



Economic Commission
for Africa



Africa's Sustainable Development Bulletin

2005

Assessing Sustainable Development in Africa



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Contents

Editorial.....	iv
Sustainable Development in Africa: The Need to Assess Status and Track Progress	1
<i>By Israel Sembajwe, Kwadwo Tutu and Isatou Gaye</i>	
Institutional Responses to Sustainable Development: National Councils for Sustainable Development (NCSDs) in Africa	8
<i>By Isatou Gaye</i>	
Assessment of Progress in Implementing NEPAD in Southern Africa.....	14
<i>By Gladys Mutangadura</i>	
Assessing the Progress Made by Southern Africa in Implementing the MDG Target on Drinking Water and Sanitation	19
<i>By Gladys Mutangadura, Saskia Ivens and Stephen Maxwell Donkor</i>	
Water and Sustainable Development in the Countries of Northern Africa: Coping with Challenges and Scarcity	24
<i>By Lamine Gueye, Mokhtar Bzioui, and Oguntola Johnson</i>	
Structural Transformation for Sustainable Development in Africa	29
<i>By Joan Kagwanja and Josue Dione</i>	
AIDS and African Sustainable Development	36
<i>By Bjorg Sandkjaer</i>	
Demographic Change and the Achievement of MDGs in Africa	41
<i>By Amson Sibanda</i>	
International Migration in Africa: Opportunities and Challenges.....	45
<i>By Israel Sembajwe</i>	
State of Awareness on Ageing in Africa and Related Policies and Programmes	51
<i>By Israel Sembajwe</i>	
Rapid Urbanization in Africa: Impacts on Housing and Urban Poverty	55
<i>By Hassan M. Yousif</i>	

Editorial

This is the 2005 edition of Africa's Sustainable Development Bulletin, a publication of the Sustainable Development Division (SDD) of the Economic Commission for Africa (ECA) published annually in English and French, and widely disseminated in Africa and beyond, among planners, policy makers, universities and researchers, NGOs, international organizations and other experts. The Bulletin is also available on the SDD website at www.uneca.org/sdd/publications.htm

How far have African countries come in achieving the different aspects of sustainable development? What are the obstacles, and what are the opportunities and success stories? These are some of the questions that the broad selection of articles in this edition seeks to address, under the overarching theme of 'assessing sustainable development in Africa'

The content ranges from articles that seek to articulate an understanding of what sustainable development means in an African context, to the institutional mechanisms for the implementation of the sustainable development agenda at the regional, subregional and national level. A number of the articles assess the status of specific issues, investigating how far Africa has come in attaining internationally agreed targets for development in specific areas, also charting some of the positive experiences that have been made, as well as obstacles that remain in the way of achieving sustainable development in Africa.

All the articles have been written in accessible language and style providing information on critical issues itself and spotlighting the linkages in the attainment of sustainable development in Africa.

The articles also reflect the work of SDD and of related institutions. Importantly, taken together, the articles in this edition demonstrate that critical sustainable development issues are not isolated, but are interlinked.

We hope you find this edition useful, and invite you to help us make future editions even more relevant to your work by providing us with feedback, using either the form provided, or by sending us e-mail at asdb@uneca.org.

Sustainable Development in Africa: The Need to Assess Status and Track Progress

By Israel Sembajwe¹, Kwadwo Tutu² and Isatou Gaye³

Abstract

In this article, the need for assessing the status of sustainable development in Africa is rationalized. Then, the need for devising tools to facilitate the tracking of progress is discussed. While the complex and inter-related nature of challenges countries have to deal with to chart the way to sustainable development is recognized, the article defines sustainable development and its operationalization; highlights its importance; dwells on its assessment and the need to track future progress; points out the need for monitoring and evaluation tools; outlines ECA's role in the process; identifies data challenges; and provides the way forward. More importantly, the article opens a window for a selected range of sustainable development issues covered by other articles in this Bulletin, including institutional responses to sustainable development; progress in implementing NEPAD; coping with water scarcity; improving agricultural productivity; structural transformation; AIDS; demographic change and the MDGs; international migration; ageing; and rapid urbanization.

Introduction

Whether we focus on the implementation of actions related to Agenda21, the International Conference Population and Development-Plan of Action (ICPD-PoA), Beijing Platform for Action, Johannesburg Plan of Implementation (JPOI), Millennium Development Goals (MDGs), the New Partnership for Africa's Development (NEPAD) or the Poverty Reduction Strategy Papers (PRSPs), our collective effort is aimed at contributing to the attainment of sustainable development. To determine our success in the implementation of relevant policies and programmes, we need to know where we are starting from and the goals we want to achieve, and devise mechanisms and tools for monitoring and evaluating progress.

In this article, therefore, an attempt is made to rationalize the need, first of all, for assessing the status of sustainable development in Africa, and secondly, for devising tools to facilitate the tracking of progress. The World Summit for Sustainable Development (WSSD) regional initiative in Africa states that sustainable development in Africa "has remained elusive for many African countries" as poverty remained a major challenge for most of the countries and the continent has not yet benefited from the opportunities presented by globalization (SDD, in SDRA Chapter 1, forthcoming).

More specifically, the article responds to the following questions:

- What is sustainable development and how is it operationalized?
- Why is sustainable development important?
- Why is it necessary to assess sustainable development status and track progress?
- What tools should be used in monitoring and evaluating sustainable development?
- What is the role of the Economic Commission for Africa (ECA) in monitoring and evaluation?
- What should the way forward be?

Countries have to deal with complex and inter-related challenges countries to chart the way to sustainable development. Therefore, while this article will deal with the general concept of sustainable development and the need to assess its status in Africa, subsequent articles will touch on a selected range of sustain-

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able development issues of special importance to the region. The range will include issues such as institutional responses to sustainable development; progress in implementing NEPAD; coping with water scarcity; improving agricultural productivity; structural transformation; AIDS; demographic change and the MDGs; international migration; ageing; and rapid urbanization.

Sustainable development and its operationalization

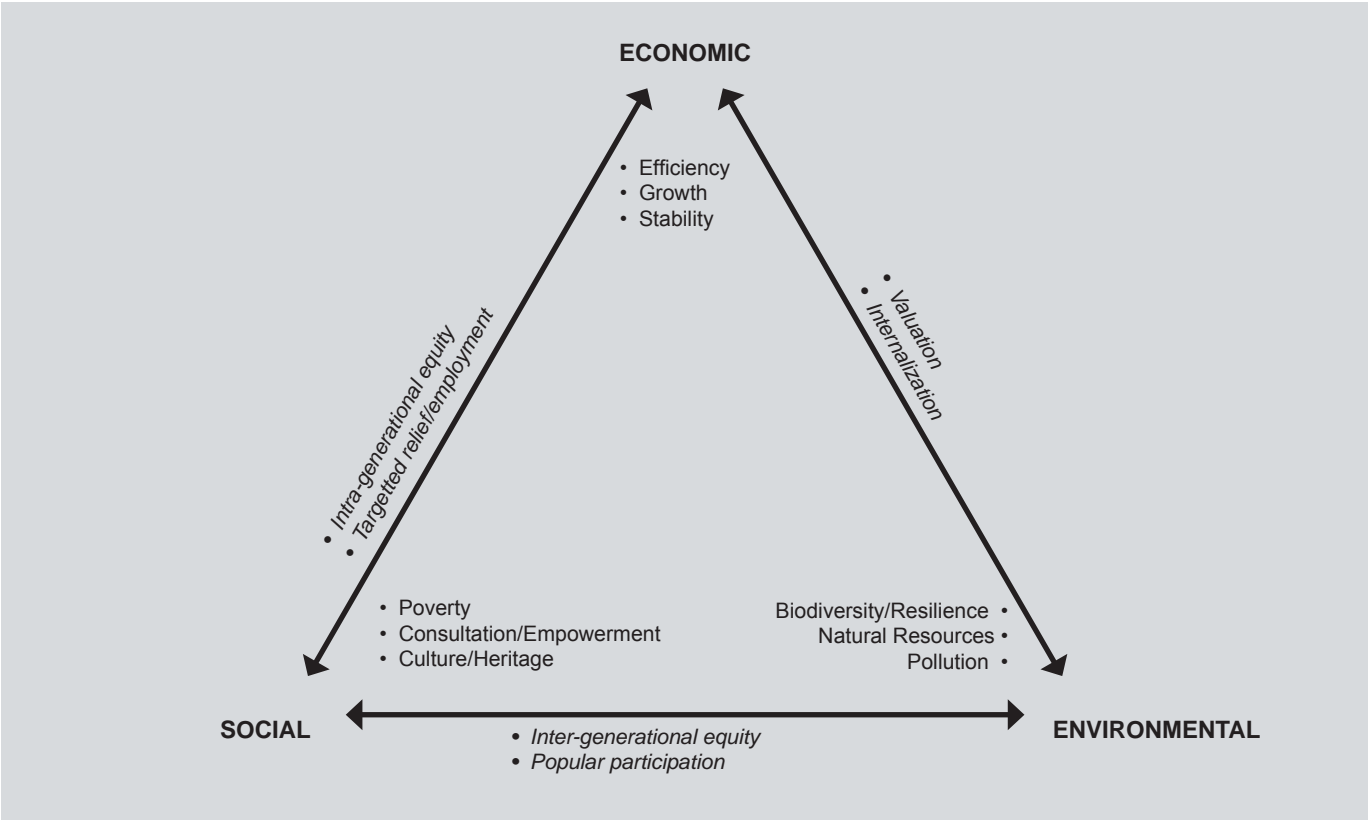
The concept of sustainable development resulted from a gradual shift in development theories and their focus. The sustainable development paradigm was conceived as a result of lack of social and economic progress for most developing countries, especially those in Africa from the development strategies undertaken over the period from the 1950s to the end of the 1990s.

