved local people. The fundamental issue is how traditional occupational pursuits can exist with oil production activities in an atmosphere of mutual suspicion and recrimination. Interest in traditional economic pursuits such as agriculture and fishing cannot be promoted as long as easy money flows from the oil companies, albeit on an unsustainable basis.

Another concern is the increase in the number of sex workers and indulgence in casual sex by both men and women. The repercussions are discussed in the following chapters on HIV&AIDS and livelihoods.

## The Influx of People into the Niger Delta

The Niger Delta region, understandably, has attracted a great number of migrants from other parts of the country. They come seeking opportunities from oil production. Although many migrants end up in the cities, a large proportion also goes into the rural areas. Some fill the gaps left by the movement of local people into the cities. They become farmers, fishers, hunters, harvesters of fuel wood and other nontimber forest products, quarry operators and artisans in other trades. These rural migrants increase the pressure on land and rural resources, however. They are not interested in issues of resource environmental conservation and protection, since their main motive is to maximize profit. Some migrants become middlemen who collect products for transportation to the urban markets. They pressure local producers to meet their demand for goods.

Traditional economic pursuits will suffer as long as easy money flows from the oil companies.

Migrants have worsened congestion, and the sense of personal responsibility towards communities has disappeared.

Many youths, even those still residing in rural areas, are mainly interested in rent-seeking from oil operations in the form of standby money or oil bunkering, hostage-taking and sabotage of oil pipelines.

### Box 3.5: Poverty Grinds against Oil Wealth in Nigeria Delta

FISHTOWN, Nigeria: Every time Stephen Yibo goes fishing around the U.S.-operated oil platform near his village in Nigeria's southern delta, soldiers come out on boats and shoot into the air to scare him away. Thousands of troops have been stationed across the delta to stop residents occupying platforms again after an uprising last year threatened oil supplies from Africa's top producer. Their aggression has only hardened hostility to the multinationals among the million-plus inhabitants of the mangrove swamps lining Nigeria's Atlantic seaboard. Yibo, 25, says oil could be used to bring health and education to Fishtown, a poverty-stricken village of wood and thatch huts which has been abandoned by the government. Instead, he reels off a list of what he believes are unfulfilled promises of the oil company ChevronTexaco. "They promised a school building, a town hall, electricity and a water borehole, but so far they have only built a jetty," he said. "We are the owners of the oil so we expect the companies to do more for us." His complaint is echoed across the Niger delta, where annual oil output is worth \$20 billion, but where many live without access to clean drinking water, basic health care or schools. In the absence of any visible sign of government in remote villages, residents naturally look to the companies for help, said Chris Alagoa, a development worker in the Akassa kingdom, which includes Fishtown. Relations between oil companies and residents have deteriorated so far that they now look at each other down the barrel of a gun along 300 miles of coast, which Alagoa calls a "corridor of conflict."

The situation does not bode well for the foreign investors in Nigeria's bountiful oil reserves, including Royal Dutch/ Shell, ChevronTexaco, Agip, ExxonMobil and Total, which had seen the country as a secure alternative source of oil to the Middle East. "When we got to Akassa, two villages were already blackmailing the oil company," Alagoa said. "The people would go to the company and make demands for money or jobs. If it refused they would harass the staff. The practice became widespread and climaxed in the taking of hostages. It produced very clear and quick results." The response of the oil companies was to pay up and to invite government troops to defend them. Having seen blackmail and hostage-taking pay off, local militants sought new ways to extort money. "In most cases, blackmail was arrived at quite innocently from people's anger at seeing the wealth oil created. Oil workers were the visible fraction of a very unholy alliance between the oil companies and the federal government," Alagoa said. Oil companies tried to be "good neighbors" to the villages in the delta, but residents say their efforts often backfired.

In Fishtown, the jetty built by ChevronTexaco is typical of the white elephant projects across the region. After just a few years, erosion has completely separated it from the land. In nearby Sangana village, a hospital built in 2001 by ChevronTexaco and its partners has no doctors or medical supplies. It serves as a temporary hostel for youth volunteers while local children die of treatable illnesses.

Source: www.planetark.com/dailynewssstory.cfm/newsid/24444/story.htm.

These migrants have also created social and political problems. They have worsened congestion in both urban and rural areas. Problems such as poor housing conditions; low levels of personal hygiene and environmental sanitation; the dumping of solid wastes in streets, gutters and river channels; and poor health facilities are not limited to the cities-they are increasingly evident in the rapidly expanding villages and towns. The sense of personal responsibility for keeping village streets and homes clean has disappeared; the urban mindset of yielding responsibility for environmental sanitation to some impersonal bureaucratic agency has permeated the rural areas.

Another trend has been incessant price movement, particularly for transportation for both passengers and goods. The escalation in costs is often blamed on increases in petrol prices, but it is also due to the pressure on the limited transport facilities and the increase in demand over supply. With incomes already low, rising inflation further entrenches poverty.

Alienated from their natural resources, either by oil companies or governments or migrants, the people of the delta see total resource control as the only solution. Different ethnic nationalities have different strategies for achieving this. The Ogoni people, for instance, see the right to ownership and control of their lives and resources as the only way to protect their environment from further degradation and promote decent livelihoods on Ogoni land (see box 3.6).

#### Box 3.6: Resolving the Niger Delta Challenges: The Kaiama Declaration

- 1. All land and natural resources (including mineral resources) within the Ijaw territory belong to Ijaw communities and are the basis of our survival.
- 2. We cease to recognize all undemocratic decrees that rob our peoples/communities of the right to ownership and control of our lives and resources, which were enacted without our participation and consent. These include the Land Use Decree and The Petroleum Decree, etc.
- 3. We demand the immediate withdrawal from Ijaw land of all military forces of occupation and repression by the Nigerian State. Any oil company that employs the services of the armed forces of the Nigerian State to "protect" its operations will be viewed as an enemy of the Ijaw people. Family members of military personnel stationed in Ijawland should appeal to their people to leave the Ijaw area alone.
- 4. Ijaw youths in all the communities in all Ijaw clans in the Niger Delta will take steps to implement these resolutions beginning from the 30th of December 1998, as a step towards reclaiming the control of our lives. We, therefore, demand that all oil companies stop all exploration and exploitation activities in the Ijaw area. We are tired of gas flaring, oil spillages, blowouts and being labelled saboteurs and terrorists. It is a case of preparing the noose for our hanging. We reject this labelling. Hence, we advice all oil companies staff and contractors to withdraw from Ijaw territories by the 30th of December 1998, pending the resolution of the issue of resource ownership and control in the Ijaw area of the Niger Delta
- 5. Ijaw youths and peoples will promote the principle of peaceful coexistence between all Ijaw communities and with our immediate neighbours, despite the provocative and divisive actions of the Nigerian State, transnational oil companies and their contractors. We offer a hand of friendship and comradeship to our neighbors: the Itsekiri, Ilaje, Urhobo, Isoko, Edo, Ibibio, Ogoni, Ekpeye, Ikwerre etc. We affirm our commitment to joint struggle with the other ethnic nationalities in the Niger Delta area for self-determination.
- 6. We express our solidarity with all people's organizations and ethnic nationalities in Nigeria and elsewhere who are struggling for self-determination and justice. In particular we note the struggle of the Oodua Peoples Congress (OPC), the Movement for the Survival of Ogoni People (Mosop), Egi Women's Movement, etc.
- 7. We extend our hand of solidarity to the Nigerian oil workers (NUPENG and PENGASSAN) and expect that they will see this struggle for freedom as a struggle for humanity
- 8. We reject the present transition to civil rule programme of the Abubakar regime, as it is not preceded by restructuring of the Nigerian federation. The way forward is a Sovereign National Conference of equally represented ethnic nationalities to discuss the nature of a democratic federation of Nigerian ethic nationalities. Conference noted the violence and killings that characterized the last local government elections in most parts of the Niger Delta. Conference pointed out that these electoral conflicts are a manifestation of the undemocratic and unjust nature of the military transition programme. Conference affirmed therefore, that the military are incapable of enthroning true democracy in Nigeria.
- 9. We call on all Ijaws to remain true to their Ijawness and to work for the total liberation of our people. You have no other true home but that which is in Ijawland.
- 10. We agreed to remain within Nigeria but to demand and work for Self Government and resource control for the Ijaw people. Conference approved that the best way for Nigeria is a federation of ethnic nationalities. The federation should be run on the basis of equality and social justice.
- 11. Finally, Ijaw youths resolve to set up the Ijaw Youth Council (IYC) to coordinate the struggle of Ijaw peoples for self-determination and justice.

Source:www.waado.org/NigerDelta/RightsDeclaration/KiamaDeclaration.html.

## Air Pollution and Health

There is very little data and information on air pollution and its deleterious effects on people in the Niger Delta, aside from some collected by the oil companies at scattered locations. An existing network of meteorological stations is too coarse to provide data covering the whole of the region. In any case, few of the stations collect data on air pollution. As is shown in box 3.7, however, air pollution is a serious health problem for poor people across the developing world, particularly in the countries of sub-Saharan Africa. In the Niger Delta, all the available evidence points to a high risk of health problems related to air pollution. Outdoor air pollutants come from a wide variety of sources, including oil facilities (refineries, gas flares and gas leaks from pipes), cement and glass factories, quarries and thermal power stations. Emissions from vehicle exhausts have increased astronomically in the last two decades, with the huge increase in vehicular traffic. Nigeria still uses leaded petrol, a major source of lead pollution.

### Box 3.7: Air Pollution in Developing Countries

Although air pollution is normally seen as predominantly a problem of industrial countries, more than 90 per cent of the deaths from this form of pollution occur in the developing world. And while air pollution is normally considered to occur mainly outdoors, more than 80 per cent of the casualties are from indoor pollution. Another misconception is that air pollution mainly affects towns and cities, but more than two-thirds of the mortalities are in rural areas.

Poor people in developing countries are at the bottom of the energy ladder. They must burn dung, wood and crop residues indoors for their cooking and heating, especially in sub-Saharan Africa, the region with the majority of the least developed countries. In most other regions, traditional fuel use has declined substantially during the past two decades. Traditional fuels are much more polluting than modern alternatives such as kerosene, propane, biogas and electricity. Burning such fuel fills houses with smoke swirling with hundreds of toxic substances, killing 2.2 million people a year, mostly in rural areas,

Source: Culled from Selim Jahan in Fukuda-Parr and Shiva Kumar 2003.

Respiratory diseases have become the third most serious health problem in the region.

Oil industry practices mean that waste management is a problem for rural inhabitants, not just for city dwellers, as is the case elsewhere in Nigeria. In addition to the probable high level of outdoor pollution in the Niger Delta, the evidence also points to acute indoor pollution. The burning of fuel wood for domestic cooking is the predominant practice, often in conditions of housing congestion, poor ventilation and poor nutrition. The last increases susceptibility to health problems such as respiratory infections, and lung and heart problems. Although there are no concrete data, the inference is that air pollution-related health problems are rising. In the survey of households carried out by the NDDC, respiratory diseases are the third most serious health problem (mentioned by 12.3 per cent of households), coming after malaria (73 per cent) and diarrhoea (19.4 per cent). Until very recently, respiratory disease was never a serious health problem in the region.

The costs incurred in dealing with health problems are very high. Beyond hospital fees and the costs of drugs, sick people and their relations spend a lot of money on transportation. This is due largely to the fact that health care facilities are few and widely dispersed. In the difficult swamp environment of the core Niger Delta, travelling to health care centres is a tedious and time-consuming undertaking.

where most of the poor live. Both indoor

air pollution and poor nutrition increase

Outdoor air pollution-once almost

entirely concentrated in the industrial

countries-is now quickly growing in the

developing world. Rapid industrialization

in many countries has greatly increased

pollution, and the spread of motorized

vehicle ownership is raising emissions all over the world. Vehicle exhaust, coal

burning and smoke from factories form

small particles in the air that cause serious

Lead, often added to petrol and emitted

by car exhaust, has been eliminated from

petrol in some OECD countries and is

being phased out in others, but it is still

used heavily in developing and transition

economies. In these countries, it continues

to harm human health, permanently

impairing children's development. The

children of the poorest urban dwellers

often are worst affected, because they tend

to live near busy roads.

health damage.

susceptibility to respiratory infections.

### Waste Management and Health

As indicated above, the rate of waste generation in the Niger Delta has risen astronomically. Wastes come from both oil and non-oil industrial establishments, and from the local markets and residences. In the oil-producing areas, both liquid and solid wastes are sometimes carelessly discarded on land, and in swamps and water bodies, leading to the contamination of groundwater in some places (see box 3.8). There is very little or no treatment of either liquid or solid wastes before disposal. Disposal methods remain very rudimentary and do little to reduce the attendant health risks. Raw sewage water runs into wells and rivers. Some communities use floating toilets, which are specially constructed on rivers or creeks. The user fee charged by the community is meant for maintenance of the comfort stations. While this facility meets the basic needs of the people, it represents another source of water pollution (Olawoye et al. 2003).

Solid wastes are also indiscriminately disposed of in most communities. One of the focus group participants said, "There are no formal solid waste management practices. What holds is the dispatch of refuse in the bush at the backyard and in case of edible wastes like cassava, yam and plantain peels, they are left for goats and like animals to feed from. Other forms of wastes are either buried or left to rot away."

The ubiquitous nature of the oil industry, particularly in the rural areas, means that the waste management problem in the Niger Delta is not primarily an urban dilemma, as in other parts of Nigeria; it is also a problem of the rural areas. The whole region is thus at risk not only from the contamination of domestic water supplies by liquid and solid wastes, but also from waste dumps that become breeding grounds for diseases. It is not surprising that malaria and diarrhoea are the two top diseases afflicting households in the region. Traditional local arrangements for resource use bave broken down. Sustainable management will require local people to once again become actively involved.

## Box 3.8: Waste Treatment and Disposal

Throughout the Niger Delta region, no special treatment is given to waste generated by most of the people. There is no formal recycling beyond scavenger activity or treatment plants for publicly generated waste. All the States operate unlined open dumps. The only exceptions being large multinational Oil Companies, particularly Shell Petroleum Development and ExxonMobil that have privately developed engineered Sanitary Landfills. Some private organizations such as Coca-Cola Bottling Company Plc, Guinness Nigeria Plc and Nigerian Breweries Plc engage in some form of primary sewage treatment of some of their effluent discharges.

Waste is dumped indiscriminately across the Niger Delta. Throughout the region, there were no working public incinerators. The operational incinerators and Thermal Disruption Units (TDUs) service the Oil and Gas industry and are used for the disposal of hydrocarbon-contaminated wastes. The final disposal of solid wastes in the Niger Delta takes place in the form of open dumping, accompanied by burying, burning and, more frequently, disposal into water bodies. The survey shows that about 55% of the refuse collected in the Niger Delta States naturally ends up being burnt. Most dumpsites are illegal. They constitute major risks and are health hazards.

Source: NDDC Regional Master Plan Final Report: Waste Management Sector, p.64-65.

## Impacts on Culture, Traditions and Authority Structures

The major socio-political results of the changes in the Niger Delta have included the disintegration of societal values and the loss of traditional authority structures. In earlier times, youth were typically at the bottom of the hierarchy. Today, however, traditional rulers and elders in the various communities have lost control over the youths. They have worked out their own, largely unsustainable ways of reaching and dealing with the oil companies, governments at all levels, and national and international organizations. The influx of 'stranger' elements from other parts of the country and abroad has further diluted local cultures and safeguards. A whole new class of middlemen controls the sale and distribution of goods, down to the village level.

For the environment and natural resources, this means that traditional arrangements for resource use and land management have virtually broken down. Clan rulers, village elders and family heads can no longer be relied upon to enforce traditional practices, which has negative consequences for the environment. Sustainable resource and environmental management will require local people to once more become active participants in using and overseeing local resources, including as partners with development agencies.

A concerted effort has been made to rehabilitate nature reserves, but this can only be sustained by making local people the chief beneficiaries of conservation programmes

### THE HISTORY OF ENVIRONMEN-TAL MANAGEMENT IN THE NIGER DELTA

Attempts at environmental management in the Niger Delta, as in Nigeria as a whole, date back to the colonial era. Two major environmental issues attracted the attention of the colonial administration: forest conservation and flood control. In line with the colonial administration's forest policy, some nature reserves were created in parts of the delta in order to protect the ecosystem and its biodiversity. All the nature reserves in the delta region today have their origins in the colonial period (see table 3.3). Most of the present nature reserves are remnants of what they used to be. Poor monitoring and management in the past led to widespread encroachment and illegal harvesting of natural products. In the last two decades, however, a concerted effort has been made to rehabilitate and develop the reserves. These initiatives can be sustained only by raising people's awareness of the need for natural resource and environmental conservation protection, and by making the local people the chief beneficiaries of conservation programmes in their localities.

Name	State
Kwale	Edo
Orle River	Edo
Cross River National Bank	Cross River
Okomu	Edo
Becheve	Cross River
Gilli-Gilli	Edo
Ifon	Ondo
Afi River Forest Reserve	Cross River
Upper Orashi forest	Rivers
Biseni Forests	Rivers
Akaassa Forests	Bayelsa
Ebok-Boje Forests	Cross River
Itu Wetlands and Swallow Forest	Akwa Ibom
Lower Orashi	Rivers
Andoni Game Sanctuary	Rivers
Edumaron	Bayelsa
Ikebiri Creek	Bayelsa
Nun Creek	Bayelsa
Nun River	Bayelsa
Egredi Creek	Bayelsa
Uremure-Yorkri	Delta
Ebue	Edo
Sapoba	Edo
Obaretin	Edo
Uronigbe	Edo
Ofosu	Edo/Ondo
Ehor	Edo
Cross River Estuary and Mangrove Forest Reserve	CRS
Akure	Ondo
Owo Forests (Ifon, Ogbesse, Little Osse)	Ondo
Olague	Delta
Idanre	Ondo
Source: ERML survey 2005.	

### Table 3.3: List of Protected Areas in the Niger Delta States

The flooding problem of the Niger Delta rivers was of special interest to the colonial administration because it affected their shipping activities and access to the interior. It became necessary not only to monitor flooding, but also to chart the waterways to track the movement of sandbanks and keep the waterways open for navigation. In the 1950s, the colonial administration commissioned the Netherlands Engineering Company (NEDECO) to carry out a major hydro-meteorological survey of the Niger Delta. NEDECO established a network of hydro-meteorological stations for data gathering on a permanent basis. Most of the data and information we have today on the hydrology of the Niger Delta rivers derive from the NEDECO surveys. There has been no comparable comprehensive hydro-meteorological survey in the Niger Delta or anywhere else in Nigeria since the 1950s.

In the 1970s, the Federal Government created river basin and rural development authorities throughout Nigeria. The Niger Delta region was carved up among three different authorities. These were meant to manage the environment of each river basin, dealing with issues such as land drainage, flood control, soil erosion control, irrigation, water supply, etc. But they made very little impact, particularly in the southern parts of the country. In the northern savannah lands, they achieved more, particularly in terms of large-scale irrigation and water supply projects. In the Niger Delta, there is almost nothing to show for the many years of their operation.

In the 1970s and 1980s, the military governments took certain policy decisions that have had a lasting impact on environmental management in the Niger Delta region. In 1976, the Land Use Act was promulgated. From the local people's perspective, this Act is an affront and an instrument of oppression and expropriation of people's land and natural resources. It has served more to protect oil companies and other agents of land degradation than to safeguard the environment and natural resources.

Following the 1988 toxic waste dumping incident at Koko in Delta State, the Federal Government established the Federal Environmental Protection Agency. Its functions have now been taken over by

the Federal Ministry of Environment. State environmental protection agencies were also created, and then replaced with ministries of the environment, as at the federal level. In 1999, the Federal Environmental Protection Agency produced the country's Agenda 21 document. It emphasized the rational use of oil and gas resources, industrial pollution management and natural resources conservation. The Agency was also instrumental in getting industrial emission and effluent discharge standards promulgated in order to control air, water and land pollution. Zonal offices of the Agency (and now the Environment Ministry) in Port-Harcourt and Warri coordinate environmental management activities in the Niger Delta region.

The 1989 National Policy on Environment (revised in 1999) was meant to guide environmental management in the country. It introduced environmental impact assessment studies in development project planning and implementation. This should have helped environmental protection and management in the Niger Delta. But in reality, the impact has not been felt on the ground. As far as the local people are concerned, it has been business as usual. The impact assessments do require listening to the views of local people who will be affected by a given development project, but very few of the consultants engaged by the petroleum companies to carry out the assessments are social scientists, so critical social and economic issues are usually glossed over in the reports. Some projects have commenced before their environmental impacts were fully ascertained, giving the impression that the oil companies can operate without any controls. Over time, the process has begun to improve.

During its lifetime, the Federal Environmental Protection Agency could not exercise much oversight of the petroleum industry, due to overcentralization, weak enforcement mechanisms and inadequate capacity. In addition, there was a 'cold war' between the Agency and the Department of Petroleum Resources, the initial regulator of the industry. Even though the Department appears to have more clout with the industry, its effectiveness has been seriously hampered by inadequate personnel, funding, equipment and logistics Environmental impact assessments require listening to local views, but the oil industry consultants who conduct them usually gloss over critical issues.

Regulating the petroleum industry has been constrained by overcentralization, weak enforcement, inadequate capacity and disputes between government agencies. support. The overall impact of the federal and state environmental agencies in the Niger Delta region remains quite feeble. The sordid environmental condition obviously reflects institutional failures, compounded by market and policy failures.

In response to the persistent complaints of people in the Niger Delta about the negative impacts of oil production and the perceived insensitivity of the oil companies and the Federal Government, the Niger Delta Environmental Survey was commissioned in 1997. With funding from the Shell Petroleum Development Company and other companies, it carried out a comprehensive survey of the Niger Delta environment.

This was the most comprehensive and results-oriented survey since the NEDECO feat of the 1950s. Using the most modern data-gathering and analysis technology, and a large number of local and foreign experts, the NDES has amassed, collated, classified and mapped vital data and information on various aspects of the Niger Delta environment. Sadly, however, this report has never been published, thus depriving the public of a rich source of data that could make major contributions to the development of the region.

The NDDC Regional Master Plan recognizes the importance of, and contains recommendations for, managing the natural environment and resources. Significantly, it provides for 'stakeholder participation' in key areas such as land, fisheries and forest management; water supply; flood control; waste management and public health.

## CONCLUSION

This chapter has highlighted the devastation of the Niger Delta environment as a result of several decades of oil production, and industrial and infrastructural developments. Profound changes have often had adverse effects on local livelihoods and social wellbeing. For years, local people hoped for protection that never came from successive federal and state governments. Attempts to fight back have at times compounded their environmental challenges—the sabotage of oil pipelines, for example, has only exacerbated oil pollution.

The oil companies initially thought they could 'buy off' people from complaining too loudly about the environmental and socio-economic challenges they face. The companies adopted the practice of paying aggrieved local people whenever complaints arose. But this simply encouraged more and more people to come forward and make claims. The practice undermined community spirit and cohesion, and soon factions and divisions emerged within the different communities. Youth and other pressure groups formed with the sole purpose of seeking their own share of the oil money. Traditional rulers and elders lost face because of a lack of transparency and accountability in the collection and disbursement of compensation for the loss of or damage to land, fishing grounds and other property. Today, the deplorable human development situation in the Niger Delta is further aggravated by growing violence and increasingly acute insecurity.

People's demands for substantial investments in infrastructure and industrial development in the region are quite legitimate and worth pursuing. But environmental sustainability must be factored in. The level of infrastructure and industrial development demanded can hardly be sustained by the fragile ecosystems in the core Niger Delta, particularly in the unique mangrove swamp zone. It will be necessary to learn from other countries how to achieve a judicious balance between development, and ecosystem protection and preservation. The oilproducing areas of the Mississippi River Delta in the United States provide a good example of how to minimize the environmental impact of oil production activities on the mangrove ecosystem.



## A CHALLENGE TO SUSTAINABLE HUMAN DEVELOPMENT

Nigeria's first case of HIV&AIDS was reported in 1986 with the diagnosis of a 13-year-old female hawker. Since then, the prevalence of HIV has increased from 1.8 per cent in 1990 to five per cent in 2003 (see chart 4.1). In 2001, a federal survey showed that 5.8 per cent of the population (or 7.5 million people) had tested positive for HIV—in other words, six out of every 100 Nigerians, including over one million children.

Today, Nigeria ranks among the countries at risk1 of the next stage of the HIV&AIDS pandemic, when prevalence rates begin to skyrocket. It has the third largest number of people living with HIV&AIDS in the world (UNICEF 2003), and the highest number of orphans from AIDS (UNAIDS 2002), estimated at about 1.2 million in 2003. Between 1986 and June 2001, 52,962 AIDS cases were recorded in Nigeria, although this is a gross underestimation due to under-reporting by private health facilities, the fear of stigma, under-diagnosis and the limited use of health care facilities (Government of Nigeria 1999). AIDS deaths in the country were projected to be as high as 850,000 adults and children by the end of 2001 (Government of Nigeria 2002: 6). Current UNAIDS estimates indicate that as many as 3.5 million Nigerians may be living with AIDS.

These grim statistics are only the proverbial tip of the iceberg, however (Alubo et al. 2002: 118). Worsening mortality is reversing gains in life expectancy accomplished over decades through programmes like the Expanded Programme on Immunization. Rural impoverishment has steadily worsened as the epidemic intensifies the ratio between dependents and workers. These trends make the development implications of HIV&AIDS very grave. The pandemic poses the most significant threat to government planning aspirations in Nigeria.

Across Africa, the HIV&AIDS pandemic is widely acknowledged as probably the greatest medical, humanitarian and developmental crisis that the continent has ever known (see box 4.1). In the Niger Delta, when combined with the prospects for an eco-catastrophe, the crisis is potentially devastating. The epidemic impedes sustainable human development by destroying the family as the basic unit of society; weakening the educational system, which nurtures the next generation of leaders; threatening agricultural productivity and food security; impeding industrial capacity; and overwhelming the health care system. The disease erodes human capacity, which is a principal building block for development, by raising attrition among farmers, teachers and other groups to rates that cannot be managed. This is a critical problem because, as discussed in chapter six, human capital is a necessary asset for sustainable livelihoods.

HIV&AIDS stands apart from other diseases because of the scale of its morbidity and mortality, as well as the patterns of contagion primarily among people in the 15- to 50-year age group. The effects of long illness and premature death within the economically active workforce have profound economic implications, causing acute labour shortages at household and community levels; altering established relations between labour, land and capital; changing established community patterns in the transmission of agricultural knowledge between generations; and distorting the age range of agricultural workers.

A high rate of HIV&AIDS also leads to irreversible drops in rural household assets

The HIV&AIDS pandemic poses the most significant threat to government planning aspirations in Nigeria. In the Niger Delta, when combined with the prospects for an ecocatastrophe, the crisis is potentially devastating.

The size of the affected population is another important factor

<sup>1</sup> A country is at high risk of an explosion of the disease when the HIV prevalence rate is more than five per cent.

and reversals in rural capital flows. It offsets the balance in strategic rural migration patterns and triggers response strategies that undermine individual and community well-being. Community structures weaken and safety nets are

### THE PREVALENCE OF HIV&AIDS IN THE NIGER DELTA

The prevalence of HIV&AIDS in the Niger Delta is among the highest in the country, higher than the average for Nigeria

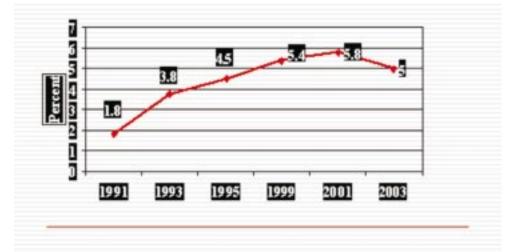


Chart 4.1: National HIV Prevalence Increase from 1991 to 2003

#### Box 4.1: The Challenge of HIV&AIDS in Africa

Africa is currently faced with a grave and degenerative crisis under HIV&AIDS. Available statistics show that nine out of every 10 new cases of HIV occur in Africa. AIDS is not only "the deadliest epidemic in continental history, but also a major demographic, humanitarian, and development crisis" (Gaigbe-Togbe and Weinberger 2003: 1).

By the end of 2002, 42 million people worldwide were infected with HIV, with 25 million already dead from AIDS. About 95 per cent of this total is in the less industrialized world. An estimated 13 million AIDS orphans currently live in sub-Saharan Africa alone. In 38 African countries (including Nigeria), the United Nations Population Division explicitly incorporated the impact of AIDS into its 2002 population projections. It estimated the total population at 603 million in 1995, with 16 million fewer people than without AIDS. By 2025, the population of these 38 countries is projected to reach 983 million, a 14 per cent shortfall.

Average life expectancy at birth has already fallen by 10 years in the most affected countries—that is, those with an adult HIV prevalence of 20 per cent or more (UN 2003).<sup>2</sup> The 1995-2000 average life expectancy is estimated at 47 years for these countries, a six-year drop due to AIDS. By 2020-2025, life expectancy is projected to reach only 52 years, or 10 years less than could otherwise be predicted.

strained. The resilience of farming and livelihood systems diminishes, vulnerability to food shortages increases, and households have less of a capacity to recover from disasters that occur. In dealing with the burdens from HIV&AIDS, people lose time and opportunities they might otherwise have had in a world without this disease. as a whole (see table 4.1 and chart 4.2). The 2003 sentinel survey rated the South-South region as having the second highest prevalence (5.8 per cent), after the North Central zone with seven per cent. This result is alarming compared to the South-West at 2.3 per cent and the North-West at 4.2 per cent (see chart 4.3). The delta has an average prevalence rate of 5.3 per cent, compared to the national average of

five per cent. Nearly half the delta states (Akwa Ibom, Cross River, Delta and Rivers) have either the same or higher prevalence rates as the national average. The Niger Delta and national rates rose from 1999 to 2001, but declined in 2003. This decline might not be an indication of successful strategies to stop HIV&AIDS, however. Official statistics over this period show a declining number of births attended to by trained medical practitioners, which is relevant given that the prevalence rate is obtained through sentinel surveys. Some experts contend that fewer Nigerians are taking voluntary tests for HIV.

There are important variations in the distribution of HIV&AIDS among the nine states of the Niger Delta. Prevalence rates range from 2.3 per cent in Ondo to 12 per cent in Cross River State. Part of the explanation for this variation is that the latter state is bordered on three out of four sides by states with a prevalence level of six per cent or more. In the north, Cross River shares boundaries with Benue State, with a prevalence of 9.3 per cent. Prevalence levels increase dramatically as one moves from the South-West to the South-East of Nigeria, where industrial activities related to oil exploration are most intensive.

Maps 4.1 to 4.4 show progressions in the incidence of HIV&AIDS in Nigeria through the years. They indicate a continuous rise in prevalence levels in the states of the Niger Delta in the period under review. Evidence from chart 4.3, however, shows three trends. First, Akwa Ibom, Edo and Imo states had consistent declines between 1999 and 2003, while the situation has been worsening in Abia and Cross River states. Rivers, Ondo, Delta and Bayelsa states worsened between 1999 and 2001 but improved in 2003. While developments in each state influence the dynamics of HIV prevalence in the region, the overall average is shaped by the situation in Rivers, Delta, Bayelsa and Ondo states (chart 4.4). Charts 4.5 and 4.6 provide a good view of the performance of the Niger Delta states relative to other states in Nigeria.

The impact of HIV&AIDS has been particularly harsh in the Niger Delta. It is well known that the disease wreaks greater havoc where there is poverty, social inequity and general political marginalization. Inadequate health systems prevent the management of the epidemic. The weakening of livelihoods and the social fabric in areas prone to oil exploitation creates additional problems in terms of care and support. Also disturbing is the limited access to anti-retroviral therapy. While no figures are available for the delta, the World Health Organization estimates that only one per cent of Africans living with HIV can obtain these drugs.

Data from the 2003 National Sentinel Survey show that prevalence rates in the South-South region of Nigeria are higher in urban than in rural areas. Six of the Niger Delta states are within this region. In the South-West, where Ondo State is located, urban prevalence is also higher. The picture is different in the South-East, where HIV&AIDS rates are higher in rural than in urban areas.

Data further show that in the South-South zone, the 20-24 age bracket displayed the highest prevalence, at 8.9 per cent, followed closely by the 25-29 age group with seven per cent. The lowest prevalence of 1.7 per cent was in the 15-19 age bracket. There was a consistent fall from 20-24 year-olds down to 40-49 year-olds (see chart 4.7). The high prevalence among younger people underscores the serious threat the epidemic poses to productivity now and in the future.

In Nigeria and the Niger Delta, the dominant form of transmission of HIV is through heterosexual sex. Prevalence rates are higher for women (especially those aged 15-24 years) than for men, as are employment truncation rates. The gender patterns signify that traditional practices such as polygyny, the holding of concubines and permissive male sexual norms operate to make women more vulnerable.

Evidence from the focus group discussions shows that the level of social exclusion and stigma is still high in the region. Women face a double vulnerability from the links between poverty and exclusion and HIV&AIDS. Prevalence is dramatically higher in areas with a heavy concentration of oil production.

The disease wreaks greater havoc in the midst of poverty, social inequity and general political marginalization—all of which afflict the Niger Delta.

States	Prevalence rates	per cent	
	1999	2001	2003
Abia	3.0	3.3	3.7
Akwa Ibom	12.5	10.7	7.2
Bayelsa	4.3	7.2	4.0
Cross River	5.8	8.0	12.0
Delta	4.2	5.8	5.0
Edo	5.9	5.7	4.3
Imo	7.8	4.3	3.1
Ondo	2.9	6.7	2.3
Rivers	3.3	7.7	6.6
Niger Delta	5.5	6.6	5.4
Nigeria	5.3	5.7	4.8

Table 4.1: HIV&AIDS Prevalence in the Niger Delta, 1999-2003

Source: Technical Report, National HIV & AIDS Sentinel Survey, 2004.

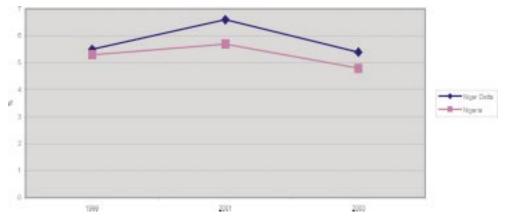
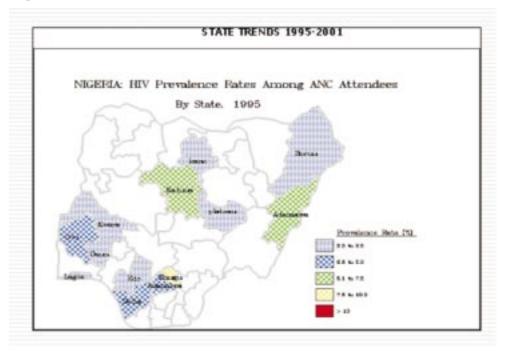
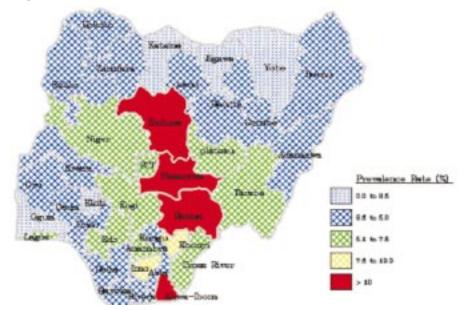


Chart 4.2: HIV Prevalence in the Niger Delta and Nigeria, 1999 - 2003

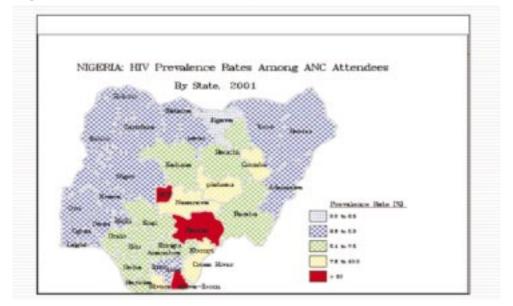
Map 4.1: HIV Prevalence Rates Among Anti-Natal Care Attendees by State, 1995



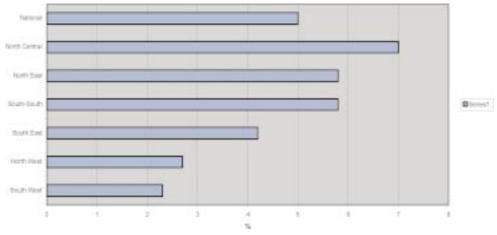


Map 4.2: HIV Prevalence Rates Among Anti-Natal Care Attendees by State, 1999

Maps 4.3: HIV Prevalence Rates Among Anti-Natal Care Attendees by State, 2003







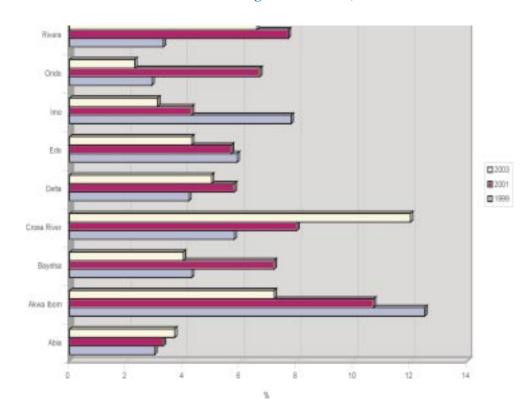
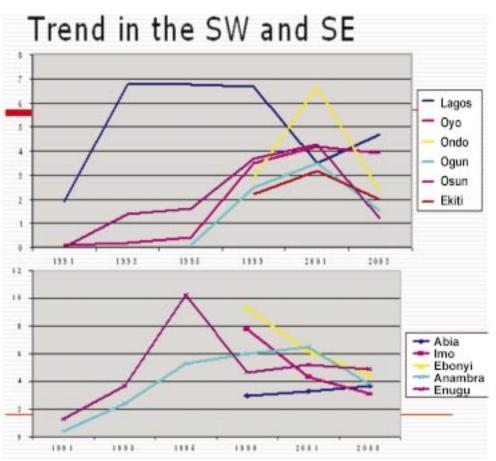


Chart 4.4: HIV Prevalence in the Niger Delta States, 1999-2003

Chart 4.5: HIV Prevalence Trend in the South-West and South-East Between 1991 and 2003



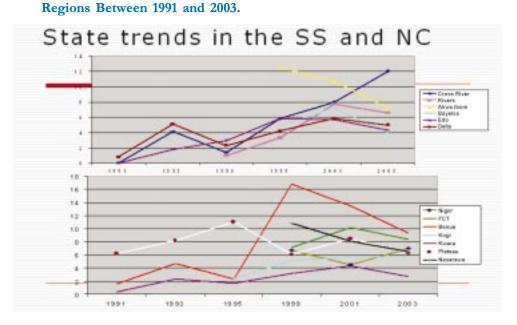
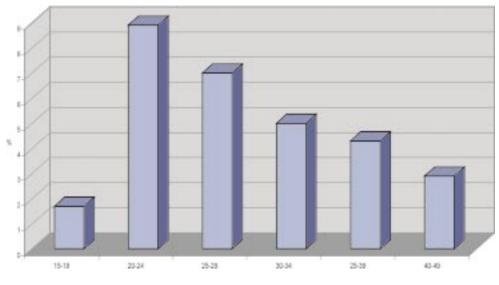


Chart 4.6: HIV Prevalence Trends in the South-South and North Central

A sense of economic buoyancy from oil wealth encourages men to engage in sexual intercourse with many partners.

Chart 4.7: Prevalence by Age in South-South, 2003



#### FACTORS BEHIND THE EPIDE-MIC

The factors promoting the spread of HIV&AIDS in the Niger Delta region can be broadly categorized as behavioural, economic, socio-cultural and biological, although there are significant overlaps in causes and effects.

#### **Behavioural Factors**

Since the dominant mode of transmission of the HIV virus is by heterosexual intercourse, one of the behavioural factors fanning the epidemic is the common practice of having multiple sexual partners. This tendency is common in all the Niger Delta states for both men and women. The practice cuts across men of varying classes, but for women, it is predominant among those from lower socio-economic backgrounds. Oil wealth encourages men to take advantage of their perceived economic buoyancy by engaging in sexual intercourse with many girls, often without protection. A focus group participant sums up sexual profligacy as follows:

It is a common thing in Port Harcourt, Warri and other places here. It is difficult to find a married man who does not have girlfriends outside. You know when men have little money, they behave like kings. Migration and overcrowded urban centres encourage risky sexual networks to flourish.

An inadequate bealth care system means people don't know their HIV status or cannot get belp when they are ill. Many turn to quacks. This is a clear confirmation of earlier findings from the 2003 NDHS, which noted that 70.6 per cent of women and 94.5 per cent of men sampled from the region revealed that they engaged in highrisk sex in the 12 months preceding the survey. Many men have sex with sex workers, and sex at young ages is also common. In the Niger Delta, while eight per cent of women and 11.5 per cent of men mentioned that they used condoms for their first marriage, the region had the highest proportion of women (7.2 per cent) stating that they had had two or more sexual partners within the preceding 12 months (NDHS 2003: 190-192).

Men's vulnerability is exacerbated by the type of work they engage in. Some jobs entail a lot of mobility, such as being a long-distance driver or oil worker. There may be separate living arrangements for spouses in different cities, and migration for labour or military work (Orubuloye 1995). The work schedule of oil workers makes them prone to the risk of HIV, because most are forced to stay away from their wives or regular sexual partners for up to one month or sometimes longer while engaged in exploratory and production activities. Some workers on this schedule reportedly engage in sexually risky behaviour after the one-month period of seclusion.

Because of their greater mobility, men tend to migrate to urban centres and places far from their families in search of employment. Youths are also likely to leave rural areas in search of opportunities in the cities. Oil industry jobs in particular have spurred migration within the delta and attracted a mass influx of people from outside. The industrial cities of Port Harcourt and Warri and the whole of Cross River State are heavy receivers of migrants and tourists who establish high-risk sexual networks.

Migration has spawned urban squalor and overcrowding; child labour (Oloko 2002); thriving commercial sex (Olusanya et al. 1986; Adedoyin et al. 1995; Omorodion 1994); the proliferation of sub-standard health care facilities, including quacks masquerading as health care agents; and abject poverty. These factors encourage risky sexual behaviour and lifestyles contributing to the spread of HIV&AIDS. In urban centres such as Port-Harcourt, Warri and Benin City, overcrowded housing units have become the breeding ground for sexual activities among neighbours, and between older men and the children/wards of their neighbours. Girls and women who hawk various items but suffer commercial shortfalls readily become the victims of predators or voluntarily resort to commercial sex. There are reports of widespread unprotected sexual intercourse between older men and girl hawkers (Erinosho 2004).

Participants in the focus group discussions for this report acknowledged that sending their children out to work and sell things at the market or by the roadside may be dangerous, but noted that it was necessary due to poverty. One participant said:

"We are trying our best, but because of hardship, we could not do anything to pay their fees and look after them; that is why we send them to go and sell; to go and help us to work. It makes it look like it is child abuse, but it is because of hardship."

The migration of girls and women from Edo State, in particular, to other parts of the world for commercial sex work has been documented by Onyeononu (2003). Some of the girls, because of the need to make money, often yield to the pressure from clients to have unprotected sex. This migratory pattern spreads HIV&AIDS not only in Edo State, but in the whole of the Niger Delta and beyond.

#### **Economic Factors**

Poverty and HIV&AIDS are closely linked. Poverty prevents the establishment of needed prevention, care, support and treatment programmes. It also reduces access to information, education and services that could reduce the spread of the virus (UNFPA 2002). For individuals and households, income poverty can mean that women, and sometimes men, end up in risky sexual situations.

HIV&AIDS also generates poverty. As those with the virus fall ill and die, a family or community loses much needed human capital or productive resources. In the Niger Delta, poverty has been one of the main propellants of the spread of HIV&AIDS (Makinwa-Adebusoye 1991; Orubuloye et al. 1992; Oyeneye et al. 1993; Omorodion 1993; Oloko et al. 1993; Makinwa-Adebusoye and Odumosu 1997; Isiugo-Abanihe et al. 1998). It also aggravates the already harsh repercussions of having the HIV virus

The lack of good and/or affordable health care facilities or the inability of people to pay for health care services means that the medical needs from HIV&AIDS cannot be met. About half the women in the delta region say they cannot afford health care, compared to a national average of 30 per cent. Qualitative data corroborate that there are few proper facilities even for common ailments, not to mention HIV&AIDS cases. One focus group participant said, "We do not have these facilities. People have to travel for eight hours to attend the hospital in the local government headquarters."

Not having health facilities makes it difficult for people to know their HIV status, even those willing to be tested for HIV. Throughout Akwa Ibom State, there are only 10 voluntary counselling and testing centres, two centres for the prevention of mother-to-child transmission of HIV&AIDS and one anti-retroviral centre. In Cross River State, each local government has a voluntary counselling and testing centre, but there are only four centres for mother-to-child transmission and one for anti-retrovirals. One focus group participant commented, "How do you expect us to know if there is HIV&AIDS or not? We do not have any clinic and there is no other government facility where we can be tested. How then are we going to know who has HIV&AIDS?"

Poverty drives the poor to seek health care from assorted health care agents who are usually quacks (Erinosho, 2004), including patent medicine sellers. They are likely to use infected needles for intravenous injections. Traditional healers, who constitute a formidable sub-group among health care providers in all states of the Niger Delta, often use unsterilized blades and knives for incisions on their clients, in order to protect them from diabolical attacks. They pose a serious threat to social and physical well-being. The abuse of blood products is also rife within the region. Blood transfusion is extremely risky because the skills and facilities needed to screen blood products are either not available or have deteriorated and/or broken down. This is particularly true in the riverine areas, which are inaccessible by road and have suffered from years of infrastructural neglect by the federal, state and local governments. Even where health care facilities are available, technical services such as blood screening often are not. People who require blood transfusions often die before screened blood can be obtained, or unscreened blood is purchased and transfused at great risk of HIV infection.