Sustainable development, however, gained worldwide attention through the report of the World Commission on Environment and Development (WCED) entitled “Our Common Future”, otherwise known as the “Brundtland Report”. The Commission defined sustainable development as: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987). Since then, the United Nations has hosted many conferences and summits to address global economic, social and environment challenges. The one most directly relevant to global sustainable development concerns was the United Nations

Conference on Environment and Development (UNCED), also called the Earth Summit, held in Rio de Janeiro, Brazil, in 1992. The Rio Summit came up with an agreement that the protection of the environment, and social and economic development were fundamental to sustainable development. This led to the development of a global program of actions dubbed “Agenda 21”, designed to promote sustainable development for humanity.

A five-year review conducted in 1997 revealed that little progress had been made in implementing Agenda 21. The desired momentum for accelerated implementation and a political declaration affirming a renewed commitment failed to be generated. In light of this, the World Summit on Sustainable Development (WSSD) was held in 2002, to conduct a further (10-year) review of the implementation of the outcomes of UNCED, particularly Agenda 21, and to reinvigorate global commitment to sustainable development. The findings of the regional reviews conducted in the run-up to WSSD confirmed a generally low level of implementation of Agenda 21 which was particularly glaring for the Africa region.

The Summit came out with three outcomes aimed at strengthening the implementation of Agenda 21: the **Political Declaration**, the **Johannesburg Plan of Implementation** (JPOI) and the **Type II Partnerships** initiative. The Political Declaration reaffirmed global commitment to the objectives of sustainable development. The Plan of Implementation, contains targets and timetables to engender actions on a wide range of issues, most



Source: Munasinghe, 1993

of which converge with and reinforce the Millennium Development Goals (MDGs). The partnership commitments numbered over 200 at the time of the Summit and included major initiatives by development partners.

In order to better focus efforts to address the development needs of Africa, the African Heads of State adopted the New Partnership for Africa's Development (NEPAD) for special attention and support and strengthened the foundation for achieving sustainable development. The priorities which the NEPAD focuses on include: peace and security; democracy and good, political, economic and corporate governance; regional co-operation and integration; capacity building; agriculture; human development with a focus on health, education, science and technology and skills development; building and improving infrastructure, including information and communication technology (ICT), energy, transport, water and sanitation; promoting diversification of production and exports, particularly with respect to agro-industries, manufacturing, mining, mineral beneficiation and tourism; accelerating intra-African trade and improving access to markets of developed countries; environment; increasing domestic savings and investments; improving management of public revenue and expenditure; improving Africa's share in global trade; attracting foreign direct investment; and increasing capital flows through further debt reduction and increase ODA flows.

The major challenge of sustainable development is its operationalization. To make this possible, many authors have worked on the conceptual framework for sustainable development. Noteworthy among these is the framework by Munasinghe (1993). This conceptual framework and its interpretation are provided below:

The economic approach to sustainability is based on the Hicks-Landahl concept of the maximum flow of income that could be generated while at least maintaining the stock of assets (or capital), which yield these benefits (Solow 1986, Maler 1990). In relation to sustainability, capital is seen as comprising manufactured, natural and human components. The economic approach, considered alone, portrays perfect substitutability among these sources of capital. In other words, it asserts that it is possible to run down natural capital in the process of growth as long as enough savings are made and invested to compensate for the depletion of natural capital. But this view is considered as "weak sustainability" because it seeks to maintain the aggregate of monetary value of the total stock of assets, assuming a high degree of substitutability among the various types of capital.

The social concept of sustainability is people-centered, and seeks to maintain the stability of social and cultural systems, including the reduction of destructive conflicts (Munasinghe and McNeely 1995). Equity is an important aspect of this approach, and preservation of cultural diversity and cultural capital across the globe, and the better use of knowledge concerning sustainable practices embedded in less dominant cultures, are desirable. Therefore, modern society would need to encourage and incorporate pluralism and grassroots participation into a more effective deci-

sion making framework for socially sustainable development. However, from the environmental view of sustainable development, the problem of irreversibility, and catastrophic collapse make perfect substitutability questionable (Pearce and Turner, 1990). This view supports a "strong sustainability" rule, which requires the separate preservation of each category of critical asset (for example, manufactured, natural, socio-cultural, and human capital) assuming that they are complements rather than substitutes. Environmental sustainability also focuses on the stability of biological and physical systems (Munasinghe and Shearer, 1995). Of particular importance is the viability of subsystems that are critical to the global stability of the overall ecosystem, making it important to consider the environmental consequences in the process of growth.

Furthermore, "natural" systems and habitats may be interpreted broadly to also include manmade environments like cities. The emphasis is on preserving the resilience and dynamic ability of such systems to adapt to change, rather than conservation of some "ideal" static state, recognizing that natural resource degradation, pollution, and loss of biodiversity reduce system resilience.

Reconciling these various concepts and operationalizing them is a major challenge. The economic and social elements interact to give rise to issues such as intra-generational equity (income distribution). Any policy that gives emphasis only to growth without considering income distribution will not be sustainable in the long run because of the likely upheavals and sub-optimal labor utilization. The economic-environmental interface has yielded new ideas on valuation and internalization of environmental impacts. Finally, the social-environmental linkage has led to inter-generational equity (rights of future generations) and popular participation.

The foregoing arguments suggest the need for a broad integrated conceptual approach in which the net benefits of economic activities are maximized, subject to the maintenance of the stock of productive assets over time, and the provision of

Box 1: Priorities may vary

There are legitimate reasons for different perceptions of sustainable development and hence political priorities. Although the most significant ecological issues are of truly global importance, industrial and developing countries still have different problems. For the majority of the people affected by environmental problems in developing countries, lack of sanitation and sewage facilities, polluted drinking water, urban air pollution, shrinking water resources, and eroding topsoil are the most pressing problems. In industrial countries, where such problems have mainly been solved, the public focuses instead on issues such as depletion of the ozone layer as well as the accumulating carbon dioxide in the atmosphere and its potential impact on climate change.

Source: Novartis Foundation for Sustainable Development, 2004

a good livelihood for the people. To achieve sustainable development, therefore, there ought to be a trade-off between economic optimization, management of the natural resources stock and provision of optimal social goals. This suggests the need for a multi-criteria analysis to achieve a balance among the three pillars of sustainable development. It also suggests that the political priorities may vary from region to region and, possibly, country to country (see Box 1).

In summary, it is important that environmental and social concerns be integrated in the economic development agenda if development is to be sustainable. Sustainable development, therefore, integrates economic growth, social development and environmental protection and treats them as interdependent, mutually supportive and reinforcing pillars of long-term development. It also calls for participatory and multi-stakeholder approaches to dealing with development issues, involving a wide range of actors such as government, private sector, NGOs, academia, and grassroots organizations.

The importance of sustainable development

It has been argued theoretically that any development strategy that does not balance the social, economic and environmental concerns in an ultimate manner will not achieve sustainable development. Problems in one aspect will lead to sub-optimal development.

The history of development, especially in Africa, has proved this theoretical assertion. African countries have gone through several episodes of development strategies since independence. Prior to the 1960s, the strategy of the colonialists was to maintain a bare minimum of development system necessary for governance. There was limited infrastructure, education, health, industry, agriculture and services.

The late 1950s and 1960s saw the beginning of independence for several African countries. In the 1960s and 1970s development planning was the main strategy for development in most of these countries; and for many of them, this strategy of growth was state-based with the rationale that the State was big enough to mobilize resources for the daunting task of development.

Ironically, the only significant period of improved development for African countries was in the 1960s and early 1970s. Between 1965 and 1973, the average annual GDP growth rate for Africa was 5.7 per cent while the population growth rate was 2.7. This enabled a respectable per capita growth rate. It was not only the GDP growth rate that showed remarkable improvement but other indicators such as agriculture, manufacturing, investment, savings, exports and imports showed significant growth rates (AfDB, 2001).

However, from 1974 till 1999, there was poor performance by African economies due basically to increasing oil prices and poor governance. Between 1974-1979, the GDP growth rate was 3.5 per cent while for population, the growth rate was

2.9, leaving only a slight positive per capita growth rate. As a result of the poor economic performance, the majority of African countries embarked upon Structural Adjustment Programs (SAPs) during the 1980s and 1990s, which were prescribed for them by the World Bank and the International Monetary Fund, as well as Poverty Reduction Strategy Papers (PRSPs) from 1999. The shift to PRSPs occurred as a result of the acknowledgement by the World Bank and others that many adjustment measures generated losses among the poor. Furthermore, there was a connection between adjustment programmes and growing poverty, inequality and environmental degradation (UNCCD 2005).

The SAPs were meant to correct the macro-economic imbalances that had occurred as a result of state-controlled economies in most of the countries. They were also to generate quick growth to compensate for the long-term low average growth for the continent. Consequently, they did not integrate environmental and most social concerns. Even for the macro-economy, not much attention was paid to the important sectors, such as agriculture and industry. This led to the general failures of the SAPs.

Even for the PRSPs, the strategies were originally conceived in the context of the HIPC debt relief initiative and hence did not consider environmental and other concerns. It is only recently that attempts are being made to mainstream sustainable development strategies into PRSPs.

From the preceding discussion, it is clear that it is important to mainstream sustainable development into all development strategies. It is the only way to ensure that optimal economic growth will occur together with social advancement and sound environmental management.

The need to track progress in sustainable development in Africa

International frameworks and instruments such as Agenda 21, ICPD-PoA, Beijing Platform for Action and the Millennium Declaration recognize the need to integrate the economic, social and environmental concerns in the development process. Furthermore, they also recognize the need for coordination, monitoring and evaluation mechanisms in assessing the degree of implementation of policies and programmes focused on achieving sustainable development.

In this regard, UNCED recommended to governments to establish national coordinating institutions for sustainable development and to improve regional and sub-regional consultative processes to facilitate the exchange of data, information and experiences in the implementation of Agenda 21. The latter can be achieved by the promotion of appropriate monitoring and evaluation mechanisms. The same mechanisms would facilitate the work of the regional UN Commissions in fulfilling their mandate of promoting, monitoring and evaluating the integration of the economic, social and environmental dimensions of sustainable development into their work and the work of regional,

sub-regional and other bodies; and of assessing and tracking of progress in the achievement of development goals for sustainable development. Building on this, the United Nations Commission on Sustainable Development (CSD) recognized the need for indicators for assessing status and tracking progress.

Indicators for assessing sustainable development

The major challenge in this monitoring and evaluation exercise is how to know what indicators to use in monitoring the process and how to use them to generate some indices in the medium-term and to develop a Sustainable Development Index for Africa in the long-term. Utilization of indicators will provide an important tool for measuring progress towards sustainable development goals (including goals on related frameworks such as the MDGs). The results will also be useful inputs to decision-making on the formulation of future policies and programmes as well as the modalities for their implementation.

In order to identify suitable indicators for use in assessing progress towards achieving sustainable development in Africa, SDD has reviewed the CSD Work Programme on Indicators of Sustainable Development conducted during the period 1995-2000. The work was based on the analysis of information in four areas (social, economic, environmental and institutional), and produced a framework containing 134 indicators. Participants in this important work included UN lead agencies such as UNDP, FAO, WHO, UNEP, and UN-HABITAT.

Some of the themes and subthemes covered are as follows:

Social: Education; Employment; Health/water supply/sanitation; Housing; Welfare and quality of life; Cultural heritage; Poverty/Income distribution; Crime; Population; Social and ethical values; Role of women; Access to land and resources; Community structure; Equity/social exclusion.

Environmental: Freshwater/groundwater; Agriculture/secure food supply; Urban Coastal Zone; Marine environment/coral reef protection; Fisheries; Biodiversity/biotechnology; Sustainable forest management; Air pollution and ozone depletion; Global climate change/sea level rise; Sustainable use of natural resources; Sustainable tourism; Restricted carrying capacity; Land use change.

Economic: Economic dependency/Indebtedness/ODA; Energy; Consumption and production patterns; Waste management; Transportation; Mining; Economic structure and development; Trade; Productivity.

Institutional: Integrated decision-making; Capacity building; Science and technology; Public awareness and information; International conventions and cooperation; Governance/role of civic society; Institutional and legislative frameworks; Disaster preparedness; Public participation.

For purposes of harmonization and standardization, any future work on developing tools for monitoring and evaluation should

be built on this foundation. This approach will also enhance the comparability of results across regions, sub-regions and individual countries.

Data availability and harmonization in Africa

Availability of statistics in African countries has improved over time. But for some countries, data are not available on a number of indicators, and even for those countries with data, past trends are usually limited to recent years. Another problem is that the data available are usually outdated. In addition, both at national and international levels, there is considerable duplication of effort, and different standards used to collect data. This limits comparability, integration and optimum utilization of such data at all levels, and calls for concerted effort to coordinate, harmonize and standardize data collection as well as to optimize their utilization.

In the 1999 report of the Committee on Development Information (CODI) of ECA it was observed that many African countries did not have current statistics (ECA 1999). Amongst the strategies proposed to address the situation were 1) use of new ICT technologies to collect and disseminate data; 2) training as many statisticians as possible; 3) promotion of greater public awareness and user needs assessment; 4) prioritization; 5) promotion of private contributions to the budget; and 6) increased regional coordination. In 2001, in a follow-up to the first meeting of the Sub-committee on Statistics of CODI, member States were urged to include a sound statistical component in their various programmes and plans, and to exchange their experiences in statistical legislation in order to define a regional prototype adaptable to the various countries (ECA 2001). The need for coordination of statistical activities at all levels remained one of the highest priorities of the committee.

More recently, at a global level, in the 2004 report of the Secretary General to the United Nations Statistical Commission, it was recognized that coordination of statistical services at national and international levels was an area where further and concerted work was required (United Nations 2004). It was noted that at national level, there are many producers of statistics who must be encouraged to work collaboratively in order to produce coherent and consistent results. At the international level, too, it was noted that different international organizations and agencies duplicated effort in producing statistical information. The result was the existence of different data sets and series on similar subjects. This called for future coordinated data collection from countries by international organizations and usage of harmonized standards and classifications of generated statistics (for example see box 2 on social statistics).

With this background in mind, the SDD has been engaged in the collection of data on indicators from national and international sources, selecting priority indicators on which information is adequate and consistent, putting together a common data set on sustainable development from disparate sources, and adding value to the indicators by first designing comparative indices and

Box 2: International efforts to improve data collection and utilization

The United Nations Statistics Division and each participating agency and organization, including the International Labour Organization (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Office of the United Nations High Commissioner for Refugees (UNHCR) and the World Health Organization (WHO), in collaboration with the regional commissions, will assess the quality and availability of national social statistics in their areas of responsibility and competency. The review will consider the totality of data sources such as population and housing censuses, population and household surveys and administrative records. It will include an assessment of the ability of countries to produce regularly statistics or reasonable quality, with explanations of standards for assessing data quality. The review will also cover timeliness of data reporting, conformity to international standards and recommendations, and the extent to which units and classifications are harmonized across sources. The findings will be published as technical reports. The Statistics Division will produce its report in 2004 while the other agencies and organizations will do so in 2005-2006.

Source: United Nations 2004

in the long-run generating a sustainable development index.

The role of ECA in monitoring and evaluating sustainable development in Africa

The ECA, as the coordinating body for the African review of progress achieved in implementing policies and programmes aimed at achieving sustainable development in the region, requires appropriate monitoring and evaluation mechanisms and tools. In coordinating the African review of progress in implementing policies and programmes on sustainable development, the ECA has largely relied on a consolidated periodic report (based on country reports) which it submits to the CSD. Rigorous analysis and tracking of sustainable development have so far been minimal due to lack of requisite human resources and appropriate tools for doing so.

Consequently, through the Sustainable Development Division (SDD), the Commission has decided to produce a periodic analytical report on the status of sustainable development in the continent entitled the **Sustainable Development Report on Africa** (SDRA). This will add to the pool of materials and tools for monitoring and evaluation. It is suggested that the inaugural report for 2004-2005 will focus on the management of land-based resources for sustainable development. The report is expected to be in two parts. The first part will concentrate on monitoring and evaluating progress made in achieving sustainable development in Africa in general, utilizing a common set of suitable indicators for all countries in the region (with more details provided from selected country case studies). The second part will cover selected topics on priority issues suited to the reporting period and related to the CSD thematic areas. The information in this report will augment ECA's work on the coordination of the African review of progress in formulating

and implementing policies and programmes on sustainable development. The report will be produced biennially, each issue concentrating on a selected priority topic related to CSD and a general review of progress.

The way forward

ECA will continue to coordinate the African review of progress in formulating and implementing policies and programmes on sustainable development. The consolidated report periodically submitted to CSD will continue to be an important input to the process. This process will, however, be strengthened by the production of the SDRA.

At country level, member States are expected to honour commitments made at regional and international levels for concerted effort to coordinate, harmonize and standardize data collection as well as to optimize their utilization. This will make it easy for them to monitor and evaluate progress made towards achieving internationally-agreed development goals such as the MDGs. Decisions for poverty eradication will be better informed and the attainment of sustainable development will be assessed with a better perspective.

The Sustainable Development Report on Africa calls on countries to:

1. Create an enabling environment at all levels to achieve sustained economic growth, peace stability and security, good governance, human rights, and gender equality;
2. Support the implementation of the vision of NEPAD and other established regional and subregional efforts;
3. Promote technology development, transfer, and diffusion, development of effective science and technology institutions;
4. Support national programs and strategies for education, strengthen research institutions and support achievement of the MDGs;
5. Enhance industrial productivity, diversity and competitiveness of the African countries, enhance the contribution of the industrial sector, particularly mining, minerals and metals, to the sustainable development;
6. Strengthen capacities to undertake environmental legislative policy and institutional support for sustainable development;
7. Deal effectively with energy problems in Africa Develop affordable transport systems and infrastructure so as to promote connectivity for sustainable development;
8. Develop affordable transport systems and infrastructure so as to promote connectivity for sustainable development;
9. Provide resources to meet needs related to adverse climatic conditions, extreme weather events, sea level rise etc.; and
10. Provide technical support for afforestation and reforestation, and build capacities for sustainable forest management.

On its part, the Economic Commission for Africa will make increased effort to promote utilization of available data on indicators from national and international sources by selecting prior-

ity indicators on which information is adequate and consistent, putting together a common data set on sustainable development from disparate sources. Also, partnerships for coordinated data collection from countries by international organizations and usage of harmonized standards and classifications of generated statistics will be advocated for, as well as greater public awareness on the need for a sound statistical component in various national programmes and plans to facilitate monitoring and evaluation as well as informed decision making. The ECA will also support capacity building for statistical services at all levels.

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Institutional Responses to Sustainable Development: National Councils for Sustainable Development (NCSDs) in Africa

By Isatou Gaye

Abstract

Governments have been encouraged to establish national coordinating institutions for sustainable development, underscoring the importance of well functioning institutions in the implementation of the sustainable development agenda. In 2003-2004, the Sustainable Development Division of the ECA conducted an assessment of the how well this has been implemented in Africa. This article presents some of the key findings from this assessment, revealing that while most countries have institutional mechanisms for sustainable development, they still face challenges related to capacity and should, as appropriate, be strengthened.

Introduction

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992, invited governments to establish national coordinating institutions for sustainable development or similar entities, otherwise known as National Councils for Sustainable Development (NCSDs). Further, the World Summit on Sustainable Development (WSSD) recommended that governments should establish and strengthen, as appropriate, national coordinating institutions or entities for sustainable development. The recommendations of UNCED and WSSD underscore the importance of well functioning institutions in the implementation of the sustainable development agenda.

UNCED and WSSD also recognize that the adoption and implementation of appropriate policies and strategies, as well as participatory approaches and mechanisms, are fundamental to successful implementation. In this regard, it is important that all institutions, policies, strategies, participatory mechanisms, and other instruments and processes established, ensure a coordinated and effective implementation of sustainable development agreements at all levels.