The situation is further compounded by a dangerous trend whereby unscrupulous Nigerians sell infected blood products that are transfused to unsuspecting clients. This blood often ends up in the veins of the urban and rural poor. The 2003 national sentinel survey showed a consistent difference in HIV prevalence among women who had never received blood transfusions and those who had. For instance, in the South-South zone, the HIV rates are higher among women with a history of blood transfusion. The same pattern is observed in the South-East and South-West zones.

The drive for economic development has unfortunately helped the spread of HIV&AIDS. In Cross River State, which has the country's highest HIV prevalence, there is apprehension that tourism might increase the spread of HIV if adequate safeguards are not in place (and that conversely, HIV could undermine development aspirations in tourism). The mass distribution of condoms to major hotels in Calabar, the state capital, during peak tourist periods, complemented with a vigorous health education campaign targeted primarily at youth should help to reduce new infections.

Cross River State is one of the few states that has allocated an appreciable amount of money to HIV&AIDS programmes. In a recent assessment conducted by the National Action Committee on AIDS, the state rated very high on financial provision, sensitization and intervention, but could Social instability and decaying social values have encouraged the widespread practice of risky behaviours.

There are strong connections between the moral dimensions of human social behaviours and the spread of HIV&AIDS.

Adolescent females engaged in transactional sex activities have become an important mode for the beterosexual transmission of HIV.

Infected blood often ends up in the veins of the poor. Many people don't bave correct information about HIV&AIDS. Some attribute it to God, witchcraft or a conspiracy by developed countries.

It is evident that knowledge about HIV prevention is very low. do more on monitoring and developing capacities to respond to the epidemic.

# Socio-cultural Factors

There are two kinds of socio-cultural factors related to HIV&AIDS: those embedded in the social structure (macro-sociological) and those that can be regarded as the externalities or unintended consequences of rapid modernization following the discovery of oil and gas in the region. The latter have become part of the socio-cultural milieu (micro-sociological).

One readily apparent area of social change is the decay in social values and the spread of social instability. There is a moral dimension to the pattern of social change in the Niger Delta region that is not always immediately visible, although there are strong implications for human social behaviour and the spread of HIV&AIDS. The delta's oil economy has generated severe moral contradictions by creating a class of rich exploiters who take advantage of the endemic poverty to flaunt their wealth, seduce impoverished adolescent girls and generally gain access to an extensive network of female sexual partners.

Parental inability to meet the needs of young persons has opened the door to youth rebellion and further degeneration of the sexual code. Adolescent females engaged in transactional sex activities an became an important mode for the heterosexual transmission of HIV from the mid-1980s onwards (see box 4.2). Social instability resulting from skewed development has meant high unemployment rates for restive youth, many of whom turn to violence. Education systems have become destabilized and employment patterns more precarious, paving the way for behaviour that transmits the virus.

Social beliefs affect understanding of the causes and prevention of HIV&AIDS, as well as practices to spread or stop the virus. Most people of the Niger Delta belong to two worlds: the European and the African. They subscribe to both scientific and magico-religious world views. According to some focus group participants, the disease is a "punishment from God and the handy work of witchcraft." In one discussion, people's perception of good health was erroneously predicated on the size of the body. A fat person was said to be healthy while a slim one is sick. Although they recognized that HIV&AIDS is a very serious disease, they could easily be deceived into believing that someone carrying the virus is healthy until the final stages of AIDS, with ill health evidenced by loss of weight.

Research shows that many people do not have correct information about the transmission and prevention of HIV&AIDS, as well as the risks associated with it. Data from the focus groups reveal that women's and men's knowledge of HIV&AIDS is grossly deficient in both the urban and rural areas of the Niger Delta. The modes of transmission known and shared by all are unprotected sexual intercourse with an infected person and sharing of needles. But their knowledge of other transmission routes as well as

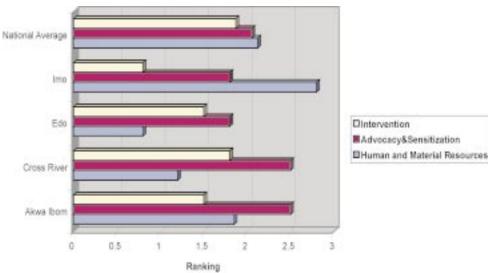
	Box 4.2: Increasing Prostitution in Oil-Producing
(	Communities
	A social problem generating serious concern is the prevalence of
•	commercial sex workers patronized by oil company workers.
-	Informants lamented the increasing social decadence and decline
i	in traditional social values as prostitution is now very rampant in
	nearby communities. The appeal for 'easy money' is a serious
	temptation, not only to ladies who come from other areas, but also
	to local young girls as well as their poverty-stricken families who
	sometimes even send them out to make money for the family.
	Sexually-transmitted diseases are now very common.

Source: EMRL field survey 2005.

the associated risks of HIV infection is low. On participant aptly summarized: "We do not have any knowledge of HIV&AIDS because there is no enlightenment." Another discussant said, "HIV&AIDS means many things to many people. While the elites know much about it, the illiterates know very little and sometimes nothing about AIDS. It is a disease from God." Responses like these underscore the need for rapid sensitization on HIV and AIDS prevention, control and management. The 2003 NDHS corroborates this view. In the South-South region, it reveals that about 10 per cent of women and eight per cent of men have yet to hear about HIV&AIDS. It is also evident that knowledge about HIV prevention is very low. Only 47.1 per cent of women and 49.8 per cent of men knew about prevention techniques such as using condoms and limiting sex to one uninfected partner. This figure was 52.4 per cent for women and 69 per cent for men in the South-West region (NDHS 2003: 170-171). The recent assessment of 17 Nigerian states by the

Traditional practices put people at high risk of acquiring HIV from unsterilized surgical instruments.

Chart 4.8: State Responses on HIV/AIDS Scope of Intervention, Advancy and Resources



Widowhood rites as practiced in some parts of the Niger Delta, such as Edo and Delta states, may put a woman at risk.

National Action Committee on AIDS revealed that only Cross River and Akwa Ibom performed above the national average on HIV&AIDS advocacy and sensitization (see chart 4.8).

Given the low level of understanding about HIV&AIDS in the Niger Delta, it is not surprising that a significant number of people believe that HIV&AIDS can be prevented and/or cured by traditional healers and medicines. Some take risks when they consume concoctions, before or after sex, that they believe are sure antidotes to HIV. Many people in the Niger Delta simply believe that the disease is not real. During one of the focus group discussions, a teacher stated that the AIDS scare is a grand design by the developed world to subject the developing countries to their whims and caprices. The following is another of the responses from the discussions that reflects the lack of understanding:

The social stigma attached to carriers of HIV&AIDS has also hampered efforts to curb the spread of the disease. One focus group participant said, "Stigma does not allow people to open up. They claim other problems of poison or witchcraft when they have AIDS."

In the Niger Delta, as in most regions of Nigeria, harmful traditional practices add an extra dimension of risk in contracting HIV. These include female genital mutilation (FGM), widowhood rites and body scarification.

FGM, which is widespread in some parts of the Niger Delta, is usually performed by traditional healers or circumcisers. This

"It happens. People die suddenly and you do not know the cause of their deaths. Men will marry their wives and die too. It happens." - Focus group participant With a lower social status and limited economic power, women often cannot negotiate safe sexual practices.

Some women expose themselves to risk rather than facing the scorn heaped upon women who don't have children.

Sexual coercion and exploitation in schools and the workplace make women and girls vulnerable to HIV&AIDS. custom is particularly rampant in some areas of Ondo, Edo and Delta states. FGM can cause serious consequences, including death from excessive bleeding, as well as from the use of unsterilized equipment that spreads HIV and other infections. Several responses from Ondo State revealed that some people are aware of the link between FGM and HIV&AIDS:

HIV&AIDS can be contracted through circumcision for children and people that do incision that involve the use of blade and letting out of blood.

The aspect of our culture that can increase the risk of HIV&AIDS is through circumcision of children, tribal/ facial marks and tattoos. All these acts should be stopped as they can cause AIDS.

Widowhood rites as practiced in some parts of the Niger Delta, such as Edo and Delta states, may put a woman at risk by requiring the woman to shave her hair, which is usually done by older women using old and unsterilized blades. Traditional scarifications on the abdomen, chest, back and/or hand are still performed in rural areas and by the urban poor. Bodily modifications such as piercing or shading have been practiced throughout human history for aesthetic, social and therapeutic reasons-virtually all the Niger Delta states have peculiar cultural body marks. But the use of unsterilized instruments again can expose people to HIV. Scarifications are often done on several people at once, which further increases the risk. And they are normally not carried out in modern hospitals, but by older community men and women who might have acquired expertise over many years. Other risky customs include traditional barbering (shaving of the head) and nail cutting to the skin, both undertaken by barbers typically using unsterilized blades or scissors.

Another socially approved traditional practice in the Niger Delta that can foster sexually transmitted diseases (STDs) is polygyny. This custom is rooted in the patriarchal nature of Nigerian society and promotes multiple sexual partners. About a quarter of married people in Nigeria are in polygynous unions (National Population Commission 2000). The practice is prevalent in the Niger Delta, especially in Ondo, Edo and Delta states. Those who engage in polygyny seek to increase social parity by establishing affinal relationships and alliances. Having more wives usually enhances the social status of the man, and having more children is seen as giving a man a greater chance of becoming immortal. Ethnically, polygyny allows a man and his lineage to establish political and economic alliances with other lineages. It also helps space childbearing, which can be a survival strategy for women in lowincome groups. The fidelity of all partners in a polygynous relationship, however, is critical for the avoidance of HIV&AIDS.

Another widowhood rite linked to HIV&AIDS in the Niger Delta is levirate, otherwise known as wife inheritance (Owasanoye 1997; Inter-African Committee 2000). The custom is based on the principle of lineage continuity, a privilege initially conferred on one member of the lineage but transferable to another on the death of the first. In the Niger Delta, as in other areas of Nigeria, the husband is usually the administrator of a woman's fertility, acquired through the payment of bride wealth. His death does not nullify the marriage. Instead, it opens access and control of the widow's fertility to some other well-defined member(s) of the lineage, even if the deceased died of AIDS. Levirate practices have been documented in Ondo, Edo, Delta, Akwa Ibom, Cross River and Imo states (Inter-African Committee 2000).

# Gender Relationships and HIV&AIDS

Gender relationships are of great social significance in the spread of HIV&AIDS. Studies show that HIV prevalence is typically higher among females—about 55 per cent of adults living with HIV&AIDS in Africa are women (UNAIDS 2000: 3). The majority were infected by age 25, with women's peak infection rates often occurring at earlier ages than those of men. In the Niger Delta, HIV&AIDS prevalence is also highest among young

people and women. Gender issues are of prime importance (Ezumah 2004) in women's heightened vulnerability, which stems from biological, social, cultural and economic factors.

Power relationships and decision-making in marriages, particularly in polygynous unions, are conducive to the spread of HIV&AIDS among women, since a man has statutory sexual privileges and access to more than a single female partner. Men usually shun condoms, while women cannot always insist on condom use during sexual intercourse, even when they know fully well that their partner could infect them.

The intersection of patriarchy with poverty, including when it propels women into the sex trade, adds another layer to women's vulnerability. Those who are poor and depend economically on their partners/husbands face an extra obstacle in insisting on protective measures in sexual relationships. The fear of repercussions also prevents them from being assertive. Some are not able to challenge their husbands for having extramarital affairs because of this.

Women at all economic levels in many Niger Delta societies are expected to be passive sexually, because it is often considered improper for women to demonstrate sexual knowledge. Even when women are provided with knowledge about HIV&AIDS, its transmission and how to protect themselves, they often feel too inhibited to share this information with their partners. Unable to participate in meaningful communication about sexuality (Ezumah 2004; Olawoye 2004), they are not able to protect themselves with abstinence, mutual fidelity or condoms (Richardson 1990). Once women acquire HIV, the communal and lineage ideologies of male preference make it less likely that meagre family or household incomes will be expended on treatment for them, especially if they are not regarded as major contributors to those incomes.

On another front, women's indulgence in risky behaviours in order to have children also predisposes them to contracting HIV&AIDS. In the Niger Delta, as in most other places in Africa, women are under great pressure to demonstrate their fertility and become mothers. This goal of childbearing is often incompatible with safer sex practices. Some women establish outside relationships to have babies when they perceive that their husbands are not in a position to impregnate them. Women want to save themselves from the embarrassment and scorn heaped upon women who are childless in Nigerian society.

Sexual harassment, sexual coercion and exploitation in schools and the workplace also make women and girls vulnerable to HIV&AIDS. Many schoolgirls are coerced and exploited by teachers and older men. The phenomenon of 'sugar daddies' has been a terrible development.

#### **Biological Factors**

The differences in prevalence rates between men and women can be partly accounted for by their biological differences. During sexual intercourse, abrasions or injuries in the vagina are more than those on the penis, particularly during violent or coerced sex. This is more serious in the case of younger girls, whose vaginal canals are not fully developed and are prone to tears and abrasions. Women tend to have a higher rate of genital ulcers, which facilitate HIV transmission.

# **Government Responses**

Government commitment to activities to control HIV&AIDS has lagged behind the high prevalence in the Niger Delta region, although the institutional frameworks for preventing and controlling the spread of HIV and mitigating its impacts are now in place. These include the national, state and local action committees on AIDS.

The performance of some of the delta states can be rated using indicators from the National Action Committee on AIDS. These include governance, planning, coordination, human and material resources, advocacy and sensitization of stakeholders, finance, monitoring and evaluation, and capacity building (see charts 4.8 to 4.10). On the issue of governance, none of the states performed up to the national average. In the composition of Akwa Ibom's State Action Committee, for instance, Muslims, youths and armed forces were excluded. Although stakeholders are well represented in activities in Edo State, there is no documented policy on HIV&AIDS, nor has Across the delta states, there are wide variations in resources, commitment and action devoted to addressing the pandemic.

In Edo State, there is no documented policy on HIV & AIDS, nor bas HIV & AIDS been fully integrated into development programmes. Days of labour are lost, productivity drops,, and households slash spending on education to pay for health care. HIV&AIDS been fully integrated into development programmes.

Unlike other states in the Niger Delta region, Akwa Ibom State put a 2005 work plan in place and is currently developing a five-year strategic plan with inputs from the State Action Committee and the State Project Team. Both Imo and Akwa Ibom states are very good in coordinating HIV&AIDS programmes (see chart 4.9). Imo's State Action Committee submits quarterly reports to the National Action Committee, the state government and the World Bank, and collaborates with about 42 organizations. Coordination is considered to be very weak in Cross River and Edo states, where the state committees lack logistical support.

Only Cross River and Akwa Ibom states outperformed the national average in advocacy and sensitization activities. In both states, advocacy outreach is targeted at policy makers, while sensitization programmes are directed at a cross-section of society. Strategies used in reaching out to people include lectures and seminars, jingles, rallies, media campaigns, meetings and distribution of educational materials. Still, there is much room for improvement.

All states in the region are still below the national average in the scope of their intervention programmes. Resources have also fallen short. Although roughly all the states have paid their counterpart funding for the International Development Association credit (see chart 4.10), only Cross River State has put in place an effective financial system. It released N14.00 million to implement its 2005 work plan. In contrast, although N21.00 million was approved by the Akwa Ibom State Government for HIV&AIDS activities in 2005, nothing was actually released.

Given the low level of intervention, inadequate facilities and limited resources, the future prospects for the region in terms of controlling HIV&AIDS are troublesome. Stepped up efforts are needed for the challenges ahead.

#### **Impacts on Key Sectors**

HIV&AIDS touches every sector of the Niger Delta economy. In agriculture, for example, when HIV&AIDS strikes farmers, the reduced cultivation of cash crops and food products is the result. Although it is difficult to precisely define the shortfall in crop production attributable to HIV&AIDS, primary data collected indicate that many farmers have died of diseases related to AIDS. A focus group participant in Abia said:

"When you see young farmers getting very sick and lean, what else can be responsible?"

In the economic and business spheres, HIV&AIDS has exacerbated the already

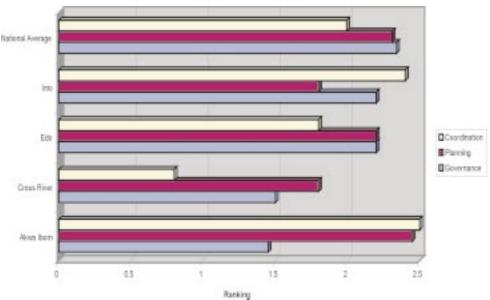


Chart 4.9: State Responses to HIV/AIDS: Coordination, Planning and Governance

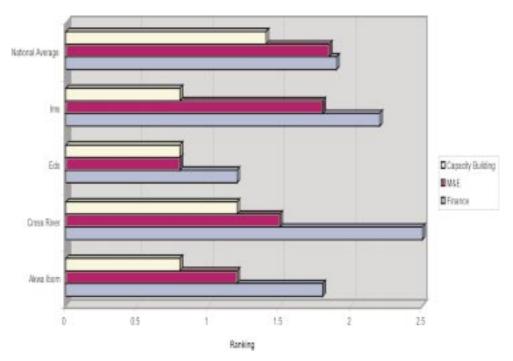


Chart 4.10: State Responses to HIV/AIDS: Capacity Building, Monitoring and Evaluation, and Finance

severe shortage of qualified men and women. Days of labour are lost to illness, productivity drops, and funeral and health costs increase. Households must slash spending on education to pay for health care. Focus group discussions across the Niger Delta confirmed these findings. Respondents described how attending the funerals of young and middle-aged men and women is now a common practice.

The impact of HIV&AIDS on education is severe. It reduces the supply of teachers, the resources for education, and the demand for education by children.

The withdrawal of children from school in response to increased expenditures on and care requirements for sick family members was commonly mentioned in the focus group discussions. Some children even become breadwinners when the heads of the family are incapacitated by sickness or die (UNESCO 2003). The quality of education suffers through teachers' absenteeism. The view of a focus group participant in Edo sums up the comments of many other discussants:

Since HIV&AIDS affects everybody, the education sector is not left out. Although we do not know for sure if teachers' deaths, school children's deaths, etc. are due to HIV&AIDS, but it seems like it is so. The impact of HIV&AIDS on the health sector is felt in the increased demand for care. Already weak health systems are overstretched, and the costs are rising for infrastructure, drugs and personnel.

Other concerns include the growing increase in the number of orphans and widespread premature death, which is radically altering life expectancy. A Nigerian child can now expect to die before his or her 41<sup>st</sup> birthday, according to the 2005 *Human Development Report* on Nigeria (UNDP 2005).

# A MULTIDIMENSIONAL STRAT-EGY

Nigeria's response to the HIV&AIDS pandemic has unfolded in three phases. The first phase, from 1986 to 1990, involved a slow beginning, due to initial denial, apathy, and lack of political will and commitment by the Government. The National AIDS Control Programme was set up in 1986, the same year that AIDS was officially reported in the country. It was highly centralized at the federal level.

In the second phase, from 1991 to 1997, some efforts at decentralizing the government response began with the establishment of the state and local action Awareness has grown that HIV&AIDS is about much more than health—it challenges all dimensions of development and requires a holistic response. The process of convincing political leaders to see HIV& AIDS as an issue of strategic priority is gathering momentum, but not all leaders are yet on board.

The Niger Delta states could harness the energies of the many development organizations already on the ground.

Initiatives must reach those profiting from the sale of infected blood or blood products, and traditional bealers/ circumcisers who use infected blades and needles.

Any strategy to control HIV & AIDS needs to protect people's basic human rights. committees and programmes. The National STD and AIDS Programs were merged with the National AIDS and STD Control Program in 1992. In 1993, the Nigerian film on AIDS, *Dawn of Reality*, was produced. NGOs working on AIDS and STDs proliferated. In 1997, the Government launched the nation's National Policy on HIV&AIDS/STIs Control.

In the first two phases, HIV&AIDS was seen purely as a health issue. Most activities were restricted to health ministries and related agencies. Stakeholders were not very involved in the planning and management of HIV&AIDS -related programmes.

By the third phase, from 1999 to the present, a growing awareness of the devastating impact of HIV&AIDS on development prompted the Nigerian authorities under the present administration to develop a high-profile National AIDS Control Program. The authorities, in collaboration with bilateral and multilateral organizations, have initiated various intervention programmes that include advocacy, counselling and the management of known cases. The principal goal of these programmes is to heighten the level of awareness, discourage highrisk sexual behaviour patterns, and promote the physical, social and mental well-being of Nigerians.

The authorities have also outlined and approved the comprehensive HIV&AIDS Emergency Action Plan. It incorporates a wide range of activities that are being implemented with the cooperation of the local, state and federal governments, and NGOs. Ongoing efforts include the formation of support groups for people living with HIV&AIDS; efforts to support orphans; and the creation of the National Action Committee on AIDS, along with its state and local counterparts. There has been an increased focus on care and support for AIDS patients. Policy and programmatic links have been made between HIV&AIDS and various sectors of the economy, including health, education, agriculture, defence, banking, the transport industry and so on. Umbrella organizations now join the efforts of NGOs, youth and people

#### living with HIV&AIDS.

The Nigerian Government appears to have grasped the notion that addressing HIV&AIDS requires a holistic approach that encapsulates both treating the symptoms and addressing the underlying causes. Viewing HIV&AIDS as a development problem allows for an understanding of the complexity of the issues at stake, and the identification of actions across different sectors.

Essential to this process is the establishment of partnerships to stop the HIV&AIDS pandemic. The organized private sector has abundant resources that could be mobilized to support HIV&AIDS programming, for example. At a minimum, businesses should develop programmes for their staff. Private sector organizations could also contribute advocacy work, and counselling and health care services.

The National Action Committee on AIDS has already convened a meeting of major private sector organizations to discuss intervention programmes. Other initiatives could involve working with NGOs on public education to increase awareness and ease the social stigmas surrounding HIV&AIDS. The state action committees in the nine Niger Delta states should pick up on this lead.

In the Niger Delta, the process of convincing political leaders to see HIV&AIDS as an issue of strategic priority is gathering momentum, but not all leaders are yet on board. Here, too, partnerships could open the door to rapid progress. The Niger Delta has a large number of local groups and external organizations already working on development. Harnessing the energies of these organizations will quickly expand and multiply efforts to control HIV&AIDS, perhaps by starting with capacity development programmes. Some organizations are already being used to deliver programmes in various communities that cannot be easily reached by authorities. They also have a vital role to play in providing support to people living with HIV&AIDS and orphans.

One particular point of outreach in the delta is to engage those actively profiting from the sale of infected blood products and traditional healers/circumcisers who use infected blades and needles. They are important partners in the fight against HIV&AIDS. Public education campaigns should target the use/abuse of blood products and blades by barbers, surgeons and traditional healers, and should place a special emphasis on reaching those in urban slums and rural areas who wholly rely on marginal forms of health care.

#### HIV&AIDS and Human Rights

In part because of the strong stigmas associated with HIV&AIDS and the discrimination that often results, any strategy to control the disease needs to recognize the protection of the basic rights of people living with HIV&AIDS. Numerous national and international laws and agreements define human rights, including the following, which are of special interest in terms of HIV&AIDS.

1. The right to life and the right to health are guaranteed under Section 33 of the 1999 Nigerian Constitution. Article 4 Section 17(3) (d) of the African Charter on Human and Peoples Rights says that "the state shall direct its policy towards ensuring that there are adequate medical and health facilities for all persons." Assured treatment and care for HIV&AIDS patients is very far away from patients in the Niger Delta and in Nigeria in general, however. It is a common practice for hospitals to refuse treatment to people with HIV&AIDS. Health care workers often decline to treat patients or treat them badly.

2. The right to human dignity is provided for in the Universal Declaration on Human Rights and in other international documents. The Nigerian Constitution says that every individual is entitled to respect for the dignity of his person and accordingly no person shall be subject to torture or to inhuman or degrading treatment. The following comment from one of the focus group participants illustrates the usual degrading treatment of people living with HIV&AIDS: I cannot have anything to do with them. I pity them but I need to protect myself too.

**3.** The right to privacy is also protected under the Universal Declaration on Human Rights, which states in Act 12 that no person shall be subjected to arbitrary interference with his privacy, home or correspondence, or to attacks upon his reputation. People living with HIV&AIDS have the right to privacy concerning information on HIV status, as well as information indicating whether a person has agreed to undergo an HIV test or not.

**4. Confidentiality** is one of the oldest principles guiding the medical profession. A person has a right to medical confidentiality; this includes his or her HIV status. The failure to respect confidentiality will drive infected people to withhold information concerning their health status, or they may even resort to telling lies.

**5.** The right to marry and the right to family life: Every individual, including those living with HIV&AIDS, has the right to marry and raise a family.

6. The right to an education: Everyone, regardless of ethnic affiliation and social or health status, has the right to an education. Data suggest that children of parents with HIV may be rejected and excluded from schools, even though an HIV test was not carried out on them. This indication of discrimination violates people's rights.

7. The right to work: Everyone has the right to work, and to have just and favourable work conditions. Although the HIV virus is not easily transmitted, many employers in Nigeria either sack those found to be HIV positive or refuse to employ them. In the Niger Delta, aside from the multinational oil and gas operators and the big oil service firms, most workplaces do not have HIV&AIDS programmes. It is a common practice to request prospective employees to undergo HIV testing before employment.

#### **CONCLUSION**

Nigeria's HIV prevalence rate remains relatively high, especially for younger Assured treatment and care for HIV & AIDS patients is very far away from patients in the Niger Delta.

Social and cultural factors help account for the delta's high rates of HIV, including heterogeneous sexual behaviours.

Reversing HIV & AIDS will require an integrated approach that recognizes the many dimensions of the pandemic. people. In the Niger Delta, most people continue to see HIV&AIDS as a health issue. But in influencing diverse aspects of national and regional welfare, it has become a major development challenge. While a poor livelihood or poverty encourages vulnerability to HIV&AIDS, the disease also dampens prospects for economic growth and development. These inextricable links are clearly at work in the delta, although social and cultural factors also account for its high rates of HIV, including heterogeneous sexual behaviours.

Reversing HIV&AIDS will require an integrated approach that recognizes the many dimensions of the epidemic. All stakeholders, including federal, state and local authorities, the NDDC, the private sector, civil society groups and international organizations, have roles to play. Strong leadership will be needed at all levels. The most effective strategies will be holistic, combining programmes to prevent opportunistic infections, manage existing cases and care for people living with HIV&AIDS. Strong policy advocacy among top-level policy makers and opinion leaders must take place, accompanied by a boost in awareness in the population at large. The issues of sustainable livelihoods and gender inequality must be addressed, and there must be steps to discourage heterogeneous and unsafe sex. Routine community conversations about HIV&AIDS would go far in reducing stigmas that curtail efforts to stop the epidemic.

# Conflict and Conflict Management: Towards Sustainable Peace

FIVE

# THE NIGER DELTA, YESTERDAY AND TODAY

A brief history of the Niger Delta will set the stage for the current conflicts, although only aspects germane to human development are highlighted. For a start, this region had the earliest and most sustained contact with Europeans, especially during the pre-colonial period. This contact served the region well. While the colonial government's 1917 township classification rated Lagos the only first-class town in Nigeria, eight of the 18 secondclass towns were in the Niger Delta and 27 of the 47 third-class towns.

Since the township classification guided the distribution of infrastructure and amenities, many towns in the delta, such as Brass, Burutu, Forcados, Sapele, etc., received colonial attention much before bigger settlements further inland. According to Church (1965), Forcados became so important during this early colonial period that until 1914, goods meant for Lagos were usually shipped through there. In the Nigeria of that time, the place to be was probably the Niger Delta!

### Yesterday

The Niger Delta was an important area for European trade, which stimulated the economic, political and social life of the people living there. New city states emerged to cope with growing prosperity. Most towns in the delta sprang up during the period of European trade between 1450 and 1800, especially in places where European traders had set up businesses (Dike 1956). As a result of the palm oil trade, middlemen became a powerful and prosperous class.

For fear of malaria, European merchants

were reluctant to move into the interior of the Niger Delta until after 1854, when the explorer Baikie proved that quinine protects against the disease. The role of the middlemen in the palm oil trade was sufficiently high for McPhee (1926) to remark that the commercial penetration of the interior was made possible through their help as agents of European firms on the coast. Middlemen established stores in the interior with goods advanced to them on credit by their European principals on the coast (Mabogunje, 1968).

As a result of the foothold the British traders had in the Niger Delta, the area now known as Nigeria was conceded to Britain at the Berlin Conference of 1885. The Royal Niger Company, in addition to its trading activities, was already virtually in charge of governance on behalf of the British. Its attempt to monopolize the trade in palm oil to the exclusion of the Niger Delta kings and middlemen was to result in the first major rebellion in the region against injustice. The British revoked the charter empowering the company to govern in 1900; thereafter, Britain assumed direct rule of Nigeria.

The active participation of the British Government in the internal development of Nigeria did not begin until the passing of the first series of Colonial Development Acts in 1929. Before this time, development was carried out with funds generated from Nigeria itself. In 1939, the scope of the Acts was changed under the Colonial Development and Welfare Act. Its stated aim was the promotion of the development of the resources of the colonies and the welfare of their peoples.

In the same year, southern Nigeria was subdivided into the Western and Eastern Regions. The present Niger Delta peoples The Niger Delta conflicts over resources began simmering during the pre-colonial period. But today, the region has become far more volatile. Years of deprivation have pushed citizens into anger, hopelessness, cynicism and violence.

The Royal Niger Company's exclusion of the Niger Delta kings and middlemen from the palm oil trade resulted in the first major rebellion against injustice. Before the advent of oil in commercial quantities, the production of palm oil, palm kernels and timber earned considerable income for the region and Nigeria.

The loss of the once vibrant agricultural and fishing sectors and very limited access to benefits from today's oil resources have set the stage for violence in the region.

> Nigeria's civil war popularized the use of force. The delta has become a theatre of almost permanent violence.

in Delta and Edo states thereby became minorities in the Western Region, which was dominated by the Yoruba. In the same way, the peoples in the states of Akwa Ibom, Bayelsa, Cross River and Rivers became minorities in the Eastern Region, which was dominated by the Ibo. The creation of minority populations also underlies the subsequent unfairness and inequity suffered by the Niger Delta states in a Nigerian Federation dominated by three big ethnic groups. Besides the Yoruba and Ibo, the third group is the Hausa/Fulani. It dominates the north of Nigeria, and has played a major role in Nigerian governance, particularly through the military.

In the pre-colonial period and certainly all through the colonial period, the mainstays of the Niger Delta economy were agriculture and fishing. A World Bank report in 1952 and 1953 (see Alamieyesigha 2005) indicated that the Niger Delta had tremendous agricultural potential-enough to produce crops for itself and for export. During this period, the production of palm oil and kernels in much of the Niger Delta; rubber in mostly the current Edo, Delta and Cross River states; cocoa in Ondo and Edo states; and timber in most states was at a high peak, earning considerable income for the region and Nigeria as a whole, including through a large proportion of foreign exchange earnings. Timber was so important in the Niger Delta that the African Timber and Plywood company, a subsidiary of the United African Company, established a large factory in Sapele to process wood. At that time, it may have been the largest such operation in Africa if not the world.

### Today

The Niger Delta conflicts over resources such as palm oil began simmering during the pre-colonial period and have continued today over the region's copious oil reserves. The major difference between then and now is that the region has become far more volatile, a situation brought on by limited access to an array of resources. Unemployment is high, especially among youth. Social services (for education, health, recreation, etc.) and physical infrastructure (roads, electricity, water, sewers, etc.) are poor everywhere. The problem of poverty in the midst of ballooning oil revenues has spawned discontent and disillusion. Several angry groups have taken up the fight for equity through agitations for resource control or at least enhanced allocations in the federally shared revenues from the oil industry. The Niger Delta is virtually in a state of siege.

Unfortunately, there are few alternatives to oil. The production of palm oil and kernels has fallen to such low levels that many palm trees are now not being harvested. Very few new palm trees are being planted.<sup>1</sup> Rubber production is a shadow of its old self. Timber has held its own, but certainly not on the previous scale. The severe pollution of rivers and soils and the overall environmental degradation wrought by oil have led to the decline of crops and fishing. In Ondo State, cocoa production is also decreasing. This is surprising, considering that this area produced a considerable proportion of the cocoa exported from Nigeria during the colonial and immediate post-colonial periods.

# **TYPES OF CONFLICT**

Violent political conflicts in the Middle Belt and Western Region of Nigeria, which national leaders could not resolve amicably in the 1960s, contributed significantly to the collapse of Nigeria's first postindependence democratic regime in 1966. The Nigerian civil war from 1967 to 1970, and the consequential widespread access to and use of small arms, popularized the use of force to settle disputes, particularly disputes between groups, in the rest of the country. Since the 1990s, the Niger Delta has assumed the character of a conflictridden region. The delta's peculiarities as the cradle of Nigeria's oil industry and its associated externalities, the realities of a constricted land area, a fragile environment compounding difficult geographical terrain, the heterogeneity of cultures, extreme economic deprivations, and competition by individuals and communities for a greater share of the natural wealth of the region have combined to create a theatre of almost permanent violence.

<sup>1</sup> Until 1970, Nigeria was acknowledged as the world's leading palm oil producer. This influenced many countries, including Malaysia, the current leading palm oil producer, to come and study palm tree production in the country. Today, Nigeria is no longer on the list of leading palm oil exporters.

The most common and vicious forms of conflict, in terms of lives lost and property destroyed, are:

- intra-community
- inter-community
- inter-ethnic
- community and oil company conflicts

Box 5.1 contains a list of examples from the past several years. There are, of course, other forms of conflict. These include disputes between local governments, between communities and local governments, between communities and state governments, between local and state governments, between states, between states and the federal government, and between local governments and oil companies. These conflicts are also important, but they lend themselves more easily to negotiated settlement than to force by either of the parties. In these cases, one party is the government, and the other party is generally reluctant to take the law into its hands.

#### Intra-community

Intra-community conflicts involve members of a clan, village or ethnic group with some form of communal identity. Examining a few cases of these conflicts will show the typical root causes. In Ogbogoro community, for example, violent intra-community conflict has flared sporadically since 1998. Under dispute is the 1978 agreement that the community reached with an oil services company, ARCO. It requires the company to pay a modest annual rent to the community, and replaced an earlier agreement with a single family voided by a court after a protest by the rest of the community. In 1993, OIL (Nig) Ltd. and West African Field Services leased the property when ARCO left. They signed an agreement that promised higher rent, contracts and jobs to local people.

This raised the stakes for Eze Oha, the traditional head of the community, because he became responsible for distributing the compensation to the community. At the same time, a new candidate emerged who made a successful claim to the right to serve as the traditional head. This divided the community into two camps, with one behind the old ruler and one behind the new ruler. Several lawsuits were filed and pending in court when, as a result of rising tension in the community, the Rivers State Military Administrator set up a Caretaker Committee and representative council to disburse the benefits from the oil companies to the indigenous members of the community. In 1998, supporters of the new ruler violently challenged the Committee's attempt to collect fees for market stalls.

Intra-community conflicts arise most often in struggles over the sharing of benefits from oil.

Box 5.1: A Catalogue of Escalating Violence in the Niger Delta, 2003-2006

- 1. 2003: At Irri, Isoko South local council, a traditional ruler was alleged to have sold the rights of the community to Agip Oil. This sparked off violence. At the end of the imbroglio, no fewer tha palace of the traditional ruler who took to his heels in the heat of the crisis.
- 2. 15 January 2003: Indigenes of Ohoror-Uwheru community in Ugbelli North local council were attacked by a detachment of soldiers from the Joint Security Task Force 'Operation Restore Hope'.
- **3. 21 March 2003**: While the Security Task Force was on patrol off n 10 persons died and property worth millions of naira was vandalized, including the Escravos River, youths attacked the team with 17 speedboats at Oporosa on the Escravos Creek, killing three soldiers and one naval rating.
- 4. 22 March 2003: Youths struck at the TotalFinaElf tank farm in Oponani Village and killed five soldiers and destroyed property worth billions of naira.
- 5. 2 May 2003: Barely 24 hours after the state House of Assembly election, youths brandishing AK-47 pump rifles and other light weapons attacked the naval base, leaving two naval ratings severely injured.
- 6. 7 November 2003: Eight mobile policemen were reportedly killed by youths between Otuan and Oporoma in Southern Ijaw Local Government Area of Bayelsa State.
- 7. April 2004: Five persons including two Americans were killed by militant youths. They were among nine people travelling in a boat along Benin River, West of Warri, when they came under what was described as "unprovoked attack". The two American expatriates were the staff of ChevronTexaco.

- **8. January 2004:** Suspected Itsekiri militants invaded some communities in Okpe Kingdom, killing 17 people and injuring three others.
- **9. 14 April 2004:** Ijaw youths attacked and killed four children including a 90-year community leader, Madam Mejebi Eworuwo, in Koko, headquarters of Warri North Local Council, Delta State.
- 10. 23 April 2004: About nine members of the Joint Security Task Force, 'Operation Restore Hope', in charge of security in Warri were killed by militant Ijaw youths.
- 11. 2 November 2004: For several hours, youths of Igbudu and soldiers of the Joint Task Force clashed in Igbudu area of Warri, Delta State.
- 12. 18 November 2004: Ijaw youths from Odioma community in Brass Council in Bayelsa State, protesting an alleged violation of a Memorandum of Understanding (MoU) by Shell Petroleum Development Company (SPDC), shut down and occupied its 8,000-barrel a day flow station.
- **13. 22 November 2004:** At least 17 youths of Ijaw extraction were confirmed dead as soldiers deployed to guard a flow station belonging to an oil-servicing firm shot sporadically into a crowd.
- 14. 28 November 2004: Ijaw youths clashed with soldiers at Beneseide flow station, near Ojobo in Bayelsa State over breach of MoU.
- **15. 23 December 2004:** The youths in Ogbe-Osewa and Ogbe Ilo quarters in Asaba clashed over a land dispute. Over 100 houses were ransacked, with property running into millions of naira destroyed.
- 16. 23 December 2004: At Ekpan, Uvwie local council of Delta State, youths clashed over the appointment of Unuevworo (traditional head) of the community.
- **17. 24 December 2004:** Militant youths kidnapped 16 oil workers including a Yugoslav at Amatu Community in Ekeremoh local council of Bayelsa State. They were kidnapped from a vessel identified as Seabulk, owned by an oil-servicing firm working with Shell.
- **18. 26 December 2004:** Alleged similar breach of MoU by SPDC led to the abduction of a Croatian worker, Mr. Ivan Roso, at the company's Sea Eagle floating crude oil production facility.
- 19. 21 December 2005: Explosion rocked Shell pipeline in Niger Delta.
- 20. 22 December 2005: Fire raged in Shell installations causing 13 deaths.
- 21. 31 December 2005: Explosion rocked Shell pipeline in Niger Delta (The Guardian, 21 December 2005).
- 22. 12 January 2006: Pirates took four expatriates hostage.
- 23. 16 January 2006: Militants attacked another Shell platform and torched houseboats.
- 24. 16 January 2006: Fourteen soldiers killed in Niger Delta shoot out (ThisDay, 16 January 2006)
- 25. 18 January 2006: Soldiers, Bayelsa militants engaged in gun duel.
- 26. 18 January 2006: Shell cut oil output by 115 BPD (ThisDay, 18 January 2006).
- 27. 19 January 2006: Federal Government opened talks with militants (The Punch, 19 January 2006).
- 28. 29 January 2006: Oil workers threatened to pull out of Niger Delta.

Source: The Guardian, 13 February 2005, p. 26, and various issues from December 2005 to January, 2006

The use of force has become a common practice rather than a last resort.

The breakdown in authority includes traditional rulers. They have lost their legitimacy partly because of greed and partly because there is not enough money to satisfy everybody. According to Ojo (2002), "Hell then broke loose. Rampaging youths engaged in gun battles, burnt down houses and destroyed millions of Naira worth of property. At the end, two Youth Forum members were dead, 50 houses had been burnt to ashes, Waterfront Youth fled the community to become refugees. Gun-totting teenagers became armed robbers and extortionists."

Another struggle for an adequate share of the benefits from oil resulted in the so called 'Nembe War'. In Nembe, like Ogbogoro, the oil companies (Shell, Agip, etc.) negotiated an agreement with the chiefs on compensation, contracts andjobopportunities. As usual, the chiefs kept a disproportionate share of such benefits, appropriating most of the money for themselves and assigning most contracts to their front companies. Even jobs in the companies could be obtained only through the nomination of the chiefs. In the late 1990s, excluded youths organized to interject themselves into these transactions. They started harassing oil workers, taking hostages, occupying flow stations, etc. to make the oil companies negotiate with them and make side payments. The side payments usually amounted to such huge sums that soon the youths split into factions to make separate demands. Rival gangs emerged, and soon second and third generations of youth gangs were extorting money from the oil companies. Once when the first-generation youths were away to collect their largesse from the state headquarters, Yenagoa, a younger group,

took control of Nembe and banished them. Violent clashes by rival youth gangs imposed a reign of terror on Nembe until the community rose in 2000 to resist (Ojo 2002). The result was heavy loss of lives and property.

What is evident from these examples of intra-community conflict is that they arise because of struggles over the sharing of benefits from oil. Quite often a community's traditional ruler or council of elders, which negotiates with the companies, is at the centre of such conflicts. When some people perceive unfairness in the distribution of compensation, they organize to challenge the existing order and seek its overthrow. This is one of the major causes of the breakdown of traditional authority in most oil-producing areas. Traditional rulers have lost their legitimacy partly because of greed and partly because there is not enough money to satisfy everybody anyway.

The consequences of the weakening of the traditional socio-political order are farreaching. Youths no longer respect not just their chiefs, but all authority structures. Having experienced the sudden wealth that can be obtained by taking matters into their own hands, they want to deal directly with oil companies themselves. Unfortunately, most lack entrepreneurial skills. They fritter away their ransom money, so they constantly have to engage in extortion to maintain themselves.

Property rights also come into play in intracommunity conflicts. Individual and community rights to land are insecure. Litigation is common because every plot of land is valuable either for oil exploration, farmland or building houses.

In managing all of these different issues, local government chairpersons, who are the closest government functionaries to the communities, command little or no respect, as chapter one describes. Evidence from the field survey revealed that their loss of legitimacy is the result of a number of factors. Local elections are not properly conducted, starting from the nomination through campaigning to actual voting. Candidates are either imposed by a godfather or the state governor. Election outcomes do not reflect voter choices, so people feel frustrated and alienated. In several communities in the Niger Delta, there is no political authority capable of making authoritative decisions. In such a situation, the use of force to effect even routine policy decisions has become a common practice rather than a last resort. This frequently draws the involvement of security agencies in local administration.

#### Inter-community

Inter-communal conflicts do not always result in violence. Some cases are settled in courts-Niger Delta communities are famous (or perhaps notorious) as patrons of the judicial system. The courts in such urban centres as Port Harcourt and Warri have a series of these cases. But in many instances, when communities are not satisfied with the outcome, violence results. These conflicts usually involve a wide spectrum of people in each community. Since only the physically strong can fight, however, male youths are often the most active participants. The role of the elders, both male and female, is usually advisory, particularly in terms of the need for moderation.

As in the case of intra-communal conflicts, inter-communal conflicts are not new in the Niger Delta. But the incidences have increased phenomenally since the 1970s, and particularly since the 1990s (see box 5.2). Table 5.1 summarizes some noteworthy examples that led to widespread destruction of life and property. For instance, in the conflict between Okpoama and Ewoama, the latter community was completely destroyed. In the Liama and Beletiama case of the 1990s, the destruction of Beletiama was such that even by the middle of 2005, it was difficult to imagine that a town of several thousand people once existed there.

The dispute between Oleh and Olomoro illustrates the kind of issues that can spark a conflagration. The Shell Petroleum Development Company oil flow station in the area straddles the communities' land, with 80 per cent in Oleh and 20 per cent in Olomoro, but Olomoro and Uzere have The oil economy is stressing traditional communal relationships. Some conflicts are so brutal that they result in entire communities being razed to the ground.

Most youths lack entrepreneurial skills and fritter away their ransom money, so they constantly have to engage in extortion to maintain themselves.

Election campaigns are constrained by thuggery and official hostility towards candidates of opposition parties.

The benefits of being able to immediately assert rights over disputed territory are attractive. Communities are impatient to seize whatever they can.



A whole community reduced to rubbles because of communal clashes

Bayelsa State	Delta State	<b>Rivers State</b>
Okpoama vs. Ewoama	Oleh vs. Olomoro	Emohua vs. Ogbakiri
Twon-Brass vs. Okpoama	Isama vs. Gbarigolo	Okrika vs. Elesa-Eleme
Liama vs. Beletiama	Ogidigbe vs. Okerenkoko	Bille vs. Ke
Emadike vs. Epebu	Odimodi vs. Ogulagha	Ekunuga vs. Okolomade
Egweama vs. Beletiama	Olota vs. Oboro	Soku vs. Kula
5		

# Table 5.1: Noteworthy Inter-Communal Conflicts in the Most Conflict-Prone States

#### Box 5.2: Oil and the Conflict between Emadike and Epebu

...the now warring communities have not always been enemies. Those communities, including Okodi, had always been good neighbours in the past until seismic activities began in the area in the 1960s by the United Geophysical Company (UGC) and Western Geophysical of Western Atlas International Nigeria Limited. When oil was struck on the piece of land, known as Obama Asaraba, Epebu, Emadike and Opuma communities soon started laying separate claims to the land; from then on, relations among these communities became strained. Peace finally took flight when aggression among these neighbours went on the high side with the discovery of the Frigbene B and Frigbene A oil wells in Frigbene by NAOC, with each community claiming ownership of the land. No farm located near the area was safe any longer. This led to frequent claims and counter-claims over farmlands and the crops.