This article provides an overview of the implementation of these recommendations by African countries. It is based on an assessment report on NCSDs in Africa¹, produced by the ECA's Sustainable Development Division (SDD) in 2005. The report is informed by a study conducted between 2003 and 2004, involving 37 countries, of which a questionnaire survey provided information on 23 countries² (survey countries), while a desk review provided information on 14 others³ (non-survey countries), as well as additional information on the survey countries. All data presented were collected as part of the study mentioned above.

What are National Councils for Sustainable Development?

NCSDs can be seen as high-level national entities facilitating and coordinating government efforts in implementing sustainable development-related agreements at the national level, within the framework of multi-stakeholder participation. In the context of Africa, NCSDs should be in a position to complement the efforts of the Africa- Committee on Sustainable Development (A-CSD) and the United Nations Commission on Sustainable Development (UNCSD), in following up on progress in the implementation of sustainable development-related agreements at the regional and global levels respectively, through inter alia, regular report-

¹ See National Councils for Sustainable Development (NCSDs) in Africa: A Review of Institutions and their Functioning (ECA, 2005).

² Algeria, Benin, Botswana, Cameroon, Central Africa Republic, Egypt, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

³ Burkina Faso, Burundi, Comoros, Djibouti, Guinea Bissau, Madagascar, Mauritania, Niger, Rwanda, Senegal, Togo, Sao Tome and Principe, Tunisia, Uganda,

ing to these bodies. The composition and roles of NCSDs may vary depending on national and regional specificities. However, key common features are their multi-stakeholder character and integrative approach.

Box 1: Common roles of NCSDs

- Facilitating the focused participation and cooperation between civil society and governments;
- Integrating economic, social and environmental dimensions of sustainable development as well as policy and action at different government levels;
- Localizing global agreements and other international, regional and sub-regional conventions related to sustainable development;
- Assisting governments in decision-making and policy formulation, and providing clear guidance on policy tools, regulations and indicators of sustainable development;
- Disseminating information to relevant stakeholders; and
- Monitoring and evaluating progress in the implementation of the sustainable development agenda, including noting of best practices and milestones.

ECA 2005, as adapted from Earth Council, 2000

Institutional Arrangements for Sustainable Development at Global, Regional and Local Levels

Global: UNCED established the high-level UNCSD. The main function of UNCSD is to monitor progress in the implementation of Agenda 21 and related activities. WSSD called for the strengthening of UNCSD and emphasized that the body should continue to be the high-level Commission on Sustainable Development within the United Nations and should serve as a forum for consideration of issues related to the integration of the three dimensions of sustainable development.

Regional: In the context of the mandate given to it at UNCED and at WSSD to facilitate and promote the regional implementation of Agenda 21 and WSSD outcomes, and in conformity with its status as the UN regional arm in Africa, ECA has played, and continues to play, an important role in the implementation of the sustainable development agenda in the region. In 1997, the Ministers responsible for economic and social development and planning in Africa established the Committee on Sustainable Development (CSD), now referred to as the Africa- CSD (A-CSD). A key function of the A-CSD is to provide guidance to the work of the Commission on matters related to sustainable development, and to serve as the regional advisory arm in Africa of the UNCSD.

Local: Principle 10 of the Rio Declaration, by extension, supports the handling of sustainable development issues at the appropriate level, and the Johannesburg Declaration resolved to strengthen and improve governance at all levels for the effective implementation of Agenda 21, the Millennium Development Goals (MDGs) and the JPOI. The JPOI recommends countries to establish institutions, including at the local level, and enhance local institutional arrangements for sustainable development.

Box 2: Linkages among sustainable development bodies at various levels

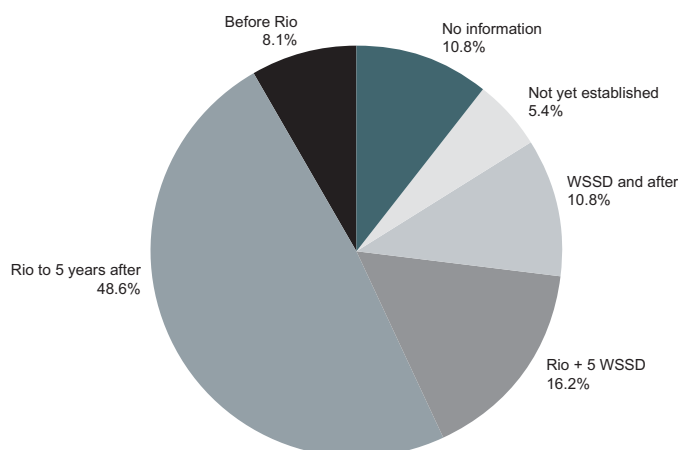
NCSDs form an integral part of the overall institutional arrangements for sustainable development, which should be linked to sustainable development coordinating entities at global, regional and local levels. In this regard, institutional arrangements at the different levels should be seen as mutually supportive. In the build-up to WSSD, Regional Commissions examined their potential role in the implementation of the outcomes of the Summit. It was recognized that given their positioning at the regional level, Regional Commissions could help bridge the gap between global agreements in sustainable development and national priorities and concerns (UN/DESA 2002). Local level implementation is also considered crucial. Implementation experiences at this level could help inform policy formulation and implementation processes at the national level.

Highlights of the NCSD-Africa Report

Institutional Framework

Most countries have established NCSDs. Of the 37 countries studied, only two (Zambia and Burundi) have not yet established such an entity. UNCED provided a major impetus to the establishment of these bodies (see Figure 1). Among the survey countries, 36 per cent have bodies that are multi-stakeholder entities with names mirroring NCSD or closely related. However, it is striking that none of these has a broad mandate with corresponding broad-based activities that address all three dimensions of sustainable development. Further, among the 35 NCSDs, 43 per cent are multi-stakeholder environment-related entities or single environment agencies, and 46 per cent have environment-related mandates. Notwithstanding, it is encouraging to note that eight of the countries that have established NCSDs have recognized that their bodies are not NCSDs in the strict sense; an additional two indicated that their bodies were of an interim nature, and seven were in the process of establishing "proper" NCSDs.

Figure 1: Establishment of NCSDs relative to the 3 major global forums on sustainable development

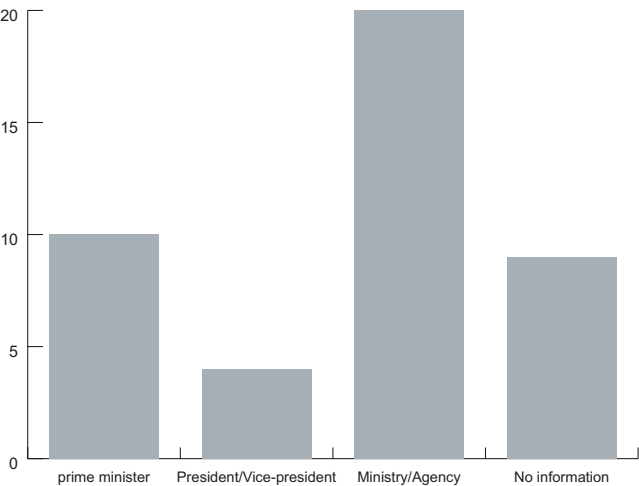


Location of NCSDs within government administrative structure

All countries with bodies located under the Office of the President/Prime Minister consider that the high level positioning ensures effective coordination. With respect to NCSDs located in ministries (see Figure 2), it is suggested that such location ensures continuity and effective collaboration with other sectoral ministries. However, inter-ministerial rivalries present a major threat to the effective functioning of such NCSDs. Seventy-eight per cent of NCSDs, chaired by the Prime Minister, President or Vice President, or located under their Offices, execute environment-related activities. This is also true for those NCSDs with broad mandates. Thus, the location of the body within government administrative structure is a useful, but a weak indicator compared to the actual policy influence of the body and the demonstrated political will.

More than half of the NCSDs in the study countries have been decentralized. This is closely linked to the local government decentralization process, which invariably, is linked to the democratization process in the region. Coordination between the bodies and their decentralized structures is mostly assured through various multi-stakeholder committees, which allow for direct communication.

Figure 2: Location within government administrative structure



Representation to NCSDs

Membership of government institutions to most NCSDs cuts across all sectors. Representation from environment and natural resources, planning and finance-related government ministries and agencies, and is quite satisfactory. However, representation from social sector related ministries and agencies could be improved. Major groups are represented in most NCSDs (see Table 1). However their representation is generally not broad and more needs to be done in terms of the representation of certain major groups, particularly workers and trade unions, parliamentarians, indigenous people, farmers, women and youth groups.

Table 1: Representation from major groups- survey countries

Representation of major groups	Countries
All 9 major groups	-
6-8 major groups	Botswana
4-5 major groups	The Gambia**
2-3 major groups	Benin, Ghana* Kenya, Malawi Nigeria*, Seychelles, Swaziland, Ethiopia, Morocco, South Africa, Zimbabwe*
1 major group	Egypt, Lesotho, Tanzania
No major group	Algeria, CAR, Cameroon, Mauritius

* = Development partners represented
** = Development partners and parliamentarians represented

Participation of Major Groups⁴

Although none of the survey countries has a specific strategy for stakeholder participation, this has been institutionalized through incorporation in thematic, national and sectoral policies and strategies, and as a matter of standard practice. The criteria used to determine membership of major groups in NCSDs are quite pertinent, as they largely relate to the relevance of their interventions to sustainable development issues as well as expertise, experience, effectiveness and overall contribution to the implementation of the sustainable development agenda. Major groups undertake a wide range of activities, which are quite relevant to the sustainable development agenda. Countries are aware and appreciate the power of IEC in promoting sustainable development objectives. In this regard, countries use a combination of IEC tools, strategies and approaches in empowering individuals, major groups, communities and relevant stakeholders to play active roles in the implementation process.

Collaboration, Coordination and Integration

There is generally a good level of collaboration in the execution of activities, and mechanisms for coordination have, to varying degrees, been established in a large majority of survey countries. Kenya and Malawi have established donor-government working groups and institutionalized regular coordination meetings. Countries use coordination, participatory, consultative and sensitization mechanisms and approaches to integrate the three dimensions of sustainable development into their work. Many countries also cited Environmental Impact Assessment (EIA) as an integrative tool. The use of Strategic Environmental Assessment (SEA) for integration at the level of policies, programmes and plans was mentioned in the case of Ghana and Benin.

Policies, Strategies and Plans

Countries have adopted different combinations of policies, strategies and plans, to address sustainable development issues (see

⁴ The Major Groups identified in Agenda 21 are: women, children and youth; indigenous people; non-governmental organizations; local authorities; workers and trade unions; business and industry; scientific and technological community; and farmers.

Table 2). The variation in combinations is an indication of the different perceptions that countries have of sustainable development. Policies, strategies and plans listed include those addressing national and rural development (Vision 2020s; National and Rural Development Plans); poverty (including PRSPs); environment; natural resources; agriculture; social issues; economic development; and sustainable development in the broad sense (NSSDs). It is encouraging to note that 75 per cent of countries that have adopted PRSPs have included them among their lists of sustainable development principles and concerns are being integrated into national development plans. Some countries have revised their policies to take into account principles of sustainability, participation, efficiency as well as integrative, and harmonized development.

Global agreements need to be incorporated or translated into national policies and strategies as well as other implementation instruments before any meaningful action can be taken. Most countries have incorporated or were in the process of incorporating these agreements in their various national development plans and/or sectoral strategies. South Africa, Lesotho, Kenya, Ghana, Zimbabwe, Egypt, and Cameroon have organized, or are in the process of organizing, national consultations in this regard. Some of these consultations have resulted in the development of roadmaps and response strategies to the Johannesburg Plan of Implementation (JPOI) adopted at WSSD.

Table 2: Sustainable Development Policies, Plans & Strategies and National Development Plans (survey countries)

Type of Policy, Plan, Strategy	Sustainable Development Policy, Plan and Strategy
Environment-related only	Botswana, Egypt, Seychelles, Zimbabwe
Environment and natural resources	Mauritius, Mozambique
Environment and economic sectors and National Vision	Tanzania
Addressing all three pillars including National Visions/ Development Plans and PRSPs	The Gambia, Swaziland
Covering all three pillars	Namibia
Environment- related and PRSPs	Cameroon, Ethiopia, Kenya, Lesotho
Environment- related and National Visions / Development Plans	Algeria, Nigeria
Environment-related and rural development plan	Morocco
Environment-related, NSSD and PRSPs	Malawi
PRSPs and National Visions	Ghana, Zambia
National Development Plans / Visions only	South Africa
Other	CAR*

* - Inter-ministerial framework document on SD

The desk review revealed that all 14 non-survey countries have adopted many national policies, strategies and plans in various sectors of the economy. Uganda and Rwanda have adopted

National Visions. Mauritania, Uganda, Burkina Faso, Togo, Rwanda and Madagascar have adopted poverty reduction/ eradication policies and programmes, while Sao Tome and Principe and Burundi were in various stages of elaborating these. Burundi intends to address poverty reduction in the context of sustainable development. Burkina Faso was in the process of revising its PRSP to incorporate a more holistic and integrated approach with a view to providing a framework for its NSSD. Niger and Tunisia have already adopted their NSSDs.

Legislation

Most countries consider their framework environmental legislation as providing the legal basis for addressing sustainable development issues. A few, (South Africa, Ghana and Ethiopia), consider their national constitutions as serving this purpose. The NCSDs of most countries were established by framework environmental legislation, except for a few, which were established by presidential or prime ministerial decrees or orders (see Table 3). From information obtained, all non-survey countries except Guinea Bissau have a framework environmental law (or code) that addresses the environmental dimension of sustainable development.

Table 3: Legislative framework (survey countries)

Type of Legislation	Legal Framework for Sustainable Development
The Constitution	Ethiopia, Ghana, South Africa
Presidential / Executive Decrees / Order	Algeria, Nigeria
Framework Environment Law	Benin, Botswana ^D , Cameroon, Kenya, Lesotho ^D , Malawi, Swaziland, Tanzania ^D , Zimbabwe
Many pieces of environment-related legislation specified	Egypt, Mauritius, Morocco, Mozambique
Many pieces of cross-cutting legislation specified	The Gambia
Other	Namibia ^{**}

^{**} = National Planning Commission Act; ^D = In draft

Funding and Implementation Experiences

Funding is clearly a constraining factor to the effective functioning of NCSDs, and the implementation of the sustainable development agenda in Africa. The location of the NCSD under a high level office (Office of the President/Prime Minister) does not automatically guarantee adequate funding. The adequacy of funding is determined, among other factors, by the economic situation of the country and the priority attached to activities being implemented. Many development partners support sustainable development-related activities. Most countries have not established financing mechanisms to generate additional funds, but continue to depend on government budgetary allocations and donor funds. A few have established environmental funds.

Success Stories

To varying degrees, countries have registered some success in terms of establishing institutions, putting in place policies, strate-

gies, and the necessary coordinating mechanisms and processes for the smooth functioning of NCSDs, and the implementation of the sustainable development agenda (see Table 4).

Table 4: Success stories – approach and process related

Category	Countries
Development and institutionalization of coordinating, collaborating/ participatory / consultative mechanisms	Mauritius, Nigeria, South Africa
Through participatory approaches, reached consensus on assessments and reports pertaining to sustainable development in general and to WSSD in particular, as well as response strategies to JPOI including the development of NSSDs	Ghana, Malawi, Mozambique, Nigeria, South Africa, Zimbabwe
Implementation of sectoral activities	Algeria, Cameroon, Egypt, Ethiopia, The Gambia, Ghana, Kenya, Malawi, Mauritius, Morocco, Seychelles, Swaziland, Tanzania

Setbacks

All survey countries, except one, cited inadequate institutional capacities, funding and/ or human resources as setbacks in the implementation process. Such setbacks have stalled progress and even eroded gains made, especially in countries where civil wars and political unrest persist. Factors that present the most threat to the implementation of the sustainable development agenda are conflicting or overlapping mandate/legislation resulting in institutional rivalries and parallel processes. Others include Africa's marginalization in the globalization process, the unsustainable debt burden, population pressure and social inequalities.

Opportunities

It is encouraging to note that countries are aware of the many opportunities that exist to enhance the implementation of sustainable development-related agreements. Type II partnership initiatives were launched at WSSD to complement government commitments to the implementation of the JPOI. These initiatives involve governments, business, the private sector, NGOs and other partners. Actions so far initiated by countries are: making links with development partners; awareness raising; information sharing; and, dialogue. However, judging by the responses provided, most countries are either not aware of these initiatives, or have not fully internalized their benefits.

Conclusion and recommendations

African countries, to varying degrees, have made progress in establishing institutions and putting in place the necessary instruments and other relevant processes to facilitate the implementation of the sustainable development agenda. However, these institutions do not adequately fulfil the role of NCSDs and a lot remains to be done to strengthen them, particularly with regard to eliminating the environmental bias and addressing the three dimensions of sustainable development in a holistic and

integrated manner. Countries have adopted many policies, strategies and plans, but perceptions and approaches are different. Furthermore, countries are yet to rationalize these to ensure that they complement each other and to avoid multiple planning processes and duplication of efforts and resources. Capacity (institutional, financial, human and technological) is a major constraining factor to the effective functioning of NCSDs as well as to the implementation of policies, strategies and plans.

It is therefore recommended that ECA and partners should collaborate and coordinate efforts in assisting countries to establish or strengthen (as appropriate) NCSDs or similar bodies. The name, mandate, location and organizational structures of such bodies should allow for horizontal and vertical linkages, and ensure that the three pillars of sustainable development are appropriately addressed. In restructuring and strengthening NCSDs, it should be ensured that structures and achievements of existing ones are built upon and continuity assured. The composition of NCSDs should be broad-based taking into account countries' respective sustainable development priorities and specificities. Trade unions, indigenous peoples, parliamentarians, farmers, women and youth groups should be better represented in NCSDs, and private sector representatives should be encouraged to be more actively engaged in activities. The Africa-CSD is an important link between national-level action and global-level processes on sustainable development. In this regard, the participation of all member States at meetings of the regional body is very important to ensure that all members have equal opportunities to express issues of concern, contribute to discussions and arrive at the same level of understanding on issues tabled.

Since many countries may not have adequately internalised what constitutes sustainable development policies, strategies and plans, it is necessary to assist them in putting these in place. The multiplicity of policies, strategies and plans should be carefully considered and rationalised in order to avoid duplication of efforts and to save on scarce resources. If existing strategies are found wanting, they should be strengthened taking into account sustainable development principles, country needs, priorities, specificities and lessons learned, rather than initiating completely new processes. The design of policies and strategies should include investment plans that adequately address resource requirements. Countries should also be assisted to identify and establish/ strengthen innovative financing mechanisms to supplement government and donor funds. The scarcity of financial resources also calls for well targeted spending and prudent management of resources.

Capacity must be enhanced. Equally important is the prioritization of needs and actions in light of available capacity and to ensure that the most relevant and pressing needs are dealt with first, and adequately. The effective implementation of international recommendations on sustainable development institutions, policies and strategies calls for new and better ways of doing things. It requires accountability on the part of governments including the management and allocation of resources for development.

This can only be realized if the political will exists to effect the necessary changes and undertake relevant actions to promote sustainable development. New and additional resources required to implement sustainable development strategies are considerable and are above the capabilities of African countries. In this regard, the provision of appropriate and adequate development assistance to African countries is pertinent.

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Assessment of Progress in Implementing NEPAD in Southern Africa

By Gladys Mutangadura¹

Abstract

In 2001, African states adopted the New Partnership for Africa's Development (NEPAD). The aim is to further African development, by placing African countries, individually and collectively, on a path of sustainable growth and development, to promote active participation of African countries in the world economy and in the globalization process and to promote the role of women in all activities. This article assesses progress in implementing NEPAD's objectives in the southern African sub-region, finding that some coordinating structure is in place in all countries, and some progress towards actual implementation has been made, particularly in infrastructure development.