Source: Niger Delta Alert, August-October, 1998.



One of the shools destroyed during communal clashes



A house destroy during one of the clashes

Not all conflicts are related to oil. Some stem from the government's failure to encourage civic participation or deliver development results.

The government and its agencies, through negligence or outright failure, are implicated in most conflicts.

The lifestyles of oil workers living on estates that meet international standards aggravate feelings of discrimination.

Intense conflicts often arise from spiteful deprivation of political rights or ethnic domination.

70 per cent of the oil produced while Oleh has only 20 per cent. The flow station is named after Olomoro, which the Oleh community does not like, while the royalty payment favours Oleh despite its lower production quota, which Olomoro contests. In 2000, the Shell Petroleum Development Company negotiated with the two communities to replace its old pipelines. Labor was to be recruited 80 per cent from Olomoro and 20 per cent from Oleh. Each community was to keep exhumed old pipelines. After the exercise, Olomoro predictably had more pipelines to share. Oleh youth invaded the sharing site and, in the ensuing battle, lost their leader. They retreated to Oleh to attack Olomoro indigenes in their community, burning down their houses and shops. The police came from Benin to restore law and order, but their response was to raze Oleh to the ground.

What is evident from this episode, and many other conflicts of this type, is that the oil economy is stressing traditional communal relationships. Litigation over land is usually not a satisfactory means of resolving conflicts because the wheels of justice grind too slowly, while good counsel is expensive to hire. Typically, a land dispute can take 10 years to move through a high court, while appeals through the Court of Appeal and the Supreme Court can take as long if not longer. The benefits of being able to immediately assert rights over disputed territory are attractive. Communities are impatient to seize the moment and claim whatever benefits they can from oil companies while they are still in their communities. The role of security agencies, called to restore law and order between warring communities, can also aggravate the violence, as in Oleh and several other places.

# Inter-ethnic

Inter-ethnic conflict, in spite of its relatively low occurrence, is the most well known of the delta conflicts to the Nigerian public, largely because it usually involves a bigger area and a greater loss of life and property. The following incidences are noteworthy:

- Ijaw vs. Itsekiri (Delta State)
- Urhobo vs. Itsekiri (Delta State)
- Ogoni vs. Okrika (Rivers State)
- Ogoni vs. Andoni (Rivers State)
- Ilaje vs. Ijaw (Ondo State)

The inter-ethnic conflicts demonstrate that not all conflicts in the Niger Delta are related to oil exploration. Quite a few are the result of historical disputes that erupt violently because violence has become the prevalent means of resolving disputes in the region. Some inter-ethnic conflicts may also be attributed to the government's failure to involve people in deciding policies that affect them and/or to deliver development results. Many persist because the government has been unable to deal with the root causes or to find acceptable solutions.

The Warri conflicts (Ijaw versus Itsekiri and Urhobo versus Itsekiri) provide some prominent examples of inter-ethnic confrontations. The Warri district of Delta State has had long-standing land disputes involving the Itsekiri, Ijaw and Urhobo, who have the largest settlements in the area. Unending litigation preceded the discovery of oil in the area, which made Warri the second most important oil city in Nigeria. The claims and counter-claims revolve around who owns the city of Warri. The courts have, of course, not been able to resolve this question to the satisfaction of all parties, hence the numerous and unending court cases. The situation has been compounded by the reorganization of local government administration in Warri.

Until 1997, the Itsekiri dominated two local governments in Warri. Their more numerous neighbors, the Ijaw and Urhobo, considered this a spiteful deprivation of political rights. So when the government decided to create a third local government in 1997, the Ijaw and Urhobo, especially the former, hoped that the headquarters of the new local government, Warri South West, would be sited at Ogbe-Ijoh, one of their settlements. Instead, the headquarters ended up in Ogodigben, an Itsekiri settlement. For the next few months, rampaging Itsekiri and Ijaw youths attacked each other's villages and properties, killing, maiming and disrupting travel on the

#### Box 5.3: Ogoni Bill of Rights, 1990

- 1. That the Ogoni people of Ogoni (Babbe, Gokana, Ken Khana, Nyo Khana and Tai) numbering about 500,000 being a separate and distinct ethnic nationality within the Federal Republic of Nigeria, wish to draw the attention of the Government and people of Nigeria to the under-mentioned facts:
- 2. That British colonization forced us into administrative division of Opobo from 1908 to 1947.
- 3. That we protested against this forced union until the Ogoni Native Authority was created in 1947 and placed under the then Rivers Province.
- 4. That in 1951 we were forcibly included in the Eastern region of Nigeria where we suffered utter neglect.
- 5. That we protested against this neglect by voting against the party in power in the region in 1957, and against the forced union by testimony before the Willink Commission of Inquiry into Minority Fears in 1958.
- 6. That this protest led to the inclusion of our nationality in Rivers State in 1967, which State consists of several ethnic nationalities with differing cultures, languages and aspirations.
- 7. That oil was struck and produced in commercial quantities on our land in 1958 at K. Dere (Bornu Field).
- That oil has been mined on our land since 1958 to this day from the following oil fields (i) Bomu, (ii) Bodo West, (iii) Tai, (iv) Korokoro, (v) Yorla, (vi) Lubara Creek, and (vii) Afam by Shell Petroleum Development Company (Nigeria) limited.
- 9. That in over 30 years of oil mining, the Ogoni nationality have provided the Nigerian nation over 40 billion Naira (N40 billion) or 30 billion dollars.
- 10. That in return for the above contribution, the Ogoni people have received NOTHING.
- 11. That today, the Ogoni people have (i) No representation whatsoever in ALL institutions of the Federal Government of Nigeria. (ii) No pipe-borne water. (iii) No electricity. (iv) No job opportunities for the citizens in the Federal, State, public sector or private companies.
- 12. That the Ogoni languages of Gokana and Khana are underdeveloped and are about to disappear, whereas other Nigerian languages are being forced on us.
- 13. That the ethnic politics of successive Federal and State Governments are gradually pushing the Ogoni to slavery and possible extinction.
- 14. That the Shell Petroleum Development Company of Nigeria does not employ Ogoni people at a meaningful or any level at all, in defiance of the Federal Government's regulations.
- 15. That the search for oil has caused severe land and food shortages in Ogoni, one of the most densely populated areas of Africa (average: 1,500 per square mile; Nigerian national average: 300 per square mile.)
- 16. That the neglectful environmental degradation laws and substandard inspection techniques of the Federal authorities have led to the complete degradation of the Ogoni environment, turning our homeland into an ecological disaster.
- 17. That the Ogoni people lack education, health and other social facilities.
- 18. That it is intolerable that one of the richest areas of Nigeria should wallow in abject poverty and destitution.
- 19. That successive Federal administrations have trampled on every minority right enshrined in the Nigerian Constitution to the detriment of the Ogoni and have by administrative re-structuring and other noxious acts transferred Ogoni wealth exclusively to other parts of the Republic.
- 20. That the Ogoni people wish to manage their own affairs.

Source: Ogoni Bill of Rights presented to the Government and People of Nigeria, 1990.

waterways, as well as stopping oil production. The Delta State Government instituted a Commission of Inquiry but was unable to publish its report or issue a 'White Paper' until a new civilian administration came into office in 1999. The violence abated somewhat when the local government headquarters relocated to Ogbe-Ijoh.

The violent Urhobo-Itsekiri conflict of 2003 was also related to the battle for

political supremacy in Warri. The Urhobo considered the demarcation of wards in the Delta South Senatorial District to favour the Itsekiri. To force the government to redress the situation, Urhobo youths attacked Itsekiris and their properties, with the latter replying in kind. As in Oleh, the Urhobo allege that the security forces, especially soldiers, sided with the Itsekiri. For a couple of months, both sides carried out reprisal attacks on each other's settlements. Normal economic

The security forces are supposed to act as peacekeepers, but they often clash with communities or ethnic groups.

<sup>1</sup> The two million-man march organized by youths in 1997 in support of Abacha's self-perpetuation accelerated the conflict in the Niger Delta. Hundreds of Niger Delta youths participated in the state-manipulated rally. This exposed them to the extreme modernization in Abuja, compared to the crudity and lack of modern facilities in most Niger Delta communities. They became agitated, wild and more confrontational. The demand for resource control became more forceful, leading to the formation of several militant groups. The Jaw Youth Council was established in December 1998; the Kaiama Declaration followed. Shortly after the declaration, youth militias of different shades appeared, e.g., the Egbesu Boys and the Niger Delta Volunteer Force. Sustainable development cannot be achieved in the face of constant fighting. activities, especially oil exploration, ceased. Several hundred people on both sides were displaced. Schools, clinics, maternity wards and other facilities were shut down.

# **Communities and Oil Companies**

Generally speaking, communities are

dissatisfied with the consequences from oil operations. This disaffection is expressed in various forms, including violent demonstrations against oil companies, blockades of their operations, the sabotage of pipelines and other oil installations, and hostage-taking. Some

Table 5.2: What the People of the Nige	r Delta Most Dislike about the Region
Priority	Per cent of respondents

1 Homey	Ter cent of respondents				
	identifying it as most disliked				
Poor leadership (governance)	16.7				
Poor governance	16.1				
Corruption	14.4				
Environmental degradation	14.3				
Unemployment	14.0				
Low education	6.7				
Insecurity	5.6				
Lack of infrastructure	4.4				
High cost of living	4.4				
Poverty	3.3				
Source: ERML fieldwork 2005	100.0				

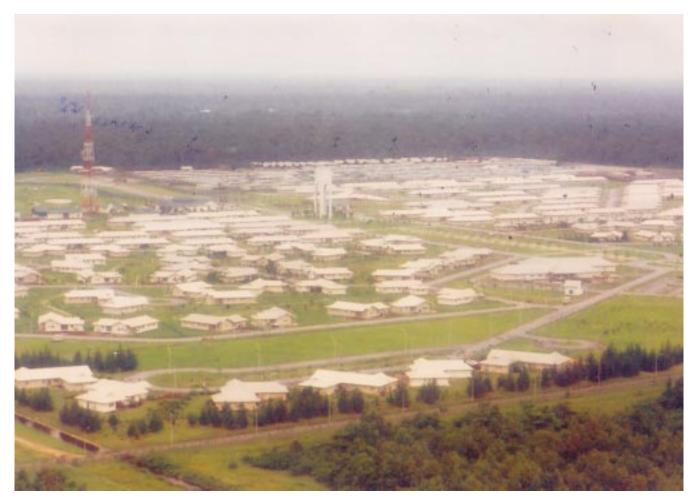
Table 5.3: Zones that Have Produced Nigeria's Head of State						
Zone	Period	Years in power				
North-West	10 years + 8 months	<ul> <li>General M. Mohammed: 29 July 1975–13 February 1976</li> <li>Alhaji Shehu Shagari: 1 October 1979–31 December 1983</li> <li>General M. Buhari: 31 December 1983–27 August 1985</li> <li>General Sani Abacha: 17 November 1993–8 June 1998</li> </ul>				
North-East	5 years +10 months	Sir Abubakar Tafa Balewa: 1     October 1960–15 January 1966				
North Central	18 years	<ul> <li>General Yakubu Gowon: 29 July 1966–29 July 1975</li> <li>General Ibrahim Babangida 27 August 1985–26 August 1993</li> <li>General Abdulsalami Abubakar:: 9 June 1998–29 May 1999</li> </ul>				
South-West	10 years + 11 months	<ul> <li>General Olusegun Obasanjo: 14 February 1976–1 October 1979</li> <li>Chief Ernest Shonekan: 26 August 1993–17 November 1993</li> <li>General Olusegun Obasanjo: 29 May 1999 to date</li> </ul>				
South-East	Six months, excluding the period of 5 years and 2 months as head of govern- ment	<ul> <li>Dr Namdi Azikwe: First Governor General, 1 October 1960–1 October 1963; President, 1 October 1963–15 January 1966 (both positions were not as the leader of government) · General</li> <li>Aguyi Ironsi: 15 January 1966–29 July 1966</li> </ul>				
South-South						

groups have produced charters, declarations, agendas and resolutions to express their demands. These began with the Ogoni Bill of Rights in 1990 (box 5.3) and include the Kaiama Declaration by Niger Delta youths, containing '100 reasons why we want our resources' (see box 3.5 in chapter three); the Oron Bill of Rights, in which the Oron people of Akwa Ibom State resolved to take their destiny into their own hands; and the Warri Accord, in which the Itsekiri people of Delta State sought ways to reap maximum benefits from the oil production in their area. In the Ogoni Bill of Rights, the Ogoni people of Rivers State sought to fight the environmental degradation, unfairness and inequities arising from the exploitation of oil resources in the area.

The oil companies, especially the Shell Petroleum Development Company, are accused of not assisting their host communities enough. They were accused of failing to adequately provide infrastructure such as water systems, health facilities, roads and electricity grids. The neglect is made more obvious when their own staff live in estates that meet international standards and are adjacent to the deprived host communities. The lifestyles of oil workers aggravate feelings of discrimination. Many locals blame the increasing incidence of prostitution and its attendant diseases such as HIV&AIDS on the influx of young girls looking for livelihoods. Local young women and even school girls feel the pressure to join the race for petro-money to raise their own standards of living.

The new economy leaves out those who are not connected to it. Land is lost to oil exploitation, while the invasion of oil workers invariably raises the local cost of living. Most local people lack the skills required to be employed by the oil companies; if they are employed at all, it is in the most menial and poorly paid jobs, where they suffer the indignity of seeing The disruption of oil production cuts into company bottom lines and government revenues. Violence endangers liveliboods and discourages investment in industry and education.

Ethnic militias have emerged to take the law into their own hands, practicing a kind of jungle justice.



An Oil company settlement: A sharp contrast of the living condition of oil producing communities.

The military, sent to quell crises, sometimes becomes an agent of buman degradation. outsiders arrive to take preeminence over them in the oil industry. Outsiders always occupy the higher echelons of the oil companies. Agitators in the region attribute this to a deliberate policy of exclusion. None of the major oil companies is headquartered in the delta.

Many conflicts have centered on renegotiating the memorandums of understanding that communities negotiate with the oil companies for benefits meant to compensate everyone in the community for the consequences of the oil activities. Since there are no standard or regulated compensation rates for either exploitation or spillage, different rates are paid to different communities. Conflicts arise when communities realize that they have not bargained hard enough and have not secured as many benefits as other communities.

Some oil companies have not always honoured the negotiated terms of entry. And in some of the worst-case scenarios, representatives of oil communities and civil

# Governance and Conflict

Chapter one outlined how the states of the Niger Delta region are in conflict with the Federal Government and non-oil states over the oil revenue allocation formula. That this conflict potentially threatens the stability of the nation was revealed when the 2005 National Political Reform Conference broke up over a failure to agree on an increase in the derivation fund that was acceptable to the oil-producing states. This generated tensionprotagonists and antagonists made inflammatory statements. Other conflicts have arisen between states and local governments over the locations of oil wells. These are mostly resolved bureaucratically, and only result in violence if interested communities lose their patience and take matters into their own hands.

Directly or indirectly, however, the government and its agencies, through negligence or outright failure, are implicated in most conflicts. The government has fallen short on ensuring a

Box 5.4: President Obasanjo's Diagnosis of the Niger Delta Youth Crisis.

Compared to the enormous oil reserves of the region, however, how much of modern development is evident in the area, and, how have we seized on the resourcefulness of the people and the region's other natural endowments to turn it into a region of great sufficiency?

I hasten to admit, in truth, that as a result of insincerity, lack of foresight and commitment of all stakeholders (government at all levels, the youth themselves, oil and gas companies, traditional leaderships, etc.) in the past, not much of the desired transformation was evident. Rather, what we had was the harvest of failed policies typified by absence of basic infrastructures like roads, electricity, health services, capacity deficiencies arising from a failing school system, army of unemployed and unemployable youths, environmental degradation, etc. The cumulative effects of these are anger in the land and easy pre-disposition of the population, especially the youths, to violence.

For most people outside the Niger Delta, the youth crisis is an unnecessary evil. For most in the region, it is an inevitable, although sometimes evil, development.

Source: Address by President Olusegun Obasanjo on 16 April 2004 at the Niger Delta Youth Stakeholder Workshop held in Port Harcourt.

society organizations accuse companies of calling armed police to maim and kill aggrieved people at the merest hint of protest. Many peaceful protests have met severe police brutality instigated by the oil companies. When individuals or communities have differences with the companies, individual or community rights suffer. proper legal and social environment for peaceful conflict resolution, which has contributed significantly to the emergence of parties that resort to violence in the Niger Delta. Regulations are inadequate in terms of requiring companies to adopt and operate uniform corporate responsibility measures—this is behind the problems with variations in the memorandums of

The underground Solution economy of oil and gas A that has flourished on the back of the instability has become bugely profitable. understanding with host communities. The fact that oil companies are allowed to maintain supernumerary police means that even the mildest protests may be met with blunt force.

The security forces are supposed to act as peacekeepers or observers of conflicts, but once they become engaged, their use of force results in clashes with communities or ethnic groups. These secondary conflicts tend to run their own course, and are sometimes more ferocious than the original dispute, as was the case when the police levelled the town of Oleh. Military interventions are also devastating. When the youths of Odi abducted five policemen, soldiers invaded and destroyed the town. Ijaw towns have been bombarded indiscriminately whenever youths have taken hostages. These knee-jerk reactions aggravate rather than deter the youths, because those responsible usually escape reprisals, while innocent citizens suffer unnecessarily.

The failure of governance also incites violent conflict. When people feel betrayed by the government through its neglect of their well-being and security, they may resort to violence to seek redress. Declining economic performance leading to rising unemployment or underemployment; a lack of access to basic necessities of life like water, shelter, health facilities, food and clothing; discriminatory policies that deny access to positions of authority and influence so people can participate in shaping the rules by which they are governed—all these factors indicate a



A Typical example of armed millitant youths in the Niger Delta.

failure of governance. For the most aggrieved people, they serve as a call to arms against the government.<sup>2</sup> Corruption aggravates feelings of being cheated when the rulers are seen to live ostentatiously amid mass poverty and extreme want.

The people of the Niger Delta region strongly believe that their various governments (state and local) have failed them (table 5.2). But the leaders of the region believe the fault is not theirs alone, and that governance failure at the national level is similarly culpable. Recent advertisements by people of the South-South and South East zones make the case that the South-South area, which is the heartland of the oil region, has been systematically discriminated against and excluded from the exercise of political power at the federal level (table 5.3). When people from the region have been included in the federal system, they are usually given minor cabinet positions. Federal parastatals are dominated by people from the majority ethnic tribes, while the Yoruba and Igbo, in particular, predominate in employment in the senior echelons of the oil industry. Such pervasive exclusion is obnoxious, from the perspective of people in the delta. Some believe this justifies the extreme measures, including violence, that their youths are using to compel redress.

An analysis of the governance situation and people's perception of the federal, state and local governments shows that all levels need to do a lot to mend fences and restore their credibility. Chapter seven puts forth some of the steps they should take.

### ECONOMIC AND SOCIAL COSTS

The economic and social costs of conflict in the Niger Delta region are enormous, both directly and in terms of lost opportunities. A general agreement among all stakeholders, including the various tiers of government, the local people, civil society organizations and the oil companies, is that sustainable development cannot be achieved in the face of constant fighting.

The most obvious public concern is the disruption of oil exploitation and allied activities, which drags down the economy and leads to the loss of foreign exchange sorely needed to finance national development. Blown pipelines disrupt the supply of crude oil to refineries and result in shortages of petroleum products and energy. The international oil market feels the shock through sudden rises in crude oil prices. Hostage-taking is not only a stress on foreign captives, their families and the companies they work for, but also a challenge to international diplomacy.

"The frequent recourse to violent protests, hostagetaking, blockage of the water ways, illegal bunkering and seizure of oil wells constitute avoidable clogs to the wheels of economic development and stability of not only the region but the entire country."

# President Olusegun Obasanjo, speech at the Akwa Ibom State Investment and Economic Summit, Uyo (ThisDay, 3 March 2006).

For the oil companies, specifically, the costs of conflict are quite high. These include: the loss of revenue due to illegal bunkering, contractor claims for breaches of contract when deliveries cannot be made, huge compensation to communities as a result of damaged pipelines and fires, the high costs of providing security for staff and equipment, higher insurance rates, large ransom payments or 'public relations' to pacify potential troublemakers, inducement contracts to community and youth leaders, and payments to government security staff. The estimated loss to illegal bunkering is 10 per cent to 15 per cent of daily production. This becomes a shortfall not only for the companies, but also for the government. Instability and lost revenues cut down hopes for achieving sustainable human development.

Violence hurts individuals and communities by endangering their livelihoods. It discourages investments in the region that could bring new jobs. Whole villages have been destroyed and the populace displaced because of conflict that could have been amicably resolved. Diminished prospects for children unable to go to school as a result of violence constrain the development of critically needed human capital.

# Conflict has become a booming business, with grave implications for future development prospects in the delta region.

The frequent conflicts and the associated occupation by military and police, coupled with the preponderance of weapons, provoke a sense of insecurity in the region and even the whole country. A major consequence of the serious threats to life and property has been the emergence of ethnic militia in the region and even across Nigeria. These groups take the law into their own hands, practicing a kind of jungle justice. Youths who could be productively engaged have become agents of a thriving crisis generation, prevention and recovery 'industry', which allows them to live on 'standby' money rather than earning a legitimate income.

Even the military, sent to quell crises like the one in Odi community, sometimes becomes an agent of human degradation. One aspect of human degradation that cut across the focus group discussions is rape. They expressed that the massive rape of young women in Odi by the soldiers sent to ensure peace in the community was a devastating example. Two years later, the community is now filled with fatherless babies. On top of being a serious assault on human dignity, the incident may have spread HIV.

### THE BENEFICIARIES

The Niger Delta conflicts have greatly benefited some people. To start, the underground economy of oil and gas that has flourished on the back of the instability has become hugely profitable. Human Rights Watch (2003) describes the bunkering or illegal theft of oil as "effectively Nigeria's most private business." According to the 2002 report of a Special Security Committee on Oil Producing Areas set up by the government, this leakage in oil revenues enriches militant youths and their sponsors, and cartels made up of powerful politicians, retired and serving military officers, and community business men. These groups depend on lawlessness to thrive and have a stake in keeping conflict running all the time.

Even law enforcement agents sent to check illegal bunkering become tempted by the huge profits to be made from conniving with bunkerers. A House of Representatives' probe in November 2004 uncovered the illegal release by naval officers of the MT African Pride, a ship that had been caught bunkering and towed to a naval base. There were attempts to cover up the crime with forged release documents, showing that the network of actors reaches high levels. The detention of foreign ships and nationals indicates the international character of this shady business. Breaking networks of powerful crooks with huge arsenals of deadly weapons, often superior to those wielded by security agencies, calls for very strong government determination.

State and local governments in the Niger Delta region have benefited from conflict, even if indirectly. Until 2001, the agitation for resource control was largely fought by militant youths, civil society organizations, ethnic groups and community-based originations. Elected governors and prominent politicians kept a safe distance because of uncertainty over the security implications of involvement. In 2001, however, most governors discovered it made political sense to lead the agitation in order to prevent the opposition from capitalizing on it, as well as to potentially secure more revenue from the derivation funds. The agreement at the National Political Reform Conference to raise the derivation percentage to 17 per cent to pacify and avert the escalation of conflict became an example of the latter.

# EXTRA BURDENS: WOMEN AND YOUTH

The chaotic and desperate situation in the Niger Delta condemns youth to a future without hope. No young person with healthy aspirations can fail to appreciate that his life chances depend upon more massive investments in social and economic infrastructure, and the more responsible harnessing of the natural endowments of the environment. For their part, women bear the greater brunt of poverty in the region. They receive the short end on all fronts, whether in terms of jobs, water, health facilities, schools or environmental resources. For both women and youth, deprivation has driven them into deep involvement in the Niger Delta conflicts.

The youth crisis began with the Twelve Day Revolution led by Isaac Boro. On 23 February 1966, a group of young Ijaw men declared the Ijaw territory of the Niger Delta 'The Niger Delta People's Republic'. Their aim was to liberate the region and obtain access to the benefits from its petroleum resources. The group blew up pipelines, particularly those linking Oloibiri and Ughelli to Port Harcourt. Within 12 days, Boro and his associates were arrested, tried and sentenced to death, but subsequently pardoned.

There was no widespread youth crisis in the region until the 1990s, when the Ogoni and others revolted. Several localized conflicts flared, however, characterized mainly by protests against oil companies. The most noteworthy was in the Umuechem community in Rivers State. In December 1990, youths demonstrated against Shell to express their displeasure over the environmental impact of oil exploitation and the lack of development in the area. The police, invited by Shell, quelled the demonstration. After a police officer was reported missing, and youths were suspected of killing him during the demonstration, the police sent a punitive mission to the community. There was

extensive loss of lives and property.

In 1990, the educated elite formed the Movement for the Survival of the Ogoni

#### Box 5.5: The Bayelsa Governor's Viewpoint on the Youth Crisis

More than any other area in Nigeria, the Niger Delta, where oil and gas exploration companies operate, has engaged the attention of those interested in Nigeria and its survival. In recent times, conference after conference, report after report and commission after commission, have attempted to tender solutions to what has been described as the Niger Delta crises. Yet the social conflicts are not abating. The principal actors in these conflicts have been the youths, leading to what has now come to be known as youth restiveness. Strictly speaking, I have no problems with the phenomenon of youth restiveness. Given the prevailing socio-economic condition in the Niger Delta, the youths have no choice but to be restive. The only problem is that sometimes, they have over-stepped their bounds and adopted methods which have led to violence and lawlessness. Otherwise, their goals have been noble, geared as they are toward protecting their future from complete ruin.

Source: A lecture delivered by Governor D.P.C. Alamieyeseigha on 7 April 2005 at the Lagos Country Club.

#### Box 5.6: Women's Protest in Warri against the Shell Petroleum Development Company

In August, a large group of women barricaded the gate of SPDC's office in Warri. Unlike other similar demonstrations in the area, it did not concern requests for employment or community development projects. Instead, it was rooted in a contractual dispute.

SPDC employs drivers through logistics contractors, who supply vehicles and drivers to transport staff on company business. There was a contractual dispute between the drivers and their employers—and the drivers decided to blockade the SPDC gates to press for a resolution. Subsequently, staff at the gates noticed that the drivers had mobilized a large group of women to participate in and support their demonstration.

The police were called as the demonstrators were refusing to allow passage through the gates. The crowd was subsequently dispersed, but accounts vary as to the manner in which this was done. A number of the women present at the demonstration claimed that the police used excessive force and local newspapers reported that one woman had been shot and 15 other women were missing.

Alerted by these articles, a 20-women delegation from the National Council of Women's Societies decided to visit Warri to establish the truth of what took place. They found no evidence to support the story about women being shot or missing. However, they did find that ten women had minor bruises and cuts.

Eight women were treated at the SPDC clinic in Warri following the demonstration. All had minor injuries and none required hospitalization. Four of the women treated said that they had been beaten. In only one case was there any indication that this might have been so, but the medical evidence was by no means conclusive.

Source: Shell Petroleum Development Company Annual Report 2002.

People. It presented its Ogoni Bill of Rights later in the year, clearly stating demands for environmental and socio-political rights. Before long, a youth wing sprang up and began organizing protests that were largely peaceful until the killing of the 'Ogoni Four' by a mob of other youths on 21 May 1994. The incident culminated in the hanging of Ken Saro-Wiwa and eight other Ogonis. Since then, the youth crisis in Ogoniland has been pronounced, characterized largely by activities to prevent the oil companies from extracting oil without due regard for the environment and the people.

The youth crisis escalated after the meeting of several Ijaw youths (later constituting themselves as the Ijaw Youth Council) at Kaiama, Bayelsa State, on 11 December 1998. The Kaiama Declaration that resulted made far-reaching demands for resource ownership and control. The youths demanded that pending the resolution of the issues raised, all oil companies must leave the Niger Delta before 30 December 1998. Rallies were organized in major Ijaw towns, but in the end, the revolt was brutally checked.

Since the Ogoni Bill of Rights, the Kaiama Declaration, and declarations and bills by other ethnic groups, such as the Urhobo and Itsekiri, militia groups have emerged claiming to promote the interests of the ethnic groups. They are not limited to the Niger Delta—in Yorubaland, there is the Oodua People's Congress; in Iboland, the Bakassi Boys; and in the north of Nigeria, the Arewa People's Congress. The Egbesu Boys of Africa is the best-known Niger Delta militia group. It arose after the Kaiama Declaration to defend the environmental and socio-political rights of the Ijaw.

While some militia groups are based on ethnicity and have a large number of followers across different regions, others are more limited and centred on individuals. The Niger Delta Volunteer Force is a typical example. It began in 2005 and is led by Asari Dokubo, an Ijaw from Rivers State. The objective of this group is the economic and political emancipation of the Niger Delta, largely through ownership and control of its petroleum resources. There are varied opinions on the youth crisis. For most people outside the Niger Delta, it is an unnecessary evil, while for most in the region, it is an inevitable, although sometimes evil, development. The views of President Obasanjo (box 5.4) and former Governor D.P.C. Alamieyeseigha (box 5.5) reveal the ambivalence about the conflicts. President Obasanjo reveals an understanding of the causes of the violence. Former Governor Alamieyeseigha found nothing wrong with youth protests.

The various protests by women in Warri against Chevron and the Shell Petroleum Development Company of Nigeria are other dramatic examples (box 5.6).

# CONCLUSION

The Niger Delta's poverty in the midst of vast oil wealth has frustrated expectations, fostered widespread indignation, entrenched deep-rooted and destructive mistrust, and incited unprecedented restiveness. Ongoing tension has changed the lives of individuals and communities, constricted the operations of the oil companies, and revealed a deep crisis in governance.

The result has been a general deterioration of economic, social and political cohesion. Conflict has become a booming business, with grave implications for future development prospects. Already entrenched are productivity losses, weak entrepreneurial skills, the destruction of traditional institutions that formerly served as reservoirs of social capital, the disregard of formal and informal authorities, and insecure property rights. Ongoing dissent denies the region lasting security, enduring peace and prosperity, and the realization of abundant opportunities.

There is some agreement among those with a stake in the region that peace will require a determined effort to develop the region. Long years of neglect and conflict, however, have left a large part of the population with a siege mentality, particularly the youth. Peace will depend therefore not only on the physical development of the region, but also on the establishment of a new and positive culture of social, economic and democratic rebirth. The following could be vital steps forward:

- A psychological reorientation should be encouraged. Cross-cultural communication systems that could facilitate human coexistence, harmony and mutual partnerships should be created.
- Rehabilitation efforts should reach out to youths who have become largely unemployable or unwilling to develop themselves.
- A realistic, long-term development agenda needs to genuinely promote sustainable development in the Niger Delta region. It must include poverty reduction through the widening of people's choices, capacity development for employment opportunities, gender empowerment and the effective management of the environment.
- A proactive evaluation mechanism could allow all stakeholders—political authorities, civil society, community

members and the oil company operators—to constantly gauge operational and development levels vis-à-vis an agreement on expectations for human development. This would also serve as an antidote to conflict.

- Improvement in the quality of governance should focus on enhanced service delivery, checks on corruption and engagement of people in shaping policies for their well-being.
- There should be a review of compensation to communities and the faithful implementation of memorandums of understanding signed between communities and oil companies.
- The derivation issue in national revenue allocation needs to be resolved.
- An Oil Trust Fund for the derivation fund should be established, and an equity stake assigned to oil communities.
- Human security should be enhanced across the region.



# "The development of a person is about how he can meaningfully and productively live his life while contributing to his society."

# -President Olusegun Obasanjo (2003)

The previous chapters highlighted several development challenges facing the people of the Niger Delta. Underlying all of them is the fundamental dilemma of pervasive poverty, accentuated by the erosion of livelihoods. Despite abundant oil resources, formal employment opportunities lag behind the demands of a growing population; informal activities remain rudimentary and insufficient. These gaps are wide enough to undermine any future development efforts.

To catalyse development, growth must be pro-poor. It must promote employment and guarantee sustainable livelihoods that expand people's capacities to generate and maintain their means of living, and enhance their well-being and that of future generations. The viability and effectiveness of development strategies to improve livelihoods depends upon the availability of assets, services and opportunities, which can be either enhanced or adversely undercut by social structures, ecological factors or institutional processes.

To be sustainable, a livelihood system must be economically efficient, firmly grounded in social equity, ecologically sound, able to preserve or restore resources for use by future generations, resilient, and capable of coping with shocks and stresses. It should allow individuals to meaningfully and productively live their lives while contributing to society. The notion of sustainable livelihoods, which UNDP has adopted as one of the requirements of sustainable human development, has acquired popular use in the development community because sustainable livelihoods are vital for alleviating poverty and vulnerability to poverty. They must be supported by economic, social and political policies, and their core assets-human capital, social capital, natural capital and infrastructure (see box 6.1)—must be allowed to complement and be re-enforce each other.

Any framework to encourage the development of sustainable livelihoods should encompass:

- Investment in human, environmental and physical capital;
- Gender equality and women's empowerment;
- Participatory development emphasizing the indigenous economy with particular emphasis on the poor;
- Reassessing resource allocations, processes and institutional mechanisms; and
- Promoting peace, social harmony and political stability.

Sustainable livelihoods hinge on job creation and high-value products that yield income for poor and vulnerable groups. Best practices across the globe have shown that vital factors include a healthy environment, opportunities to acquire skills, the diversification of the economy, resource management and control, and financial empowerment, such as through credit for micro- and small enterprises.

For the Niger Delta region to become economically prosperous, socially stable, ecologically regenerative and politically peaceful, its people need sustainable livelihoods.

# LIVELIHOOD OPPORTUNITIES AND ACTIVITIES

Prior to the discovery of oil in large commercial quantities in the Niger Delta in the 1950s, much attention was paid to A sustainable livelihood system is efficient, equitable, ecological and able to cope with shocks and stresses.

Sustainable livelihoods binge on job creation and high-value products that yield income for poor and vulnerable groups.

### Box 6.1: Sustainable Livelihoods

Sustainable livelihoods must be accompanied by industrial diversification and economic growth, and grounded in several capital assets fundamental to the development of communities. These include:

- *Natural capital:* Natural resource stocks from which resource flows useful for livelihoods are derived (land, water, wildlife, biodiversity, environmental resources, etc.)
- *Human capital:* The skills, knowledge, ability to labour and good health important to pursuing different livelihood strategies.
- *Physical capital:* The basic infrastructures (transport, shelter, water, energy and communities), and the production equipment and means that enable people to pursue livelihoods
- **Social capital:** The social resources (networks, membership groups, relationships of trust, access to wider institutions of society) upon which people draw in pursuit of livelihoods
- *Financial capital:* The financial resources (whether savings, supplies of credit or regular remittances or pensions) that supply people with different livelihood options.

Source: Carney 1998; Scoones 1998.

The lack of work correlates to the highest incidences of youth restiveness and conflicts.

The discovery of petroleum shifted attention from agricultural and rural transformation to urban industrialization and the extraction of petroleum resources with serious repercussions for livelihoods rural transformation. Substantial resources poured into agricultural facilities, basic education and primary health care. This was the period when agricultural settlement was established in many parts of Nigeria. The Western Region served as the benchmark for free education, agricultural settlements, industrial development and the promotion of small-scale industries, among other things. Regional advantages were given serious consideration, so groundnuts were cultivated in the north, cocoa in the west, and rubber and palm oil in the east.

The discovery of large stores of petroleum shifted attention to urban industrialization and the extraction of these resources. People were pulled from rural areas to urban centres, which widened gaps between the two. Agricultural productivity plummeted, while urban areas began suffering from strains on infrastructure, unemployment and a proliferation of social vices. The Government's inability to promote balanced development during the oil boom has had serious repercussions for livelihoods.

Sustainable livelihoods require people to have access to economic activities, especially employment. The link between employment and sustainable livelihoods derives from the second aspect of human development, which emphasizes the use people are able to make of their acquired capabilities for employment, productive activities or leisure. In the Niger Delta, available data show that formal and informal sector activities are generally at a low level, meaning that access to employment and other economic activities is limited (table 6.1).

Except for Abia, Edo and Ondo states, the unemployment rate is much higher in the region than the national average.<sup>1</sup> Similarly, the underemployment rate is generally higher, except in Edo, Bayelsa and Abia states. A particularly disturbing dimension is the incidence of unemployment per household. For example, 5.8 per cent of households have one to two dependents without a job, 15.3 per cent have three to four dependents without a job, and 72.5 per cent have five or more dependents without a job (DPC, 2001). A high level of unemployment increases the dependency ratio, which worsens poverty.

Data from the NDDC (2005) portray the same pattern of findings on unemployment. The lack of work, as a good direct measurement of unemployment, has been most markedly pronounced in Delta, Rivers and Bayelsa states, which also have the highest incidence

<sup>1</sup> The figures for Edo State in the table cannot be realistically interpreted as a reflection of the rate of unemployment. For example, a survey from the Federal Office of Statistics that defined the labour force age bracket as 15-70 years (rather than the 15-64 years used by the International Labour Organization) reports a composite unemployment rate of 14.3 per cent, an urban rate of 24 per cent and a rural of 11.8 per cent for Edo State. For Cross River State, the figures are 16.6 per cent, 7.3 per cent and 18.3 per cent, respectively.

COUNTRY/	UNEMPL	OYMEN	JT %	UNDEREMPLOYMENT %			
STATE	Composite	Urban	Rural	Composite	Urban	Rural	
Nigeria	4.7	7.2	3.7	12.9	5.8	16.0	
Abia	2.9	8.7	2.4	7.7	NA	8.4	
Akwa Ibom	18.2	12.6	18.3	18.5	9.2	18.8	
Bayelsa	6.5	13.0	5.5	6.0	NA	6.9	
Cross River	NA	NA	NA	16.6	7.3	18.3	
Delta	10.3	16.2	8.8	13.0	23.6	10.2	
Edo	1.5	7.3	NA	4.6	1.8	5.3	
Imo	6.8	2.7	7.2	15.5	21.1	25.0	
Ondo	4.1	4.7	3.6	12.9	9.3	15.5	
Rivers	19.1	18.2	19.3	14.1	2.7	15.9	

# Table 6.1: Unemployment and Underemployment Rate in the Niger Delta, 2000

Unemployment is very pronounced in states with the highest incidence of youth restiveness and conflicts.

**Note:** An unemployed person did not do any work during the period of survey; an underemployed person worked less than normal hours for involuntary reasons.

Source: Labour force sample survey December, 2000 FOS/ILO, Federal office of Statistics Statistical News No. 322, June 2001

of youth restiveness and conflicts. The percentage of unemployed household members on the basis of lack of available work in those states by far surpasses the average for the region, although equally high percentage points in Abia, Akwa Ibom, Cross River and Imo underscore that unemployment is high across the region. This obviously has implications for income inequality and poverty.

The positive correlation between states earning high revenues with high rates of people with no available work is striking. It indicates that in terms of providing employment, the revenue generated is not having much impact upon the local population.

Evidence from the NDDC (2005) findings reveals that an appreciable portion of people is disabled (ranging from 7.1 per cent in Cross River State to 2.6 in Edo State), while about 1.1 per cent of people suffer from some form of infirmity. These vulnerable groups must be incorporated into any meaningful human development agenda in the region.

#### The Informal Sector

The most important issue to consider when attempting to bolster sustainable livelihoods is how to enhance the informal sector's potential to absorb those without viable income-generating activities, and to scale up existing informal enterprises so they involve a larger number of unemployed or underemployed persons. The informal sector accounts for as much as 70 per cent to 85 per cent of employment in the Niger Delta. Informal sector workers are in diverse enterprises, including petty trading, auto repair, welding, carpentry, street trading and shoe repairing.

Major characteristics of the informal sector include low productivity and low wages. According to Cour (2000), the informal sector in sub-Saharan Africa accounts for 75 per cent of employment but only 25 per cent of income. Abumere (2005) has argued that of the 70 per cent of Nigerians classified as poor and living on less than US \$1 a day, over 80 per cent belong to the informal sector. De Soto (2000) reckons that the high levels of poverty in the informal sector may be accounted for by the dominance of 'dead capital'. This is because the land and houses belonging to the people in the sector cannot be used as collateral to improve their creditworthiness, since they are unable to obtain titles to them.

Women are particularly active in the informal sector, but their entrepreneurial activities are mainly small in scale, with a low-income base and low technological content. Traditionally, Niger Delta women were engaged in the cultivation of land and fishing. Unfortunately, the pollution and destruction of agricultural land and waterways, including through oil spills, has High revenues in some states have not contributed to increased employment.

The informal sector accounts for as much as 85 per cent of employment in the delta. But its characteristics include low productivity and low wages. Women are active in the informal sector, but their entrepreneurial activities are small, with a low-income base and low technological content.

The informal sector, if adequately transformed and integrated into the formal sector, has the unique capacity to flexibly absorb labour and generate additional income.

People cobble together multiple sources of income in order to survive. imposed serious hardships on women. Those who work as informal sector entrepreneurs need to learn new and modern ways of doing business to avoid the danger of displacement and marginalization.

Pro-poor growth and poverty reduction in the Niger Delta calls for inclusive growth that allows the poor to reap the greatest share of benefits. Special attention to the informal sector would move economic growth in this direction and simultaneously reduce the gender gap. Clearly, the employment and expansion potential of the informal sector is vast. The informal sector, if adequately transformed and integrated into the formal sector, has the unique capacity to flexibly absorb labour and generate additional income. Box 6.2 describes an example of a novel initiative aimed at enhancing the productivity and income-generating capacity of a group of

people are likely to refer only to their primary occupation, which may be in the formal or informal sector, in all likelihood, they also carry out other tasks to meet their livelihood needs. As a focus group participant in Akwa Ibom State said:

'In the main, commercial cycling, water fetching, wine tapping, itinerant weekly market sale of farm produce, palm oil milling and keeping of domesticated animals constitute the sources of liveliboods. The Okada riders mainly operate in Uyo. Even those with employment in the public sector also augment their income by petty trading and the young adults would hawk various goods in the urban centres."

In a study carried out in Ogoloma, an island community in Rivers State, it was found that the average number of incomegenerating activities per person was 3.2 for males, while for females, it was 2.1 (Olawoye 2002). The types of activities

# Box 6.2: Targeting the Informal Sector

In an attempt to enhance productivity and income in the informal sector, Mabogunje and Abumere, through the auspices of the Development Policy Centre, an NGO, started a project with the motor mechanics in Ijokodo, Ibadan. Mechanics have a reservoir of technology that can be utilized beyond mere repairs of motor vehicles. The values added and the incomes of mechanics will remain low so long as all they did was just to repair vehicles. They can be made to fabricate things. For this purpose, engineers were recruited from the university and the polytechnic in Ibadan.

The engineers surveyed the tools and equipments owned by the mechanics along with their expertise and skills. The types of items they could fabricate were identified. These ranged from exhaust pipes to play toys and other gadgets with potential demand on the market. Additional equipments were procured to facilitate these productions.

The next stage was to link the mechanics with potential markets. This model of enhancing productivity and incomes in the informal sector can be extended to furniture makers, dressmakers, shoemakers, plumbers, etc. The model is a potent way of reducing poverty in the informal sector as well as hastening the transition of the enterprises from informality to formality.

Source: DPC, Ibadan (2005)

motor mechanics in Ibadan city in Oyo State.

#### **Multiple Incomes**

Many people in the delta, whether living in the rural or urban areas, male or female, young or old, better-off or poorer, indigenous or migrant, participate in multiple activities to earn income. Although are listed in table 6.2, disaggregated by gender to show the relative significance of these activities to men and women.

Understanding the entire scope of activities can help in supporting those that demonstrate the greatest potential for expansion and sustainability. For instance, in Akwa Ibom and River states, being a housemaid is a popular informal sector activity. Professionalizing the quality of service and monitoring this form of employment would help in formalizing it and ensuring decent wages. There is a employ over 70 per cent of the total workforce. In the Niger Delta, aside from the tremendous oil and gas wealth, the region is endowed with a large number of

There is need to formalize and transform sectors that promise more and better employment opportunities.

 Table 6.2: Distribution of Sampled Rural Men and Women by Income-Generating

 Activities in Ogoloma Community, Rivers State

<i>Type of activity</i>	Men engaged in (%)	Women engaged in (%)
Livestock rearing	26.7	12.9
Trading	33.3	64.5
Civil servant/teacher	26.7	9.7
Fishing/hunting	93.3	16.1
Gathering/selling NTFPs*	20.0	22.6
Processing of farm and		
other related products	13.3	16.1
Work as hired labourer	20.0	3.2
Carpenter/bricklayer	20.0	
Selling food/snacks	20.0	22.6
Tailor	26.7	22.6
Others	20.0	22.6
Mean number of		
income-generating		
activities	3.2	2.1

\* NTFP stands for non-timber forest products such as snails, fruits, nuts, fuel, etc. Source: Olawoye 2002

pressing need to transform sectors that promise more and better employment in this way.