Introduction

The New Partnership for Africa's Development (NEPAD) is a vision for Africa adopted by the African Heads of State and Government in July 2001 as the continent's principal agenda for development. The Regional Economic Communities (RECs) and African countries are designated as the key implementers of NEPAD programmes. African countries are expected to integrate NEPAD into their national plans and programmes and ensure implementation of NEPAD at country level. The RECs are expected to be active in the identification and prioritization of projects and activities that enhance the implementation of NEPAD programmes in the sub-regions.

How far, however, have the RECs and African countries come in achieving the goals they set in 2001? In answer to this question, this article seeks to assess the progress made in the implementation of NEPAD at national and sub-regional levels in southern Africa², identify the major challenges and suggest recommendations that can enhance the implementation of NEPAD.

This article is based on a study conducted by the southern Africa regional office of the Economic Commission for Africa. The study methodology involved a synthesis of existing literature on progress on implementing NEPAD; a questionnaire specially designed to collect country specific information on implementation of NEPAD from key government offices (Ministries of Foreign Affairs and Ministries of Planning), the civil society and the general public; and interviews with key officials of the NEPAD Secretariat and the Development Bank of Southern Africa (DBSA).

NEPAD Objectives

The objectives of NEPAD include poverty eradication; placing African countries, both individually and collectively, on a path of sustainable growth and development; promoting active participation of African countries in the world economy and in the globalization process; and promotion of the role of women in all activities. NEPAD recognises the wide-ranging number of African problems – a colonial legacy, weak governing capacity, and the marginalisation of Africa within a global context and the depth of African resources – mineral, environmental, and cultural resources and identifies priority areas that can help address these problems and achieve sustainable development in Africa. The priority areas of NEPAD's Initial Action Plan are detailed in box 1.

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² Countries in Southern Africa include Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.

Box 1. Priority areas identified in NEPAD's Initial Action Plan

- Peace and security;
- African Peer Review Mechanism for both Political and Economic Governance (APRM);
- Agriculture - Comprehensive Africa Agriculture Development Programme (CAADP);
- Human Resource Development - eradication of communicable diseases (HIV/AIDS, Malaria and Tuberculosis), education and poverty reduction;
- Market Access— promotion of intra-African trade and increased access to markets of industrialized countries;
- Regional Infrastructure Development – Information Communication and Technology (ICT), energy, transport, and water and sanitation;
- Environment;
- Increased capital flows – debt reduction and foreign direct investment

The expected outcomes of NEPAD are: economic growth and development and increased employment; reduction in poverty and inequality; diversification of productive activities; enhanced international competitiveness and increased exports; and increased African integration. The expected outcomes of NEPAD are similar to what the Millennium Development Goals (MDGs) aim to achieve notably eradicating widespread and severe poverty (MDG Goal 1), promote accelerated growth and sustainable development (MDG Goal 7), Human Resource Development: education and health (MDG Goals 2,3,4,5,6), Increased capital flows – debt reduction and foreign direct investment (MDG Goal 8). NEPAD thus reinforces the MDGs and NEPAD is acknowledged as a framework for realizing the MDGs in Africa.

Progress made in implementing NEPAD in Southern Africa

This section outlines the progress that has been made in setting up institutional structures to coordinate NEPAD at national level, the level of sensitization on NEPAD in member states, status on including NEPAD in national plans and policies, progress made in implementing NEPAD projects in the member states and progress in the implementation of NEPAD by RECs in Southern Africa.

Establishment and location of institutional structures for coordinating NEPAD activities at country level

Institutional structures and mechanisms are the vehicles through which the goals of NEPAD can be implemented at national level. The establishment of an appropriate institutional framework, such as an inter ministerial committee or a national secretariat, to develop a national implementation strategy, is important in ensuring the implementation and monitoring of NEPAD in the country. In most countries (Lesotho, Mauritius, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe) the Ministry of Foreign Affairs is the one coordinating NEPAD activities. In other countries (Malawi, Swaziland and Angola),

NEPAD activities are being coordinated by the Ministry responsible for planning because of the need to integrate NEPAD into existing planning systems. In Botswana, the Development Unit of the Office of the President coordinates NEPAD activities in the country. Although no information is available at this stage regarding which of the arrangements is producing better results, the creation of these structures demonstrates commitment by countries to the NEPAD framework.

Progress in sensitization of NEPAD

Generally responses to the questionnaire indicate that government seemed to be well sensitized in all responding countries. Civil society was rated to be partially sensitized. Private sector was rated as not fully sensitized in all countries with the exception of South Africa and Malawi. All reporting countries noted that the general public had not been sensitized on the NEPAD programme. The main gaps were people based in rural areas. Such feedback indicates the need to intensify sensitization efforts on NEPAD for all stakeholders in general and for the private sector and general public in particular.

The status of integrating NEPAD into national development plans and policies

Responses to the questionnaire indicate that none of the countries have developed a national NEPAD implementation plan or strategy except for Zambia where a draft implementation plan is being developed. However some countries are already aware of the need to integrate NEPAD into the national development plans, and strategies. For example in Malawi, the presentation of the Ministry of Economic Planning and Development at the national NEPAD workshop highlighted that the major task for the country is to properly articulate Malawi's strategic interests (as reflected in the Vision 2020, Malawi Poverty Reduction Strategy Paper and Malawi Economic Growth Strategy) so that the national development agenda is advanced through the NEPAD initiative (Government of Malawi, 2004). Other countries such as South Africa, Namibia and Lesotho indicated that their national plans already address NEPAD objectives of economic growth and development and increased employment; reduction in poverty and inequality; and diversification of productive activities.

Status of implementation of NEPAD priority programmes

NEPAD is currently focusing on promoting the following programmes: the Comprehensive African Agricultural Development Programme (CAADP), the Short-Term Action Plan for Infrastructure (STAP), the African Peer Review Mechanism, NEPAD Environment Initiative, NEPAD Health Strategy, Education, and Science and technology. The following passage gives highlights on progress made on the key areas.

Agriculture

NEPAD formulated a Comprehensive Africa Agriculture Development Programme (CAADP) that seeks to restore agricultural growth, rural development and food security in the African region. National Medium-Term Investment Plans (NMTPs) and bank-

able projects were prepared or are being prepared in Angola, Malawi, Mozambique, Swaziland, Zambia, Zimbabwe, South Africa, Lesotho, Namibia, and Botswana using funding provided by FAO (NEPAD-FAO, 2005). The NEPAD Secretariat has held meetings with SADC and COMESA to prepare investment projects that include the ones identified in NMTPs. NEPAD's consultations with all the RECS culminated in the development of CAADP implementation action plans for each sub-region that were presented at a continental workshop in Ghana in May 2005. NEPAD is now facilitating resource mobilization to support RECs in implementing the action plans. All countries responding to the questionnaire indicated that they were participating in the development of CAADP investment programme.

Infrastructure

The RECs in collaboration with member states, the World Bank, African Development Bank and the Development Bank of Southern Africa have been working on NEPAD's infrastructure short-term action plan (STAP), and the Medium to Long Term Strategic Framework (MLTSF) that identified infrastructural projects that can be implemented in the short term and medium to long-term in energy; transport (road and air); water and sanitation; and ICTs. With funding from CIDA, a NEPAD Project Preparation Facility was established and is managed by the African Development Bank and the Development Bank of Southern Africa. The purpose of the facility is to contribute to mobilization of technical and financial resources to strengthen the capacity of African institutions and governments to formulate viable infrastructure development projects and programmes that can attract public and private investments. The Facility funds activities of an advisory or operational nature related to preparation of infrastructure projects and programmes within the framework of NEPAD. Projects currently being handled under the NEPAD Project Preparation and Feasibility Study Fund facility include the following:

(1) **Energy:** The Zambia-Tanzania-Kenya Electricity Interconnection and the WESCOR/Inga Hydro electricity plant (DRC, Angola, Namibia, Botswana, South Africa); (2) **ICT:** Com 7 (Comafica) and East African submarine cable system (EASSY) (3) **Transport Sector:** Kazungula Bridge; and (4) **Water Sector:** Greater Limpopo transfrontier park. The projects are at different levels of being assessed for their feasibility. Progress made by RECS in implementing projects identified in NEPAD's STAP are detailed under the section detailing progress implementation by RECs.

African Peer Review Mechanism

The primary purpose of the African Peer Review Mechanism (APRM) is to foster the adoption of policies, standards and practices that lead to political stability, high economic growth, sustainable development and accelerated sub-regional and continental economic integration through sharing of experiences and reinforcement of successful and best practice. Currently, 23 countries have signed the APRM Memorandum of Understanding, thereby acceding to being reviewed by their peers. Six countries in the sub-region have acceded to APRM: Angola, Lesotho, Malawi, Mauritius, Mozambique, and South

Africa. A review is under way in Mauritius and South Africa will be the next country from the sub-region to be reviewed.

Environment

An action plan on the Environment Initiative of NEPAD that includes over 200 projects was endorsed by the African Union Summit in Maputo in July 2003. The plan covers such areas as combating land degradation, drought and desertification; conserving Africa's wetlands; conservation and sustainable use of marine, coastal and freshwater resources; preventing, controlling and managing invasive species; combating climate change; cross-border conservation and management of natural resources; and assessment and early warning for natural disasters. At the African Ministerial Conference on the Environment held in March 2005, projects were prioritized into a short list of approximately 68 projects that are ready for implementation and to be presented to potential partners at the Partnership Conference that is still to be held.

Health

The AU/NEPAD Health Strategy is based on, strengthening health systems and services; scaling up programmes against disease and conditions related to pregnancy and childbirth; empowering individuals and communities to improve their health; mobilizing and effectively using sufficient sustainable resources; and sharing available health services equitably. Responses from countries did not indicate progress in the implementation of health projects under the NEPAD Health Strategy, but they however indicated that many of the countries' health strategies are already aligned.