#### Small and Medium Enterprises

When considered individually, small and medium enterprises often look too limited to make any meaningful impact on the economy. But when taken as a group, their contribution can be significant. It is estimated that about 87 per cent of businesses in Nigeria are small, but they working age people, along with land with the potential for cultivation and fishery resources. These provide platforms for cottage industries. Appropriate policies and programmes, including those focused on developing entrepreneurs, could nurture a wide range of small to medium enterprises. Any programme related to sustainable livelihoods should pay attention to this sector.

Table 6.3 presents small and medium enterprises in the Niger Delta. Of the 2,377

enterprises are essential to sustainable livelihoods. Programmes and policies should nurture them.

Small and medium

Appropriate policies and programmes, including those focused on developing entrepreneurs, could nurture a wide range of small to medium enterprises.

	Agriculture		Manufacturing/ traditional crafts		Tertiary services/ mining and construction		Multiple services		Total
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	
Abia	146	44.11	124	37.46	56	16.92	5	1.51	331
Akwa Ibom	56	22.22	90	35.71	104	41.27	2	0.79	252
Bayelsa	76	34.55	42	19.09	84	38.18	18	8.18	220
Cross River	52	20.63	56	22.22	144	57.14	0	0.00	252
Delta	80	37.56	26	12.21	75	35.21	32	15.02	213
Edo	44	17.60	54	21.60	125	50.00	27	10.80	250
Imo	77	21.69	180	50.70	94	26.48	4	1.13	355
Ondo	42	16.80	68	27.20	124	49.60	16	6.40	250
Rivers	55	21.65	69	27.17	129	50.79	1	0.39	254
Total	628	26.42	709	29.83	935	39.34	105	4.42	2,377

Source: Niger Delta Regional Master Plan Sector Report on Micro and Small Enterprises, Wider Perspectives Ltd., 2004 p. 35

Better production and processing modes of small and medium could improve efficiency and enhance incomes.

People need opportunities to acquire skills and develop capacities that lead to productive and sustainable liveliboods.

Some occupations, like traditional agricultural activities, need to be improved to attract youth.

To enhance agricultural productivity and improve other enterprises, improved technology is needed.

An important way of ensuring effective utilization of skills is facilitating access to capital. enterprises surveyed, 29.8 per cent are in manufacturing and 39.3 per cent are in tertiary services and construction, both of which are relevant to an industrialization strategy.

An institutional framework would strengthen these enterprises by allowing a diagnosis of obstacles and the identification of possible solutions. The 2003 act establishing the Small-Medium Scale Enterprises Development Agency of Nigeria is a step in the right direction. The role of this agency in the Niger Delta should be strongly promoted. Small and medium enterprises are often labour intensive, which ensures the employment of larger populations. Better production and processing modes, however, could improve efficiency and enhance incomes, while providing other benefits such as greater safety. For example, women in fishing communities involved in fish smoking often complain of heat and smoke exposure, and request improved equipment such as the Chokor oven, which can minimize health hazards from their activities.

### Capital Assets Human Capital Assets

Human capital components of livelihoods include skills acquisition, knowledge and creativity. The available occupational and vocational data imply that the level of vocational skills acquisition in the Niger Delta is low. This comes both from policy neglect and public misconceptions about the inherent value of vocational training for both formal and informal employment. The number of formal vocational training institutions is also inadequate. More institutions and better policies are needed for people to acquire skills and develop the capacities that lead to productive and livelihoods, sustainable through entrepreneurship and self-employment. The vocational training initiative of the Nigerian National Petroleum Corporation is a novel idea that should be expanded, especially in areas where the potential for livelihood development is strong. Age and sex characteristics are significant determinants of the quality and capability of the human capital available. According

to focus group participants, the aging rural

population has affected agricultural productivity, for example. One person said, "As for us we are predominantly farmers that cannot farm again because of several reasons ranging from old age to illness to poverty."

Evidence suggests that women and youth suffer most under the present scenario of neglect in the Niger Delta. Skills acquisition programmes should clearly be targeted to these groups so they can be equipped for employment in the public and private sectors. Training and skill building must be geared to the enhancement of employment opportunities, especially for а representative spectrum of the region's labour force to explore gainful activities in a variety of vocations and professions. Some occupations, particularly small-scale traditional activities like agriculture, need to be improved to attract youth, who may not want to engage in these activities, even though they are otherwise unemployed. A focus group participant said:

"The economy is largely agrarian and as such farming and trade in farm produce constitute the main sources of livelihoods. But the youths who mostly prefer urban life seldom participate in such jobs which they term as 'menial'."

The partnership in the Niger Delta between UNDP and Shell is currently assessing vocational institutions in some states, with a view towards defining the existing gaps in capacity, sparking greater demand for these institutions and enhancing their performance.

The income from oil industry activities, including temporary construction work or short-term contracts, as well as from compensation for oil spills and the 'conflict economy', vastly exceed the sums earned in traditional occupations. To enhance agricultural productivity and improve other enterprises, and to encourage fuller participation in suitable activities, improved technology is needed. As the study for this report found, the residents of the Niger Delta are mostly peasant farmers without any help from the government or financial institutions. They contend that they need things like tractors, harvesters and machines for palm oil production. Manual production, according to the focus group

participants, is hard and tedious and wastes time. Appropriate equipment would make it easier to produce enough to sustain people and alleviate poverty. One focus group participant said: instrument for achieving this.

Another important human capital asset for achieving sustainable livelihoods is people's motivation to build a better society. A



An important human capital asset is people's motivation to build a better society. People in the Niger Delta believe the future is bright.

An example of a local fishing gear in the Niger Delta

"We also need financial assistance to help us set up companies like palm kernel oil factories, garri, yam processing companies and rice mill factories. We produce rice too. These are the things we need in order to make life worth living in the area."

On the whole, the importance of education and continuous functional training as catalysts for human capital development and sustainable livelihoods cannot be overstated. For young people, computer literacy should be a priority so that they can compete effectively in this information age. Technical schools, like the Petroleum Training Institute in Warri, should be replicated in many parts of the Niger Delta, preferably one per state. Special attention should also be paid to upgrading the skills of entrepreneurs in the informal sector, which can multiply impacts through increased production and the absorption of labour. If the skills acquired cannot be used for a better livelihood, however, such efforts would be wasted. An important way of ensuring effective utilization of skills is facilitating access to capital. The recently launched Micro-Credit Policy, a partnership between the Central Bank of Nigeria and UNDP, could prove to be a major positive perspective is a strong force for change and denotes a willingness to put effort into improving local conditions. Table 6.4 presents findings on views concerning the future of the Niger Delta region. The majority of the respondents indicated that they believe the future is bright, including full employment opportunities, industrialization and infrastructural development. This is an asset that can be channeled into working towards making that vision a reality.

A holistic approach to human capital development in the Niger Delta should also involve the oil and gas sector. This is considered more fully later in this chapter.

#### Natural Capital

The Niger Delta has an enormously rich natural endowment in the form of land, water, forests and fauna. These assets, however, have been subjected to extreme degradation due to oil prospecting. For many people, this loss has been a direct route into poverty, as natural resources have traditionally been primary sources of sustenance. It is not possible therefore to discuss sustainable livelihoods in the Niger A bealthy environment could support many communities in the delta, which could become the food basket of Nigeria if properly managed. For agricultural sector to meaningfully provide sustainable livelihoods, local governments need to get more involved in exploring the local potential for agriculture. Delta without referring to oil extraction and its impacts on the environment, a subject explored extensively in chapter three of this report. Box 6.3 further illustrates the issue and how it affects people's welfare.

During the focus group discussions, participants generally reported that people have almost been pushed out of farming due to soil impoverishment, which affects crop yields. Numerous studies have shown that non-timber forest products, such as firewood, snails, medicinal plants and spices, have significantly declined in recent years due to pollution and deforestation. Since the poorer members of the community are more dependent upon these 'free' natural resources, the reduction has serious consequences upon the welfare of most rural households. In many localities, this has put more strain upon women, who are more likely to be engaged in gathering such products to meet their household responsibilities.

A healthy environment could once more become a source of support to many communities in the delta, which has the capacity to become the food basket of Nigeria, if properly managed. With good storage facilities, it would be possible to satisfy high demands for food-related commodities across the country. Table 6.4 shows a list of possible agricultural and mineral products. To help transform the agricultural sector in ways that provide sustainable livelihoods, local governments need to get more involved in exploring the local potential for agriculture, complementing several federal agricultural initiatives that already exist. Strong partnerships between each tier of government and between the government and communities need to be established. There should also be closer ties between agriculture and industry, especially among small and medium enterprises. Other elements required to rejuvenate agriculture in the delta include the provision of rural infrastructure, microcredit facilities, and the reopening of comatose fertilizer companies and promotion of new ones.

With some traditional income-generating activities adversely affected by environmental degradation or social changes, the introduction of alternative activities should be explored, with due regard for environmental sustainability. A number of development interventions have introduced training in snail harvesting, fish farming and beekeeping in rural areas that have suffered severe environmental destruction and can no longer support traditional farming and fishing activities at a level sufficient for people's needs.

### Social Capital

One of the fundamental principles guiding a development approach that emphasizes



A plaintain and pineapple plaintation that could be encouraged among youths

### Box 6.3: Environmental Degradation and Threats to Welfare and Livelihood Activities: The Case of Okoritak, Akwa Ibom State

According to the respondents from Okoritak, the quality of land, forest and water in the community is poor. The evidence of poor land and soil in the community is that most of the fruit trees in the area do not bear fruits again and when they do, the fruits are small. Okoritak is surrounded by water, but the people have no potable water. The people travel by canoe to neighbouring villages to buy water for drinking. There are two wells in the village, but the water from them is rusty due to high iron content. The people describe their water as containing crude oil.

The main environmental problems in the area include oil spillage, which has considerably reduced fish production; coastal flooding that destroys houses, causing families to move frequently; and deforestation due to fuelwood extraction activities of the people. These problems have serious effects on the livelihood activities of the people. For instance, in the past, women used to fish in the Qua Iboe River, but today they have settled for fish processing due to the poor harvest in the badly polluted water. Also, fuelwood is more expensive now than years ago.

Raw material	Possible uses	Processing equipment required
Rice	Rice milling,* flour, starch,	Thresher, huller, polisher, parboiling
	alcohol, livestock feed, matting	tank, dryer and milling machine.
Maize	Flour,* starch/glucose, confectio	Thresher, de-stoner, gritting plant,
	nery, cornflake, corn oil, livestock	milling plant
	feed, pharmaceuticals	
Cassava	Garri,* starch, flour, chips, livestock	Peeler, grater, press, mechanical fryer,
	feed, thickener, bakery	fermentation tank, sieve
Yam	Flour,* yam chips, flakes, livestock feed	Peeler, chipping plant, dryer and miller
Melon	Packed melon,* vegetable oil, feed	Grinder, basin, scale
	industry, livestock feed	
Cowpea	Flour,* bean cake, food and beverages	Thresher, dryer, miller and packaging
	industry	machine
Tomato	Canned tomato,* fruit drink, soup making	Grinder, stainless steel containers,
		steamer, homogenizer
Cocoyam	Chips,* starch, flour, livestock feed	Grinder, stainless steel containers,
		steamer, homogenizer
Pepper	Spice	Dryer, miller and packaging machine
Okra	Thickening soup	Slicer, dryer and packaging machine
Sweet potato	Chips,* human food, animal feed,	Chipping plant, fryer, dryer, packaging
-	flour, food industry	machine
Groundnut	Vegetable oil,* groundnut cake,	Sheller, extractor, expeller, miller, sifter
	livestock feed	_
Oil palm	Palm oil,* palm kernel oil, palm kernel	Cooker, sterilizer, digester, screw press,
-	cake, soap and detergents, margarine,	clarifier
	lubricating oil, candle, cosmetics	
Сосоа	Cocoa butter, beverages,* cocoa powder,	Dryer, pulverizer, mixer
	alcohol from the pod, wine, livestock	
	feed	
Banana	Food,* confectionery*	Peeler, slicer, dryer, miller
Plantain	Food,* chips,* plantain drink, jam,	Peeler, chipping machine, fryer, dryer
	jelly, soap, livestock feed	
Pineapple	Fruit juice, jam	Continuous juice expeller, pasteurizer,
	······································	filtration machine, cooking machine,
		packaging machine
Orange	Fruit juice	"
Orange Sugarcane	Sugar	Crusher, press cooling machine,
Sugarcane	Sugar	
D 11		packaging machine
Rubber	Tyres and tubes,* belts, shoes,	Oven, extrusion machine, roller, mill,
	rubber-based vehicle parts, rubber baby	conveyor belt
	napkins, detergents, shampoo, putty,	
	crumbs, balls	
Mango	Fruit juice,* jam	Juice expeller, pasteurizer, filtration
		machine, cooling machine
Coconut	Oil,* feed/food, chips, yoghurt, milk,	Shedding equipment, slicer, mill press
	cosmetics, drinks, butter	
Timber/teak	Chip board, particle board,* furniture,	Sawmill and furniture equipment
	* paper and pulp, toothpicks, rulers,	
	toilet rolls, electric poles	
Bamboo	· · · · · · · · · · · · · · · · · · ·	Dryer, paper mill
Bamboo	Pulp and paper,* toothpicks, building materials	
Cashew	Roasted nuts,* juice	Roaster, cracker, extractor

#### Table 6.4: Summary of Some Available Raw Materials and Possible Uses of the Resources

Fish	Dried fish,*, oil, livestock feed	Smoking kiln
Livestock	Food	Smoking kiln, laughter slab and equipment
Shrimps	Food (smoked)	Smoking kiln
Salt	Table salt	Heater, cooler
Ginger	Spices	Extractor
Mushroom	Food	Growth media, inoculant storage material
Kolanut	Stimulant,* food	Extractor, dryer, grinder
Spring water	Bottled and sachet water	Automatic sachet or bottle filling machine
Raffia palm	Raffia production	
Kaolin	Pharmaceutical,* paper-making, fertilizer, insecticide, fibre glass, textiles, welding electrodes, paint	Crusher, mixer, filter, dryer, pulverizer, press
Lignite	Locomotive engines, electric power generation, energy conservation plant, tar, polish and wax, * paraffin, nitrate fertilizer	Crusher, dryer mill, mixer, grater screen
Silica sand	Production of bottles,* drinking glasses, glass sheets, sand paper	Glass-making furnace
Clay	Burnt brinks,* ceramics, pottery wares, bronze casting, sanitary wares	Crusher, kiln
Bauxite	Manufacture of refractory,* abrasives, * chemicals for paper-making, water treatment, oil and gas industries	Crusher, beneficiation plant
Gravel	Building construction	Digger, collector, washer
Granite	Building construction	Driller, crushers, screens
Marble	Tiles	Grinder, polisher, edge-cutting machine, overhead and wales tank, water pump, miscellaneous tools and fixtures
Bitumen	Road construction	Bitumen plant
Crude oil	Diesel,* fuel,* kerosene,* surface active agents, synthetic rubber, nitrogen fertilizers, pharmaceuticals	Refinery
Natural gas	Cooking,* fertilizer, power generation, * synthetic plastics and resins	Gas processing plant

Note: \* - Products that can be developed through small and medium enterprises.

Most communities have a variety of support groups that provide short- and long-term coping mechanisms.

Links between rural and urban areas support livelihoods in both. sustainable livelihoods is the need to build upon existing potential to ensure the suitability, success and sustainability of interventions. This is particularly relevant in considering social capital. Social groups and organizations, cultural norms and values, indigenous knowledge and practices, local governance structures and decisionmaking processes, social links and support networks are all important for local livelihoods. These social assets provide coping mechanisms, such as a loan from friends, to respond to short-term shocks or stresses. They also allow long-term adaptive strategies including migration to relatives in other localities.

Most communities have a variety of support groups, including cooperatives, local savings and credit or *isusu* systems, informal work exchange groups and religious organizations. These are all important sources of social capital. For most people, particularly the poor, who have no access to formal institutions to secure credit or other services, the social support network is the first place to seek assistance in time of difficulty. Friends and family form a safety net in situations that might otherwise destroy the ability to overcoperate in setting up craft guilds. What may be impossible for an individual to accomplish could be attainable as a group.

The social and economic links between rural andn cash and kind, including food products, have a profound effect on the livelihoods of both kinds of residents. Occupational ties have also been found. There has been a growth of some urbantypes of income-generation in rural areas, which reduces the flow of migrants to the cities and opens opportunities for rural dwellers. Cabinet-making, block-moulding, motor vehicle repair, metal fabrication and larger scale retail activities had previously been largely limited to urban or peri-urban areas, but are now being extended to more rural localities. The reverse also takes place—more agriculture activities are being carried out in urban areas (Okali et al. 2001).

One of the coping mechanisms practiced by some poorer households is the seasonal migration of some members to urban areas or other localities to earn cash. This practice occurs quite extensively in the South-South and South-East geo-political zones (Olawoye et al, 2003; Okali et al, 2001). According to the focus group discussions, a significant number of people from the delta work as migrant cocoa farmers in Cameroon, while others work as artisans and cyclists. Participants pointed out that the absence of reliable livelihoods in the delta has forced many youths to migrate to urban centres to make an income. Apart from depleting the rural assets for agriculture, this has been linked to the spread of HIV in the region.

Social norms and local practices can also be an important source of social capital. While he was still the Deputy Governor of Bayelsa State, Dr. Goodluck Jonathan, who is now the Governor, wrote the following account of his memories as a child. He demonstrates the importance of indigenous practices:

'In my community called Otuoke in Ogbia LGA of Bayelsa State, the practice when I was a child was for the community to stop fishing in the river after the traditional festival in October. The river is re-opened for fishing on the 23rd or 24th of December and the catch per unit effort was usually tremendous. The people, however, did not know that what they were practicing was in line with some aspects of fisheries management and conservation. In the Niger Delta, most freshwater fish spawn during the flood period when the water level is very high, overflowing into the levees. This period starts in September and reaches its peak. in October. Juvenile fish fill the whole river system at this period. The closure of the river allows the juvenile fish to grow to table size by December" (Jonathan, 2004).

As with many local practices that are based on traditional social beliefs, however, modern religions and current ideologies

have discarded these norms due to their 'fetish' undertones. Unfortunately, this has led to the loss of sound practices. A similar case is seen in the traditional preservation of 'shrine forests', which has now been discarded with the encroachment into the forests and the resultant loss of biodiversity. The significance of such social capital should be understood not only relative to traditional belief systems, but also in terms of the potential benefits to be derived. Good practices should be retained, even though the reasons behind them may be altered to reflect the need to preserve the natural resources that local livelihoods depend upon.

#### Infrastructure

Chapter one discussed the significance of infrastructure for human development. It is common to distinguish between three types of infrastructure: physical (e.g., roads, canals and bridges); social (e.g., health and educational facilities, and public utilities); and institutional (e.g., credit institutions and postal services). Some experts define infrastructure as the whole physical framework within which all activity and other forms of development take place. It includes housing and buildings of all kinds, roads and other forms of transportation, communications, and water and energy supplies.

The provision of infrastructure will be critical to achieving sustainable livelihoods in the Niger Delta. Accessibility is a major livelihood issue, for example, given the grossly inadequate options for transport in the region. Roads are in a bad state, or simply not passable. Some communities have been practically cut off from the mainstream of activities because of this problem. They are unable to market their produce, particularly fish products, and often suffer high losses. Without health care or educational facilities within their communities, the local residents have literally no means to improve their welfare or income.

For some riverine communities, there are two means of access to other parts of the delta and beyond—by water (through the rivers and creeks) or by road. In many Modern ideologies have encouraged some sound traditional practices to be discarded—this tendency should be reconsidered.

Sustainable livelihoods depend on adequate roads, electricity, housing and basic social services. Oil companies' intervention projects have not been able to meaningfully impact on livelihood because they were implemented without any systematic link to any development plans.

People say infrastructure is their number one concern. Educational facilities and good water rate near the top of their list. cases, the water route is the only one, and where the option exists, more direct than the highland road. Residents travelling out of the vicinity typically use a motorized boat. Bridges could link some of these communities, if they are environmentally sustainable. The canalization of the major waterways, construction of jetties and shore protection should also be given priority. Unfortunately, as discussed earlier, successive state and federal governments have neglected such physical developments. For their part, the multi-national companies have established facilities reaching international standards in oil-producing areas, concretely demonstrating to the local inhabitants that their communities could be better developed (Chokor, 2000).

The analysis will be incomplete if the role of oil companies in providing physical, social and institutional infrastructure is not mentioned. All the major oil companies operating in the Niger Delta Region, the Nigerian National Petroleum Corporation (NNPC) and its subsidiaries have had one community- development programme or the other in their areas of operation. Such community development projects cut across rehabilitation and/ or construction of roads, hospitals, schools and water system; establishment of entrepreneurial development programmes; and award of scholarships; establishment of micro-credit programmes; among others. See table 6.5 for the specific projects undertaken by the oil companies. It is important to note that these projects have not been able to meaningfully impact on livelihood because of some reasons. First, the ineffectiveness of local governance in this region is appalling. These projecs, which could have complemented the developmental role of local governments virtually ended up as the only development projects in most of these communities. Second, the projects were implemented on ad hoc basis without any systematic link to any development plans either at the local or state government level. Consequently, in some cases, schools and hospitals were built without any teachers or para-medical staff to operate the infrastructure. In many cases, indigenes rather than blaming governments often hold oil companies responsible for the lapses associated with poor planning.

An affordable energy supply is also critical for livelihoods in the Niger Delta. It is a prerequisite for industrialization and a major support to small and medium enterprises. A gas-powered energy supply would be the cheapest option, in view of the abundance of gas and the existence of gas pipelines in the region. Currently, however, even though the delta satisfies both national and international energy needs, it experiences energy shortages, and fuel is more expensive than in many other parts of Nigeria.

The provision of good, affordable housing in urban and rural areas is another critical element. The squalid conditions under which the vast majority of city dwellers live in the oil rich cities of Port Harcourt and Warri is one glaring evidence of the juxtaposition of poverty and development in the region. In the rural areas, the oil wealth has made very little impact in upgrading building structures and materials. According to the NDDC survey, the yearly increase in registered and approved building plans in the period 1999 to 2003 was about 1.2 per cent while the rate of population increase for the same period was 4.5 per cent.

The significance of infrastructural development came through clearly in the focus group discussions. Respondents identified issues that should be addressed urgently (see table 6.6). Infrastructure was ranked first, with three times the importance assigned to the second concern, unemployment. The focus group discussions went further to collect the views of local populations on the most crucial infrastructural problems. They regarded educational facilities to be the highest priority (34.4 per cent), followed by a good water supply (16.7 per cent), health facilities (13.3 per cent) and facilities to create jobs (8.9 per cent). Other priority needs were roads (7.8 per cent), electricity (6.7 per cent), industries (4.4 per cent) and a clean environment (3.3 per cent).

The priority needs of local populations are likely to vary from one community to another, however, as each community faces its own unique problems. Similarly, within a community, different groups,

Companies	Projects
NNPC/Eleme Petrochemical Company	Provision of health and civil centres, street lights, classrooms and transformers in Akpajo, Okerewa, Aleto, Agbonchia and Elelenwo (Rivers State).
NNPC/Shell/Elf/Agip Joint Venture	• Introduced an agricultural extension scheme in the Niger Delta.
	• Promoted formation of cooperative societies and set up Micro Credit
	Scheme for agricultural development.
	• Provided educational infrastructure: science equipment, classroom blocks,
	pipe-borne water, electricity and scholarships.
	• Between 1996 and 1997 alone, 10 communities were provided with improved
	health care delivery services
NNPC/Mobil Joint Venture	• Between 1964 and 1998 it constructed 40 asphalt roads of approximately 60
	kilometers in Eket, Esit Eket, Ibeno and Onna, including the popular
	Qua Iboe Terminal road in Akwa Ibom State.
	<ul> <li>As at 1998, 80 boreholes had been drilled in various parts of Akwa Ibom State.</li> <li>500 university attained from hard a back aboreholes.</li> </ul>
	<ul> <li>500 university students offered scholarships.</li> <li>Is On Contact and District Table 117 is a Contact and District 1005</li> </ul>
	Its Oso Condensate Project's Technical Training Centre, established in 1995,     training technical generated for the metroleum on Larlets Lin betwice
	trained technical personnel for the petroleum and related industries.
	• In 2003, the following projects were commissioned in Akwa Ibom State:
	Boreholes for Saint Francis Secondary School (Ikot Akatu) and Saint     Peter and Paul School (Inua Evet Ikot)
	<ul> <li>Peter and Paul School (Inua Eyet Ikot)</li> <li>A 3-kilometer road (Okon)</li> </ul>
	<ul> <li>A 3-kiloineter road (Okon)</li> <li>8-classroom block at Community Commercial Secondary School (Ikot</li> </ul>
	Ebiere)
	• 4-classroom block at Union Technical College (Ikpa)
	• 4-bedroom Principal Quarters at Peter and Paul School, etc.
NNPC/Chevron Joint Venture	• In 1992, 18-bed community hospital constructed and equipped at Ugborodo,
-	Delta State.
	• Its National University Scholarship Programme offered scholarships for 1500
	beneficiaries annually.
NNPC/Agip/Phillips Joint Venture	The project that started in 1987 at Obiau-Obrikom (Rivers State), as at 2003, offered the
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Nigeria Liquidified Natural Gas (NLNG) Total Upstream	<ul> <li>following:</li> <li>Through its popular Green River Project, provided improved crop multiplication skills and extension services to farmers.</li> <li>Between 2001 and 2003 developed Burma rice farm with associated infrastructure and machinery.</li> <li>Implemented Roll Back Malaria Health Centre by providing male, female and children wards, laboratory, pharmacy, staff quarters, potable water and boat ambulance in Okoroma/Teke LGA of Bayelsa State.</li> <li>So far it executed more than 50 community projects on Bonny Island and about 200 self-help projects (including health, roads, electricity and water) on its pipeline communities. This includes provision of renovation/construction of Finima market, shopping mall in Bony, buses for Bonny and Finima youths, cargo boat for Finima women, purchase of fishing materials for fishermen in Okirika and Kalabari, and 4 cargo boats to Bonny community. Other specific projects include:</li> <li>As at 2001 awarded 934 scholarships to indigenes of Bonny Island.</li> <li>N500 million (\$4.0 million) Micro-credit facility established to host communities under the management of a bank and an NGO.</li> <li>Constructed Egi independent power project (at a cost of about \$6.3 million) to ensure steady power supply to Rivers State with particular attention to 20 oil communities.<sup>2</sup></li> <li>Water schemes established in Akabuka, Akabta, Amah, Erema, Ibewa/Obukegi,etc.</li> <li>Between 2001-2002, a 25-kilometer road linking Akabuka to Obagi was</li> </ul>
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Nigeria Liquidified Natural Gas (NLNG)	<ul> <li>following:</li> <li>Through its popular Green River Project, provided improved crop multiplication skills and extension services to farmers.</li> <li>Between 2001 and 2003 developed Burma rice farm with associated infrastructure and machinery.</li> <li>Implemented Roll Back Malaria Health Centre by providing male, female and children wards, laboratory, pharmacy, staff quarters, potable water and boat ambulance in Okoroma/Teke LGA of Bayelsa State.</li> <li>So far it executed more than 50 community projects on Bonny Island and about 200 self-help projects (including health, roads, electricity and water) on its pipeline communities. This includes provision of renovation/construction of Finima market, shopping mall in Bony, buses for Bonny and Finima youths, cargo boat for Finima women, purchase of fishing materials for fishermen in Okirika and Kalabari, and 4 cargo boats to Bonny community. Other specific projects include:</li> <li>As at 2001 awarded 934 scholarships to indigenes of Bonny Island.</li> <li>N500 million (\$4.0 million) Micro-credit facility established to host communities under the management of a bank and an NGO.</li> <li>Constructed Egi independent power project (at a cost of about \$6.3 million) to ensure steady power supply to Rivers State with particular attention to 20 oil communities.<sup>2</sup></li> <li>Water schemes established in Akabuka, Akabta, Amah, Erema, Ibewa/ Obukegi,etc.</li> <li>Between 2001-2002, a 25-kilometer road linking Akabuka to Obagi was constructed.</li> <li>Between 2003 and 2005, 1,200 youths from Akwa Ibom, Rivers and Delta States had benefited from skill development programmes.</li> </ul>
Nigeria Liquidified Natural Gas (NLNG)	<ul> <li>following:</li> <li>Through its popular Green River Project, provided improved crop multiplication skills and extension services to farmers.</li> <li>Between 2001 and 2003 developed Burma rice farm with associated infrastructure and machinery.</li> <li>Implemented Roll Back Malaria Health Centre by providing male, female and children wards, laboratory, pharmacy, staff quarters, potable water and boat ambulance in Okoroma/Teke LGA of Bayelsa State.</li> <li>So far it executed more than 50 community projects on Bonny Island and about 200 self-help projects (including health, roads, electricity and water) on its pipeline communities. This includes provision of renovation/construction of Finima market, shopping mall in Bony, buses for Bonny and Finima youths, cargo boat for Finima women, purchase of fishing materials for fishermen in Okirika and Kalabari, and 4 cargo boats to Bonny community. Other specific projects include:</li> <li>As at 2001 awarded 934 scholarships to indigenes of Bonny Island.</li> <li>N500 million (\$4.0 million) Micro-credit facility established to host communities under the management of a bank and an NGO.</li> <li>Constructed Egi independent power project (at a cost of about \$6.3 million) to ensure steady power supply to Rivers State with particular attention to 20 oil communities.<sup>2</sup></li> <li>Water schemes established in Akabuka, Akabta, Amah, Erema, Ibewa/Obukegi,etc.</li> <li>Between 2001-2002, a 25-kilometer road linking Akabuka to Obagi was constructed.</li> <li>Between 2003 and 2005, 1,200 youths from Akwa Ibom, Rivers and</li> </ul>

<sup>2</sup> The Egi electricity project has produced tremendous benefits that include eradication of power outage in Egi Kingdom, improvement of quality of life and growth of small enterprises in the area.

Table 6.6: People's Identification of Priority Issues for the Niger Delta				
Priority	Per cent respondents identifying it			
Poor infrastructure	37.8			
Unemployment	13.3			
Pollution	12.2			
Corruption	11.1			
No rule of law, equity and justice	7.8			
Youth restiveness	6.7			
Environmental degradation	4.4			
Erosion	3.4			
Education	2.2			
Poverty	1.1			
	100.0			
Source: ERML Fieldwork, 2005				

The participatory approach to development management is essential for the sustainable livelihood. especially along gender and generational lines, are likely to have different perspectives concerning their priority needs, especially as their livelihood activities vary and certain facilities or services will have different impacts upon their abilities to meet their needs. Table 6.7 illustrates the differences in perceived priorities between the nine states of the Niger Delta based on the NDDC survey. The priorities identified are similar in some respects to those found during the preparation of this report. The provision of social and infrastructural facilities is at the top of people's agenda. But in the NDDC survey, education ranks first followed by health and a pipe-borne water supply. Education is rated rather low in the study for this report, probably because of the other issues it includes.

From these findings, it is apparent that each community needs to be carefully considered and the views of the various stakeholders sought before development projects are designed. The participatory approach to development management is essential for the sustainability of such interventions.

### Economic Growth That Promotes Sustainable Livelihoods

Experience in other parts of the world has shown that in order to promote economic growth in backward regions, certain industries have the ability to generate the necessary backward and forward links to galvanize the local economy. Such 'propulsive' industries are referred to as 'growth poles'. They act like magnets,

Table 6.7: Percentage Distribution of Households by Their Identification of Facilities That Should Be Provided or Improved in Their Community

State	School	Health	Road/	Well/	Pipe-	Trans	Sani	Agricul	Police
			waterways	borehole	borne	porta	tation	ture	
				water	water	tion			
Abia	74.9	25.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0
Akwa-Ibom	89.8	9.6	0.1	0.0	0.5	0.0	0.0	0.0	0.0
Bayelsa	94.2	5.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0
<b>Cross River</b>	80.2	19.5	0.0	0.1	0.1	0.0	0.1	0.0	0.1
Delta	86.2	13.1	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Edo	65.6	34.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0
Imo	90.0	9.5	0.1	0.3	0.1	0.0	0.0	0.0	0.0
Ondo	63.7	35.3	0.1	0.4	0.4	0.1	0.0	0.2	0.0
Rivers	85.8	13.8	0.1	0.4	0.4	0.1	0.0	0.2	0.0
Niger Delta	82.5	17.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0

Source: NDDC Demography and Baseline Studies Sectoral Report

drawing other industries to their localities, as well as labour, social facilities and services, and infrastructural developments that ultimately foster economic development.

The growth pole strategy could work in the Niger Delta, especially given the preponderance of small settlements and the low purchasing power of most of the people. Potential propulsive industries include cassava and fruit processing, which could establish two-way links with other sectors of the economy and, because they are labour-intensive, absorb a large number of workers. If based in the medium-sized urban centres, especially those located away from oil-producing areas, industries like these will serve as engines of growth and provide alternative sources of livelihood. Growth poles must be established on the basis of existing assets and their ability to stimulate appropriate market forces, however. Prospects for environmental degradation and negative social changes must be simultaneously considered. Table 6.8 lists crops and potential industries that reflect the relative advantages and natural characteristics of each state in the delta. The conditions for economic growth-

whether in industry or services-are complex and will require planning and the building of substantial infrastructure, as well as the development of human and institutional capacity (NDDC Niger Delta Regional Master Plan). Table 6.9 shows a number of pilot projects that the NDDC Niger Delta Regional Master Plan considers as potential growth poles in some urban areas. Most of the projects are located in state capitals, which may hinder their impacts. More urban growth poles could be identified in cities outside the capitals and in rural areas.

Growth pole' industries draw other industries. labour, social services and infrastructure.

State	Crop expansion potentials	Fishing growth potentials	Tourism growth potentials
Abia	Cassava, maize, yam, oil palm	Aquaculture	Heritage (Umuahia)
Akwa Ibom	Oil palm, leafy vegetables, yam, cassava	Fishing, shrimp culture, aquaculture	Leisure beach (Oron Beach) Ecological (Eket, Delta Creeks
Bayelsa	Cassava, plantain, yam, coco- yam, oil palm, rice plantations in the mangrove swamps.	Fishing, aquaculture	Leisure beach Delta creeksHistorical (Akassa Raid/ Nembe-British war relics)
Cross River	Cassava, yam, cocoyam, plantain, palm, rubber, cocoa, pineapples	Fishing, aquaculture	Numerous historic and pre- historic sitesEcological tourism pristine tropical rain forest and wild life Unique forests in the montane region
Delta	Cassava, yam, plantain, rubber, oil palm, diverse fruits	Fishing, aquaculture	'Tourism belt' (Ethiope River)
Edo	Yam, plantain, cassava, maize, rubber, oil palm, diverse fruits	Aquaculture	Heritage ( Benin)Ecological forest (Okomu)
Imo	Cassava, oil palm, yam, vegetables, diverse fruits	Fish cage culture in the water bodies	Leisure resort (Oguta Lake)Historical (war relics)
Ondo	Cocoa, oil palm, yam, maize	Aquaculture	Ecological hills (Idanre hills)
Rivers	Cassava, oil palm, yam, pineapple	Shrimps by trawling fishing, aquaculture	Ecological forestDelta creeksHistoric (Jaja of Opobo/slavery relics)

Source: NDDC Niger Delta Region Master Plan

Investment climate is critical to the success of all development interventions, including private sector-led industrialization. Table 6.10 shows the average ratings for selected investment climate variables, revealing that investors generally consider the Niger Delta less attractive for investment than Nigeria. This must be due to the recurring and widely publicized insecurity, conflict and violence in the region, and in Bayelsa, Delta and Rivers states in particular. The Niger Delta received the worst ratings on infrastructure, peaceful existence, economic growth, security and regulatory controls. Oil money could go a long way towards improving this situation through

State	City	Medium and large enterprises	Micro and small enterprises	Research and development specialization
Abia	Aba		Manufacturing, leather and Clothing, trading and retail, clay, caoline, silica	Entrepreneurship and business management (Abia State University)
Akwa Ibom	Eket	Petro-chemicals, limestone	Service industries, caoline; clay	Information technology (University of Uyo)
Bayelsa	Yenagoa	Chemical requirements of the oil and gas industry, and gas derivatives	Community/personal services, retail, sand, clay	Fishing/aquaculture, oceanography and marine research (NigerDelta University)
	Brass	Petro-chemicals, trawling and trading port	Service industries	
Cross River	Calabar EPZ	Agro-processing, export-oriented products, quarrying and solid minerals beneficiation industries (limestone, granite, bentonite, tantalite), hospitality industry	Service industries, business and community services, pottery and crafts	Public administration, urban planning and management (University of Calabar)
Delta	Warri	Crude oil refineries, petro-chemical products, export-oriented products	Service industries, community and personal services, sand, clay	Information technology (Delta State University)
Edo	Benin	Limestone, bitumen, granite, processed citrus and pineapple	Arts and crafts, comm- unity and personal services ,bentonite, dolomite, marble, cao- line, feldspar, gipsum, gold	Food processing, mineral processing (University of Benin)
Imo	Owerri	Food processing	Food processing, caoline, clay	Engineering, food processing(Federal University of Technology, Owerri)
Ondo	Akure	Bitumen; Granite; Limestone;	Kaoline, silice, clay	Petro-chemicals (Federal University of Technology, Akure)
Rivers	Port Harcourt	Petro-chemicals; Export oriented products; Palm produce	Service industries, community and per- sonal services, silica, clay	Petro-chemicals (University of Science and Technology)

Source: NDDC Niger Delta Regional Master Plan

appropriate investment promotion measures, the facilitation of industrialization and the boosting of employment opportunities.

# The Role of Regional Development Bodies

The NDDC has an essential role in promoting investment that increases

development should be properly expended, with accountability and transparency. And since part of social and community responsibility is the strict adherence to the tenets of public service, local populaces should act as checks on public servants, community leaders and the political elites if they are not rendering the expected services to the electorate or community.

Investment climate is critical to industrialization, investors however consider the Niger Delta to be less attractive for investment.

Table 6.10: Average Ratings on Investment Climate Variables

S/	/No	Variable	Average ratings Nigeria	Niger Delta
	1	Politics and political	22	1.5
	2	System	1.6	1.1
	3	Infrastructure	1.8	1.4
	4	Economic policies	1.6	1.2
	5	Regulatory controls	1.8	1.2
	6	Security	2	1.1
	7	Peaceful coexistence	1.8	1.1

Source: Niger Delta Regional Master Plan Final Report on Investment PromotionStudy, Lagos. Resman Associates Ltd, 2005

sustainable livelihoods, especially through the removal of obstacles such as the lack of infrastructure. Since infrastructural development is an area of major preoccupation of the Commission, accounting for a significant share of its capital budget, it can make a meaningful contribution by sustaining and increasing the tempo of its work.

Unfortunately, local people view the NDDC with great suspicion. They see the Commission as an agent of the Federal Government with a questionable loyalty to the delta region. All the members of the Commission are political appointees of the Federal Government, which is considered another glaring example of the political exclusion of the people of the Niger Delta. They have no popular representation in the major organs of government that make decisions touching their lives and livelihoods, and wonder why at least some NDDC members are not elected or selected in some way by local people. Moving forward, the Commission should embrace a fully participatory approach.

At the same time, people at the grass-roots should demand more accountability from their elected or appointed representatives in general, but also in terms of the implementation of particular development projects. Funds meant for community

# Livelihoods from the Oil and Gas Industry

A policy effort to significantly improve employment and reduce conflicts in the Niger Delta must include the expansion of opportunities in the oil and gas industry for youths, women and able-bodied members of the labour force. Despite discussions about creating alternative livelihoods, many people are most interested in working in the oil and gas sector so that they can benefit from its proceeds, which they see have enriched many Nigerians and foreigners alike. Any agenda aimed at generating sustainable livelihoods in the Niger Delta must seek ways to increase local involvement in this industry.

Communities have frequently complained that oil companies don't hire permanent staff, or in some cases sufficient personnel, or even employ casual labour from the host community for construction work or other projects. A common response from oil companies has been that skilled workers are only employable on merit and must possess formal qualifications (see Human Rights Watch, 1999; p. 17). According to a focus group discussions participant, however, even with the proper qualifications, local residents might not be employed by the oil companies. Two participants said: People view the NDDC with great suspicion. To ease this, the Commission should adopt fully participatory approaches to its work.

People at the grass-roots should demand more accountability from their elected or appointed representatives.

Men and women need skills they can use in the oil and gas industry, the centrepiece of the delta economy. Many people are most interested in working in the oil and gas sector, having seen others reap large rewards.

Oil companies have voiced concern that employing local people could lead to security problems.

Any effort to eradicate poverty in the Niger Delta must seek to revive and revitalize the traditional economic activities.

Initiatives aimed at developing the skills and capacities of the local population to grasp opportunities for income are central to sustainable livelihood. "We produce oil and we should work there for the oil companies. At some points they said we were not educated enough that's why we were not employed. Now we are educated but employment in the oil companies has not been secured. They should employ us."

'The situation is that there is no equity and justice particularly in the employment of staff in Exxon/Mobil. Non-indigenes are favoured by the establishment. And so there exists a great feeling of deprivation."

An unvoiced concern of oil companies is that given the restiveness in the region and the prevalence of rent-seeking activities, employing people from the locality may expose the company to security problems, which might hinder their production activities. But a sustainable future in the Niger Delta region depends on creating the conditions for employing skilled and qualified people from the host communities. Social and labour policies could encourage affirmative action that would start this process. As mentioned above, vocational training and related initiatives could develop human resources. More specifically, men and women need skills they can use in the oil and gas industry, in view of the industry's position as the centrepiece of the Niger Delta economy.

Mentoring and tutelage could provide individuals with opportunities to build skills and pursue occupational or career development in gainful employment. In general, the concept of 'entrepreneurial mentoring', involves one entrepreneur acting as 'critical friend' or 'guide', helping to oversee the career and development of a less experienced entrepreneur (Harrington, 1999). A specific mentoring programme could be designed for the Niger Delta to foster long-term and sustainable business relationships between the mentored personnel and the oil industry. Such a programme could leverage effective local participation in the oil and gas industry, while nurturing professional skills and human capital in the Niger Delta.

# CONCLUSION

The oil industry has lured many youths away from traditional economic activities and livelihoods and into a search for wage employment in the modern oil and gas sector. Many formerly self-employed individuals have become rent seekers, roving contractors or job seekers. Any effort to eradicate poverty in the Niger Delta must seek to reverse this trend through the revival and revitalization of traditional economic activities.

Some of the wealth from the oil and gas industry must be channelled into fostering a diverse economy that includes agriculture, fishing, agro-processing and the production of non-timber forest products. This would ease the local perception that oil wealth is simply pouring into gigantic urban, industrial, infrastructural and agricultural projects in other parts of the country at the expense of the Niger Delta region.

The oil wealth can be made to work for the people by funding innovative practices in relevant economic activities. Initiatives aimed at developing the skills and capacities of the local population to grasp opportunities for income must be vigorously pursued. The mentoring strategy suggested above to increase the involvement of the local people in the oil sector is worth developing in all the states of the Niger Delta, and in other economic sectors. Individual oil companies and other industrial establishments could easily implement mentoring programmes.

The Student Industrial and Work Experience Scheme, which is already well established for students in science and technical fields in institutions of higher learning in Nigeria, is an example of an existing mentoring programme that both the federal and state governments could adapt for the delta. Mentoring programmes should not be limited to graduates of tertiary institutions, however. There is an urgent need to reach existing informal sector operators who could also benefit from programmes to acquire skills and develop their entrepreneurial skills. Since youths and women constitute a very large proportion of informal sector operators, a mentoring programme for them could be one route towards ending gender disparities and discrimination against youths in the delta.

Nothing can be achieved for sustainable livelihoods, however, unless the climate for investment improves. This starts with the maintenance of a lasting peace.



CHAPTER SEVEN

# WHY A NEW APPROACH TO PLANNING?

A number of trends have marked the history of development planning in Nigeria. These serve as lessons to guide a future human development agenda for the Niger Delta. First, for a long time, economic policy revolved around a state-planned economy. A gradual shift towards a market-based economy has only taken place in the last few years. Second, strategies have often been designed from the top by development experts, without the benefits of consultations with people affected by these plans. Third, economic development has consistently been concentrated in urban areas at the expense of rural areas, even though many of the resources for development come from the latter, and the vast majority of Nigerians make a living there. While some geographical areas have made significant gains, progress has been slower in others because of the lack of discipline and accountability in programme implementation, and gross neglect in the distribution of development investments.

To date, development choices have failed to galvanize people into optimally productive activities. There have not been adequate opportunities for people to positively explore, expand and display their skills. The strategies adopted have failed to:

- improve education for children, youths and adults;
- expand people's access to basic health care services, clean water and sanitation;
- produce the right atmosphere for investment promotion, peace and social stability;
- develop a holistic plan inspiring confidence in the future; and
- coordinate development activities to

make the most effective use of resources.

The human development agenda for the Niger Delta region set out below draws from the strengths and weaknesses of past national development planning efforts as well as the programmes of NEEDS, SEEDS, LEEDS, the Regional Master Plan of the NDDC, the action plan of the NDES, the plans of the National Poverty Eradication Programme, and the programmes of the National Action Committee on AIDS.

Above all, the human development agenda is people-centred. It seeks to remove obstacles that prevent people from achieving their life objectives, and to empower people, particularly at the grass-roots and on the margins of society. There are attempts to reduce inequalities of all kinds, including those related to location, gender and generation, and to enlarge people's choices, especially in the political, economic, social and cultural realms. These steps point to overall social inclusion, with an ultimate objective of achieving human development for the region as a whole. Integrated policies will be key to this goal.

The proposed agenda cannot solve all the problems of the Niger Delta at once. It serves as a foundation, however, for calming the anger and indignation in the region, promoting good governance, creating sustainable livelihoods, reducing poverty, ensuring social and economic justice, and reducing social exclusion.

Over the longer term, a human development agenda could transform the delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful. It could ensure development that is rapid, just, equitable and sustainable. The proposed agenda cannot solve all problems at once. But it can help calm frustrations and lay the foundations for the region to become prosperous and peaceful over time.

Economic development bas consistently been concentrated in urban areas at the expense of rural areas, even though substantial resources for development come from the latter and the vast majority of Nigerians make a living there.

The lack of discipline and accountability in programme implementation accounts for low development outcomes in the region. Achieving this vision requires a two-track approach. First, priority projects and quick interventions, including those that build confidence in the possibilities ahead, should be identified. Second, there is a need to plan at a more strategic level and implement long-term development programmes that address fundamental structural and infrastructural constraints on human development.

#### HUMAN DEVELOPMENT SCE-NARIOS

Earlier chapters of this report analysed the key development challenges of the Niger Delta region. Some are based on people's perceptions; others are defined by empirical data. The seven-point human development agenda that follows derives from three formulations:

- (i) images of the future of the Niger Delta described by people during the field survey for this report (tables 6.3 to 6.8 in chapter six);
- (ii) the scenarios identified in the NDDC master plan; and
- (iii) the scenarios identified by the stakeholders at the consultative and validation meetings held to prepare this report.

Evidence from the field study revealed a common vision of the Niger Delta as a region with abundant employment opportunities. This underscores the importance of jobs not only in poverty reduction, but also in enabling people to live their lives to the fullest while contributing to overall development. As indicated in table 7.1, about 22.2 per cent of the focus group participants foresaw a Niger Delta that is fully industrialized, which again reveals people's aspirations for productive employment opportunities.

By contrast, people had comparatively low expectations of their governments. The ratings were low for good governance (8.9 per cent), adequate water supply (6.7 per cent), and a secure and safe region (3.0 per cent). In the short term, this underscores the need to kick-start the development agenda with quick-win projects that rejuvenate interest, loyalty and trust. The medium and long-term phases would then build upon a higher level of confidence and commitment.

The following human development scenarios formed the basis for stakeholders' discussions, out of which the seven-point development agenda emerged:

- a land with full employment opportunities
- a fully industrialized region
- a secure and safe region
- an environment first option
- a balanced and integrated human development option
- a business as usual option
- an equity and social justice option

These scenarios are not necessarily mutually exclusive. Apart from the 'business as usual' option, the others are all different dimensions of the human development equation. The 'balanced and integrated human development' scenario probably comes closest to the human development agenda in this report. All the other scenarios are subsumed under this. The seven points of the agenda below capture the salient aspects.

The agenda emphasizes the involvement and cooperation of all the stakeholders in the Niger Delta. Opportunities for forging partnerships for development are highlighted. As an integrated package, the agenda will take time, effort, goodwill and consistency on the part of policy and decision makers to produce tangible results. The test of its successful launching will be an easing of the tension, mutual suspicion and recrimination in the area, and the readiness of different stakeholders to participate in advancing it.

### A HUMAN DEVELOPMENT AGENDA FOR THE NIGER DELTA

# PEACE AS THE FOUNDATION

More than any other agenda, the need for peace in the Niger Delta is the one likely to receive universal approval. Examination of the various conflicts in the region shows that competition for scarce

A common vision in the delta imagines a region flush with employment opportunities. People's expectations about their government, however, fall short.

Table 7.1: People's Vision of the Future of the Niger Delta				
	Per cent of respondents			
Land with full employment opportunities	37.8			
A fully industrialized region	22.2			
A fully developed infrastructure	11.6			
Good governance	8.9			
Adequate potable water everywhere	6.7			
Fully developed roads	5.6			
Free from corruption	5.3			
Secure and safe region	3.0			
	100.0			
Source: ERML Fieldwork, 2005.				

resources is the predominant cause of most of them. Some conflicts predating commercial oil and gas exploitation were largely related to resources, while those connected to the extraction industry have escalated phenomenally in the last 10 to 15 years.

All violent conflicts—including inter- or intra-ethnic conflicts, hostage-taking, blowing up of pipelines, the occupation of flow stations, militants' confrontation of the oil and gas companies and the government, and so on—have constrained development efforts. The UN Secretary-General has stressed that development cannot proceed in societies where militancy and conflict are the order of the day. The lack of development, however, contributes to the tensions that result in conflict. This vicious cycle must be broken to realize the region's full development potential.

An appropriate definition of peace in the Niger Delta comes from Kenneth Boulding: "On the positive side, peace signifies a condition of good management, orderly resolution of conflict, harmony associated with mature relationships, gentleness, and love. On the negative side, it is conceived as the absence of something—the absence of turmoil, tension, conflict and war." The region needs peace in both senses.

The main goals of the agenda for peace are to:

- substantially reduce the conflicts in the region to the barest minimum to attract private sector investment and enhanced employment opportunities;
- ensure substantially better manage

ment of the resources of the region, and more equitable distribution of the benefits of the oil industry;

- promote free and fair elections as the only legitimate means of accession to office and respect for the rule of law; and
- demilitarize and effectively enforce the law to enhance human security in the region.

The strategies for achieving these goals are to:

- assuage grievances for peace-building;
- promote the rule of law and easier access to justice;
- resolve the revenue allocation impasse to accord higher value to derivation;
- distribute equitably the benefits from mineral resources;
- demilitarize the region; and
- ensure effective law enforcement and policing.

These are elaborated below.

# GOAL 1: Assuage Grievances for Peace-Building

Peace-building in the Niger Delta region is a continuous process. But a new urgency has arisen along with the frequency and seriousness of conflicts. Governments and oil companies need to demonstrate their strong commitment to addressing people's perceived grievances. The accelerating tempo of conflicts is resulting in huge economic and social costs—including the loss of revenues due to petroleum and gas line blow-ups, the trauma of hostage-taking and the reversal of human development gains. One good initiative already in place is the All violent conflicts constrain development. In the delta, peace is the one agenda with a universal appeal.

There is an urgent need for a strong coordination and control of development efforts among the states, local governments, oil companies and the NDDC. The NDDC needs to be empowered to perform its development coordination role more effectively without substituting for federal initiatives in the region.

> The states, local governments, oil companies and the NDDC should coordinate their development efforts.

Transparent and accountable community development funds should be institutionalized. NDDC. Its elaborate stakeholder analysis informs its ambitious regional master plan for the development of the region. The plan contains initiatives and activities that span all tiers of government, which raises some problems in terms of coordination and control. This dilemma should be resolved to reduce tensions stemming from state and local governments and the NDDC all purporting to do more or less the same things in the same locations.

Consequently:

- The NDDC, being a region-wide development agency, should prioritize its activities to focus on area-wide development challenges, such as the construction of major interstate highways and bridges across difficult terrain to facilitate transportation and communication; electricity generation to promote industrialization and the growth of small and medium enterprises; and the provision of opportunities for acquiring new skills and entrepreneurial training. The NDDC could also serve as a major catalyst in the promotion of growth pole industries that boost the economy and employment.
- The NDDC should efficiently deploy its resources towards the goal of integrated and sustainable development, while promoting partnerships to coordinate other stakeholders' activities.
- Local disaffection with the NDDC must be resolved by reviewing the composition of its board with a view to allowing popular representation and participation.
- The Federal Government should reinforce the efforts of the NDDC, but the NDDC's development activities should in no way substitute for federal initiatives in the region.
- State and local governments should be more serious in planning and maintaining social infrastructure development.<sup>1</sup> Investments in schools and hospitals, clinics, maternity wards, rural roads and rural electricity are not only good for development, but are good politics as well.

# GOAL 2: Distribute Benefits Equitably

Giving people a stake in oil and gas production would reduce feelings of alienation. Since they will share in the economic loss arising from the disruption of operations, communities will not lightly engage in sabotage.

Therefore:

- Each state and local government and community should share in the wealth of the region through equity stake-holding.
- The Federal Government should facilitate this by changing the rules of participation in oil and gas exploitation so that companies must assign a proportion of equity directly to states and communities. Benefits would no longer come only indirectly through federal taxation and royalties.
- Accruals to state and local governments from this share of production should go into an oil and gas trust fund, 50 per cent of which should be available for current infrastructure and other development. The rest should be capitalized for future use.
- The adoption of a decentralized derivation principle would address the perception that resources are not equitably shared. Whatever proportion paid to the state government under the derivation should equally be paid to local governments located where oil resources are being extracted, based on their contributions. A similar principle should also apply to the communities from the respective local government areas.

All affected communities should be encouraged to institutionalize a community development fund for priority development projects. Fund management should be characterized by transparency and accountability. Each fund should be managed by an appropriate body comprising representatives of concerned communities, and, as applicable, local and state governments.

Table 7.2 lists examples of trust funds in different parts of the world. Alaska has an oil fund (see Box 7.1) made up of accruals from oil rents and royalties, which

<sup>1</sup> To quickly build confidence and rejuvenate trust and loyalty, however, requires quick-win projects.

cushions the state's economy against cyclical shocks in earnings. In March 2006, the Cross River State Government passed a law to save N50 million monthly for 15 years towards a future development fund.

Establishing trust funds at the local government and community levels will signal to the youths of the region that their future is not being mortgaged by current exploitation of exhaustible resources. Box 7.2 on the Nunavut Trust in Canada gives an example of how revenues can be shared with local communities, and also how such communities can be compensated for negative external consequences of oil and mineral extraction. The misuse of trust funds is a potential problem that must be dealt with if such a fund is set up for the Niger Delta.

It will serve the cause of peace if state and local governments manage public funds

prudently and can be held accountable. There must also be a show of the capacity to deal with cases of corruption and abuse of office, because the evident impunity of elected officials chips away at the restoration of social order and legitimacy of government. This will go far in instilling discipline and respect for authority in youth. All of these issues are elaborated in agenda two on governance.

#### **GOAL 3: Protection of Land Rights**

Peace-building also requires the government to address the issue of title to communal land and how that can be reconciled with the Land Use Act. The good intentions behind the Act seem overtaken by the complications from the lack of clarity over who should benefit from the economic exploitation of land by private business. A distinction should be made between the government's right to land for public State and local governments should be more serious in planning and maintaining social infrastructure development.

A decentralized derivation principle and inclusive equity stake-bolding are vital for equitable distribution of benefits.

Name of fund	Country	Date	Original purpose		
		established	Sterilization	Volatility	Savings
Heritage Savings Fund	Alberta, Canada	1976			X
Copper Fund	Chile	1986	Х	Х	
Foreign Currency Reserve Account	Iran	2000	X	X	X
Reserve Fund for Future	Kuwait	1976			X
Generations					
State Petroleum Fund	Norway	1990	Х	Х	X
General Reserve Fund	Oman	1980			Х
Alaska Permanent Fund	Alaska, USA	1976			X
Stabilization Investment Fund	Venezuela	2000		Х	
Future Generations Fund	Chad	1999			Х

#### Table 7.2 Examples of Trust Funds

#### Box 7.1: Alaska Trust

The Alaska Permanent Fund is one of the oldest natural resource funds. Established in 1976, it has grown to US \$25 billion. Citizens have been extensively engaged in public consultation; each year they receive dividends.

The Alaska Permanent Fund Corporation manages the fund, which is invested in stocks, bonds and real estate. Unreserved assets (income from the reserved assets)are retained in the Fund until appropriated by the legislature. As of 30 June 2003,the unreserved assets totalled US \$100million. To date, the legislature has

used these assets for three primary purposes:

- payment of dividends (US \$12.5 billion from 1982 through 2003 paid out to Alaskans)
- inflation-proofing the reserved assets
- increasing the size of the reserved assets

Critics have argued that Alaska's fiscal policy should include the use of a portion of unreserved assets to support state services and programs. Paying out the same dividend to everyone does not take account of varying social or economic needs. On the other hand, the system ensures that the Government does not misuse the oil wealth.

Transparency underpins the fund's operations. The corporation publishes frequent reports and its Web site contains comprehensive information about legislation and governance.

Source: Alaska Permanent Fund Corporation, 2004.

#### Box 7.2: Nunavut Trust in Canada

The Nunavut Trust illustrates not only how revenues can be shared, but also how a community can be compensated for the negative external consequences of oil and mineral extraction, and can turn this compensation into local development.

Nunavut is the northernmost territory in Canada, bordered on the east by Greenland. The Trust was set up in 1993 as part of a land claim settlement between the Canadian Government and the native people of Nunavut. The settlement recognized native rights to land and resources, and reflected the right of native people to participate in decision-making concerning the use of such resources, including offshore.

The settlement included a share of royalty payments from natural resource development in Nunavut. The Trust administers this as well as a compensation payment from the Canadian government for the negative local consequences of resource extraction. Some US \$1.2 billion dollars in compensation money will pass from the federal government to the people of Nunavut over 14 years, ending in 2007.

The Nunavut Trust is unique because its beneficiaries run it independently of any government. It is a community-managed fund. Three regional Inuit civil society organizations—Kitikmeot Inuit Association, Kivalliq (Keewatin) Inuit Association and Baffin Regional Inuit Association—appoint the trustees.

Unlike other funds, the Trust does not pay out dividends. Its designers feared that such a payment could lead to increased unhealthy spending on personal consumption such as alcohol. Separate non-profit organizations are responsible for spending the money, the largest of them being Nunavut Tunngavik Inc. Money has gone into health, sports, local business development, etc. Nunavut Tunngavik Inc. meets regularly with Inuit communities to discuss priorities for spending, so the locals appear to be heavily involved in the governance of the Trust.

Current challenges include: increasing demand for spending; the end of transfers from the federal government in 2007; and possible pressure for borrowing from the principal.

Source: Nunavut Tunngavik Incorporated

purposes, and the property rights of individuals and communities where private business is concerned.

# GOAL 4: The Rule of Law and Access to Justice

The rule of law, access to justice and effective law enforcement are central to any efforts to build peace in the Niger Delta region. The region is insufficiently policed, so breaches of the law cannot be dealt with expeditiously. This only encourages 'self help' when people are aggrieved. Secondly, access to justice is constrained by many factors. The primary issues are the costs related to litigation, a lack of understanding of applicable laws, and the scarcity of courts and judges, which leads to slow judicial processes. Increasing access to justice depends on the following.

- The establishment of more courts of various types in the region would speed up dispensation of justice.
- Since the region is not homogeneous, alternative conflict resolution mechanisms should be tailored to the culture and circumstances in each state and locality.

#### GOAL 5: Demilitarize the Region and Ensure Effective Law Enforcement

Peace-building will advance through the demilitarization of the region. Small arms are commonly available, and militant gangs have weapons superior to those of the police. A report by Amnesty International (*Nigeria: Are Human Rights in the Pipeline?*) estimates that there are about 70,000 sophisticated weapons in the region. This helps explain why the government calls in soldiers for what obviously are internal security operations, with often disastrous consequences. Therefore:

- the number of police in the region, particularly in the more conflict-prone core Niger Delta, should be increased substantially, and they should be supported by appropriate logistics and arms; and
- sustained efforts should be made to reduce the proliferation of arms.

The arms buy-back deal that the government struck with Alhaji Mujaheed Dokubo-Asari, the leader of the Niger Delta Peoples Volunteer Force resulted in the surrender of quite a large number of arms, but this does not seem to have diminished the ability of militant gangs in the area to replenish and outgun the police. Much more needs to be done.

Furthermore, the military should be withdrawn from the region once the operational efficiency of the police is sufficient to cope with security demands. The presence of the military contributes to a sense of siege, in addition to the denial of human rights wherever the military is deployed.

#### **Indicators of Peace**

The centrality of peace to the development of the Niger Delta region generally and to poverty reduction specifically is so fundamental that all necessary efforts should be mustered to ensure that there is obvious progress in a relatively short time. The following indicators could mark the advancement of peace:

- a 60 per cent reduction in cases of criminal assault and burglary within 10 years;
- an 80 per cent reduction in sabotage of oil and gas pipelines within 10 years;
- an 80 per cent reduction in violent intra-communal, inter-communal and inter-ethnic conflicts within 10 years; and
- a 70 per cent reduction in conflicts between communities and oil companies within 10 years.

#### phisticated weapons in the region. This helps explain why the government calls in soldiers for what obviously are internal **GOVERNANCE BASED ON GENU-INE DEMOCRACY, PARTICIPA-TION AND ACCOUNTABILITY**

The importance of governance to sustainable human development cannot be overemphasized. Genuine democracy should appeal to the Niger Delta people, given the multiple stakeholders in the region and their dissatisfaction with the current performance of state and local governments across the region (see chapter five).

Many people in the delta possess a poor understanding of democratic processes The complications of the consequences of lack of clarity over who should benefit from alienation of land need urgent attention.

The rule of law, access to justice and effective law enforcement are central to any efforts to build peace.

Peace-building will advance through the demilitarization of the region. Genuine democracy should appeal to the people of the delta, given their diversity. But a lack of understanding of democratic principles hinders participation and accountability.

Effective devolution of powers is needed to ensure qualitative democratic participation.

Participatory planning, budgeting and monitoring will help ensure accountability in the use of public funds. and how these affect their lives, however. This lack of understanding, as well as the present non-inclusive governance and the absence of accountability, permit corruption to take root at various levels of government and within communities.

A useful agenda for dealing with governance problems has to be strategic and have an immediate impact to lend government a new face and credibility. The goals of the governance agenda are to:

- promote greater democratic participation in governance through more effective devolution and involvement of non-state agents in decision-making processes;
- improve service delivery by building the capacity of public institutions; and
- ensure responsive and responsible government through institutionalized accountability.

# GOAL 1: Greater Democratic Participation

The quality of democratic participation could be improved through more effective devolution of powers. This would remove the pervasive feeling in the Niger Delta that the government is too remote and hence insensitive to the aspirations of the people. General dissatisfaction with the high level of centralization in Nigeria's federal system is not peculiar to the regionit has been the subject of various attempts at constitutional and political reform. The recent National Political Reform Conference deliberated extensively on steps to advance decentralization. Ongoing attempts at constitutional amendments will no doubt lead to some greater measure than currently exists.

The key elements of decentralization that should be adopted include:

- enhanced revenue allocation to derivation in excess of the 17 per cent figure that resulted in a stalemate at the National Political Reform Conference;
- reassignment of jurisdictions to ensure that state and local governments assume direct responsibility for social services, together with adjustments to

the revenue allocation system to provide sufficient resources;

- de-listing of local governments from the Constitution so that states can have full responsibility for their number and control; and
- effective mechanisms for ensuring the accountability of public officials, especially at the local government level.

As stated above in the agenda for peace, demonstrable accountability is key to restoring respect for and confidence in government. People have become almost inured to corruption, even though the scale and consequences are so staggering that no punishment could be too much to check it.

Accountability for public funds can be improved in several ways. Through participatory planning, budgeting and monitoring, people can track public expenditures to make sure they adhere to public needs and deliver the greatest value for money. To facilitate this process, budget analysis should be detailed enough to show which expenditures apply in designated senatorial zones, local governments and communities, and to targeted minority or vulnerable groups such as women, youth and people living with HIV&AIDS.

#### **GOAL 2: Political Education**

Massive political education could reorient people in general towards a positive appreciation of what democratic governance and responsibility entail. Right now, there is limited appreciation in the region of the notion that citizens have duties to the state, and the faithful performance of such duties is what ensures responsible governments in democracies. Civic responsibilities such as going out to vote, respecting the law and the rights of others, reporting and assisting governments in fighting crime, paying taxes, etc. have to be learned.

This effort is beyond what one level of government alone can handle. Together with community support, it requires the concerted efforts of all levels of government and their agencies. A starting point could be a programme of civic education for the region's primary, secondary and tertiary schools, and for different forms of adult education.

# GOAL 3: Enhanced Electoral Integrity

Effective arrangements to ensure electoral integrity are critical. The low level of respect for political authorities in the Niger Delta region is primarily due to their lack of popular mandates. Many have ascended to their offices through various electoral abuses and sometimes outright avoidance of elections. There can be no sustainable peace wherever elections are massively rigged and unpopular candidates imposed; in most societies, and indeed in the Niger Delta, this is a recipe for lawlessness and chaos.

To ensure the acceptance of electoral outcomes and to restore respect for authorities:

- elections at all levels, within and among parties, should be transparently conducted;
- pre-election campaigns should be free and devoid of force;
- elected officials should be held accountable between elections by the political parties that sponsored them; and
- security agencies on electoral duties should be neutral and faithful in reporting the conduct of elections.

# GOAL 4: Institutional Capacity Development

The capacity of public institutions at all levels is very limited, but more so at the local government level. This is not difficult to explain. During the several years of military rule, training was not at a premium, so public institutions are not familiar with most new techniques and skills of public management. Since the international community's re-engagement with Nigeria following the return to democratic rule, redress of the decay in public management capacity has been concentrated mainly at the federal level. Although to a lesser extent at the state level, capacity development at the state and local governments has been neglected. This has to be tackled

if the recommendations for more effective decentralization of responsibilities and financial resources to lower levels of government are to have their desired effect.

The following strategies are recommended to enhance the capacity of state and local government officials:

- capacity development in conflict resolution;
- capacity development in project cycle management;
- capacity enhancement in financial management and auditing; and
- capacity enhancement in participatory development management.

### GOAL 5: Synergy Among the Federal Government, State and Local Governments, and Oil Companies

The multiple roles of the many institutions operating in the Niger Delta—including the Federal Government and its agencies (e.g., the NDDC), state and local governments, the oil companies and international aid organizations—present a challenge. There must be synergy in these relationships, especially between the NDDC and the state and local governments in implementing a development agenda. It is important to work out partnership arrangements to coordinate activities, as discussed under agenda six.

# **3** AN IMPROVED AND DIVERSI-FIED ECONOMY AS THE LE-VER OF PROGRESS

With its stock of natural and human resources, the Niger Delta region offers immense opportunities for developing a diversified economy founded on small, medium and large industries. Such an economy could draw on the agricultural and fisheries resources of the region, the oil and gas businesses, forestry and other natural capital stocks. Agro-based and allied businesses, other industries and tourism could generate sustainable livelihoods in communities, and reduce unemployment and conflict. Capacity building at the state and local governments has to be tackled for effective decentr alization ofresponsibilities and financial resources to lower levels of government to have their desired effect.

Citizens' appreciation of their duties to the state is very limited. Concerted promotion of civic responsibilities is vital.

There can be no sustainable peace wherever elections are massively rigged and unpopular candidates imposed. Investing in people sets the stage for balanced economic development. People use existing strengths and new assets to increase employment, productivity and incomes.

The delta has to move from an era in which youths besiege operation sites and company offices to demand 'settlement', to an era driven by the dignity of labour and industry.

Funding skills acquisition and adult education depends upon mobilizing the collaboration of stakeholders. The overall objectives of agenda three are:

- to stimulate pro-poor economic growth, which will increase employment, productivity and the incomes of poor people while channelling public resources into human development through improved human skills, health and livelihoods;
- to make industrialization and diversification the pivot of balanced development, considering the nature of oil and gas resources as non-renewable assets, and to fully develop and deploy human and institutional capacities through the use of oil and non-oil resources;

•

to eradicate poverty by empowering the people to use their strengths and assets to improve their livelihoods; and to stimulate industrial competitive advantages by ensuring access to basic public goods that include the infrastructure (e.g., roads, waste management, transport, and networks for energy and water) and 'software' (e.g., industrial extension services, credit, training, etc.) essential for a functioning economy.

Several underlying conditions determine the prospects for economic prosperity in the delta. The delta has to move from an era in which youths besiege operation sites and company offices to demand 'settlement', to an era driven by the dignity of labour and industry. A new way of life that promotes this sense of dignity should be encouraged, including through heavy investments in education. Unless the culture of industry and resourcefulness is promoted, it will be very difficult to create an environment for industrial competitiveness and transformation.

Cultivating a vibrant industrial base requires a close alignment between business objectives and broader human development in the region. Due to high unemployment and widespread poverty, there is a growing tendency to undervalue education and skills acquisition. Countering this trend calls for raising awareness about the benefits from education, along with special programmes to provide skills to the long-term unemployed. More resources should flow into the transformation of basic education (primary and junior secondary school education), core science subjects and information technology.

All of these steps depend upon mobilizing the collaboration of stakeholders, particularly state and local governments. The NDDC should make significant contributions, including by securing resources from oil companies and the private sector to fund skills acquisition and adult education.

Particular initiatives that deserve more resources include:

- the overhauling of school curricula across all levels to reflect the development priorities and challenges of the region;
- the development of reading lists in primary and secondary education;
- the upgrading and provision of requisite infrastructure in schools, including vocational and non-formal educational centres;
- adequately funded training for primary, secondary, technical or vocational, and adult education teachers;
- literacy programmes for disadvantaged youths;
- programmes to improve the relevance and skills of the workforce, to increase productivity and to help youths prepare for entering the workforce; and
- regular awareness campaigns on livelihood and economic empowerment issues.

Investing in people sets a solid foundation for sustainable industrialization, because adequate skills to compete in the workplace are needed for industrial competitiveness.

For industrial development to be sustainable and support communities, the following steps must take place:

- identification of potentials for transforming the region into a respectably diversified and prosperous economic entity;
- identification of industries that can serve as growth poles, which may also require the emergence of growth centres that enhance spatial integration in development, and minimize rural-urban gaps and swamp land inequalities;

identification of the potentials for agricultural and industrial activities in each state;

- enhancement of small and medium enterprises' activities, especially those that draw on traditional resources and community economic activities; and
- the mentoring of young entrepreneurs so they master skills needed in their chosen endeavours.

# Goal 1: Identifying Potential Sources of Economic Diversification

Economic diversification has been a primary strategy to promote value-added exports in many emerging oil economies. The over-reliance on oil in the Niger Delta underscores the need to move away from oil in order to avoid susceptibility to revenue volatility. Approaches to diversification vary from one country to another, depending on economic realities. In the delta, given the many potential agricultural resources, improving rural competitiveness in non-traditional agricultural products through value-added exports could be a major source of economic diversification. This is similar to the approach adopted in Latin America (see box 7.3).

The most sustainable route to long-term economic diversification involves identifying those sectors that can serve as engines of growth sufficient to bring about transformation. The rapid expansion of such service industries as information technology and communication, re-exports through the establishment of free trade zones/ports, tourism, water transportation and finance would all generate synergy between agriculture and industry in the region.<sup>2</sup> The United Arab Emirates (UAE) provides a model of planning diversification based on comparative advantages (see box 7.4).

Countries benefiting from economic diversification have done so on the back of economic reforms. These are clearly needed in the delta to attract enough domestic and foreign investment in sectors outside oil. Beyond transparent and accountable governance, other reform initiatives should cover: the privatization of non-government businesses;

- the liberalization of markets;
- reductions in tariffs;
- steps towards efficient and proactive bureaucracy; and
- the clarification of property and contract rights.

Other complementary programmes would include the following.

- 1. Investment in human capital development, in the form of education, health and nutrition, creates knowledge, broadens skills and improves health. This is key to sustaining economic growth, raising living standards and enriching peoples' lives. Public spending should focus on essential social services, such as basic education and literacy, primary health care, reproductive health, nutrition and safe drinking water, with a view to making social services pro-poor. Adequate attention must be paid to HIV&AIDS, which undermines the gains in development. Effective preventive and curative programmes are imperative.
- 2. A key factor behind sustainable livelihoods is a more equitable distribution of physical assets (e.g., land) and greater access to the means of production (including credit and information). Agrarian reform is required to expand access to land. Credit opens markets to the poor, and can make small farmers, artisans and other smallscale businesses more economically viable.
- 3. Massive infrastructure provision is needed to support both agricultural and industrial development.

### Goal 2: Creation of New Growth Centres and Growth Poles for Equitable Spatial Development

The creation of growth poles is aimed at promoting rural industrialization and equitably distributing the benefits of socio-economic development. When a few cities dominate socio-economic activities, this spurs rural-to-urban migration and gross spatial inequities in development. Any inHeavy investment in buman capital development and equitable distribution of pbysical assets are essential for economic diversification.

Improving rural competitiveness in nontraditional agricultural products through valueadded exports could be a major source of economic diversification.

<sup>&</sup>lt;sup>1</sup> Although the challenges are daunting, they are not impossible. For instance, Malaysia's consumer electronics industry was developed from scratch in the early 1970s and now dominates exports, employing almost 400,000 people. This achievement accounted for the dramatic difference in per capita income in 2003, which was US \$9,000 for Malaysia, compared to US \$800 for Nigeria (Myers, 2005).

Combining local comparative advantage opportunities with the location of a few propulsive industries through strong publicprivate partnership is essential for creating growth poles. dustrial policy framework must therefore include addressing the marked primacy of urban areas in most states in the Niger Delta region, particularly in Bayelsa, Rivers and Cross River states. A more evenhanded approach could draw on the following strategies.

- New growth centres linked by infrastructure would encourage the more equitable distribution of urban areas and more integrated development.
- The growth centres could be developed around large–scale industries that utilize local raw materials, e.g., the petrochemical industry, the sugar refin-

ing industry, the rubber products industry, etc. Governments can play a catalytic role by partnering with the private sector to establish these industries, but with a view to privatizing them within three years.

• Some growth centres could emerge from existing settlements. For example, in Bayelsa State, Brass and Nembe could become new nodes for development and the concentration of socio-economic activities. In Cross River State, Ikom, Akampa, Ugep, Obudu and Igoli-Ogoja could become nodes. As much as possible, each senatorial district should have at least two or three major nodes with a medium-



A surface water tank in one of the Niger Delta Communities

<sup>1</sup> Although the challenges are daunting, they are not impossible. For instance, Malaysia's consumer electronics industry was developed from scratch in the early 1970s and now dominates exports, employing almost 400,000 people. This achievement accounted for the dramatic difference in per capita income in 2003, which was US \$9,000 for Malaysia, compared to US \$800 for Nigeria (Myers, 2005).

#### Box 7.3: In Mexico, New Forms of Trade Supplant a Reliance on Oil

In Latin American countries, successful efforts were made in promoting rural economic diversification and competitiveness, including nontraditional agricultural exports and access to specialty markets. To help rural small and medium farmers and improve rural enterprise competitiveness, business development and marketing services centres were established and effectively operated. In Central Latin America, trade and investment were used as the twin engine of economic growth, which played essential role in reducing poverty in the region. To achieve this several trade agreements were entered into.

In Mexico, for instance, rural competitiveness was achieved through diversification and penetration of agricultural as well as manufactured goods niche markets. One of the drivers of diversification in Mexico is expanding her network of free trade agreement. It extended trade and investment pacts with many countries in the North American Free Trade Agreement (NAFTA) and Latin American neighbours. An important outcome of this is the diversification from an oil-dominated economy in the 1970s. As a percentage of total exports, non-oil products rose from 38 percent in 1983 to 93 percent in 2000. Manufactured goods accounted for over 90 percent of exports, with Mexico becoming the eighth largest exporter, selling about \$13 billion worth of goods.

Source: USAID (2003); "USAID: Latin American Caribbean Overview", http//www.usaid.gov/policy/budget. Centre for International Private Enterprise (CIPE)(2001): "Mexico: Fighting Causes of Past Crises" http//www.cipe.org/publications/fs/ articles

#### Box 7.4: The UAE Diversifies Based on Regional Comparative Advantages

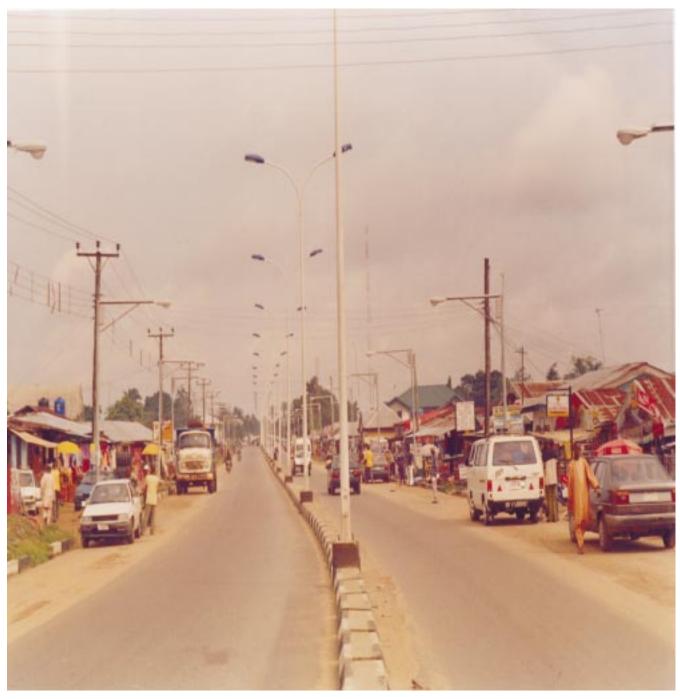
The UAE is the fourth largest producer of oil in the Organization Petroleum Exporting Countries (OPEC) with reserves estimated at 98 billion barrels (10% of the world reserves). Oil contributed 36% of GDP in 2003. Since the early 1980s, the two main economic aims of the UAE authorities have been to reduce the dependence on hydrocarbons and to boost private sector activities. To this end, a twenty-year diversification plan was put in place with an allocation of (US) \$24 billion to develop the non-oil economy.

The major strategy is to diversify its developing trading, financial, petrochemical and technological industries, as well as tourism. To achieve, this, regional economic specialization through comparative advantages was implemented. Abu Dhabi specializes in energy-based industries; Dubai in commercial and financial services, telecommunication and trading; Sharjah in light manufacturing; and the northern emirates in agriculture, quarrying and cement manufacturing.

As of 1999, oil production accounted for 25.6% of GDP, 39% of exports and 88% of government revenues. Non-oil sector accounted for 74.4% of GDP. Its per capita income rose from \$16,996 in 1998 through 2004 to \$23,870 in 2004.

Source: Bureau of Economic and Business Affairs (2001); "2000 Country Reports on Economic Policy and Trade Practices: United Arab Emirate".

TDC Trade (2006); "Market Profiles: United Arab Emirates (UAE)".



A newly rehabilitated road in one of the Niger Delta States

To diversify the region's economy beyond oil and gas activities, commercial cultivation of vast agricultural products needs to be initiated and promoted. to large-scale industry to leverage growth.

- Industrial activities for which a node has some comparative advantage such as raw materials, or community production and marketing structures—should be encouraged through support from the oil and gas industry, the NDDC, and state and local governments.
- A growth pole strategy should involve the location of a few propulsive industries in growth centres, around which will revolve a range of socioeconomic activities in the surrounding rural areas. For example, a major rubber, cocoa, or palm oil processing industry in a growth centre could propel smaller-scale industrial development activities and lead to more integrated rural-urban development.

<sup>1</sup> Although the challenges are daunting, they are not impossible. For instance, Malaysia's consumer electronics industry was developed from scratch in the early 1970s and now dominates exports, employing almost 400,000 people. This achievement accounted for the dramatic difference in per capita income in 2003, which was US \$9,000 for Malaysia, compared to US \$800 for Nigeria (Myers, 2005).

• There should be support for more community-based small and medium enterprises to provide services and supplies to the oil and gas industry. This can lead to better economic integration and mutual benefits for communities and the industry.

enterprises to provide services and supplies to the oil and gas industry. This can lead to better economic integration and mutual benefits for communities and the industry.

#### Goal 3: Identification of Potential Agricultural and Industrial Activities

If industrial development strategies are appropriate, they can simultaneously promote growth and diversification, increase employment and reduce poverty. For this reason, agriculture is essential to a healthy and balanced economy in the Niger Delta. Drawing on plentiful natural resources, this sector could become a major source of income and jobs. Other useful strategies might focus on industries that require labour-intensive techniques.

Overall, the goals of agricultural and industrial development in the delta region should be to:

- provide alternative sustainable means of livelihood;
- raise productivity and income levels, and address the high incidence of poverty;
- promote the acquisition of the skills and capabilities to engage in appropriate businesses;
- provide opportunities for people to make use of their acquired capabilities through employment; and



A common agricultural produce in the Niger Delta Region

• achieve pro-poor, pro-job growth, and diversify the economy beyond oil and gas activities.

# Potential Agricultural Activities

Vast possibilities exist in the Niger Delta region for the commercial cultivation of rice, cassava, yam, plantains, bananas, pineapples, oranges, grapes, sugar cane, Irish potatoes, etc. In particular, the freshwater swamp forest zone covering parts of Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Ondo and Rivers states is inundated annually by floods and has ample capacity to produce rice, oil palms, vegetables and fruits. The palm oil yield in the freshwater swamp forest zone is about three times that of the dry area.

The following agricultural activities have significant potential and deserve active support from governments, oil and gas companies, and international donors.

*Rice production and milling:* Rice production and milling would be especially suitable in Bayelsa, Rivers, Cross River and Delta states. Nigeria is a net importer of rice, as local rice production is well below domestic demand. But upland rice can be cultivated with irrigation facilities and adequate rainfall, while swamp rice grows readily along the freshwater rivers and in the swamp areas of the Niger River and the delta basin.

*Sugar:* Sugar can be cultivated throughout the delta. It has a good local market value, although current local sugar production meets less than 10 per cent of national demand. Informal sector participation in the processing of sugar remains limited largely because of the capital-intensive nature of the business. This is one possible area for meaningful partnership between the government and other stakeholders.

*Cocoa products:* Cocoa production has potential in Ondo and Edo states. Derivable products are cocoa beans, and, with further processing, cocoa powder, liquor, butter, cocoa-based beverages and confectionaries. The current output of cocoa beans is about 50 per cent of the level in the 1970s.

*Roots and tubers:* Varieties of these, such as cocoyam, yam and cassava, are widely consumed in the Niger Delta. Products from cassava, the most important root crop produced in Nigeria, include garri, flour, chips, flakes, starch, alcohol, yeast, adhesives and glue. There is a readymade market for small-scale producers and processing industries.

*Citrus and other fruits:* Citrus production and processing are viable in Edo, Ondo and Cross River states, and in other parts of the Niger Delta. The processing subsector holds great potential assuming the introduction of careful packaging, grading and improved varieties. Unfortunately, quality, transport and distribution difficulties currently result in wastage and spoilage.

**Plantains:** These are grown mainly near the freshwater rivers in the north central areas. Plantains can be cut into chips or milled into flour. Possible benefits might come from research findings on plantain cultivation being carried out in the Niger Delta by the International Institute for Tropical Agriculture.

*Rubber and rubber products:* Rubber cultivation and the rubber-processing industry could take root in Delta, Ondo, Edo and Cross River states. The rubber products sub-sector covers tyres and tubes, rubber gloves, condoms, vulcanized plates, rubber thread and cords.

**Poultry products:** Expansion through small business enterprises needs to be encouraged through credit and extension schemes.

Animal husbandry: Organized through individual, family and community enterprises, animal husbandry has good potential in all the states.

*Aquaculture:* The possibilities of this industry are great, especially for the harvesting of fish and shrimps, but they have not been sufficiently explored. Opportunities for fish farming exist in all the states, particularly in Bayelsa, Delta and Rivers states. In both Rivers and Delta states, most of the fishery is artisanal (small-scale).

*Api-culture (beekeeping):* This could be appropriate for individuals and cooperatives with relevant training and skills as well as extension services.

*Forestry:* This is important in the rainforest areas. Technical and financial support is required for small-scale activities related to timber and non-timber products (e.g., cane for chairs), and horticultural products.

Some of the strategies to capitalize on the potentials in agriculture include the follow-ing.

- The Central Bank of Nigeria's new subsidized agricultural expansion programme and the community savings and credit schemes of oil companies should promote crop production by individuals and cooperatives.
- Seed multiplication centres and extension services should be set up at reasonable distances to farming areas.
- The provision of water management infrastructure will aid farming in the freshwater swamp zone. Such infrastructure comprises dykes, canals, pumps, etc.
- Partnerships between governments (local, state, federal and the NDDC) and oil companies and other industries could establish large-scale commercial production of sugar.
- Support to cassava production under the current Presidential Initiative on Cassava would help farms secure key inputs, obtain high-yielding varieties, mechanize operations and acquire land.
- Training should be provided to run animal husbandry enterprises. Stocking centres in all states and senatorial districts should offer individuals and cooperatives start-up stocks. The Songhai project in Amukpe, Delta State, provides a model centre for skills acquisition.
- To expand the potential of aquaculture, loans, skills provision and training programmes are indispensable. Support schemes are required for equipment acquisition, and the adop-

tion of improved methods of harvesting, processing, storage and marketing.

- Technical support is needed for sustainable soil management, erosion and flood control related to agricultural development and the growth in communities, off-season farm production, and soil enrichment through fertilizers and other inputs.
- Massive investment in social and economic infrastructure will create a favourable environment for agricultural activities.
- To deliver professional and extension services to farmers and fishermen/ women, closer cooperation should take place among appropriate research institutes, extension services, the NDDC, agricultural development projects and state government agencies.
- The establishment of storage facilities and buffer stock for agricultural produce would stabilize the prices of agricultural commodities and ensure a regular supply to agro-based industries. Also important are schemes to reduce post-harvest losses.

### Potential Industrial Activities

All nine states of the Niger Delta have vast resources, but face similar challenges in terms of the growth of small and medium industrial enterprises. Chapter six lists the raw materials found in Edo, Delta, Bayelsa, Rivers, Akwa lbom and Cross River states, which are present in the other states as well. These provide the bases for the agricultural schemes and industrial activities suggested below.

*Agro-based industries:* Most states could offer investment opportunities in the following areas, among others:

- manufacture of tyres and other rubber products;
- small plants for preserving and bottling palm wine and distilled beverages from palm wine, which have a large market;
- cassava pellets, garri and starch processing, with clusters of small businesses around Oghara, Mosogar, Kwale, Abraka, Agbor and Iseluku in Delta State;

With supportive social environment and better access to infrastructure in place, SMEs can be promoted by fostering legal and community awareness and support frameworks, including a well-structured microcredit scheme.

- processing of yams and plantain into products with extended shelf life, such as powder chips;
- the design and provision of appropriate maize storage facilities at farms and depots;
- fruit canning in small and medium factories;
- canoe carving and cane craft products;
- cloth weaving and mat-making;
- sugar processing;
- extraction of salt from brackish water;
- palm oil and vegetable processing activities, and soap making, especially in Edo, Ondo, Bayelsa, Rivers, Delta and Cross Rivers states; and
- the establishment of onshore and offshore fish storage and processing terminals, and marketing networks on land, especially in Rivers, Bayelsa, Delta, Akwa Ibom, Cross River and Ondo states.

# Non-metallic mineral-based

*industries:* Sand and clay provide opportunities for investment in a range of industries, including:

- the production of marble slabs and terrazzo chips, ceramics, ceramic wares, decorative and dinner wares, glass for windows, sanitary wares and electro-porcelain;
- the manufacturing of glass windows and greenhouses;
- the production of poles from teak

farms in Edo, Ondo and Cross River states; and

• wood and wood residue processing, and the furniture industry, especially in Edo and Ondo states.

Ecotourism: The potential for ecotourism exists in all the delta states. Ecotourism could be developed with community participation, especially along the Ethiope River, for swamp forests and beaches in Delta, Rivers, Bayelsa, Akwa Ibom and Cross River states, in the Okomu National Park in Edo State, on the Obudu Cattle Ranch, in Oban National Park in Cross River State, etc.

# Goal 4: Enhancing the Potential of Small and Medium Enterprises

In many countries, small and medium enterprises have been important instruments for expanding growth, generating output and employment, and boosting exports and foreign exchange earnings. They also provide the basis for a strategy targeting disadvantaged group, such as women and youths. These enterprises should be vigorously promoted in the Niger Delta region.

Assuming the creation of a more supportive and cohesive social environment and better access to infrastructure, the strategies to assist the development of small and medium enterprises include fostering legal and community awareness and support frameworks. This entails the following measures.

- A general judicial review and enactment of new legislation, particularly laws relating to informal business arrangements, would facilitate changes required for small and medium businesses to thrive.
- Micro-credit is crucial and needs to be expanded and publicized. Isusu and other community-based savings and credit schemes, if properly organized and supported, could be relevant to rural capital mobilization for investment in small and medium enterprises. But the government needs to play a more active role in enhancing microcredit, especially in areas and communities where oil and gas activities are taking place. An understanding among the NDDC, the oil industry, state and local governments, banks and communities on effective delivery and management of micro-credit is essential. 'Standby' money could be channelled into micro-credit schemes.
- New investments would contribute to growth in both agricultural and industrial products.
  - The establishment and/or restructuring of small business information centres would allow the provision of legal, business and technical informa-

If the current rate of environmental degradation continues unchecked, human development will not be sustainable. And the impacts will extend to the globe.

Concerted effort is needed to implement direct mentoring programme while skills acquisition and vocational centres should be revamped to deliver standard and quality services to young entrepreneurs.



Niger Delta Youths Metal fabricator in action

tion, skills development and information dissemination.