Education

NEPAD's education priorities focus on improving curriculum development, more and better access to internet communication technologies, expanded access to secondary education, the promotion of networks of specialized research and higher education institutions, and overall better quality of and access to education at all levels. Questionnaire responses from Mozambique and South Africa indicated that the e-school project is being implemented in those countries. In South Africa, pilot inter-institutional linkage programme has been developed between selected Nigerian Polytechnics and their South African counterparts.

Science and technology

Flagship programmes under NEPAD's Science and Technology initiative include supporting the establishment of a continent wide network of centers of excellence in science and technological innovation, facilitating leveraging of increased public expenditure on science and technology, facilitating building of an African consensus and common strategy on biotechnology and biosafety, facilitating the development of an African strategy on intellectual property protection, human resource capacity development, and science and technology policy development. In the sub-region, the National Laser Center of South Africa, was designated as part of the NEPAD African Laser Center of excellence.

Progress in the implementation of NEPAD by Regional Economic Communities in Southern Africa

SADC

SADC has responded to NEPAD by developing the Regional Indicative Strategic Development Plan (RISDP), which is a 15-year blueprint that is being implemented in five-yearly phases. The objectives and priority areas of the RISDP and NEPAD are similar. The priorities covered by both initiatives include peace, security, democracy, good governance, capacity building, poverty eradication, gender and development, HIV and AIDS, science and technology; information and communication technologies (ICT); agriculture and food security, environment, social and human development, infrastructure, trade and economic liberalization (SADC, 2004).

The main areas in which SADC and NEPAD will work together include the following³:

- In agriculture: Under CAADP, SADC and NEPAD Secretariats will collaborate in the development of specific projects and interventions at the regional and national levels.
- In Environment: SADC Environment Ministers will fast track the implementation of priority projects.
- In Education: The SADC Secretariat will identify priority areas for inclusion in the NEPAD programme.
- In Health: SADC Secretariat will identify areas of collaboration with NEPAD in the areas of the manufacturing and production of generic drugs on HIV and AIDS, and mosquito nets; and The NEPAD Secretariat will assist in mobilizing resources for the implementation of the Action Plan of the SADC HIV and AIDS Strategic Framework.
- On Science and technology: SADC Secretariat will work with NEPAD to identify areas of collaboration in centers of excellence, designing of flagship programmes, and strengthening the capacity of SADC.
- On Tourism: SADC will identify and implement cross-border collaborative initiatives that promote regional integration.
- On Capacity Building: SADC Secretariat will work with NEPAD to facilitate capacity building at both national and regional levels.
- On Infrastructure: SADC is working on the following NEPAD STAP priority projects: i) Kazungula Bridge, ii) SADC Interconnectors, iii) Assessment of Surface Water, iv) Okavango Project, v) SADC Regional Information Infrastructure, vi) Capacity Building Needs, and vii) Implementation of Yamoussoukro Decision.

COMESA

COMESA and the NEPAD Secretariats have formulated programmes for implementation in the areas of agriculture and infrastructure. In January 2005, COMESA held a CAADP meeting in Dar es Salaam with member states, and other stakeholders to reach agreement on the main components of the CAADP investment programs and initiatives for the East and Southern

Africa region, including resource requirements, detailed implementation action plans, coordination arrangements, and target launch dates.

COMESA is also leading in the development of regional infrastructure projects in the sub-region under NEPAD's STAP and MLTSF. COMESA is working on the following NEPAD STAP priority projects: i) Yamoussoukro Decision; ii) ICT: (a) Regional ICT Policy and Regulation, (b) COMTEL; iii) Water Management: (a) Nile Basin Initiative (b) Safe Navigation of Lake Tanganyika/Malawi; iv) Road Transport Facilitation: (a) One Stop border Post (b) Axle Load Harmonization (c) Efficiency improvement of Railways, Roads and Ports (d) Transport Reform and Integration Support Facility for Policy Institutional and Regulatory Reforms and Assisting member in implementing Regional agreed interventions (see Box 2).

Box 2. NEPAD Related road transport projects being implemented by COMESA

Overload Control along Road Corridors

A regional Overload Control Project is being carried jointly by COMESA, EAC, ECA and SADC through the SSATP programme. This will entail preparation of a synthesis report including the documentation of best practices and the preparation of draft guidelines. There will then be a regional workshop to consider and adopt the guidelines. SSATP Programme is funding this component. There will be need to fund further work to facilitate national implementation and capacity building in the states. The main constraint faced is the lack of funding to prepare model overload control system and to customise it for member states.

Establishment of One Stop Border Posts and Strengthening Stakeholders Associations for Trade Facilitation

Pilot projects are being carried out in Malaba (Kenya and Uganda) and in Chirundu (Zambia and Zimbabwe). The Malaba project is receiving some assistance from the USAID but no funding has been made available for Chirundu and Kasumbalesa (Zambia-Congo DR). The main constraint is funding to finance consultancies and stakeholder participation in building consensus. Request for funding has been made to the ADB.

Institutionalisation of the Yamoussoukro Decision

The competition regulations have been prepared jointly for COMESA/EAC/SADC and have been adopted. Preparation of implementation procedures and the establishment of a regional joint monitoring unit are being prepared with some funding from the EU.

Safety of Navigation on Lakes Tanganyika/Malawi/Niassa/Nyasa Project

The model safety regulations prepared through the assistance of IMO have been completed and circulated to member states. The outstanding issues include the customisation of the regulations and capacity building in member states. There is need for funding the customisation of the regulations in member states and also training of personnel to enforce the regulations

³ From SADC, 2004, Report of the Senior Officials Meeting on NEPAD.

Challenges experienced in implementation of NEPAD in member states and the sub-region

- **Lack of a national level secretariat:** The most common challenge reported by member states is lack of a substantive NEPAD coordinating body or office or committee that could spearhead the implementation process at country level. This coordinating body has to be set up within national structures that are already in existence.
- **Lack of a National Plan of Action for NEPAD:** There is no implementation plan or framework for implementation of NEPAD available in most countries. This makes it hard to plan and monitor implementation at national level.
- **Low awareness and sensitization of NEPAD, and lack of full participation by all stakeholders:** Some countries indicated lack of knowledge on NEPAD between key stakeholders private sector and the general public to be a major stumbling block in its implementation.
- **Poor coordination:** The implementation of NEPAD demands the co-operation of more than one agency or stakeholder. Some stakeholders especially civil society and private sector are not fully involved with the processes of internalizing NEPAD within the country and this is hampering the full adoption of the initiative.
- **Institutional capacity constraints due to lack of financial and human resources:** Some member states indicated lack of human and financial resources for implementing NEPAD programmes.
- **Lack of sharing of experiences between countries in the implementation of NEPAD:** Countries can potentially benefit from the experiences of other countries in implementing NEPAD, but such sharing of experiences has not been promoted as yet.
- **At sub-regional level, creation and sustaining implementation capacity:** The RECs are constrained with both human and financial capacity in implementing NEPAD programmes and enhanced coordination for effective resource mobilization and implementation of regional projects poses a major challenge.

Conclusions and Recommendations

All countries in the southern African region have established some national focal point structures to coordinate NEPAD activities within the country, and some countries in the sub-region have already acceded to APRM. Southern African countries and RECs have been actively involved in developing NEPAD strategy and action plans on agriculture, health, environment, infrastructure, education, and science and technology. Some projects especially in infrastructure are already under implementation, while in the other sectors such as agriculture implementation is about to commence.

Based on the findings discussed above, the following recommendations to enhance implementation of NEPAD are suggested;

- Integration of NEPAD priorities into national plans and pro-

grammes to ensure its successful implementation.

- Sensitization and education campaigns so that the public becomes more articulate, knowledgeable and better able to participate in NEPAD implementation efforts.
- Promotion of effective coordination of all stakeholders for the implementation of NEPAD priorities.
- Sharing of experiences and information. Disseminate exemplary success stories on NEPAD experiences from other countries eg. on APRM and other projects. This is critical to enable countries overcome bottle-necks and obstacles being experienced.
- Capacity building to meet the human and financial needs required for successful implementation of NEPAD at national and sub-regional levels. There is need to dramatically increase the capacity of RECs and other NEPAD implementing agencies, both on a short term and long term basis for accelerating effective implementation of NEPAD projects.

The major challenges to implementing NEPAD include lack of a national level secretariat, lack of a National Plan of Action for NEPAD, low awareness and sensitization on NEPAD, poor coordination among the key stakeholders and the general public, and lack of adequate financial, human and material resource capacity to sustain implementation at both national and sub-regional levels.

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Assessing the Progress Made by Southern Africa in Implementing the MDG Target on Drinking Water and Sanitation

By Gladys Mutangadura, Saskia Ivens¹ and Stephen Maxwell Donkor²

Abstract

Safe drinking water and hygienic sanitation facilities are preconditions for success in the fight against poverty, hunger, child deaths and gender inequality. All African countries have committed to the Millennium Development Goals, where target 10 is to halve “by 2015 the proportion of people without sustainable access to safe drinking water and sanitation”. This article details the progress made by countries in the Southern African sub-region since the MDG baseline year of 1990, finding that there has been a general positive trend in the sub-region. However, the pace of improvement must be accelerated if the MDG target is to be reached by 2015, particularly in rural areas.

Introduction

Ensuring access to clean water and sanitation is one of the core pre-requisites for sustainable development. Access to water and sanitation is a right, a basic need for survival, a requirement for reducing poverty, and for achieving positive health outcomes. Poor access to water and sanitation is directly linked to occurrences of diseases such as diarrhea, cholera and typhoid. Provision of adequate and clean drinking water, basic sanitation and waste disposal, together with simple personal hygiene measures can prevent these diseases (WHO 1996). Much of the suffering from a lack of access to water and sanitation is borne by the poor, those who live in degraded environments, and overwhelmingly by women and girls.

This article seeks to chart progress in attaining the agreed goal of halving, by 2015, the proportion of those without access to safe drinking water and sanitation. The key finding is that despite overall positive developments, the pace of improvement is too slow to meet the goal by 2015.