- Small industrial estates and skill development centres could be positioned in major growth areas.
- Developing the capacities of extension workers on issues related to village or community business management would in turn support the abilities of business owners to manage their enterprises more professionally and efficiently.
- Incentives for small and medium enterprises could include tax credits for research and development expenses; low tax rates for 10 years after an initial tax holiday; and accelerated depreciation of industrial machinery.
- Fundamental improvements in business ethics, whether in micro- or large enterprises, private or public businesses, would include a greater sense of transparency and accountability. Well-designed and widely disseminated public information programmes will support the process of change.
- Some cooperatives have been successfully established. They represent important options for organizing community production and providing capital for investment in production and marketing. Legislation on cooperatives should be strengthened to provide stiff penalties for fraud and default. State and local governments should play a major role in this area

Social integration requires everyone, but especially marginalized groups, to participate in development, and have access to goods and services. Enterprise development also depends upon technological capacities and fabrication activities. The Federal Ministry of Industry provides technological and organizational support for industrial development, including agro-allied businesses. The Ministry has four Industrial Development Centres, located in Ibadan, Owerri, Zaria and Bauchi, to develop technological capacities in an industrial setting. But none of these serves the core Niger Delta. The Federal Government's current blueprint for industrial development has features that, if extended to the Niger Delta, could significantly boost industrial diversification and sustainability.

It is important that the policy framework for small and medium enterprises in the Niger Delta aim at the following:

- establishment of a small and medium enterprises development agency for the region;
- identification of a minimum number of clusters for these enterprises, e.g., two per senatorial district for promotion and support;
- establishment of a regional credit guarantee scheme;
- establishment of a regional project development facility to support enterprises in various spheres; and
- establishment of one industrial development centre and one industrial nurseries park/incubator per state to support small-scale industries.

### Goal 5: Mentoring Young Entrepreneurs

Mentoring is a supportive one-on-one relationship between an accomplished individual and an aspiring individual to facilitate the aspirant's growth. In the Niger Delta, the specific objectives of mentoring programmes should be:

• to enable people, particularly women and youths, to have the requisite professional skills and experience to participate in the oil and gas industry and other economic activities; • to establish long-term business relationships between mentored personnel and their specific industry; and to provide a framework for the effective promotion of local participation, especially in the oil and gas industry.

The following strategies could be considered.

- Attachment programmes along the lines of the Student Industrial Work Experience Scheme in universities and polytechnics should be developed in the oil industry and other major industrial/commercial establishments. The programmes should target unskilled and semi-skilled workers required in the industry. They could vary from four to six months and serve as a transition to full employment, based on performance and commitment.
- Existing skills acquisition centres run by the government and industry should be documented. Training activities need to be standardized. Where necessary, specialized channels for harmonizing and exchanging ideas should be developed to make the skills acquired more relevant to industry and self-employment needs.
- Large-scale training of artisans—including mechanics, bricklayers, shoemakers and dressmakers—should be conducted through apprenticeships, as is done through the National Directorate of Employment.
- More vocational and technical schools in each state should provide vocational training in such areas as computer operation, draftsmanship, accounting, tanning, jewellery making, beading, welding, furniture, cane works, carving, casting, sculpture, etc.
- The federal and state governments should convene a meeting of stakeholders in the Niger Delta, particularly governments, oil and gas industry operators, major commercial enterprises and NGOs, to map out strategies for implementing direct mentoring programmes.

# **A PROMOTING SOCIAL INCLUSION**

The agenda for promoting social inclusion is based on the view that the Niger Delta region has been marginalized and excluded from the mainstream of development in Nigeria, as highlighted particularly in chapters one, two, three and six. Social exclusion presents a serious obstacle to sustainable human development, because most members of the population have been left out of development opportunities, and the related economic, social and health benefits.

Changing this pattern calls for an environment that empowers everyone, including marginalized groups and individuals, to participate in development opportunities, and enjoy access to needed goods, services and facilities. Strategies to promote social inclusion need to recognize that it is intrinsically linked with other development concerns, including governance, environmental quality, poverty, infrastructural development and partnerships.

The problem of social exclusion in the Niger Delta can be looked at on two levels:

- a. social exclusion of the Niger Delta as a region, relative to the rest of the country; and
- b. the social exclusion of specified groups (e.g., women and youth), individuals or communities within the delta.

The first level is evident in the conflicts that result from residents demanding a greater share of the benefits from oil revenues. Perceived exclusion of groups or communities has sparked disputes and conflicts between different ethnicities, generations or other groups within communities (see chapter five).

On the second level, this report has shown that a significant proportion of the population in the Niger Delta constitutes socially marginalized groups and individuals. They have been shut out from the wealth derived from mineral exploitation, which has failed to produce improvements in livelihoods or the general standard of living. An additional form of marginalization afflicts people in areas with severe environmental degradation.

Social exclusion came out clearly in chapter six on sustainable livelihoods as well as in chapter four on HIV&AIDS. The overall objectives of agenda four are:

- to reduce social exclusion by increasing access to opportunities, goods, services and facilities for all stakeholders; and
- to develop capacities to overcome obstacles and meet livelihood needs.

Several strategies and actions need to be considered.

#### **Empowerment of Marginalized Groups**

For close social integration to occur, socially marginalized groups and individuals must be able to fully participate in social and economic opportunities. Reaching this point depends upon opening employment opportunities both within and outside the oil industry. These should target women and youths, who have often been left out of efforts to increase sustainable livelihoods. To explore new options, individuals require training determined by their interests and talents, the types of skills needed locally and the condition of natural resource assets. At the same time, they need opportunities to use new skills.

#### Institutional Strengthening

Institutional strengthening is needed in a number of areas and for several different groups of stakeholders. Government officials at state and local levels and other practitioners working with local populations must be trained in the participatory approach to development and sensitized to gender issues, generational concerns, and the value of indigenous groups and practices. In this way, they will be more effective in working with local residents.

#### Inclusiveness and Capacity Development at the Grass-Roots

Whenever possible, existing local groups should be used rather than new ones formed for development programmes, in Any strategy to achieve environmental sustainability must be people-centred and work from the bottom up. A regional approach to conservation should be adopted in order to improve biodiversity in all the ecological zones and the international boundary area.

A community-based approach to natural resources management fashioned after the Cross River State initiative should be emphasized. order to make good use of existing human capital assets. Capacity development can help indigenous groups and organizations become more effective channels of programme benefits, such as information, technology or facilities. Such groups may need training in basic accounting, bookkeeping, leadership and democratic principles.

#### Participatory Decision-Making

The participation of stakeholders in decision-making must be built into the planning and implementation of all development programmes, in order to allow local people a voice in matters concerning them. This will encourage programmes that meet people's felt needs and reduce the feeling of alienation, which so often creates not only the perception but also the actual situation of being socially excluded.

### Promotion of Partnerships

Partnerships could go far in removing the barriers to social inclusion. There are currently many development projects in the Niger Delta region. At times, the efforts even conflict or compete. Closer collaboration will ensure synergy among government agencies, oil companies, donors, NGOs, community-based organizations and other groups.

### Targeting Groups and Localities

The unique needs of particular groups or communities call for interventions tailored accordingly. Each strategy should be based on an assessment of the relevant human, natural, social and infrastructural assets. This requires the commitment of government officials and civic leaders to extending development benefits to all communities and groups, regardless of ethnicity, gender, generation, health conditions or socio-economic status. Special efforts, including affirmative action, may be needed to fully integrate socially marginalized people into their society

### **5** THE ENVIRONMENT AS A BASIS FOR SUSTAINABILITY

The findings of this report include the fact

that 75 per cent of the people residing in the Niger Delta region rely on natural endowments for a living. But air, water, soil and forest resources have been devastated by the exploitation of oil and gas resources by joint ventures, foreign oil companies and the Nigerian Government. Particular problems result from gas flares and oil spills. Local people suffer harm to their health, productivity, incomes and welfare.

If the current rate of environmental degradation continues unchecked, human development will not be sustainable. Some impacts will extend beyond the delta—the continuing gas flares and oil spills have national and global environmental consequences, including through their destructive effects on the ozone layer. The level of pollution in the Niger Delta today reflects a failure of the state and market, and of the institutions and incentive systems embedded in them.

In the future, achieving environmental sustainability will require creativity and cooperation. Four types of goals will be necessary:

- physical
- socio-cultural
- economic
- institutional

Any strategy to achieve environmental sustainability must be people-centred and work from the bottom up. It should embrace partnerships at all levels, including:

- inter-governmental (local, state and federal) and intra-governmental (executive branch, legislature and judiciary);
- government, society, citizens and businesses; and
- international (involving governments, businesses, societies and citizens).

Agenda six provides further elaboration on partnerships. General strategies for the environmental sustainability goals follow below.

#### **Goal 1: Physical Goals**

The physical goals target the extensive loss of forest resources, the pollution of the

air caused by gas flares, the degradation of water and land resources linked to oil spills, and so on. The main elements are:

- natural resources conservation
- reduction in pollution, marked by fewer oil spills and lower gas flare rates
- achievement of target levels of clean air, water and soil fertility

In view of the extensive loss of forest resources, massive re-forestation programmes should be initiated in and outside existing protected areas, with priority given to indigenous plant species. Local communities should actively participate at all stages. Degraded areas should be rehabilitated, while polluted areas should be bio-remediated using technology that optimizes local capacity.

As part of poverty reduction and health care programmes, fruit trees, and special herbal plant and animal farms should be established in the region's diverse ecological zones. Citrus fruits should be planted to generate revenues to meet community needs. A community-based approach to natural resources management fashioned after the Cross River State initiative where communities hosting forest reserves share appreciable part of proceed from forest exploitation should be emphasized. People living within protected areas and environmental support zones should be assured of tangible benefits such as scholarships, and financial remuneration from user fees and the sale of fruits, etc., in order to gain their support and reduce poaching.

Biodiversity protection should be integrated into land use planning, marine and coastal zone planning, forest management plans and the implementation of national biodiversity strategies. Project planning by local authorities, state and national ministries and agencies, development aid institutions and major private developers must incorporate steps to determine ways to maintain key sites, species and genes, and provisions for investments in research, assessment, and forestry, agriculture, fisheries and wildlife management. A regional approach to conservation should be

Ensure timely access to information, public participation in decision-making and access to justice in environmental matters.

### Box 7.5: International Best Practices in Information Access

Several international instruments—such as Principle 1 of the Stockholm Declaration on the Human Environment, Principle 10 of the Rio Declaration, and more recently, the United Nations Economic Commission for Europe Convention (the 'Aarhus Convention')—emphasize procedural rights such as access to information, public participation in decision-making and access to justice in environmental matters. Although there is a public participation provision in the 1992 Environmental Impact Assessment Act, what is now required is a wider application of the access principles in other areas of environmental legislation.

Currently, pockets of data and a UNEP Environmental Information Node exist within Nigeria's Federal Ministry of Environment. There is no legally sanctioned and reliable data gathering, processing and retrieval framework, however, which has made it extremely difficult to access information for environmental management and monitoring.

Separate environmental protection measures have been created, and related agencies such as the Department of Petroleum Resources, the NDDC, state ministries of environment and the state environmental protection agencies. have been established, but they have remained powerless and ineffective because of entrenched interests, weak administrative linkages, inadequate logistics support, poorly equipped personnel and financial constraints.

A central repository of environmental information is needed. An environmental management information system would contain accessible information on all issues related to the environment, including environmental damage and the performance of key industrial sectors like the oil industry. A special component should concentrate on generating data on the environmental performance of the oil companies operating in the Niger Delta. Department of Petroleum Resources has in recent times been unable to provide relevant data on the oil industry, especially data on oil spillage.

A bill aimed at creating a national environmental management agency to replace the moribund Federal Environmental Protection Agency has been sent to the National Assembly, yet the bill has not received the urgency it deserves.

<sup>&</sup>lt;sup>1</sup> Eradication of extreme poverty and hunger, achievement of universal primary education, promotion of gender equality and the empowerment of women, reduction of child mortality, improvement of maternal health, and combating of HIV&AIDS, malaria and other diseases.

A minimum level of income and employment can be guaranteed if there is greater efficiency in use of public funds and value added enterprises are promoted.

All stakeholders federal, state and local governments, the NDDC, the private sector, CSOs and international organizations—bave roles to play in addressing HIV & AIDS pandemic.

Strong advocacy from top leaders should accompany public awareness campaigns about the multidimensional nature of HIV&AIDS. A major concern is the shortage of health care facilities. adopted in order to improve biodiversity in all the ecological zones and the international boundary area.

Other specific strategies that complement the physical goals include:

- air quality synoptic stations to monitor air quality in the region;
- engineered landfills, such as those in Port Harcourt and Owerri, supported by public-private partnerships;
- a reliable national spill contingency plan for oil spills; and
- effective enforcement of the 2008 deadline for the oil companies to discontinue gas flaring.

As a general principle, every economic project in the Niger Delta should be required to incorporate environmental provisions using tools such as:

- environmental impact assessments
- strategic environmental assessments
- environmental policy integration

#### Goal 2: Socio - Cultural Goals

The socio-cultural goals include:

- the first six MDGs;
- a level of per capita social and economic infrastructure (roads, rail lines, waterways, hospitals, schools, etc.) that is well above the national average;
- a reduction in dependence on natural resources or an expansion in opportunities for participation in oil and gas and other industries, both in the Niger Delta and other parts of Nigeria;
- timely access to credible information, and citizens who are aware of their rights and options;
- protection of the environmental and cultural rights of citizens; and
- increased security for lives and property.

Given the current levels of human development in the Niger Delta, attaining the first six MDGs by 2015 will require more than business as usual. Any effective development strategy must resolve the tensions between the Niger Delta states and the rest of Nigeria over the use of oil revenues, and cultivate relations between governments and citizens defined by clear social contracts and enforceable citizens' rights. Resolution of the issue of resource control in a way that promotes a peoplecentred and bottom-up approach to national development, however, would make it possible for oil revenues to be equitably distributed and efficiently utilized to:

- build social and economic capital (road networks, rail lines, waterways, power grids, hospitals, schools, etc.);
- support the expansion of opportunities for participation in oil and gas as well as in non-oil and gas activities in the delta region and in other parts of Nigeria; and
- ensure timely access to credible information, justice, peace and the protection of cultures.

The goal of timely access to credible information and more aware citizens requires further elaboration (see box 7.5), as it has not been touched on elsewhere in this report. In essence, poorly informed people cannot hold either governments or businesses to account, even when these groups make decisions that undermine people's lives. Knowledgeable citizens are therefore critical to progress on all human development goals.

#### **Goal 3: Economic Goals**

The main economic goals are:

- guarantees of minimum levels of income and employment opportunities, and greater access to health care, education, safe drinking water, etc, leading to improved human development;
- a higher share of revenue from oil

and gas, and growth in oil and gas revenue;

- greater efficiency in resource use through deliberate employment of local resources and capacities;
- growth in added value from oil and gas resources through deliberate polices that promote backward and forward integration along the oil and gas value chain; and

• appropriate and timely compensation for externalities from oil and gas.

Oil money can help the people of the Niger Delta to develop new primary production activities. These must be labour-intensive and have the capacity to engage as many rural dwellers as possible. They should encourage cooperative enterprises, contribute substantially to the local economy and provide a decent profit to the participants.

#### **Goal 4: Institutional Goals**

The main institutional goals include:

- review and update existing environmental laws to protect the rights of citizens;
- set mandatory environmental standards for the oil and gas business that are consistent with average global standards; and
- ensure easier access to judicial redress where rights are violated either by the government or businesses.

Settling the distribution of oil revenues will help produce a Nigeria in which the main goal of the state is to serve the people. Otherwise, the institutional goals may not be feasible. It is not enough to make new laws; the laws must be enforced. And if the state is not designed to serve the people, it may make laws that it has no intention to uphold.

# 6 AN INTEGRATED APPROACH TO DEALING WITH HIV&AIDS

HIV&AIDS has become a major challenge in the Niger Delta, one inextricably linked to development. Poor livelihoods or poverty can increase vulnerability to HIV&AIDS, while HIV prevalence hinders economic growth and development. Evidence from chapter four reveals that economic, social and cultural factors have spread HIV in the delta region. But most people still see it purely as a health issue, ignoring other factors, including rampant heterogeneous sexual behaviours.

Dealing with the many dimensions of HIV&AIDS requires an integrated approach. All stakeholders—federal, state and local governments, the NDDC, the private

sector, civil society organizations and international organizations—have roles to play. An effective response depends on strong leadership at all levels.

#### Specific Strategies and Programmes

Holistic programmes should address all facets of HIV, but with a focus on preventing opportunistic infections and caring for people living with HIV&AIDS.

- Strong policy advocacy from top-level policy makers and opinion leaders should accompany public awareness campaigns about the multidimensional nature of HIV&AIDS.
- Reducing vulnerability related to economic factors urgently requires strategies to provide sustainable livelihoods and the implementation of a human development agenda.
- Since gender inequality plays a significant role in spreading HIV, all forms of gender discrimination should be discouraged. Communication initiatives should educate people on existing laws prohibiting discriminatory practices. A social re-engineering campaign should be launched at the various levels of government and among non-state actors, with special attention given to women's empowerment.
  - A sectoral diagnostic survey of the epidemiology of HIV&AIDS should be undertaken to identify sectoral drivers and deal with them accordingly. Strong and proactive educational campaigns on opportunistic infections, risky sex behaviours and other related issues should be rolled out through dramas, debates, rallies, conferences, radio jingles, billboards, etc. Community conversations could foster behavioural change related to the prevention, care and management of HIV&AIDS.
- Heterogeneous sex is very popular among youths in the delta. They should be a particular focus of behaviour change campaigns.
- Faith-based institutions should be encouraged to increase awareness and good practices on the control and management of HIV&AIDS. Social workers should help raise awareness

Partnerships will make or break the human development agenda. The conflicts in the delta show what happens when partnerships fall apart, or never have a chance to form. during religious conventions, conferences and other related programmes.

- Workplace policies on HIV should be encouraged in public and private institutions, with particular emphasis on issues relating to stigma and discrimination against people living with HIV&AIDS.
- Strong leadership is needed at all levels of society.
- The responses of state and local governments and the NDDC should be institutionalized and sustained. They should emphasize capacity development, advocacy and awareness, resource deployment, planning, monitoring and evaluation, governance and coordination.
- Special programmes should assist orphans and vulnerable children, including through the provision of free health care and education. Both the state and local governments should be responsible for this.
- Oil companies should include HIV&AIDS assistance within their social responsibility and community development activities.
- The dearth of health care and HIV\*AIDS facilities is a matter of urgent concern in the Niger Delta. The shortage of voluntary counselling and testing centres, services for the prevention of mother-to-child transmission and distribution points for anti-retroviral drugs should be addressed collectively, with state and local governments in the driver's seat and the NDDC as the overall coordinator for the region.

#### **7** PARTNERSHIPS FOR SUSTAIN-ABLE HUMAN DEVELOPMENT

There is a growing consensus globally that partnerships are critical to development. This is exemplified by the fact that the eighth MDG is on developing a global partnership for development. But so far, Nigeria has not built appropriate partnerships for Nigeria in general and the Niger Delta region in particular.

Partnerships will make or break the human development agenda outlined above. They could potentially be built at all levels—local, state, national and international. Nationally, for instance, partnerships are necessary to build consensus on embracing development that serves the people. The failure of the National Political Reform Conference to clearly address derivation policy and the deepening of the conflicts in the Niger Delta thereafter show, if anything, that failures to build national partnerships for development can undermine sustainable human development not just for the delta but also for all of Nigeria.

It is important to remember that not all partnerships are automatically in the service of development, however. For instance, the joint venture partnerships between the Federal Government and foreign oil companies have at best not developed the Niger Delta region and at worst have bred a crippling form of underdevelopment.

In building partnerships for sustainable human development, the following players or stakeholders are crucial:

- the citizens of the Niger Delta and other parts of Nigeria
- oil-producing communities and the rest of Nigeria
- NGOs and community-based organizations
- businesses
- governments (local, state and federal)
- the global community (NGOs, governments, multilateral and bilateral organizations, etc.)

What kinds of partnerships are feasible for the delta? There are no easy answers, partly because of the heterogeneity of stakeholders and partly because those who have strategic advantages and benefit from the status quo are often unwilling to make the concessions required for partnerships. But building mutually beneficial partnerships at the following points will determine the future course of development:

- inter-governmental (local, state and federal)—to resolve resource control problems, the peace and governance agendas, etc.;
- intra-governmental (the executive branch, legislature and judiciary)—to

The key to building partnerships is to be strategic, which encompasses the notion that current strategic advantages do not outweigh the interests of other people. build institutions for sustainable human development;

- governments and communities, and governments and citizens—to nurture peace, good government and sustainable human development;
- communities and oil companies—to encourage peace and sustainable human development;
- inter-community—to cultivate peace;
- international actors and communities, international actors and governments, international actors and NGOs/community-based groups—to build peace, good government and sustainable human development; and
- NGOs and community-based organizations—to bolster capacity development and public monitoring. The outcomes of partnerships often depend on the balance of strategic advantages: Unbalanced relations tend to produce unbalanced outcomes. In the Niger Delta, imbalances need to be redressed in:
- local, state and federal relationships by matching tax jurisdictions with responsibilities;
- relationships among the executive branch, legislature and judiciary—by limiting the powers of the executive and strengthening the judiciary and the legislature;
- government and community relationships—by changing property rights for oil and gas resources and land in favour of citizens and communities;
- community and oil company relationships—by protecting the rights of citizens; and
- international actors and communities; international actors and governments; international actors and NGOs/community-based groups—by increasing transparency and accountability in allocation of resources and in access to information.

The challenge is to convince those benefiting from the status quo that partnerships can lead to better outcomes for all. Mutually beneficial compromises could steer the delta and Nigeria away from repeatedly suffering failures such as the collapse of the National Political Reform Conference, endemic violence, the loss of lives and property, and the ineffective use of oil revenues. The key to building partnerships is to be strategic, which encompasses the notion that current strategic advantages do not outweigh the interests of other people.

The delta's many stakeholders can be categorized into broad groups:

- the government and its agencies, including the Federal Government and associated statutory agencies, the state governments, local government authorities and the NDDC;
- multinational oil and gas companies, and various industries;
- civil society groups, NGOs and community-based organizations, including women's and youth groups, religious bodies, various trade associations and traditional authorities; and
- donor or development assistance agencies and the international NGOs.

Their willing participation and commitment could readily stimulate the building of necessary institutions and sustain enduring partnerships.

#### Partnerships for Niger Delta Development

Partnership building should target the following goals:

#### Governments

- Coordinate and harmonize development programmes to avoid duplication, conflict and waste.
- Plan for sustainable development, and with the aid of competent facilitators, advise on appropriate policies for symmetrical community development and for training in community development.
- Work towards achieving the MDGs.
- Commit to the judicious use of counterpart funding, with utmost accountability and transparency.
- Create and sustain the right environment for meaningful development that can sustain the optimal use of the rich endowment of human and material capital in the Niger Delta region.

Federal, state and local governments are central to partnerships building and sustenance. However, they must be committed to judicious use of public resources, pursue participatory planning and sustainable development and be accountable to the people.

Commitment to corporate social responsibilities and adding value to their operational environment are vital. But such development interventions should be demand driven and linked to government plans Development partners are key to keeping peace and catalysing development in the region. But their readiness and willingness to mobilize resources for development and promote best practices on

the salient aspects of the MDGs are vital for making progress.

Communities should ensure security of petroleum installations and hold leaders accountable while CSOs should be good mediators by facilitating open dialogue, communication and cooperation.

- Pursue sustainable development through investment flow promotion, and through the participation of stakeholders in making decisions about development planning, programming and budgeting.
- Ensure wide consultation and popular participation across the various tiers of government and their agencies in devising implementation strategies.
- Embrace dialogue and consultative processes for conflict resolution (e.g., alternative dispute resolution or mediation approaches), towards the achievement of lasting peace and security.
- Purposively empower women and youth groups so they can help themselves and contribute towards development and the public good.
- All levels of government must live up to public service and funding promises and responsibilities, and must recommit to the ideals of balanced development, in part by not undermining the mutual trust and honour that support sustainable partnerships.
- The NDDC, through its Participatory Sustainable Development Forum, should catalyse sustainable partnerships in various ways, including through the periodic benchmarking of development needs and goals in the Niger Delta, the periodic audit of progress rates in the pursuit of development, and the proactive encouragement of mutual coexistence among partners and stakeholders.

# Oil and gas companies/organized industry

- Commit to corporate social responsibilities that add tangible value to the operating environment and help fulfil critical development gaps.
- Promote good neighbourliness and mutual coexistence with the host communities.
- Shun unscrupulous business practices and the abuse of the environment.
- Embrace consultative processes and popular participation in supporting community development.
- Ensure synergy in development interventions.

- Assist in building institutions that support human development in host communities, offer mentoring for the acquisition of productive skills and grant appropriate scholarships to aid the development of critical industrial competencies.
- Render capacity assistance to other stakeholders to better optimize their contributions to development. Exhibit good faith and uphold international best practices in compensation payments and their management.

# Community-based and civil society organizations

- Embrace and uphold legitimate avenues for seeking redress for periodic injustices and discontent arising from strained government and/or host community relationships, through consultation, negotiation, judicial remedies, etc.
- As stakeholders, recognize the need for, and show concern about, the security of petroleum operations through empathetic neighbourliness as hosts to the multinational oil and gas industries and other firms.
- Help to foster lasting peace and an enduring, reasonable political calm— through the deliberate creation and nurturing of social avenues for cordial mutual interfaces, dialogue, open communication and cooperation, among communities and across stake-holders.
- Explore and advance opportunities for sustainable development, and advocate for local acceptance and ownership of socio-economic development reforms.
- Focus more attention on improving local governance, holding local leaders accountable, and taking ownership of development by both contributing and being generally involved.
- Assist in shaping democratic institutions in the Niger Delta region and in Nigeria in general, including through the promotion of civic, voter and peace education for the acculturation of democratic norms and culture.
- Be directly involved in the observation and monitoring of elections for transparency and accountability.

- Act as pressure groups in restraining or changing fascist government policies, laws and programmes.
- Motivate and mobilize youths for popular participation, and for political, social and economic empowerment.

# Donors/development assistance agencies

- Set development priorities in line with the guidelines and oversight or supervisory functions of the Federal Government. The existing institutional mechanism for harmonizing the activities of aid agencies in Nigeria is the Department of International Cooperation, in the Ministry of National Planning.
- Work consistently to achieve development symmetry through harmonization of individual aid agency efforts and the avoidance of unnecessary duplication or wastage.
- Promote best practices in development management and the achievement of the MDGs in the region.
- Facilitate the process of mobilizing resources for development.

#### General Guidelines for Partnerships

- Ideally, all stakeholders should agree on what is essential for development to move forward, such as the provision of necessary infrastructure, the facilitation of peace and human security, effective management and protection of the environment.
- There should be consensus on the need for improved governance and the sustainable use of natural resources, through the harmonization of efforts by government, donors, the private sector, NGOs and communities.
- On health care, a priority should be the provision and improvement of assisted local health care delivery systems (e.g., through community health service projects on such issues as malaria awareness, treatment and prevention in the Niger Delta, and similar strategic interventions in favour of HIV&AIDS control and other major health problems).

- All stakeholders should collectively embrace the tenets of probity, accountability and transparency.
- The empowerment of women and youth groups is essential both in helping them to help themselves, and towards development and the public good.
- Local communities should be involved in all development efforts. This will further strengthen the framework of partnerships, mutual trust and understanding among stakeholders.
- All stakeholder groups should network to share information on the delta's development needs and challenges.
- All stakeholder groups should subscribe to joint maintenance of the rule of law.

#### **CONCLUSION**

The seven-point human development agenda described on the previous pages has great potential for expediting sustainable human development in the Niger Delta region. Several interconnecting themes run through this agenda, starting with peace as a requisite for any form of development. Without it, progress will remain out of reach. Good governance will determine whether or not development programming is adequate and appropriate, and symmetrical across the region.

Also critical is the modification of the delta's economic structure through appropriate diversification, including industrialization for greater employment generation and labour market flexibility. Further, social inclusion must be nurtured through local participation, community involvement in decision-making, access to employment, more comprehensive development programming, and the empowerment of women and youths. The environment must be well managed as an essential element of all other development objectives.

Several issues that challenge sustainable human development in the Niger Delta region have been addressed in the various chapters of this report. This chapter highlights mutually beneficial partnerships as making the difference in achieving sustainable development. Partnerships should take root among federal, state, and local governments and involve the oil companies, NGOs and the wider gamut of civil society organizations. Scarce resources at all levels should encourage networking to pool financial and other assets. Collaboration can also minimize the weaknesses often associated with unilateralism.

Human development is multidimensional and requires holistic strategies that depend upon individual and collective commitments to redress high-stakes social problems. The complex and long-term agendas suggested in this chapter will be best achieved through collaboration that ensures development takes off, is broad in its scope and endures. Advocacy is urgently needed to encourage social partnerships to form. Not all the development issues in this report are peculiar to the delta region. They cut across the entire Nigerian nation, with many areas afflicted by poor governance, conflicts, corruption, environmental degradation and social exclusion, albeit to varying degrees. Achieving some of the goals in the seven-point agenda for the Niger Delta would show the way forward on such issues of generic national interest as leadership and governance, corruption, environmental management and others. The human development agenda for the Niger Delta, therefore, carries hope for meaningful change for people both in the region and Nigeria as a whole.



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	Jurces of wa	ter to House	noids							
State	Pipe- borne	Untreated pipe	Protected well	Unprotected well	River, lake, pond	Vendor truck	Others	Safe	Unsafe	Total
Akwa-Ibom	7.37	5.36	33.48	-	9.15	31.92	0.22	12.50	46.21	53.79
Bayelsa	7.49	2.17	4.11	-	8.21	76.09	0.72	1.21	13.77	86.23
Cross River	2.43	0.88	19.25	0.44	14.38	31.64	-	30.97	23.01	76.99
Delta	2.89	1.84	31.32	16.05	26.05	20.53	0.26	1.05	52.11	47.89
Edo	9.70	1.21	28.89	19.19	10.51	24.24	4.85	1.41	58.89	41.01
Rivers	12.42	4.04	23.60	10.25	31.99	16.15	-	1.55	50.31	49.69
Ondo	5.97	1.12	16.04	19.4	7.09	50.0	0.37	-	42.54	57.46
Imo	6.15	2.69	30.77	4.62	11.54	30.38	4.62	9.23	44.23	55.77
Abia	3.38	2.54	54.95	0.23	1.80	34.91	0.45	0.68	62.16	37.87
Mean	6.40	0.93	27.00	10.02	13.41	35.10	1.64	7.32	43.69	56.31
Nigeria	13.56	2.48	17.27	17.21	19.64	24.12	3.31	2.40	50.52	49.48

Table A1.1: Sources of Water to Households

Source: National Bureau of Statistics 2005.

	0			0					
State	Kerosene	Gas	Electricity	Generator	Battery	Candle	Firewood	Others	Total
Akwa-Ibom	71.5	1.7	22.1	0.5	0.2	-	3.7	0.2	100.0
Bayelsa	86.7	1.3	3.5	4.5	-	0.5	1.3	2.1	100.0
Cross River	78.2	1.1	18.9	0.2	-	-	1.6	-	100.0
Delta	43.0	0.9	53.3	1.1	-	-	1.7	-	100.0
Edo	24.6	1.1	70.7	0.4	-	0.7	1.3	1.1	100.0
Rivers	77.6	2.5	18.3	2.9	-	-	2.2	2.5	100.0
Ondo	59.7	0.2	38.3	-	-	-	-	0.8	100.0
Imo	58.6	0.8	38.1	1.2	-	-	0.8	0.4	100.0
Abia	49.9	1.0	45.4	0.8	-	0.5	1.5	1.0	100.0
Mean	61.1	1.2	34.3	1.5	0.2	0.6	1.8	1.2	100.0
Nigeria	62.5	1.1	31.6	0.5	0.1	0.2	3.5	0.6	100.0

Table A1.2:	Percentage	Distribution	of	Source	of	Light
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Source: National Bureau of Statistics 2005.

Table A1.3: Types of Fuel Used by Households										
State	Firewood	Charcoal	Kerosene	Gas	Electricity	Crop residue	Animal waste	Others	Total	
Akwa-Ibom	85.0	1.0	13.0	0.7	-	-	-	0.2	100.0	
Bayelsa	65.3	-	33.1	0.3	0.3	-	-	1.1	100.0	
Cross River	86.9	0.2	12.4	-	0.2	-	-	0.2	100.0	
Delta	70.2	0.6	26.4	1.4	0.9	-	0.3	0.3	100.0	
Edo	55.4	1.8	39.7	2.5	0.4	-	0.2	-	100.0	
Rivers	67.6	0.4	28.1	1.8	0.4	-	0.4	1.4	100.0	
Ondo	67.2	-	32.0	-	0.4	0.4	-	-	100.0	
Imo	90.2	0.4	8.6	0.8	-	-	-	-	100.0	
Abia	68.8	-	29.8	0.8	0.8	-	-	-	100.0	
Mean	73.0	0.7	24.8	1.2	0.5	0.0	0.35	0.6	100.0	
Nigeria	77.9	0.8	19.8	0.6	0.4	0.1	0.1	0.4	100.0	

## Table A1.3: Types of Fuel Used by Households

Source: National Bureau of Statistics 2005.

		-					
State	Mud	Cement	Burnt bricks or concrete	Stone	Iron sheets	Others	Total
Akwa-Ibom	32.96	49.44	0.67	2.67	0.45	13.81	100.0
Bayelsa	33.73	41.20	1.45	0.48	3.86	19.28	100.0
Cross River	61.06	35.18	0.88	0.66	1.33	0.88	100.0
Delta	17.06	68.77	3.67	0.79	0.26	9.45	100.0
Edo	17.98	76.97	4.04	0.20	0.20	0.61	100.0
Rivers	24.53	58.70	2.48	0.93	0.93	12.42	100.0
Ondo	56.34	35.45	2.24	0.37	0.37	5.22	100.0
Imo	11.54	76.92	2.31	1.54	-	7.69	100.0
Abia	11.24	82.47	2.47	0.22	-	3.60	100.0
Mean	29.6	58.34	2.2	0.9	1.1	8.1	100.0
Nigeria	52.85	36.90	2.37	0.70	0.50	6.67	100.0

Table A1.4: Type of Housing Construction by Households
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Source: National Bureau of Statistics 2005.

## Table A1.5: Percentage Distribution of Households by Type of Flooring Materials

State	Earth or mud	Wood or tile	Plank	Concrete	Plant straw	Others	Total
Akwa-Ibom	27.7	0.4	0.4	58.0	4.2	9.3	100.0
Bayelsa	31.5	0.6	1.8	45.7	1.2	19.1	100.0
Cross River	42.4	0.3	0.1	52.5	3.5	1.1	100.0
Delta	8.2	1.6	2.4	81.2	0.3	6.3	100.0
Edo	7.9	0.2	-	84.4	6.5	1.0	100.0
Rivers	12.0	1.0	-	70.5	1.5	15.0	100.0
Ondo	19.5	3.1	9.0	67.5	-	0.8	100.0
Abia	8.3	0.6	1.5	87.1	0.1	2.4	100.0
Imo	4.9	1.8	2.5	83.9	0.1	6.9	100.0
Mean	18.0	0.9	2.5	70.1	2.2	6.9	100.0
Nigeria	36.2	1.3	1.2	50.6	5.2	5.6	100.0

Source: National Bureau of Statistics 2005.

State	Bush	Toilet on water	Flush to sewer	Flush to septic	Pail bucket	Covered pit latrine	Uncovered pit latrine	Ventilated improved pit latrine	Others	Total
Abia	0.6	1.5	5.7	18.2	7.8	47.4	17.2	0.1	1.5	100.0
Akwa-Ibom	-	4.0	0.8	0.2	5.2	78.9	9.5	-	1.3	100.0
Bayelsa	2.1	84.9	1.5	1.2	-	2.0	0.7	-	7.6	100.0
Cross River	10.1	-	1.3	2.2	3.5	33.7	25.1	2.0	22.1	100.0
Delta	6.8	9.2	3.6	4.1	4.8	41.2	16.7	1.4	12.1	100.0
Edo	4.8	10.6	7.0	2.2	7.0	47.3	9.8	1.8	9.6	100.0
Imo	2.8	1.7	1.0	5.6	8.6	66.6	6.2	4.2	3.3	100.0
Ondo	12.8	14.2	6.5	0.8	3.1	38.4	4.8	4.5	15.0	100.0
Rivers	2.2	20.5	5.4	6.1	1.2	28.2	16.6	0.4	19.4	100.0
Mean	5.4	18.3	3.6	4.5	5.2	42.6	11.8	2.1	10.1	100.0
Nigeria	9.8	4.3	2.9	3.1	4.5	46.3	14.8	1.9	12.5	100.0

Table A1.6: Percentage Distribution of Types of Toilet Facilities in Households

Source: National Bureau of Statistics 2005.

### Table A2.1: HDI, HPI-1, HPI-2, GDI and GEM by Local Government

State	Life expect- ancy index	Education index	GDP index	HDI	HPI-1	HPI-2	Equally distributed life expectancy index	Equally distributed education Index	Equally distributed income index	GDI index	Equally distributed equivalent percentage (EDEP) parliamentary	EDEP economic participa- tion	EDEP for income	GEM
C Rivers Abi	0.475	0.333	0.408	0.405	28.232	29.168	0.472	0.575	0.306	0.451	0.000	0.871	0.057	0.309
Akamkpa	0.483	0.332	0.389	0.402	24.521	32.203	0.480	0.607	0.391	0.493	0.000	0.879	0.057	0.312
Akpabuyo	0.475	0.314	0.405	0.398	23.047	36.368	0.473	0.593	0.367	0.477	0.000	0.877	0.057	0.311
Bakassi	0.392	0.280	0.409	0.360	19.858	39.641	0.389	0.604	0.316	0.437	0.000	0.877	0.057	0.311
Bekwara	0.408	0.302	0.389	0.366	18.860	36.546	0.404	0.658	0.301	0.454	0.000	0.862	0.056	0.306
Biase	0.425	0.351	0.386	0.387	22.776	34.589	0.422	0.694	0.373	0.496	0.000	0.874	0.057	0.310
Boki	0.450	0.374	0.416	0.413	21.060	39.322	0.448	0.642	0.377	0.489	0.000	0.873	0.057	0.310
Calabar M	0.575	0.443	0.484	0.501	27.291	41.778	0.574	0.658	0.399	0.543	0.000	0.882	0.057	0.313
Calabar South	0.575	0.430	0.471	0.492	25.352	43.991	0.574	0.634	0.392	0.533	0.000	0.882	0.057	0.313
Etong	0.458	0.399	0.445	0.434	22.959	42.120	0.456	0.635	0.353	0.481	0.000	0.880	0.057	0.312
Ikom	0.483	0.385	0.442	0.437	25.138	41.332	0.480	0.646	0.296	0.474	0.000	0.880	0.057	0.312
Obaniliku	0.500	0.349	0.377	0.409	21.777	42.725	0.496	0.643	0.261	0.466	0.000	0.870	0.057	0.309
Obubra	0.517	0.359	0.483	0.453	22.440	39.901	0.513	0.600	0.292	0.469	0.000	0.873	0.057	0.310
Obudu	0.558	0.349	0.429	0.446	22.566	37.133	0.556	0.603	0.345	0.501	0.000	0.872	0.057	0.310
Odukpani	0.475	0.335	0.431	0.414	21.888	36.381	0.473	0.556	0.319	0.449	0.000	0.875	0.057	0.310
Ogoja	0.550	0.357	0.442	0.450	23.888	33.982	0.547	0.585	0.348	0.493	0.000	0.875	0.057	0.310

Yakurr	0.442	0.372	0.399	0.404	23.259	40.111	0.439	0.613	0.305	0.452	0.000	0.873	0.057	0.310
Yala	0.442	0.383	0.218	0.347	23.419	40.138	0.438	0.605	0.325	0.456	0.000	0.869	0.057	0.308
ABIA														
Aba North	0.492	0.308	0.537	0.446	31.859	54.519	0.491	0.581	0.396	0.489	0.000	0.887	0.033	0.307
Aba South	0.500	0.345	0.709	0.518	32.862	55.889	0.495	0.524	0.383	0.467	0.000	0.896	0.033	0.310
Arochukwu	0.408	0.260	0.130	0.266	23.922	53.669	0.404	0.524	0.356	0.428	0.000	0.875	0.032	0.303
Bende	0.433	0.283	0.690	0.469	26.798	52.241	0.431	0.482	0.342	0.418	0.000	0.876	0.032	0.303
Ikwuano	0.383	0.280	0.137	0.267	23.842	56.100	0.376	0.410	0.297	0.361	0.000	0.873	0.032	0.302
Isiala Ngwa North	0.408	0.282	0.193	0.295	24.789	58.419	0.407	0.447	0.318	0.390	0.000	0.871	0.032	0.301
Isiala Ngwa South	0.450	0.288	0.183	0.307	24.770	50.065	0.440	0.488	0.333	0.420	0.000	0.875	0.032	0.303
Isuikwuato	0.458	0.304	0.230	0.331	24.746	53.666	0.458	0.501	0.333	0.431	0.000	0.873	0.032	0.302
Umunneochi	0.442	0.282	0.101	0.275	25.037	53.303	0.440	0.470	0.294	0.401	0.000	0.869	0.032	0.300
Obio Ngwa	0.383	0.271	0.114	0.256	23.568	52.535	0.377	0.428	0.315	0.373	0.000	0.874	0.032	0.302
Ohafia	0.492	0.308	0.155	0.318	26.322	52.199	0.490	0.479	0.321	0.430	0.000	0.872	0.032	0.301
Osisioma Ngwa	0.417	0.279	0.294	0.330	24.941	55.117	0.416	0.464	0.350	0.410	0.000	0.898	0.033	0.310
Ugwunagbo	0.458	0.300	0.313	0.357	26.797	49.375	0.454	0.466	0.245	0.389	0.000	0.874	0.032	0.302
Ukwa East	0.425	0.271	0.357	0.351	21.686	52.228	0.425	0.485	0.357	0.422	0.000	0.874	0.032	0.302
Ukwa West	0.475	0.272	0.271	0.339	25.611	56.117	0.472	0.458	0.325	0.418	0.000	0.880	0.032	0.304
Umuahia South	0.442	0.275	0.266	0.328	26.042	58.185	0.440	0.569	0.366	0.459	0.000	0.873	0.032	0.302
Umuahia North	0.508	0.335	0.384	0.409	28.789	59.592	0.506	0.571	0.370	0.482	0.000	0.888	0.033	0.307
<b>EDO</b> Akoko Edo	0.483	0.318	0.042	0.281	19.234	53.007	0.481	0.644	0.366	0.497	0.000	0.939	0.084	0.341
Egor	0.492	0.324	0.558	0.458	18.595	51.491	0.488	0.698	0.337	0.507	0.000	0.939	0.084	0.341
Esan Central	0.533	0.345	0.306	0.395	22.978	47.936	0.532	0.677	0.223	0.477	0.000	0.946	0.084	0.344
Esan North East	0.533	0.388	0.464	0.462	23.365	45.328	0.532	0.655	0.240	0.476	0.000	0.946	0.084	0.344
Esan South East	0.508	0.375	0.259	0.381	24.006	45.069	0.505	0.628	0.243	0.459	0.000	0.945	0.084	0.343
Esan West	0.558	0.371	0.252	0.394	22.075	45.058	0.556	0.735	0.240	0.510	0.000	0.947	0.084	0.344
Etsako East	0.492	0.336	0.205	0.344	21.291	48.240	0.488	0.653	0.321	0.487	0.000	0.937	0.084	0.340
Etasako Central	0.475	0.317	0.000	0.264	20.034	50.771	0.471	0.644	0.336	0.484	0.000	0.937	0.084	0.340
Etasako West	0.475	0.307	0.279	0.354	19.592	49.461	0.473	0.645	0.321	0.480	0.000	0.948	0.084	0.344
Igueben	0.500	0.342	0.287	0.376	22.632	50.872	0.499	0.619	0.294	0.471	0.000	0.952	0.085	0.346
Ikopa Okha	0.450	0.237	0.247	0.311	14.030	40.355	0.447	0.765	0.237	0.483	0.000	0.952	0.085	0.346
Oredo	0.592	0.388	0.467	0.482	26.230	45.583	0.590	0.795	0.246	0.544	0.000	0.952	0.085	0.346
Orhionwon	0.442	0.256	0.191	0.296	17.642	49.232	0.440	0.661	0.288	0.463	0.000	0.954	0.085	0.346
Ovia North East	0.417	0.225	0.313	0.318	18.608	42.970	0.415	0.717	0.326	0.486	0.000	0.960	0.085	0.349
Ovia South West	0.417	0.232	0.241	0.297	17.858	45.717	0.415	0.710	0.282	0.469	0.000	0.960	0.085	0.348
Owan East	0.475	0.306	0.193	0.325	21.721	47.597	0.473	0.659	0.316	0.483	0.000	0.949	0.085	0.344
Owan West	0.475	0.340	0.193	0.336	22.001	47.571	0.473	0.693	0.314	0.493	0.000	0.949	0.085	0.344
Uhum- wonde	0.467	0.325	0.106	0.299	20.739	46.046	0.466	0.658	0.300	0.475	0.000	0.954	0.085	0.346

<b>ONDO</b> Akoko North East	0.392	0.322	0.285	0.333	24.093	59.143	0.388	0.655	0.367	0.470	0.000	0.914	0.066	0.326
Akoko North West	0.392	0.314	0.255	0.320	27.282	59.164	0.388	0.658	0.316	0.454	0.000	0.914	0.066	0.326
Akoko South West	0.392	0.321	0.140	0.284	23.284	58.726	0.389	0.658	0.302	0.450	0.000	0.921	0.066	0.329
Akoko South East	0.400	0.328	0.000	0.243	27.333	59.475	0.396	0.655	0.309	0.453	0.000	0.921	0.066	0.329
Akure North	0.558	0.416	0.000	0.325	32.498	56.090	0.557	0.626	0.377	0.520	0.000	0.924	0.067	0.330
Akure South	0.558	0.421	0.418	0.466	33.337	56.030	0.557	0.627	0.399	0.528	0.000	0.924	0.067	0.330
Idanre	0.392	0.312	0.290	0.331	31.052	50.468	0.390	0.546	0.240	0.392	0.000	0.929	0.067	0.332
Ifedore	0.392	0.279	0.017	0.229	29.709	47.472	0.389	0.507	0.352	0.416	0.000	0.918	0.066	0.328
Okitipupa	0.533	0.335	0.219	0.362	32.278	54.495	0.533	0.374	0.296	0.401	0.000	0.925	0.067	0.331
Ilaje	0.425	0.268	0.201	0.298	30.855	59.865	0.424	0.298	0.261	0.328	0.000	0.918	0.066	0.328
Ese Odo	0.450	0.271	0.000	0.240	31.983	62.397	0.446	0.272	0.293	0.337	0.000	0.918	0.066	0.328
Ile Oluji Okeigbo	0.500	0.379	0.000	0.293	31.551	57.050	0.499	0.591	0.345	0.478	0.000	0.919	0.066	0.328
Irele	0.392	0.294	0.148	0.278	31.307	53.797	0.389	0.569	0.319	0.426	0.000	0.923	0.067	0.330
Odigbo	0.400	0.281	0.230	0.304	33.722	51.773	0.397	0.569	0.349	0.438	0.000	0.925	0.067	0.331
Ondo East	0.583	0.335	0.068	0.329	29.941	56.209	0.580	0.702	0.386	0.556	0.000	0.918	0.066	0.328
Ondo West	0.592	0.336	0.068	0.332	30.489	56.895	0.590	0.703	0.367	0.553	0.000	0.918	0.066	0.328
Ose	0.467	0.349	0.185	0.334	32.234	52.248	0.466	0.556	0.234	0.419	0.000	0.927	0.067	0.331
Owo	0.533	0.357	0.222	0.371	32.410	57.227	0.532	0.657	0.248	0.479	0.000	0.920	0.066	0.329
<b>AKWA IBOM</b> Abak	0.492	0.332	0.121	0.315	25.706	47.420	0.489	0.469	0.304	0.421	0.000	0.873	0.063	0.312
Eastern	0.458	0.326	0.000	0.261	29.630	43.272	0.455	0.470	0.325	0.417	0.000	0.873	0.063	0.312
Eket Obodo	0.417	0.322	0.581	0.440	29.075	48.185	0.413	0.544	0.152	0.370	0.000	0.881	0.064	0.315
Nsit Atai	0.442	0.312	0.354	0.369	26.868	46.398	0.439	0.484	0.158	0.360	0.000	0.880	0.064	0.314
Essien Udim	0.500	0.323	0.112	0.312	27.786	51.131	0.495	0.469	0.052	0.339	0.000	0.868	0.063	0.310
Etim Ekpo	0.492	0.278	0.070	0.280	26.497	47.090	0.488	0.528	0.049	0.355	0.000	0.866	0.063	0.310
Etinan	0.517	0.317	0.005	0.280	28.291	43.584	0.514	0.526	0.045	0.362	0.000	0.864	0.062	0.309
Ibeno	0.500	0.313	0.253	0.355	20.805	41.928	0.502	0.529	0.102	0.378	0.000	0.919	0.067	0.329
Ibesikpo	0.483	0.331	0.281	0.365	20.638	41.972	0.481	0.460	0.025	0.322	0.000	0.866	0.063	0.310
Ibiono Ibom Asutan	0.483	0.322	0.309	0.372	22.827	42.890	0.482	0.463	0.089	0.345	0.000	0.880	0.064	0.314
Ika	0.425	0.304	0.714	0.481	18.673	47.056	0.421	0.495	0.049	0.321	0.000	0.866	0.063	0.310
Ikono	0.433	0.275	0.072	0.260	18.564	45.380	0.427	0.499	0.108	0.345	0.000	0.865	0.063	0.309
Ikot Abasi	0.483	0.288	0.745	0.505	24.519	48.606	0.480	0.504	0.120	0.368	0.000	0.881	0.064	0.315
Ikot Ekpene	0.483	0.302	0.563	0.449	21.738	53.955	0.457	0.513	0.184	0.385	0.000	0.872	0.063	0.312
Ini	0.533	0.350	0.226	0.370	21.319	54.071	0.533	0.563	0.188	0.428	0.000	0.871	0.063	0.311
Itu	0.525	0.357	0.000	0.294	25.169	48.335	0.524	0.565	0.127	0.406	0.000	0.875	0.063	0.313

Name637638639639639630 </td <td>Mbo</td> <td>0.408</td> <td>0.295</td> <td>0.258</td> <td>0.320</td> <td>24.075</td> <td>49.888</td> <td>0.409</td> <td>0.467</td> <td>0.055</td> <td>0.310</td> <td>0.000</td> <td>0.911</td> <td>0.066</td> <td>0.326</td>	Mbo	0.408	0.295	0.258	0.320	24.075	49.888	0.409	0.467	0.055	0.310	0.000	0.911	0.066	0.326
Name	Mkpat Enin	0.392	0.270	0.167	0.276	19.344	54.383	0.387	0.419	0.079	0.295	0.000	0.863	0.062	0.308
Normal         Normal<	Nsit Ibom	0.517	0.325	0.571	0.471	22.366	45.689	0.515	0.430	0.107	0.351	0.000	0.872	0.063	0.312
No.         No. <td>Nsit Ubium</td> <td>0.533</td> <td>0.309</td> <td>0.174</td> <td>0.339</td> <td>24.339</td> <td>41.969</td> <td>0.532</td> <td>0.489</td> <td>0.075</td> <td>0.365</td> <td>0.000</td> <td>0.872</td> <td>0.063</td> <td>0.312</td>	Nsit Ubium	0.533	0.309	0.174	0.339	24.339	41.969	0.532	0.489	0.075	0.365	0.000	0.872	0.063	0.312
No.         No. <td>Obat Akara</td> <td>0.475</td> <td>0.311</td> <td>0.000</td> <td>0.262</td> <td>22.709</td> <td>43.443</td> <td>0.472</td> <td>0.537</td> <td>0.102</td> <td>0.370</td> <td>0.000</td> <td>0.872</td> <td>0.063</td> <td>0.312</td>	Obat Akara	0.475	0.311	0.000	0.262	22.709	43.443	0.472	0.537	0.102	0.370	0.000	0.872	0.063	0.312
No.         No. <td>Okobo</td> <td>0.467</td> <td>0.302</td> <td>0.295</td> <td>0.354</td> <td>21.448</td> <td>47.050</td> <td>0.463</td> <td>0.477</td> <td>0.050</td> <td>0.330</td> <td>0.000</td> <td>0.877</td> <td>0.064</td> <td>0.313</td>	Okobo	0.467	0.302	0.295	0.354	21.448	47.050	0.463	0.477	0.050	0.330	0.000	0.877	0.064	0.313
And         And <td>Onna</td> <td>0.417</td> <td>0.284</td> <td>0.063</td> <td>0.254</td> <td>20.527</td> <td>53.430</td> <td>0.415</td> <td>0.518</td> <td>0.142</td> <td>0.358</td> <td>0.000</td> <td>0.898</td> <td>0.065</td> <td>0.321</td>	Onna	0.417	0.284	0.063	0.254	20.527	53.430	0.415	0.518	0.142	0.358	0.000	0.898	0.065	0.321
And         And <td>Oron</td> <td>0.533</td> <td>0.341</td> <td>0.233</td> <td>0.369</td> <td>23.977</td> <td>49.532</td> <td>0.533</td> <td>0.480</td> <td>0.101</td> <td>0.372</td> <td>0.000</td> <td>0.885</td> <td>0.064</td> <td>0.316</td>	Oron	0.533	0.341	0.233	0.369	23.977	49.532	0.533	0.480	0.101	0.372	0.000	0.885	0.064	0.316
Chance Chance Carbon	Orukanam	0.425	0.284	0.063	0.257	21.271	49.148	0.420	0.513	0.171	0.368	0.000	0.856	0.062	0.306
n         n	Udung Uko	0.508	0.330	0.043	0.294	21.927	52.251	0.503	0.529	0.171	0.401	0.000	0.856	0.062	0.306
No.         No. <td>Ukanafun</td> <td>0.475</td> <td>0.278</td> <td>0.258</td> <td>0.337</td> <td>22.365</td> <td>49.130</td> <td>0.471</td> <td>0.457</td> <td>0.077</td> <td>0.335</td> <td>0.000</td> <td>0.867</td> <td>0.063</td> <td>0.310</td>	Ukanafun	0.475	0.278	0.258	0.337	22.365	49.130	0.471	0.457	0.077	0.335	0.000	0.867	0.063	0.310
Image         Image <th< td=""><td>Esit Eket</td><td>0.475</td><td>0.312</td><td>0.253</td><td>0.346</td><td>21.601</td><td>45.418</td><td>0.473</td><td>0.515</td><td>0.051</td><td>0.346</td><td>0.000</td><td>0.881</td><td>0.064</td><td>0.315</td></th<>	Esit Eket	0.475	0.312	0.253	0.346	21.601	45.418	0.473	0.515	0.051	0.346	0.000	0.881	0.064	0.315
Ord         Cond         Cond <thc< td=""><td>Uruan</td><td>0.483</td><td>0.316</td><td>0.139</td><td>0.313</td><td>19.753</td><td>49.347</td><td>0.483</td><td>0.528</td><td>0.094</td><td>0.368</td><td>0.000</td><td>0.857</td><td>0.062</td><td>0.306</td></thc<>	Uruan	0.483	0.316	0.139	0.313	19.753	49.347	0.483	0.528	0.094	0.368	0.000	0.857	0.062	0.306
Image		0.475	0.292	0.000	0.256	21.036	53.044	0.468	0.477	0.124	0.356	0.000	0.839	0.060	0.300
Brase         Order         Order <th< td=""><td>Uyo</td><td>0.575</td><td>0.339</td><td>0.284</td><td>0.399</td><td>27.783</td><td>49.996</td><td>0.573</td><td>0.610</td><td>0.249</td><td>0.477</td><td>0.000</td><td>0.878</td><td>0.064</td><td>0.314</td></th<>	Uyo	0.575	0.339	0.284	0.399	27.783	49.996	0.573	0.610	0.249	0.477	0.000	0.878	0.064	0.314
Note		0.458	0.308	0.000	0.255	30.144	47.293	0.458	0.641	0.212	0.437	0.000	0.901	0.050	0.317
Opdama         Matrix         Matrix<	Ekeremor	0.411	0.282	0.195	0.296	26.947	47.216	0.410	0.615	0.215	0.413	0.000	0.906	0.050	0.319
Nembe         044         027         020         0.314         2513         46973         0.433         0.639         0.453         0.000         0.906         0.906         0.339           Ogla         0.471         0.260         0.166         0.281         2.2428         46.807         0.471         0.669         0.217         0.453         0.000         0.901         0.050         0.330           Saghama         0.488         0.260         0.118         0.200         2.4178         4.622         0.497         0.692         0.200         0.464         0.000         0.905         0.500         0.313           Southern Jaw         0.388         0.281         0.120         0.422         0.402         0.402         0.402         0.400         0.901         0.500         0.317           Yenagon         0.38         0.341         0.422         3.138         4.714         0.507         0.716         0.219         0.418         0.000         0.319         0.501         0.317           Menchan         0.592         0.353         0.617         0.418         0.400         0.338         0.368         0.368         0.368         0.368         0.368         0.368         0.368		0.426	0.269	0.094	0.263	24.123	46.916	0.424	0.643	0.210	0.425	0.000	0.899	0.050	0.316
i $i$ <td>Nembe</td> <td>0.444</td> <td>0.277</td> <td>0.220</td> <td>0.314</td> <td>25.513</td> <td>46.973</td> <td>0.443</td> <td>0.639</td> <td>0.276</td> <td>0.453</td> <td>0.000</td> <td>0.906</td> <td>0.050</td> <td>0.319</td>	Nembe	0.444	0.277	0.220	0.314	25.513	46.973	0.443	0.639	0.276	0.453	0.000	0.906	0.050	0.319
1 $1$ <td>Ogbia</td> <td>0.471</td> <td>0.266</td> <td>0.106</td> <td>0.281</td> <td>22.428</td> <td>46.807</td> <td>0.471</td> <td>0.669</td> <td>0.217</td> <td>0.453</td> <td>0.000</td> <td>0.910</td> <td>0.050</td> <td>0.320</td>	Ogbia	0.471	0.266	0.106	0.281	22.428	46.807	0.471	0.669	0.217	0.453	0.000	0.910	0.050	0.320
Image	Sagbama	0.488	0.266	0.118	0.290	24.178	46.762	0.487	0.692	0.220	0.466	0.000	0.905	0.050	0.318
No.No	Southern Ijaw	0.398	0.281	0.126	0.268	25.728	47.338	0.396	0.603	0.209	0.402	0.000	0.901	0.050	0.317
Anorch North53980.4390.21853.9770.5920.5750.0870.4180.0000.8380.0800.308Anorch Anorch0.5920.4330.4340.56119.58154.4740.5800.5950.1120.4290.0000.7300.0710.209Bonadi0.580.4300.4120.4370.43724.71056.0390.5470.6250.0760.4160.0000.7300.0710.209Burutu0.430.2180.49724.71056.0390.5470.6250.0760.4160.0000.7300.0710.209Burutu0.430.2190.51124.0056.220.4260.4700.0880.3010.0000.7300.0710.209Burutu0.430.320.6990.5512.240058.620.4260.4700.0880.3000.7000.7300.0710.271Burutu0.430.320.6990.5512.40058.620.4600.4310.0500.3300.0000.7210.0710.261Burutu0.500.520.5512.4005.4170.5800.610.6180.4010.4010.4010.4010.4010.4010.401Burutu0.550.3400.5610.4812.2205.2590.5340.6260.4120.4000.4000.7200.7200.7210.7610.7610.7610.7610.761	Yenagoa	0.508	0.253	0.504	0.422	31.138	46.714	0.507	0.716	0.219	0.481	0.000	0.901	0.050	0.317
Aniocha South $0.592$ $0.343$ $0.747$ $0.561$ $19.581$ $54.74$ $0.580$ $0.595$ $0.112$ $0.429$ $0.000$ $0.730$ $0.077$ $0.269$ Bomadi $0.558$ $0.340$ $0.412$ $0.437$ $24.710$ $56.39$ $0.547$ $0.625$ $0.076$ $0.416$ $0.000$ $0.730$ $0.077$ $0.269$ Burutu $0.433$ $0.321$ $0.899$ $0.551$ $24.400$ $58.62$ $0.426$ $0.407$ $0.088$ $0.307$ $0.000$ $0.730$ $0.077$ $0.269$ Ethiope Kes $0.59$ $0.329$ $0.699$ $0.551$ $22.400$ $58.62$ $0.440$ $0.698$ $0.307$ $0.000$ $0.730$ $0.077$ $0.269$ Ethiope Kes $0.59$ $0.329$ $0.699$ $0.550$ $23.212$ $54.105$ $0.491$ $0.050$ $0.724$ $0.077$ $0.077$ $0.269$ Ethiope Kes $0.592$ $0.361$ $0.626$ $0.679$ $0.472$ $0.077$ $0.077$ $0.077$ $0.077$ $0.077$ </td <td>Aniocha</td> <td>0.592</td> <td>0.308</td> <td>0.419</td> <td>0.439</td> <td>20.218</td> <td>53.997</td> <td>0.592</td> <td>0.575</td> <td>0.087</td> <td>0.418</td> <td>0.000</td> <td>0.838</td> <td>0.086</td> <td>0.308</td>	Aniocha	0.592	0.308	0.419	0.439	20.218	53.997	0.592	0.575	0.087	0.418	0.000	0.838	0.086	0.308
ind         ind <td></td> <td>0.592</td> <td>0.343</td> <td>0.747</td> <td>0.561</td> <td>19.581</td> <td>54.474</td> <td>0.580</td> <td>0.595</td> <td>0.112</td> <td>0.429</td> <td>0.000</td> <td>0.730</td> <td>0.077</td> <td>0.269</td>		0.592	0.343	0.747	0.561	19.581	54.474	0.580	0.595	0.112	0.429	0.000	0.730	0.077	0.269
Image: definition of the left	Bomadi	0.558	0.340	0.412	0.437	24.710	56.039	0.547	0.625	0.076	0.416	0.000	0.730	0.077	0.269
$I_{L}$ <	Burutu	0.433	0.321	0.899	0.551	22.400	58.622	0.426	0.407	0.088	0.307	0.000	0.739	0.078	0.272
InterpretationInter	Ethiope East	0.508	0.329	0.689	0.509	23.212	54.105	0.496	0.443	0.050	0.330	0.000	0.724	0.077	0.267
East         Image: Second	Ethiope West	0.592	0.361	0.626	0.526	20.716	62.477	0.580	0.671	0.072	0.441	0.000	0.727	0.077	0.268
integral	Ika North East	0.550	0.336	0.566	0.484	22.290	52.259	0.534	0.626	0.269	0.476	0.000	0.722	0.076	0.266
Isoko South         0.500         0.299         0.605         0.468         19.505         52.119         0.483         0.738         0.176         0.465         0.000         0.716         0.076         0.264	Ika South	0.558	0.296	0.773	0.542	23.258	45.926	0.546	0.583	0.129	0.420	0.000	0.726	0.077	0.267
	Isoko North	0.567	0.302	0.605	0.491	19.554	52.319	0.550	0.738	0.176	0.488	0.000	0.716	0.076	0.264
Ndokwa East         0.500         0.326         0.666         0.497         22.580         55.236         0.483         0.553         0.132         0.390         0.000         0.719         0.076         0.265	Isoko South	0.500	0.299	0.605	0.468	19.505	52.119	0.483	0.738	0.176	0.465	0.000	0.716	0.076	0.264
	Ndokwa East	0.500	0.326	0.666	0.497	22.580	55.236	0.483	0.553	0.132	0.390	0.000	0.719	0.076	0.265

Ndokwa West	0.525	0.331	0.722	0.526	21.758	55.770	0.514	0.630	0.024	0.389	0.000	0.731	0.077	0.269
Okpe	0.358	0.327	0.713	0.466	18.787	36.484	0.353	0.352	0.212	0.306	0.000	0.724	0.077	0.267
Oshimili North	0.558	0.296	0.711	0.522	15.794	45.964	0.547	0.684	0.092	0.441	0.000	0.734	0.077	0.270
Oshimili South	0.583	0.279	0.723	0.529	16.405	46.130	0.568	0.643	0.108	0.439	0.000	0.724	0.077	0.267
Patani	0.592	0.254	0.704	0.517	22.343	54.962	0.580	0.512	0.041	0.378	0.000	0.726	0.077	0.268
Sapele	0.483	0.343	0.679	0.502	20.700	49.401	0.466	0.662	0.245	0.458	0.000	0.716	0.076	0.264
Udu	0.600	0.316	0.822	0.579	19.994	55.776	0.591	0.628	0.022	0.414	0.000	0.725	0.077	0.267
Ughelli North	0.433	0.295	0.000	0.243	17.002	53.913	0.418	0.666	0.252	0.445	0.000	0.734	0.077	0.271
Ughelli South	0.567	0.300	0.674	0.514	17.420	53.957	0.551	0.650	0.206	0.469	0.000	0.723	0.077	0.267
Ukwuani	0.558	0.339	0.523	0.473	23.716	60.508	0.547	0.630	0.040	0.406	0.000	0.727	0.077	0.268
Uvwie	0.467	0.291	0.642	0.466	24.353	53.943	0.458	0.639	0.111	0.403	0.000	0.730	0.077	0.269
Warri South	0.475	0.247	0.853	0.525	20.582	45.487	0.464	0.664	0.195	0.441	0.000	0.738	0.078	0.272
Warri North	0.583	0.306	0.777	0.555	21.960	35.265	0.569	0.664	0.252	0.495	0.000	0.733	0.077	0.270
Warri South- West	0.592	0.291	0.703	0.528	21.559	45.829	0.580	0.618	0.145	0.447	0.000	0.727	0.077	0.268
<b>IMO</b> Aboh Mbaise	0.525	0.331	0.391	0.416	28.691	52.394	0.523	0.616	0.140	0.426	0.000	0.923	0.062	0.328
Ahiazu Mbaise	0.525	0.309	0.274	0.369	27.356	52.256	0.523	0.600	0.171	0.431	0.000	0.918	0.061	0.327
Ehime Mbano	0.492	0.314	0.171	0.325	25.859	55.918	0.487	0.597	0.126	0.403	0.000	0.924	0.062	0.329
Ezinihitte	0.450	0.305	0.080	0.278	23.090	52.141	0.449	0.628	0.084	0.387	0.000	0.921	0.062	0.327
Idiato South	0.508	0.319	0.212	0.346	25.925	52.351	0.504	0.706	0.119	0.443	0.000	0.920	0.061	0.327
Idiato North	0.550	0.297	0.144	0.330	24.152	51.925	0.546	0.644	0.129	0.440	0.000	0.932	0.062	0.331
Ihitte Uboma	0.567	0.327	0.254	0.382	26.032	56.249	0.562	0.587	0.080	0.410	0.000	0.930	0.062	0.331
Ikeduru	0.458	0.301	0.086	0.282	26.438	55.838	0.458	0.618	0.146	0.407	0.000	0.920	0.061	0.327
Isiala Mbano	0.442	0.309	0.250	0.334	25.104	51.855	0.442	0.621	0.171	0.411	0.000	0.921	0.062	0.328
Isu	0.517	0.341	0.609	0.489	24.601	54.078	0.514	0.568	0.126	0.403	0.000	0.925	0.062	0.329
Mbaitoli	0.492	0.325	0.083	0.300	21.245	53.996	0.488	0.562	0.137	0.396	0.000	0.925	0.062	0.329
Ngor/ Okpala	0.483	0.315	0.276	0.358	23.406	52.284	0.481	0.571	0.097	0.383	0.000	0.927	0.062	0.330
Njaba	0.492	0.303	0.159	0.318	21.170	54.581	0.486	0.553	0.115	0.385	0.000	0.915	0.061	0.325
Nkwangele	0.517	0.320	0.479	0.438	20.871	54.077	0.509	0.569	0.182	0.420	0.000	0.915	0.061	0.325
Nkwerre	0.492	0.331	0.185	0.336	22.379	54.240	0.489	0.615	0.173	0.425	0.000	0.934	0.063	0.332
Obowo	0.517	0.334	0.287	0.379	26.118	54.202	0.513	0.620	0.094	0.409	0.000	0.919	0.061	0.327
Oguta	0.483	0.324	0.300	0.369	24.034	50.197	0.481	0.686	0.185	0.451	0.000	0.928	0.062	0.330
Ohaji/ Egbema	0.492	0.275	0.269	0.345	25.037	55.866	0.489	0.599	0.117	0.402	0.000	0.934	0.063	0.332
Okigwe	0.558	0.333	0.227	0.373	24.518	50.165	0.555	0.612	0.237	0.468	0.000	0.930	0.062	0.331
Onuimo	0.508	0.313	0.237	0.353	25.229	55.982	0.505	0.587	0.091	0.394	0.000	0.928	0.062	0.330

Orlu	0.567	0.349	0.320	0.412	25.527	54.151	0.561	0.669	0.171	0.467	0.000	0.922	0.062	0.328
Oru	0.508	0.294	0.263	0.355	24.597	52.144	0.503	0.591	0.146	0.413	0.000	0.915	0.061	0.325
Oru East	0.483	0.290	0.582	0.452	24.546	53.925	0.480	0.617	0.182	0.426	0.000	0.915	0.061	0.325
Oru West	0.433	0.283	0.411	0.376	25.309	53.926	0.429	0.617	0.182	0.409	0.000	0.915	0.061	0.325
Owerri Municipal	0.508	0.336	0.567	0.471	27.395	54.197	0.506	0.658	0.249	0.471	0.000	0.935	0.063	0.333
Owerri North	0.550	0.340	0.233	0.374	29.261	54.187	0.546	0.648	0.249	0.481	0.000	0.935	0.063	0.333
Owerri West	0.550	0.344	0.233	0.375	28.665	54.246	0.546	0.648	0.249	0.481	0.000	0.935	0.063	0.333
<b>RIVERS</b> Abua/ Odual	0.474	0.258	0.213	0.315	20.275	48.659	0.474	0.596	0.177	0.415	0.000	0.911	0.092	0.334
Ahoada East	0.461	0.291	0.254	0.335	21.803	49.273	0.460	0.599	0.194	0.418	0.000	0.911	0.092	0.335
Ahoada West	0.539	0.263	0.175	0.326	22.664	46.711	0.540	0.596	0.150	0.429	0.000	0.911	0.092	0.335
Akuru-Toru	0.434	0.298	0.481	0.404	21.807	48.047	0.430	0.594	0.281	0.435	0.000	0.910	0.092	0.334
Andoni	0.502	0.264	0.000	0.255	20.780	45.771	0.497	0.588	0.297	0.461	0.000	0.909	0.092	0.334
Asari-Toru	0.461	0.238	0.377	0.359	20.513	46.286	0.460	0.551	0.295	0.436	0.000	0.909	0.092	0.334
Bonny	0.471	0.293	0.658	0.474	24.935	45.603	0.467	0.616	0.313	0.466	0.000	0.910	0.092	0.334
Degema	0.512	0.282	0.235	0.343	23.668	48.368	0.512	0.607	0.288	0.469	0.000	0.912	0.093	0.335
Eleme	0.476	0.282	0.744	0.501	25.206	47.438	0.470	0.622	0.306	0.466	0.000	0.907	0.091	0.333
Emuoha	0.428	0.293	0.207	0.309	23.480	48.997	0.419	0.643	0.291	0.451	0.000	0.905	0.090	0.332
Etche	0.471	0.302	0.138	0.304	23.071	47.227	0.463	0.637	0.286	0.462	0.000	0.907	0.091	0.333
Gokana	0.464	0.291	0.276	0.344	23.092	45.884	0.462	0.600	0.285	0.449	0.000	0.907	0.091	0.333
Ikwerre	0.468	0.326	0.211	0.335	24.595	46.727	0.465	0.655	0.281	0.467	0.000	0.908	0.092	0.333
Khana	0.557	0.299	0.322	0.392	21.734	45.362	0.554	0.628	0.272	0.484	0.000	0.904	0.090	0.332
Obia/Akpor	0.437	0.271	0.620	0.442	23.009	44.776	0.431	0.624	0.214	0.423	0.000	0.909	0.092	0.334
Ogba/Egbema /Ndoini	0.528	0.299	0.241	0.356	22.445	46.094	0.527	0.614	0.214	0.452	0.000	0.907	0.091	0.333
Ogu/Bolo	0.505	0.297	0.000	0.267	23.126	46.096	0.501	0.570	0.257	0.443	0.000	0.908	0.092	0.333
Okrika	0.502	0.307	0.206	0.338	22.404	47.993	0.501	0.620	0.264	0.462	0.000	0.904	0.090	0.331
Omumma	0.451	0.252	0.394	0.366	20.425	48.645	0.449	0.594	0.249	0.431	0.000	0.904	0.090	0.331
Opobo/ Nkoro	0.483	0.276	0.000	0.253	21.640	48.336	0.483	0.628	0.240	0.450	0.000	0.909	0.092	0.334
Oyigbo	0.478	0.241	0.302	0.340	21.210	44.541	0.475	0.532	0.242	0.417	0.000	0.904	0.090	0.332
Port Harcourt	0.556	0.326	0.789	0.557	28.137	55.136	0.556	0.678	0.395	0.543	0.000	0.912	0.092	0.335
Tai	0.438	0.309	0.332	0.360	24.756	44.451	0.436	0.603	0.292	0.444	0.000	0.907	0.091	0.333

Index	High range	Medium range	Low range
HDI	0.463 - 0.579	0.462 - 0.347	0.346 - 0.229
HPI-1	14.03 -20.594	20.595 - 27.158	27.159 - 33.722
GDI	0.470 - 0.556	0.469 - 0.383	0.382 - 0.295
GEM	0.322 - 349	0.321 - 0.293	0.292 - 0.264
Life expectancy	0.520 - 0.600	0.519 - 0.440	0.439 - 0.358
Equally distributed			
life expectancy	0.513 - 0.592	0.512 - 0.434	0.433 - 0.353
GDP index	0.600 - 0.899	0.599 - 0.301	0.000 - 0.300
Educational index	0.371 - 0.443	0.370 - 0.299	0.298 - 0.225
Source: ERML Field Work 2005.			

### Table A2.2: Range of Values Used in Ranking Human Development Indicators

Table A2.3: HPI-1 Index and Dimensions for Local Government Areas in the Niger Delta Region

State	Probability at birth of not surviving to age 40	Adult illiteracy rate	Unweighted	HPI-1
C Rivers				
Abi	32.40	23.50	27.38	28.23
Akamkpa	17.40	23.00	29.93	24.52
Akpabuyo	26.20	18.50	23.15	23.05
Bakassi	19.05	15.50	23.43	19.86
Bekwara	14.70	16.00	23.43	18.86
Biase	20.55	21.50	25.63	22.78
Boki	16.20	25.50	19.30	21.06
Calabar M	12.35	34.00	27.05	27.29
Calabar South	13.65	32.50	22.90	25.35
Etong	16.90	28.25	20.75	22.96
Ikom	21.80	28.00	24.85	25.14
Obaniliku	21.85	22.50	20.93	21.78
Obubra	19.65	24.00	23.20	22.44

Obudu	19.35	25.50	22.00	22.57
Odukpani	15.25	23.50	24.63	21.89
Ogoja	22.47	26.50	22.20	23.89
Yakurr	22.00	26.50	20.40	23.26
Yala	20.90	26.50	22.10	23.42
ABIA				
Aba North	29.90	28.00	36.43	31.86
Aba South	26.70	33.50	36.80	32.86
Arochukwu	23.35	21.50	26.40	23.92
Bende	25.85	25.00	29.18	26.80
Ikwuano	14.40	24.50	28.43	23.84
Isiala Ngwa North	15.05	25.00	29.88	24.79
Isiala Ngwa South	24.95	25.50	23.80	24.77
Isuikwuato	18.00	28.00	26.05	24.75
Umunneochi	19.95	25.00	28.65	25.04
Obio Ngwa	17.65	23.50	27.50	23.57
Ohafia	16.25	28.50	30.10	26.32
Osisioma Ngwa	20.70	24.50	28.43	24.94
Ugwunagbo	23.60	27.00	29.20	26.80
Ukwa East	14.10	23.00	25.00	21.69
Ukwa West	22.35	23.25	29.88	25.61
Umuahia South	26.60	23.10	27.95	26.04
Umuahia North	26.05	32.00	27.65	28.79
EDO		0.00		
Akoko Edo	17.50	19.00	20.90	19.23
Egor	10.00	20.00	21.75	18.60
Esan Central	18.50	25.00	24.35	22.98
Esan North East	14.00	30.00	20.43	23.36
Esan South East	15.00	29.00	23.95	24.01

Esan West	15.50	26.50	21.50	22.08
Etsako East	15.00	22.00	24.63	21.29
Etasako Central	15.35	20.50	22.83	20.03
Etasako West	15.00	19.00	23.10	19.59
Igueben	16.00	28.50	19.60	22.63
Ikopa Okha	10.00	13.00	17.20	14.03
Oredo	15.50	31.00	27.43	26.23
Orhionwon	16.00	12.00	22.00	17.64
Ovia North East	17.50	10.50	23.40	18.61
Ovia South West	16.00	11.00	22.68	17.86
Owan East	17.00	23.50	23.43	21.72
Owan West	17.50	23.50	23.88	22.00
Uhumwonde	16.50	25.00	18.80	20.74
ONDO				
Akoko North East	20.50	22.50	28.00	24.09
Akoko North West	17.10	21.00	36.00	27.28
Akoko South West	17.40	22.00	28.00	23.28
Akoko South East	17.55	23.50	35.00	27.33
Akure North	29.65	33.50	34.00	32.50
Akure South	25.70	34.00	38.00	33.34
Idanre	25.00	22.50	39.75	31.05
Ifedore	19.35	20.50	39.75	29.71
Okitipupa	20.00	31.50	39.50	32.28
Ilaje	20.00	21.50	41.25	30.86
Ese Odo	30.00	24.15	38.50	31.98
Ile Oluji Okeigbo	16.50	33.00	37.75	31.55
Irele	31.00	21.20	37.50	31.31
Odigbo	30.90	19.50	42.75	33.72
Ondo East	33.80	22.50	31.25	29.94

Ondo West	34.00	22.50	32.50	30.49
Ose	17.35	31.50	40.00	32.23
Owo	28.95	27.50	38.50	32.41
AKWA IBOM				
Abak	10.00	26.00	31.88	25.71
Eastern Obodo	20.50	25.00	37.75	29.63
Eket	30.50	23.50	31.88	29.07
Nsit Atai	23.00	21.00	33.25	26.87
Essien Udim	17.50	25.50	34.88	27.79
Etim Ekpo	16.00	22.00	34.50	26.50
Etinam	16.00	24.50	36.63	28.29
Ibeno	19.00	24.00	18.50	20.80
Ibesikpo Asutan	14.00	25.00	20.00	20.64
Ibiono Ibom	20.00	23.50	24.50	22.83
Ika	17.00	21.00	17.50	18.67
Ikono	18.00	20.00	17.50	18.56
Ikot Abasi	31.00	21.50	16.50	24.52
Ikot Ekpene	23.00	22.00	20.00	21.74
Ini	13.00	24.50	23.00	21.32
Itu	19.00	25.50	29.00	25.17
Mbo	21.00	22.00	28.00	24.07
Mkpat Enin	16.50	18.00	22.50	19.34
Nsit Ibom	21.50	25.00	20.00	22.37
Nsit Ubium	26.50	24.50	21.50	24.34
Obat Akara	20.50	21.50	25.50	22.71
Okobo	17.50	20.50	25.00	21.45
Onna	10.00	19.00	26.25	20.53
Oron	20.50	26.00	24.75	23.98
Orukanam	20.50	19.00	23.75	21.27

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Udung Uko	20.00	25.00	20.00	21.93
Ukanafun	19.00	20.50	26.25	22.37
Esit Eket	21.00	20.00	23.50	21.60
Uruan	16.00	23.00	19.00	19.75
Urue Offong/Oruk	23.50	20.50	18.50	21.04
Uyo	33.00	21.00	26.75	27.78
BAYELSA				
Brass	12.65	27.00	39.25	30.14
Ekeremor	13.35	24.85	34.48	26.95
Kolokuma/Opokuma	13.10	21.95	30.83	24.12
Nembe	12.80	22.65	33.05	25.51
Ogbia	12.25	19.40	29.13	22.43
Sagbama	11.30	17.75	32.83	24.18
Southern Ijaw	13.55	25.70	31.63	25.73
Yenagoa	33.50	14.95	36.75	31.14
DELTA				
Aniocha North	17.50	21.50	21.18	20.22
Aniocha South	13.00	22.50	20.75	19.58
Bomadi	25.00	24.00	25.10	24.71
Burutu	20.50	24.00	22.43	22.40
Ethiope East	26.00	22.50	20.45	23.21
Ethiope West	16.00	23.50	21.25	20.72
Ika North East	17.50	24.00	24.13	22.29
Ika South	24.00	23.50	22.20	23.26
Isoko North	17.50	18.00	22.40	19.55
Isoko South	17.50	17.50	22.60	19.51
Ndokwa East	17.50	28.50	18.20	22.58
Ndokwa West	20.00	19.50	24.93	21.76
Okpe	12.50	20.00	21.50	18.79

Oshimili North	7.50	16.00	19.40	15.79
Oshimili South	7.50	17.00	19.93	16.41
Patani	25.00	20.00	21.43	22.34
Sapele	12.50	24.00	22.13	20.70
Udu	17.50	23.50	17.80	19.99
Ughelli North	7.50	18.00	20.40	17.00
Ughelli South	7.50	17.50	21.60	17.42
Ukwuani	20.00	28.50	20.70	23.72
Uvwie	15.00	19.50	31.93	24.35
Warri South	17.50	17.50	24.90	20.58
Warri North	20.00	23.50	22.10	21.96
Warri South-West	17.50	22.50	23.70	21.56
IMO				
Aboh Mbaise	25.50	24.50	34.08	28.69
Ahiazu Mbaise	25.00	21.50	32.98	27.36
Ehime Mbano	20.50	22.00	31.95	25.86
Ezinihitte	18.00	18.50	29.15	23.09
Idiato South	26.50	23.50	27.45	25.92
Idiato North	18.00	20.50	30.30	24.15
Ihitte Uboma	21.50	23.50	31.08	26.03
Ikeduru	23.00	19.50	32.98	26.44
Isiala Mbano	17.50	18.50	32.95	25.10
Isu	25.00	23.00	25.65	24.60
Mbaitoli	10.00	21.00	26.45	21.24
Ngor/Okpala	15.00	21.50	29.30	23.41
Njaba	12.00	21.00	25.95	21.17
Nkwangele	10.00	22.00	25.00	20.87
Nkwerre	11.00	23.00	27.20	22.38
Obowo	24.00	24.00	29.55	26.12

Oguta	11.00	20.50	31.65	24.03
Ohaji/Egbema	22.50	18.50	30.85	25.04
Okigwe	17.00	23.00	30.05	24.52
Onuimo	21.00	23.50	29.60	25.23
Orlu	23.00	24.50	28.45	25.53
Oru	24.50	17.50	29.08	24.60
Oru East	23.00	18.50	29.58	24.55
Oru West	23.50	17.50	31.18	25.31
Owerri Municipal	28.00	22.00	30.75	27.39
Owerri North	28.50	23.70	33.83	29.26
Owerri West	27.50	24.20	32.93	28.67
RIVERS				
Abua/Odual	11.05	18.50	25.88	20.28
Ahoada East	11.15	23.50	25.58	21.80
Ahoada West	11.70	20.50	29.13	22.66
Akuru-Toru	13.75	23.50	24.95	21.81
Andoni	11.75	19.50	26.15	20.78
Asari-Toru	14.55	18.50	25.45	20.51
Bonny	22.45	23.00	28.45	24.93
Degema	12.60	21.00	30.55	23.67
Eleme	19.65	21.50	31.25	25.21
Emuoha	13.20	21.00	30.10	23.48
Etche	12.45	22.00	28.95	23.07
Gokana	16.95	23.00	27.10	23.09
Ikwerre	19.50	24.00	28.60	24.59
Khana	12.25	20.50	27.30	21.73
Obia/Akpor	18.85	18.50	28.65	23.01
Ogba/Egbema /Ndoini	11.50	23.00	27.25	22.45

Ogu/Bolo	11.80	23.50	28.23	23.13
Okrika	11.20	24.50	26.03	22.40
Omumma	12.05	17.50	26.43	20.42
Opobo/Nkoro	12.35	18.50	28.10	21.64
Oyigbo	12.50	17.50	27.73	21.21
Port Harcourt	28.45	22.00	32.13	28.14
Tai	19.30	23.50	29.38	24.76

### Table A2.4: GDI Index and Dimension for Local Government Areas

State	Equally distributed life expectancy index	Equally distributed education Index	Equally distributed income index	GDI index
C Rivers				
Abi	0.472	0.575	0.306	0.451
Akamkpa	0.480	0.607	0.391	0.493
Akpabuyo	0.473	0.593	0.367	0.477
Bakassi	0.389	0.604	0.316	0.437
Bekwara	0.404	0.658	0.301	0.454
Biase	0.422	0.694	0.373	0.496
Boki	0.448	0.642	0.377	0.489
Calabar M	0.574	0.658	0.399	0.543
Calabar South	0.574	0.634	0.392	0.533
Etong	0.456	0.635	0.353	0.481
Ikom	0.480	0.646	0.296	0.474
Obaniliku	0.496	0.643	0.261	0.466
Obubra	0.513	0.600	0.292	0.469
Obudu	0.556	0.603	0.345	0.501
Odukpani	0.473	0.556	0.319	0.449
Ogoja	0.547	0.585	0.348	0.493
Yakurr	0.439	0.613	0.305	0.452
Yala	0.438	0.605	0.325	0.456
ABIA Aba North	0.491	0.581	0.396	0.489
Aba South	0.495	0.524	0.383	0.467
Arochukwu	0.404	0.524	0.356	0.428
Bende	0.431	0.482	0.342	0.418
Ikwuano	0.376	0.410	0.297	0.361
Isiala Ngwa North	0.407	0.447	0.318	0.390

Isiala Ngwa South	0.440	0.488	0.333	0.420
Isuikwuato	0.458	0.501	0.333	0.431
Umunneochi	0.440	0.470	0.294	0.401
Obio Ngwa	0.377	0.428	0.315	0.373
Ohafia	0.490	0.479	0.321	0.430
Osisioma Ngwa	0.416	0.464	0.350	0.410
Ugwunagbo	0.454	0.466	0.245	0.389
Ukwa East	0.425	0.485	0.357	0.422
Ukwa West	0.472	0.458	0.325	0.418
Umuahia South	0.440	0.569	0.366	0.459
Umuahia North	0.506	0.571	0.370	0.482
EDO				
Akoko Edo	0.481	0.644	0.366	0.497
Egor	0.488	0.698	0.337	0.507
Esan Central	0.532	0.677	0.223	0.477
Esan North East	0.532	0.655	0.240	0.476
Esan South East	0.505	0.628	0.243	0.459
Esan West	0.556	0.735	0.240	0.510
Etsako East	0.488	0.653	0.321	0.487
Etasako Central	0.471	0.644	0.336	0.484
Etasako West	0.473	0.645	0.321	0.480
Igueben	0.499	0.619	0.294	0.471
Ikopa Okha	0.447	0.765	0.237	0.483
Oredo	0.590	0.795	0.246	0.544
Orhionwon	0.440	0.661	0.288	0.463
Ovia North East	0.415	0.717	0.326	0.486
Ovia South West	0.415	0.710	0.282	0.469
Owan East	0.473	0.659	0.316	0.483
Owan West	0.473	0.693	0.314	0.493
Uhumwonde	0.466	0.658	0.300	0.475
ONDO	0.400	0.030	0.500	0.475
Akoko North East	0.388	0.655	0.367	0.470
Akoko North West	0.388	0.658	0.316	0.470
Akoko South West	0.389	0.658	0.302	0.450
Akoko South East	0.396	0.655	0.302	0.453
Akure North	0.557	0.626	0.309	0.433
Akure South	0.557	0.627	0.399	0.528
Idanre	0.390	0.546	0.240	0.392
Ifedore	0.389	0.507	0.352	0.416
Okitipupa	0.533	0.374	0.296	0.401
Ilaje	0.424	0.298	0.261	0.328
Ese Odo	0.446	0.272	0.293	0.337
Ile Oluji Okeigbo	0.499	0.591	0.345	0.478
Irele	0.389	0.569	0.319	0.426
Odigbo	0.397	0.569	0.349	0.438
Ondo East	0.580	0.702	0.386	0.556
Ondo West	0.590	0.703	0.367	0.553

Ose	0.466	0.556	0.234	0.419
Owo	0.532	0.657	0.248	0.479
AKWA IBOM				
Abak	0.489	0.469	0.304	0.421
Eastern Obodo	0.455	0.470	0.325	0.417
Eket	0.413	0.544	0.152	0.370
Nsit Atai	0.439	0.484	0.158	0.360
Essien Udim	0.495	0.469	0.052	0.339
Etim Ekpo	0.488	0.528	0.049	0.355
Etinam	0.514	0.526	0.045	0.362
Ibeno	0.502	0.529	0.102	0.378
Ibesikpo Asutan	0.481	0.460	0.025	0.322
Ibiono Ibom	0.482	0.463	0.089	0.345
Ika	0.421	0.495	0.049	0.321
Ikono	0.427	0.499	0.108	0.345
Ikot Abasi	0.480	0.504	0.120	0.368
Ikot Ekpene	0.457	0.513	0.184	0.385
Ini	0.533	0.563	0.188	0.428
Itu	0.524	0.565	0.127	0.406
Mbo	0.409	0.467	0.055	0.310
Mkpat Enin	0.387	0.419	0.079	0.295
Nsit Ibom	0.515	0.430	0.107	0.351
Nsit Ubium	0.532	0.489	0.075	0.365
Obat Akara	0.472	0.537	0.102	0.370
Okobo	0.463	0.477	0.050	0.330
Onna	0.415	0.518	0.142	0.358
Oron	0.533	0.480	0.101	0.372
Orukanam	0.420	0.513	0.171	0.368
Udung Uko	0.503	0.529	0.171	0.401
Ukanafun	0.471	0.457	0.077	0.335
Esit Eket	0.473	0.515	0.051	0.346
Uruan	0.483	0.528	0.094	0.368
Urue Offong/Oruk	0.468	0.477	0.124	0.356
Uyo	0.573	0.610	0.249	0.477
BAYELSA				
Brass	0.458	0.641	0.212	0.437
Ekeremor	0.410	0.615	0.215	0.413
Kolokuma/Opokuma	0.424	0.643	0.210	0.425
Nembe	0.443	0.639	0.276	0.453
Ogbia	0.471	0.669	0.217	0.453
Sagbama	0.487	0.692	0.220	0.466
Southern Ijaw	0.396	0.603	0.209	0.402
Yenagoa	0.507	0.716	0.219	0.481
DELTA				
Aniocha North	0.592	0.575	0.087	0.418
Aniocha South	0.580	0.595	0.112	0.429
Bomadi	0.547	0.625	0.076	0.416

Burutu	0.426	0.407	0.088	0.307
Ethiope East	0.496	0.443	0.050	0.330
Ethiope West	0.580	0.671	0.072	0.441
Ika North East	0.534	0.626	0.269	0.476
Ika South	0.546	0.583	0.129	0.420
Isoko North	0.550	0.738	0.176	0.488
Isoko South	0.483	0.738	0.176	0.465
Ndokwa East	0.483	0.553	0.132	0.390
Ndokwa West	0.514	0.630	0.024	0.389
Okpe	0.353	0.352	0.212	0.306
Oshimili North	0.547	0.684	0.092	0.441
Oshimili South	0.568	0.643	0.108	0.439
Patani	0.580	0.512	0.041	0.378
Sapele	0.466	0.662	0.245	0.458
Udu	0.591	0.628	0.022	0.414
Ughelli North	0.418	0.666	0.252	0.445
Ughelli South	0.551	0.650	0.206	0.469
Ukwuani	0.547	0.630	0.040	0.406
Uvwie	0.458	0.639	0.111	0.403
Warri South	0.464	0.664	0.195	0.441
Warri North	0.569	0.664	0.252	0.495
Warri South-West	0.580	0.618	0.145	0.447
IMO				
Aboh Mbaise	0.523	0.616	0.140	0.426
Ahiazu Mbaise	0.523	0.600	0.171	0.431
Ehime Mbano	0.487	0.597	0.126	0.403
Ezinihitte	0.449	0.628	0.084	0.387
Idiato South	0.504	0.706	0.119	0.443
Idiato North	0.546	0.644	0.129	0.440
lhitte Uboma	0.562	0.587	0.080	0.410
Ikeduru	0.458	0.618	0.146	0.407
Isiala Mbano	0.442	0.621	0.171	0.411
lsu	0.514	0.568	0.126	0.403
Mbaitoli	0.488	0.562	0.137	0.396
Ngor/Okpala	0.481	0.571	0.097	0.383
Njaba	0.486	0.553	0.115	0.385
Nkwangele	0.509	0.569	0.182	0.420
Nkwerre	0.489	0.615	0.173	0.425
Obowo	0.513	0.620	0.094	0.409
Oguta	0.481	0.686	0.185	0.451
Ohaji/Egbema	0.489	0.599	0.117	0.402
Okigwe	0.555	0.612	0.237	0.468
Onuimo	0.505	0.587	0.091	0.394
Orlu	0.561	0.669	0.171	0.467
Oru	0.503	0.591	0.146	0.413
Oru East	0.480	0.617	0.182	0.426
Oru West	0.429	0.617	0.182	0.409

Owerri Municipal	0.506	0.658	0.249	0.471
Owerri North	0.546	0.648	0.249	0.481
Owerri West	0.546	0.648	0.249	0.481
RIVERS				
Abua/Odual	0.474	0.596	0.177	0.415
Ahoada East	0.460	0.599	0.194	0.418
Ahoada West	0.540	0.596	0.150	0.429
Akuru-Toru	0.430	0.594	0.281	0.435
Andoni	0.497	0.588	0.297	0.461
Asari-Toru	0.460	0.551	0.295	0.436
Bonny	0.467	0.616	0.313	0.466
Degema	0.512	0.607	0.288	0.469
Eleme	0.470	0.622	0.306	0.466
Emuoha	0.419	0.643	0.291	0.451
Etche	0.463	0.637	0.286	0.462
Gokana	0.462	0.600	0.285	0.449
Ikwerre	0.465	0.655	0.281	0.467
Khana	0.554	0.628	0.272	0.484
Obia/Akpor	0.431	0.624	0.214	0.423
Ogba/Egbema/Ndoini	0.527	0.614	0.214	0.452
Ogu/Bolo	0.501	0.570	0.257	0.443
Okrika	0.501	0.620	0.264	0.462
Omumma	0.449	0.594	0.249	0.431
Opobo/Nkoro	0.483	0.628	0.240	0.450
Oyigbo	0.475	0.532	0.242	0.417
Port Harcourt	0.556	0.678	0.395	0.543
Tai	0.436	0.603	0.292	0.444

### Table A2.5: GEM Index and Dimensions for Local Government Areas

State	EDEP economic participation	EDEP parliamentary	EDEP for income	GEM
C Rivers				
Abi	0.000	0.871	0.057	0.309
Akamkpa	0.000	0.879	0.057	0.312
Akpabuyo	0.000	0.877	0.057	0.311
Bakassi	0.000	0.877	0.057	0.311
Bekwara	0.000	0.862	0.056	0.306
Biase	0.000	0.874	0.057	0.310
Boki	0.000	0.873	0.057	0.310
Calabar M	0.000	0.882	0.057	0.313
Calabar South	0.000	0.882	0.057	0.313
Etong	0.000	0.880	0.057	0.312
Ikom	0.000	0.880	0.057	0.312
Obaniliku	0.000	0.870	0.057	0.309
Obubra	0.000	0.873	0.057	0.310

Obudu	0.000	0.872	0.057	0.310
Odukpani	0.000	0.875	0.057	0.310
Ogoja	0.000	0.875	0.057	0.310
Yakurr	0.000	0.873	0.057	0.310
Yala	0.000	0.869	0.057	0.308
ABIA				
Aba North	0.000	0.887	0.033	0.307
Aba South	0.000	0.896	0.033	0.310
Arochukwu	0.000	0.875	0.032	0.303
Bende	0.000	0.876	0.032	0.303
Ikwuano	0.000	0.873	0.032	0.302
Isiala Ngwa North	0.000	0.871	0.032	0.301
Isiala Ngwa South	0.000	0.875	0.032	0.303
Isuikwuato	0.000	0.873	0.032	0.302
Umunneochi	0.000	0.869	0.032	0.300
Obio Ngwa	0.000	0.874	0.032	0.302
Ohafia	0.000	0.872	0.032	0.301
Osisioma Ngwa	0.000	0.898	0.033	0.310
Ugwunagbo	0.000	0.874	0.032	0.302
Ukwa East	0.000	0.874	0.032	0.302
Ukwa West	0.000	0.880	0.032	0.304
Umuahia South	0.000	0.873	0.032	0.302
Umuahia North	0.000	0.888	0.033	0.307
EDO				
Akoko Edo	0.000	0.939	0.084	0.341
Egor	0.000	0.939	0.084	0.341
Esan Central	0.000	0.946	0.084	0.344
Esan North East	0.000	0.946	0.084	0.344
Esan South East	0.000	0.945	0.084	0.343
Esan West	0.000	0.947	0.084	0.344
Etsako East	0.000	0.937	0.084	0.340
Etasako Central	0.000	0.937	0.084	0.340
Etasako West	0.000	0.948	0.084	0.344
Igueben	0.000	0.952	0.085	0.346
Ikopa Okha	0.000	0.952	0.085	0.346
Oredo	0.000	0.952	0.085	0.346
Orhionwon	0.000	0.954	0.085	0.346
Ovia North East	0.000	0.960	0.085	0.349
Ovia South West	0.000	0.960	0.085	0.348
Owan East	0.000	0.949	0.085	0.344
Owan West	0.000	0.949	0.085	0.344
Uhumwonde	0.000	0.954	0.085	0.346
ONDO	0.000	0.754	0.005	0.540
Akoko North East	0.000	0.914	0.066	0.326
Akoko North West	0.000	0.914	0.066	0.326
Akoko South West	0.000	0.914	0.066	0.320
Akoko South West Akoko South East	0.000	0.921	0.066	0.329
AKOKO SOUTH PAST	0.000	0.921	0.000	0.329

Idanre         0.000         0.929           Ifedore         0.000         0.918           Okitipupa         0.000         0.925           Iaje         0.000         0.918           Ese Odo         0.000         0.918           Ile Oluji Okcigbo         0.000         0.919           Ircle         0.000         0.923           Odigbo         0.000         0.923           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.918           Ose         0.000         0.918           Owo         0.000         0.918           AkWA IBOM	0.067       0.067         0.066       0.066         0.066       0.066         0.066       0.066         0.067       0.066         0.066       0.066         0.066       0.066         0.066       0.066         0.066       0.063         0.063       0.064	0.330 0.332 0.328 0.331 0.328 0.328 0.328 0.328 0.330 0.331 0.328 0.328 0.328 0.328 0.328
Head         0.000         0.918           Okitipupa         0.000         0.925           Ilaje         0.000         0.918           Esc Odo         0.000         0.918           Ile Oluji Okeigbo         0.000         0.919           Irele         0.000         0.923           Odigbo         0.000         0.923           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.918           Owo         0.000         0.918           Owo         0.000         0.927           Owo         0.000         0.927           AKWA IBOM         Incertain the set of	0.066       0.067         0.067       0.066         0.066       0.067         0.067       0.067         0.066       0.066         0.067       0.066         0.066       0.067         0.066       0.063         0.063       0.064	0.328 0.331 0.328 0.328 0.328 0.328 0.330 0.331 0.328 0.328 0.328 0.328
Okitipupa         0.000         0.925         I           Ilaje         0.000         0.918         I           Ese Odo         0.000         0.918         I           Ile Oluji Okeigbo         0.000         0.919         I           Irele         0.000         0.923         I           Odigbo         0.000         0.923         I           Ondo East         0.000         0.918         I           Ondo West         0.000         0.918         I           Ose         0.000         0.927         I           Owo         0.000         0.920         I           AkWA IBOM         I         I         I           Abak         0.000         0.873         I           Eastern Obodo         0.000         0.881         I           Nsit Atai         0.000         0.880         I           Eket         0.000         0.866         I           Ibeno         0.000         0.866         I           Ibinon Ibom         0.000         0.881         I           Ika         0.000         0.881         I           Ikono         0.000         0.886	0.067         0.066         0.066         0.066         0.067         0.067         0.066         0.066         0.066         0.067         0.066         0.066         0.067         0.063         0.063         0.064	0.331 0.328 0.328 0.328 0.328 0.330 0.331 0.328 0.328 0.328 0.331
Ilaje         0.000         0.918           Ese Odo         0.000         0.918           Ile Oluji Okeigbo         0.000         0.919           Irele         0.000         0.923           Odigbo         0.000         0.925           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM	0.066       0.066         0.066       0.067         0.067       0.067         0.066       0.066         0.067       0.066         0.066       0.063         0.063       0.064	0.328 0.328 0.328 0.330 0.331 0.328 0.328 0.328 0.331
Ese Odo         0.000         0.918           Ile Oluji Okeigbo         0.000         0.919           Irele         0.000         0.923           Odigbo         0.000         0.925           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM             Abak         0.000         0.873           Eastern Obodo         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.866           Etinam         0.000         0.866           Etinam         0.000         0.880           Ibeno         0.000         0.880           Ika         0.000         0.866           Ika         0.000         0.886           Ikono         0.000         0.886	0.066         0.066         0.067         0.067         0.066         0.066         0.067         0.066         0.067         0.066         0.067         0.063         0.063         0.064	0.328 0.328 0.330 0.331 0.328 0.328 0.328
Ile Oluji Okcigbo         0.000         0.919           Irele         0.000         0.923           Odigbo         0.000         0.925           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM             Abak         0.000         0.873           Eastern Obodo         0.000         0.881           Statern Obodo         0.000         0.880           Eket         0.000         0.880           Essien Udim         0.000         0.866           Etim Ekpo         0.000         0.866           Etimam         0.000         0.880           Ibeno         0.000         0.886           Ibeno         0.000         0.886           Ika         0.000         0.886           Ika         0.000         0.886           Ikono         0.000         0.886           Ikono         0.000         0.886           Ikono         0.000         0.881           Ikot Ekpene         0.000         0.8	0.066         0.067         0.067         0.066         0.066         0.067         0.066         0.067         0.063         0.063         0.064	0.328 0.330 0.331 0.328 0.328 0.328
Irele         0.000         0.923           Odigbo         0.000         0.925           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.927           Owo         0.000         0.920           AKWA IBOM	0.067         0.067         0.066         0.066         0.067         0.066         0.063         0.063	0.330 0.331 0.328 0.328 0.328
Odigbo         0.000         0.925           Ondo East         0.000         0.918           Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM	0.067         0.066         0.066         0.067         0.067         0.063         0.063         0.064	0.331 0.328 0.328 0.331
Odo         East         0.000         0.918           Ondo East         0.000         0.918         0           Ose         0.000         0.927         0           Owo         0.000         0.920         0           AKWA IBOM          1         1           Abak         0.000         0.873         1           Eastern Obodo         0.000         0.873         1           Eket         0.000         0.881         1           Nsit Atai         0.000         0.880         1           Essien Udim         0.000         0.866         1           Etim Ekpo         0.000         0.866         1           Etinam         0.000         0.866         1           Ibeno         0.000         0.880         1           Ibesikpo Asutan         0.000         0.886         1           Ika         0.000         0.881         1           Ikot Abasi         0.000         0.881         1           Ikot Abasi         0.000         0.872         1           Ihi         0.000         0.873         1           Mbo         0.000         0.872         <	0.066       0.066         0.067       0.067         0.066       0.063         0.063       0.063	0.328 0.328 0.331
Ondo West         0.000         0.918           Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM	0.066 0.067 0.066 0.063 0.063 0.064	0.328 0.331
Ose         0.000         0.927           Owo         0.000         0.920           AKWA IBOM             Abak         0.000         0.873           Eastern Obodo         0.000         0.873           Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etinam         0.000         0.866           Ibeno         0.000         0.866           Ibeno         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.866           Ibiono Ibom         0.000         0.886           Ika         0.000         0.881           Ika         0.000         0.881           Ikot Abasi         0.000         0.872           Ini         0.000         0.873           Mbo         0.000         0.872           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872	0.067 0.066 0.063 0.063 0.064	0.331
Owo         0.000         0.920           AKWA IBOM	0.066 0.063 0.063 0.064	
AKWA IBOM         0.000         0.873           Abak         0.000         0.873           Eastern Obodo         0.000         0.873           Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etinam         0.000         0.866           Etinam         0.000         0.866           Ibeno         0.000         0.866           Ibeno         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.872           Ini         0.000         0.871           Itu         0.000         0.872           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Ohabo         0.000	0.063 0.063 0.064	0.329
Abak         0.000         0.873           Eastern Obodo         0.000         0.873           Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etim Ekpo         0.000         0.866           Etimam         0.000         0.866           Ibeno         0.000         0.866           Ibeno         0.000         0.866           Ibeno         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.877           Ona         0.000         0.877	0.063 0.064	
Eastern Obodo         0.000         0.873           Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etimam         0.000         0.866           Etinam         0.000         0.866           Ibeno         0.000         0.866           Ibeno         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.880           Ikono         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.872           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.877           Okobo         0.000         0.877           Onna         0.000         0.885	0.063 0.064	
Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etimam         0.000         0.866           Ibeno         0.000         0.866           Ibono Ibom         0.000         0.880           Ika         0.000         0.886           Ikono         0.000         0.886           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.872           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.877	0.064	0.312
Eket         0.000         0.881           Nsit Atai         0.000         0.880           Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etimam         0.000         0.866           Ibeno         0.000         0.866           Ibono Ibom         0.000         0.880           Ika         0.000         0.886           Ikono         0.000         0.886           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.872           Mbo         0.000         0.872           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.877		0.312
Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etinam         0.000         0.864           Ibeno         0.000         0.919           Ibesikpo Asutan         0.000         0.886           Ibiono Ibom         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.886           Ikono         0.000         0.886           Ikono         0.000         0.886           Ikono         0.000         0.881           Ikot Abasi         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Orna         0.000         0.877	0.064	0.315
Essien Udim         0.000         0.868           Etim Ekpo         0.000         0.866           Etinam         0.000         0.864           Ibeno         0.000         0.919           Ibesikpo Asutan         0.000         0.886           Ibiono Ibom         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.886           Ikono         0.000         0.880           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.872           Orna         0.000         0.877		0.314
Etim Ekpo         0.000         0.866           Etinam         0.000         0.864           Ibeno         0.000         0.919           Ibesikpo Asutan         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.873           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Oron         0.000         0.872	0.063	0.310
Etinam         0.000         0.864           Ibeno         0.000         0.919           Ibesikpo Asutan         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.865           Ikono         0.000         0.881           Ikot Abasi         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Onna         0.000         0.872	0.063	0.310
Ibeno         0.000         0.919           Ibesikpo Asutan         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.872           Oron         0.000         0.872	0.062	0.309
Ibesikpo Asutan         0.000         0.866           Ibiono Ibom         0.000         0.880           Ika         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Onna         0.000         0.872	0.067	0.329
Ibiono Ibom       0.000       0.880         Ika       0.000       0.866         Ikono       0.000       0.865         Ikot Abasi       0.000       0.881         Ikot Ekpene       0.000       0.872         Ini       0.000       0.875         Mbo       0.000       0.875         Mbo       0.000       0.863         Nsit Ibom       0.000       0.872         Obat Akara       0.000       0.872         Okobo       0.000       0.872         Oron       0.000       0.872	0.063	0.310
Ika         0.000         0.866           Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.872           Ini         0.000         0.875           Mbo         0.000         0.875           Mbo         0.000         0.863           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Onna         0.000         0.877           Oron         0.000         0.872	0.064	0.314
Ikono         0.000         0.865           Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.871           Itu         0.000         0.875           Mbo         0.000         0.911           Mkpat Enin         0.000         0.872           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.872           Oron         0.000         0.872	0.063	0.310
Ikot Abasi         0.000         0.881           Ikot Ekpene         0.000         0.872           Ini         0.000         0.871           Itu         0.000         0.875           Mbo         0.000         0.911           Mkpat Enin         0.000         0.872           Nsit Ibom         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.872           Oron         0.000         0.872	0.063	0.309
Ikot Ekpene         0.000         0.872           Ini         0.000         0.871           Itu         0.000         0.875           Mbo         0.000         0.911           Mkpat Enin         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898	0.064	0.315
Ini         0.000         0.871           Itu         0.000         0.875           Mbo         0.000         0.911           Mkpat Enin         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.885	0.063	0.312
Itu0.0000.875Mbo0.0000.911Mkpat Enin0.0000.863Nsit Ibom0.0000.872Nsit Ubium0.0000.872Obat Akara0.0000.872Okobo0.0000.877Onna0.0000.898Oron0.0000.885	0.063	0.311
Mbo         0.000         0.911           Mkpat Enin         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.063	0.313
Mkpat Enin         0.000         0.863           Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.066	0.326
Nsit Ibom         0.000         0.872           Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.062	0.308
Nsit Ubium         0.000         0.872           Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.063	0.312
Obat Akara         0.000         0.872           Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.063	0.312
Okobo         0.000         0.877           Onna         0.000         0.898           Oron         0.000         0.885	0.063	0.312
Onna         0.000         0.898           Oron         0.000         0.885	0.064	0.312
Oron 0.000 0.885	0.065	0.313
	0.064	0.316
$O_{\text{fl}}$ $(0.000 - 0.056 - 0.000)$	0.062	0.306
	0.062	0.306
~	0.063	0.310
	0.064	0.315
	0.001	0.306
		0.300
Uyo         0.000         0.878	0.062	0.300

BAYELSA				
Brass	0.000	0.901	0.050	0.317
Ekeremor	0.000	0.906	0.050	0.319
Kolokuma/Opokuma	0.000	0.899	0.050	0.316
Nembe	0.000	0.906	0.050	0.319
Ogbia	0.000	0.910	0.050	0.320
Sagbama	0.000	0.905	0.050	0.318
Southern Ijaw	0.000	0.901	0.050	0.317
Yenagoa	0.000	0.901	0.050	0.317
DELTA				
Aniocha North	0.000	0.838	0.086	0.308
Aniocha South	0.000	0.730	0.077	0.269
Bomadi	0.000	0.730	0.077	0.269
Burutu	0.000	0.739	0.078	0.272
Ethiope East	0.000	0.724	0.077	0.267
Ethiope West	0.000	0.727	0.077	0.268
Ika North East	0.000	0.722	0.076	0.266
Ika South	0.000	0.726	0.077	0.267
Isoko North	0.000	0.716	0.076	0.264
Isoko South	0.000	0.716	0.076	0.264
Ndokwa East	0.000	0.719	0.076	0.265
Ndokwa West	0.000	0.731	0.077	0.269
Okpe	0.000	0.724	0.077	0.267
Oshimili North	0.000	0.734	0.077	0.270
Oshimili South	0.000	0.724	0.077	0.267
Patani	0.000	0.726	0.077	0.268
Sapele	0.000	0.716	0.076	0.264
Udu	0.000	0.725	0.077	0.267
Ughelli North	0.000	0.734	0.077	0.271
Ughelli South	0.000	0.723	0.077	0.267
Ukwuani	0.000	0.727	0.077	0.268
Uvwie	0.000	0.730	0.077	0.269
Warri South	0.000	0.738	0.078	0.272
Warri North	0.000	0.733	0.077	0.270
Warri South-West	0.000	0.727	0.077	0.268
IMO				
Aboh Mbaise	0.000	0.923	0.062	0.328
Ahiazu Mbaise	0.000	0.918	0.061	0.327
Ehime Mbano	0.000	0.924	0.062	0.329
Ezinihitte	0.000	0.921	0.062	0.327
Idiato South	0.000	0.920	0.061	0.327
Idiato North	0.000	0.932	0.062	0.331
Ihitte Uboma	0.000	0.930	0.062	0.331
Ikeduru	0.000	0.920	0.061	0.327
Isiala Mbano	0.000	0.921	0.062	0.328
Isu	0.000	0.925	0.062	0.329
Mbaitoli	0.000	0.925	0.062	0.329

Ngor/Okpala	0.000	0.927	0.062	0.330
Njaba	0.000	0.915	0.061	0.325
Nkwangele	0.000	0.915	0.061	0.325
Nkwerre	0.000	0.934	0.063	0.332
Obowo	0.000	0.919	0.061	0.327
Oguta	0.000	0.928	0.062	0.330
Ohaji/Egbema	0.000	0.934	0.063	0.332
Okigwe	0.000	0.930	0.062	0.331
Onuimo	0.000	0.928	0.062	0.330
Orlu	0.000	0.922	0.062	0.328
Oru	0.000	0.915	0.061	0.325
Oru East	0.000	0.915	0.061	0.325
Oru West	0.000	0.915	0.061	0.325
Owerri Municipal	0.000	0.935	0.063	0.333
Owerri North	0.000	0.935	0.063	0.333
Owerri West	0.000	0.935	0.063	0.333
RIVERS				
Abua/Odual	0.000	0.911	0.092	0.334
Ahoada East	0.000	0.911	0.092	0.335
Ahoada West	0.000	0.911	0.092	0.335
Akuru-Toru	0.000	0.910	0.092	0.334
Andoni	0.000	0.909	0.092	0.334
Asari-Toru	0.000	0.909	0.092	0.334
Bonny	0.000	0.910	0.092	0.334
Degema	0.000	0.912	0.093	0.335
Eleme	0.000	0.907	0.091	0.333
Emuoha	0.000	0.905	0.090	0.332
Etche	0.000	0.907	0.091	0.333
Gokana	0.000	0.907	0.091	0.333
Ikwerre	0.000	0.908	0.092	0.333
Khana	0.000	0.904	0.090	0.332
Obia/Akpor	0.000	0.909	0.092	0.334
Ogba/Egbema/Ndoini	0.000	0.907	0.091	0.333
Ogu/Bolo	0.000	0.908	0.092	0.333
Okrika	0.000	0.904	0.090	0.331
Omumma	0.000	0.904	0.090	0.331
Opobo/Nkoro	0.000	0.909	0.092	0.334
Oyigbo	0.000	0.904	0.090	0.332
Port Harcourt	0.000	0.912	0.092	0.335
Tai	0.000	0.907	0.091	0.333

# APPENDIX B 1.1: LIST OF PARTICIPATING ORGANIZATIONS/INDIVIDUALS

UNDP-civil society consultative meeting in Abuja, 13 August 2004 UNDP-civil society consultative meeting in Port Harcourt, 22 February 2005 UNDP-civil society stakeholders meeting in Calabar, 2-3 June 2005 UNDP-civil society stakeholders meeting in Port Harcourt, 9 February 2006

## List of Participating Organizations/Individuals List of Participating Organizations for Niger Delta HDR publication

# **CSOs**

1)	Kayode Fayemi	Centre for Democracy and Development (CDD)
,	Stella Amadi	Centre for Democracy and Development (CDD)
	John Moru	ActionAids Nigeria
	Otive Igbuzor	ActionAids Nigeria
	Emmanuel Atuma	Centre for Rights to Health
	Sam Amade	Centre for Rights to Health
	Pamela Esiri	Law Environment and Development Associates (LEDAS)
	Legborsi Pyagbara	Movement for the Survival of the Ogoni People (MOSOP)
	Ledun Mitee	Movement for the Survival of the Ogoni People (MOSOP)
	Kigbara Younce	Movement for the Survival of the Ogoni People (MOSOP) Movement for the Survival of the Ogoni People (MOSOP)
,	Ekpiken-Ekanem Roibito	Women Action Organisation
	Emmanuel Obot	Nigerian Conservation Foundation (NCF)
,	Ade Majekodunmi	Nigerian Conservation Foundation (NCF)
	Nkoyo Toyo	Gender and Development Action (GADA)
	Okeke Anya	Gender and Development Action (GADA)
	Elizabeth Preye Joseph	Peace and Development Initiative for Africa (PADVIA)
	Nogi Imoukhuede	Women's Right Watch Nigeria
	Ekpenyong Bassey	Akpabuyo Bakassi Green Movement (ABGREMO)
	Wilson Essien	Ivorytop Consult
,	Andy Ogbunigwe	Accord for Community Development
	Patrick Ijegbo	Accord for Community Development
	Michael Knaikpo	Environmental Rights Action
	Nse Oyuko	Team Initiative for Development
	Patrick Chiekwe	Save Earth Nigeria
	Bill Knight	Pro-Natura International
	S. Okeowo	Poters Development Centre
	Nkim Nicholas F.E.	Fresh and Green
	Ekpo Nta	Centre for Agriculture and Rural Development
	Rev. Bright T.E.	Liberty Now
30)	Innih Achibong	Liberty Now
	Igwele, U	Green Croc Foundation
	Noble U. Akenge	Green Croc Foundation
	Nengi J. James	Bayelsa State Youths Federation
	J.O. Folarin	Country Women of Nigeria
,	J.F. Oluwatimenim	Country Women of Nigeria
	Amedu Andrew O.	Imo Self Help Organization Project
	Claribel Okpara	Concerned Group for Environment Population & Dev.
,	I.A. Ikwuabor	Volunteers for Clean Water & Clean Environment
	Obi Z. Osuji	Human Angle
40)	Obomo Spiff	Human Angle
41)	Olubunmi Dipo Salami	Baobab for Women's Human Rights
42)	Ezinne Ekekwe	Baobab for Women's Human Rights
43)	Angela Daniel	Women Entrepreneurs Association of Nigeria
44)́	Igbekele Jabwase	Environment and Mineral Resources
45)	Prosper Ezo Okoro	Delta Environment Network
46)	Adefemi Isumonah	Centre for Advanced Social Science

47)	L. Adele Jinadu	Centre for Advanced Social Science
48)	Israel Hikezie	Community Development Initiative
49)	Chizor Wisdom Dike	Community Rights Initiatives
50)	Victor Omodo	VICHEM Technologies
51)	Taiwo Olayinka	Junior Achievement Nigeria
52)	Alalibo Briggs	Ijaw Council for Human Rights
53)	Idongesit Umoh	Kebetkache Women Development &
		Resource Centre
54)	Ben Abidde	Living Earth Nigeria Foundation
55)	Seigha Victor Glasgew	Niger Delta Youth Movement
56)	Martins Egot	Development Concern
57)	Jude C. Munaonye	Living Hope Organization
58)	Dorgu Fortune T.	National Council for Women Societies
59)	Ekpenyong Bassey	Akpabuyo Bakassi Green Movement
60)	Chris Omusi	Edo State NGOs Action Committee
61)	Jonjon Oyeinfe	Ijaw Youth Council
62)	Femi Ajibola	New Nigeria Foundation
63)	Gloria Okemuo	Women's Edu. & Mothering Resource

### MEDIA

### 64) John Onah **Business** Day 65) Tunde Adeniyi **Business** Day 66) Ese Awhoty New-Age 67) Michael Faloseyi Punch Newspaper 68) Seniu Okanlawon Punch Newspaper 69) Senior Okonkwo Punch Newspaper 70) Cletus Akwaya This Day Newspapers The Guardian Newspaper 71) Kayode Ogunbunmi 72) Bagshaw Ntai Daily Independent

- 73) Ayinde Soaja
- 74) Abayomi Adeshida

# PRIVATE SECTOR

75) Macaulay Olagoke	Shell Petroleum Development Company (SPDC)
76) Okoro E. B.	Shell Petroleum Development Company (SPDC)
77) Apollos D. Nale	Shell Petroleum Development Company (SPDC)
78) O. C. Tawari	Shell Petroleum Development Company (SPDC)
79) M. B. Idiong	Mobil Producing
80) G. A. Ombeh	ChevronTexaco
81) Joe Jakpa	ChevronTexaco
82) Eyitoyo O. T.	ChevronTexaco
83) Obara O.	EPNL
84) Abimbola Osaikoya	EPNL

NTA Abuja

Vanguard Newspaper

Centre (WEMREC)

### **GOVERNMENT AGENCY**

85) Eze A. Nwa-uwa	Niger Delta Development Commission (NDDC)
86) Shedrack A. Akolokwu	Niger Delta Development Commission (NDDC)
87) Eyo E. Nyong	Niger Delta Development Commission (NDDC)
88) Atei Beredugo	Niger Delta Development Commission (NDDC)
89) Idumange John	Niger Delta Development Commission (NDDC)

### DEVELOPMENT AGENCY

90) Alex Stevens	Department for International Development
	(DFID)

### STATE GOVERNMENTS

- 91) Chinedu S. Brown
- 92) I. Irabor
- 93) Valentine Atta
- 94) Adie Pius J.
- 95) Boro, Kingsley Eyo
- 96) Cyril Anyanwu
- 97) Representative of
- 98) Representative of
- 99) Representative of
- 100) Representative of

### **CONSULTANTS**

- 101) Prof. Tony Imevbore
- 102) Mr. Victor Imevbore
- 103) Prof. S.I. Abumere
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- 105) Dr. Olu Oluwashola
- 106) Dr. G.C. Obute
- 107) Dr. Emma E. Osuji
- 108) Dr. A.O.I. Gabriel
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- 111) Dr. Bade Falade
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- 113) Prof. Willie Okowa
- 114) Prof. S. Ekpenong 115) Dr. P. Kassey Garba
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- 117) Dr. Olu Oluwasola
- 118) Prof. Niyi Gbadegesin
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- 120) Prof. Ben Aigbokhan
- 121) Mr. Pedro Aisesehi
- 122) Sola Ojo 123) Y. Opeke
- 124) O.I. Olatunji
- 125) Prof. A Adesomoju 126) Dr. A.A. Aderinto

- Abia State Governments Edo State Governments
  - Akwa Ibom State Governments
- Cross River State Governments
- Cross River State Governments
- Imo State Governments
- **Rivers State Governments**
- Bayelsa State Governments
- Delta State Governments
- Ondo State Governments
- Environmental Resources Managers Limited (ERML)
- Environmental Resources Managers Limited (ERML)
- ERML/University of Ibadan
- ERML/University of Ibadan
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- ERML/University of Ibadan
- ERML
- ERML **ERML/NDES**
- ERML/UN-Habitat
- ERML ERML ERML ERML ERML ERML/University of Ibadan ERML ERML ERML ERML ERML ERML ERML/University of Ibadan ERML/University of Ibadan

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127) Thierno Kane	UNDP
128) Emma Torres	UNDP
129) Sarah Bord-Sharp	UNDP
130) Tegegnework Gettu	UNDP
131) Samuel Harbor	UNDP
132) Ogonnaya Okoro	UNDP
133) Bertram Eguwatu	UNDP
134) Anthony Dioka	UNDP
135) Mary Symmonds	UNDP
136) Emmanuel Evbodaghe	UNDP
137) Bisi Adenigba	UNDP
138) Waziri Adio	UNDP
139) Ayodele Odusola	UNDP
140) Emmanuel Oladipo	UNDP



## TECHNICAL NOTE ON HUMAN DEVELOPMENT INDICES

The holistic human development paradigm requires several indicators to measure various aspects of socio-economic progress and human advancement. To compute the relevant human development indicators for the Niger Delta, four main indicators have been used: the HDI (human development index), HPI-1 (human poverty index for developing countries), GDI (gender-related development index) and GEM (gender empowerment measure).

# TECHNICAL NOTE 1: DATA REQUIREMENT, COLLECTION AND PRESENTATION

# 1.1 Areal Units for Data Collection and Presentation

It is common practice in a report of this type to use different areal units for presentation. This report, being a regional one and given the need to unmask the various dimensions of inequalities, calls for a combination of areal units, such as at the regional, state and local government levels. Given the dearth of data at the community level, local government areas were adopted as the appropriate smallest areal unit for data collection and presentation. There are 185 local government areas in the Niger Delta.

Why the choice of these? As is clearly evident in this report, all nine states of the Niger Delta rank at the top of human development measures in Nigeria. This means that the development challenges of the Niger Delta are not so much in terms of aggregate development performance, but in the vast inequalities that lurk beneath the surface, both regionally and in the urban/rural divide. The imperative of assessing these inequalities underscores the need to analyse data at the local government level.

## 1.2 Data Needs and HDI Calculation

The data needs may be categorized into two broad groups. First, data are required for the indicators to compute the human development indices. The HDI indicators include a long and healthy life (measured by life expectancy), knowledge (measured by adult literacy rate and gross enrolment ratio) and a decent standard of living (measured by GDP per capita [purchasing power parity (PPP) in US\$]). In the case of the HPI-1, the relevant indicators include a long and healthy life (measured by probability at birth of not surviving to age of 40), knowledge (measured by adult literacy rate) and a decent standard of living (measured by the percentage of the population not using improved water sources and the percentage of children under five who are underweight). For the GDI, the indicators are a long and healthy life (measured by female life expectancy and male life expectancy), knowledge (measured by female adult literacy rate and male adult literacy rate) and a decent standard of living (measured by female estimated earned income and male estimated earned income). Lastly, the GEM is calculated based on political participation (measured by female and male shares of parliamentary seats), economic participation and decision-making (measured by female and male shares of professional and technical positions) and power over economic resources (measured by female and male estimated earned income).

The standard UNDP methods and mathematical relationships (UNDP 2003) were used for computing each of the human development indices for this report. The methodology requires the selection of 'goalposts' for some of the indices. These also conform to UNDP standards in order to allow comparisons to the results from other regions of Nigeria and other countries.

Beyond the computation of the human development indices, data are also needed to provide baseline benchmarks for the Niger Delta. One of the objectives of this study is to provide this information. Data on a wide range of indicators outside the computation of the human development indices could measure progress or lack of it in the Niger Delta. Examples include indicators for governance, human rights, the rule of law, the environment, corruption, security, social capital and HIV&AIDS, to mention a few.

# 1.3 Data Availability and Data Gaps

In the early 1960s, Wolfgang Stolper, who was then the economic advisor to the newly independent Nigeria, chastised the country for always planning without facts. Four decades after the concern was raised, this uncomplimentary appellation is still very much warranted. The value of data for development planning is far from being appreciated by government officials and the vast majority of Nigerians, and data scarcity is the bane of Nigerian economic development planning. This challenge was faced once again in this study.

After an initial exhaustive search for existing secondary data on the indicators of interest, it became obvious that the data gaps are huge. For many of the indicators, data are either not available at all at both the state and local government levels, or are available only at the state level. Local data was found for very few of the indicators. Given that the Niger Delta is the most studied region in Nigeria, this dearth of local data is worrisome.

Attempts to fill the data gaps through fieldwork yielded some useful results, although there were still a number of holes. This was the case even for the indicators required to calculate the human development indices. Surrogate data were used in some cases, while data interpolation became necessary in others.

For the state calculations, GDP data were not available; internally generated revenue (IGR) was used as a surrogate. This substitution can be justified by the fact that all states in Nigeria derive their revenue from two main sources: statutory allocations from the Federal Government based on the Constitutional Allocation Formula to the three tiers of government, and the state IGR. Each state's IGR represents all income generated within the state, including personal income tax, withholding taxes, pools-betting and gaming machine taxes, stamp duties, vehicle licenses, among others. The preponderance of the informal sector and tax evasion, however, are major challenges to state revenue collection.

For the local government areas, IGR data were not readily available, so the composite GDP index calculations do not include them. The local HDI rankings essentially reflect life expectancy and knowledge, which means they cannot be summed up and compared to the state calculations.

While the income surrogate is clearly an important development indicator that measures economic modernization, its omission in the local government calculations does not render them invalid. A respectable level of human development does not necessarily hinge on unlimited income. The local HDI scores illustrate the importance of data availability at the local level, and also how a number of environmental challenges—such as terrain, urban/rural inequalities, settlement size and commercial oil exploitation—have affected human development in the region. The absence of local income data also indicates the quality of governance in the region.

# 1.4 Interpolation for Missing Data

The data acquisition strategy for this report involved strenuous efforts to obtain figures from state and local government offices to fill gaps. All state capitals and local government headquarters were visited during the study. When there was no data even for the selected surrogates, standard interpolation techniques made it possible to obtain robust estimates for the missing data, with little bias and an appreciable level of accuracy.

There are numerous standard interpolation techniques. Some, such as the moving average models, provide estimates by averaging the scores of selected neighbours. This method requires an objective way of selecting the appropriate number of neighbours, however. Other techniques, such as the trend surface model, use all the data points available. With this method, the problem of the number of neighbours does not arise. This report uses a combination of methods.

# TECHNICAL NOTE 2: CALCULATING THE HUMAN DEVELOPMENT INDICES (ADAPTED FROM UNDP 2003)

## 2.1 The Human Development Index (HDI)

The HDI is a summary measure of human development. Within the context of this report, it measures the average achievements in the Niger Delta region, its constituent nine states and 185 local government areas in three basic dimensions of human development:

- i. A long and healthy life, as measured by life expectancy at birth
- ii. Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight)
- iii. A decent standard of living, as measured by GDP per capital (PPPUS\$)

Before the HDI itself is calculated, an index needs to be created for each of these dimensions. To calculate these dimension indices—the life expectancy, education and GDP indices—minimum and maximum values (goal-posts) are chosen for each underlying indicator.

Performance in each dimension is expressed as a value between 0 and 1 by applying the following general formula.

Dimension index = <u>actual value – maximum value</u> maximum value – minimum value

The HDI is then calculated as a simple average of the dimension indices.

Goalposts for calculating the HDI: This report maintains the goalposts computed for the global Human Development Report in order to compare the results with other parts of the world where oil is major natural resource base. Given the level of resources generated from the region, it should rank as one of the best areas in the world in the three dimensions of human advancement.

	Maximum	Minimum
Indicator	Value	Value
Life expectancy at birth (years)	85	25
Adult literacy rate (%)	100	0
Combined gross enrolment ratio (%)	100	0
GDP per capita (PPP US\$)	40,000	100

Calculating HDI: While the computation for the life expectancy index, which measures the relative achievement of the region, a state or a local government area in life expectancy at birth, is straightforward, the calculation of the education index is not so. The education index measures the relative achievement in both adult literacy and combined primary, secondary and tertiary gross enrolment. First, an index for adult literacy and one for combined gross enrolment are calculated. Then these two indices are combined to create the education index, with two-thirds weight given to adult literacy and one-third weight to combined gross enrolment. The education index was measured thus: 2/3 (adult literacy index) + 1/3 (gross enrolment index). As earlier mentioned, IGR was used as a proxy for income at the state level.

Once the dimension indices have been calculated, determining the HDI is straightforward. It is a simple average of the three dimension indices.

HDI = 1/3 (life expectancy index) + 1/3 (education index) + 1/3 (GDP index).

### 2.2 The Human Poverty Index (HPI-1)

While the HDI measures average achievement, the HPI-1 measures deprivations in the three basic dimensions of human development captured in the HDI:

- A long and healthy life—vulnerability to death at a relatively early age, as measured by the probability at birth of not surviving to age 40.
- Knowledge-exclusion from the world of reading and communication, as measured by the adult illiteracy rate.
- A decent standard of living-lack of access to overall economic provisioning, as measured by the percentage of the population not using improved water sources and the percentage of children under five who are underweight.
- Calculating the HPI-1 is more straightforward than calculating the HDI. The indicators used to measure the deprivations are already normalized between 0 and 100 (because they are expressed as percentages) so there is no need to create dimension indices as for the HDI.

Calculating the HPI-1: An unweighted average of two indicators is used to measure deprivation in a decent standard of living.

Unweighted average : =  $\frac{1}{2}$  (population not using improved water sources)  $+ \frac{1}{2}$  (underweight children under five).

The formula for calculating the HP-1 is as follows: HPI-1=  $(1/3(P_1^{\hat{a}} + P_2^{\hat{a}} + P_3^{\hat{a}}))^{1/\hat{a}}$ 

Where

P<sub>1 =</sub> Probability at birth of not surviving to age 40 (times 100)

Adult literacy rate

 $P_{2=} P_{3=}$ Unweighted average of population not using improved water sources and underweight children under age five

### 2.3 The Gender-related Development Index (GDI)

While the HDI measures average achievement, the GDI adjusts the average achievement to reflect the inequalities between men and women in the following dimensions:

- A long and healthy life, as measured by life expectancy at birth
- Knowledge, as measured by adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio
- A decent standard of living, as measured by estimated earned income (PPP US\$)

The calculation of the GDI involves three steps. First, female and male indices in each dimension are calculated according to this general formula.

Dimension index = <u>actual value – maximum value</u> maximum value – minimum value

Second, the female and male indices in each dimension are combined in a way that penalizes differences in achievement between men and women. The resulting index, referred to as the equally distributed index, is calculated according to this general formula:

Equally distributed index = ((female population share (female index  $^{1-}$ )) + (male population share (male index  $^{1-}$ ))) $^{1/1-*}$ 

<sup>a</sup> measures the aversion to inequality. In the GDI <sup>a</sup> =2. Thus, the general equation becomes:

Equally distributed index =  $((\text{female population share (female index }^{-1})) + (\text{male population share (male index }^{-1})))^{-1}$ , which gives the harmonic mean of the female and male indices.

Third, the GDI is calculated by combining the three equally distributed indices in an unweighted average.

Goalposts for calculating the GDI

	Maximum	Minimum
Indicator	value	value
Female life expectancy at birth (years)	87.5	27.5
Male life expectancy at birth (years)	82.5	22.5
Adult literacy rate (%)	100	0
Combined gross enrolment ratio (%)	100	0
Estimated earned income (PPP US\$)	40,000	100

Note: The maximum and minimum values (goalposts) for life expectancy are five years higher for women to take into account their longer life expectancy.

GDI = 1/3 (life expectancy index) + 1/3 (education index) + 1/3 (income index)

The value of <sup>a</sup> is the size of the penalty for gender inequality. The larger the value, the more heavily a society is penalized for having inequalities. If <sup>a</sup> = 0, gender inequality is not penalized (in this case the GDI) would have the same value as the HDI). As <sup>a</sup> increases towards infinity, more and more weight is given to the lesser achieving group. The value 2, used in calculating the GDI, places a moderate penalty on gender inequality in achievement.

### 2.4 The Gender Empowerment Measure (GEM)

Focusing on women's opportunities rather than their capabilities, the GEM captures gender inequality in three key areas:

- Political participation and decision-making power, as measured by women's and men's percentage shares of parliamentary seats.
- Economic participation and decision-making power, as measured by two indicators—women's and men's percentage shares of positions as legislators, senior officials and mangers, and women's and men's percentage shares of professional and technical positions.
- Power over economic resources, as measured by women's and men's estimated earned income (PPP US\$).

For each of these three dimensions, an equally distributed equivalent percentage (EDEP) is calculated, as a population weighted average, according to the following general formula:

 $EDEP = \{ [female population share (female index <sup>1-*</sup>)] + [male population share (male index <sup>1-*</sup>)] \}^{1/1-*}$ 

<sup>a</sup>measures the aversion to inequality. In the GEM (as in the GDI)  $^{a} = 2$  which places a moderate penalty on inequality. The formula is thus:

EDEP = {[female population share (female index <sup>-1</sup>)] + [male population share (male index <sup>-1</sup>)]} -1

For political and economic participation and decision-making, the EDEP is then indexed by dividing it by 50. The rationale for this indexation: In an ideal society, with equal empowerment of the sexes, the GEM variables would equal 50% - that is, women's share would equal men's share for each variable.

Finally, the GEM is calculated as a simple average of the three indexed EDEPs.

# Female and Male Earned Income

Despite the importance of having gender-disaggregated data on income, direct measures are unavailable. For this report crude estimates of female and male earned income have therefore been derived.

Income can be seen in two ways: as a resource for consumption and as earnings by individuals. This measure is difficult to disaggregate between men and women because they share resources within a family unit. By contrast, earnings are separable because different members of a family tend to have separate earned incomes.

The income measure used in the GDI and the GEM indicates a person's capacity to earn income. It is used in the GDI to capture the disparities between men and women in command over resources and in the GEM to capture women's economic independence.

Female and male earned incomes (PPP US\$) are estimated using the following data:

- Ratio of the female non-agricultural wage to the male non-agricultural wage.
- Male and female shares of the economically active population.
- Total female and male population.
- GDP per capita (PPP US\$).