Efforts to ensure access to water and sanitation

Improving access to water and sanitation has been the thrust of most governments, UN agencies and other development partners dating back to the 1980s which evidenced the declaration of the International Decade for Water and Sanitation that emphasized the need for sanitation, hygiene education, improved community participation and a greater role for women in water and sanitation projects. Globally, improvements in water supply and sanitation were recorded but millions of people still lacked access to safe water supply and proper sanitation facilities.

A very poignant point to note was that Africa was the only continent where coverage for access to water and sanitation was not improved over the decade due to a combination of factors such as high population growth rate and inadequate investments in water and sanitation. The African Water Vision 2025 (UN Water/Africa 2004) was developed in answer to the overall challenges in the water sector including those of domestic water supply and sanitation.

To further address this challenge, one of the eight Millennium Development Goals (MDGs) adopted by all the countries and the international community addresses improved water supply and sanitation. Target 10 of Millennium Development Goal number 7 calls on governments to “halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water and the proportion of people who do not have access to basic sanitation (see Box 1). Provision of these basic necessities makes possible the achievement of some of the other Millennium Development Goals such as those on completing primary schooling, girls’ education, under-five mortality, maternal mortality and poverty eradication (MDGs 1, 2, 3, 4 and 5).

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Box 1. Water-related Millennium Development Goal, Target and Indicators	
MDG 7: Ensure Environmental Sustainability	
<p>Target 10. Halve by 2015 the proportion of people without sustainable access to safe drinking</p>	<p><i>Indicators for monitoring progress</i></p> <ul style="list-style-type: none"> • Proportion of population with sustainable access to an improved water source, urban and rural • Proportion of population with access to improved sanitation, urban and rural

Assessment of progress towards the MDG target for water and sanitation

Positive overall trends

Most countries in Southern Africa have made notable progress towards improving access to clean water supply and sanitation as shown in Table 1. All the countries tremendously improved water accessibility coverage for the period 1990 to 2002³. In 2002 the total number of people with access to improved water in the sub-region was 84 million (or 70% of the total population) compared to 58 million (or 62% of the entire population) in 1990. Southern Africa performed better than sub-Saharan Africa whose improved water coverage increased from 49% in 1990 to 58% in 2002, however, the wide variation in access to improved water sources in Southern Africa should be noted. Southern Africa performed below the world aggregate improved water coverage that improved from 77% in 1990 to 83% in 2002 and below the aggregate for the developing regions that improved from 71% in 1990 to 79% in 2002.

Table 1: Water and sanitation in Southern Africa

Country	Population with sustainable access to improved water source (%)		Population with sustainable access to improved sanitation (%)	
	1990	2002	1990	2002
Angola	32	50	30	30
Botswana	93	95	38	41
Lesotho	52*	76	37	37
Malawi	41	67	36	46
Mauritius	100	100	99	99
Mozambique	32*	42	25**	27
Namibia	58	80	24	30
S. Africa	83	87	63	67
Swaziland	43*	52	36*	52
Zambia	50	55	41	45
Zimbabwe	77	83	49	57

Source: WHO and UNICEF, 2004, * 1994 figures from WHO, WSSCC and UNICEF, 1996, ** 1999 figure from SADC.

The countries that recorded the greatest increase in the number of people with access to improved water source in Southern Africa were Angola, Mozambique, and Malawi that started off at

the lowest values in 1990. Lesotho and Namibia achieved more than 20% increases in the proportion of people with access to improved water source. Analysis of the figures leads to the conclusion that Mauritius has already reached the 2015 target while the other countries in Southern Africa, except for Zambia, are on track.

The progress made in sub-regional sanitation coverage was not as good as in improved water supply (see Table 1). The percentage of people with access to improved sanitation rose from 47% in 1990 to 50% in 2002. Although the wide variation in sanitation coverage in Southern Africa should be noted, Southern Africa performed better than sub-Saharan Africa as a whole, where overall sanitation coverage increased from 32% in 1990 to 36% in 2002, and better than the aggregate for developing regions, whose sanitation coverage increased from 34% in 1990 to 49% in 2002. The countries that made substantial progress include Swaziland, and Malawi that had started off with low percentages of people with access to improved sanitation. In 2002, in only four of the eleven countries did more than half of their populations have access to sanitation, namely Mauritius, South Africa, Swaziland and Zimbabwe. Sanitation coverage in Mozambique, Angola and Namibia stood at less than 30 per cent in 2002, and sanitation improvement rates for all three were among the lowest in the world (WHO and UNICEF 2004). Further analysis indicates that except for Swaziland and Mauritius, all countries are lagging behind in achieving the target by 2015.

Rural-urban disparity

About 60 per cent of the 120 million people in Southern Africa live in rural areas. Despite a general positive trend in the sub-region, many people, especially in rural communities are still without access to improved water sources and sanitation. The disparity between rural and urban is significant as illustrated by Figures 1 and 2. In Angola, Mozambique, Swaziland and Zambia, more than half the rural population did not have access to improved water sources in 2002.

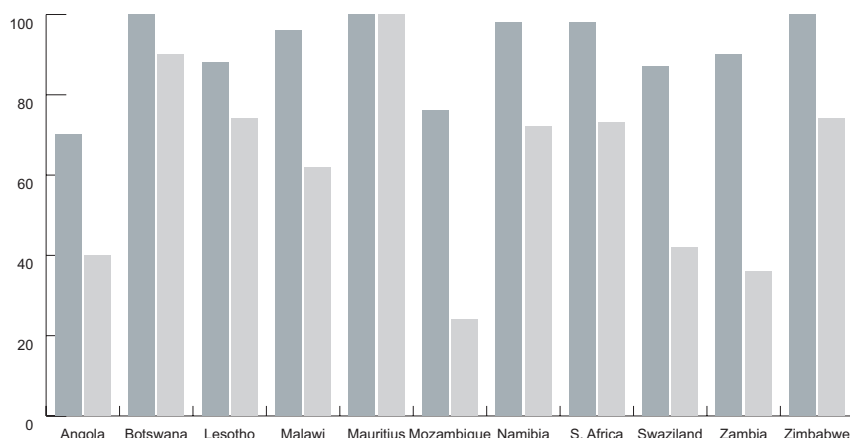
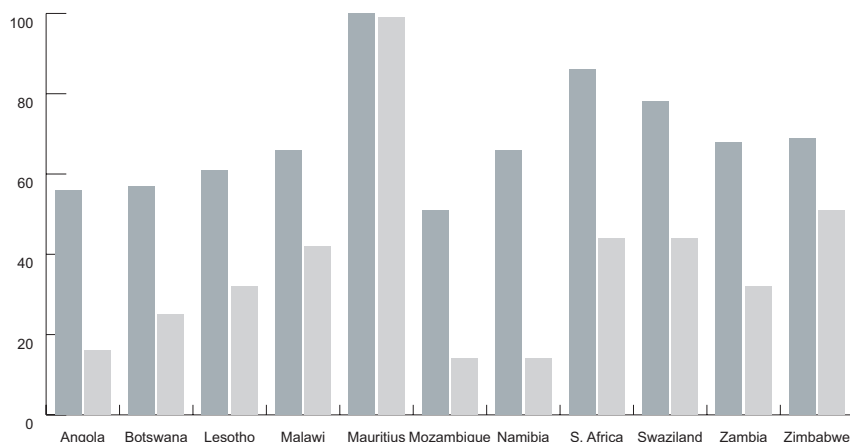
The rural urban imbalance is more severe with sanitation. In all countries, with the exception of Mauritius and Zimbabwe, more than half the population did not have access to improved sanitation in 2002. Clearly, there is a significant imbalance between rural and urban areas that needs to be addressed if the water and sanitation MDG target is to be achieved in the sub-region.

People who still need improved access to water and sanitation

Despite the progress which has been made in improving access to clean water sources, 35.5 million people are still using water from unimproved sources in the sub-region. Of the 35.5 million people using water from unimproved sources, the largest proportion are in Mozambique followed by Angola, South Africa, Zambia and Malawi.

Fifty nine million people or 50% of the total population in Southern Africa are still without improved sanitation coverage. The largest proportion of those without improved sanitation coverage live in South Africa, Mozambique and Angola. To halve the pro-

³ Except for Mauritius, where the entire population has sustainable access to an improved water source.

Figure 1. Urban and rural improved drinking water sources coverage by country in 2002**Figure 2. Urban and rural sanitation coverage by country in 2002**

portion of people without improved sanitation, the sub-regional coverage needs to grow to at least 73% by 2015, from a starting point of 47% in 1990. The proportion of the sub-region's population with improved sanitation only increased by 3% since 1990, a rate which is slower than that required to meet the MDG target. There is need for dramatic acceleration in the provision of sanitation services in the sub-region if the MDG target on sanitation is to be achieved.

Challenges in implementing the MDG on water and sanitation in Southern Africa

Despite the progress made by Southern African countries in addressing the water and sanitation MDG target, the countries still face many development challenges that present severe obstacles to the achievement of the MDGs by 2015. The greatest challenges to realizing the water and sanitation target in the sub-region include low priority accorded to sanitation, high

levels of poverty and income inequality, disparities between rural and urban areas, weak government policies and institutions, gender inequality, HIV/AIDS, natural disasters, financing challenges, and debt burden. The prospects of achieving the MDGs in the sub-region will be largely dependent on resolving these challenges.

Low priority accorded to sanitation

Sanitation and hygiene programmes suffer from low political priority and low budgets, and the institutional responsibility for sanitation is often unclear. Where water and sanitation are managed jointly, water receives most of the money and attention. There is need to give much higher priority to sanitation by all actors.

High levels of poverty and income inequality

High poverty levels limit prospects for achieving the water and sanitation target in Southern African countries. Over one third of the population in Southern Africa is living on less than US \$1 a day (UNDP 2004). High levels of poverty co-exist with equally high levels of within-country income inequality. Namibia, Lesotho, Botswana, South Africa and Zimbabwe make five of the ten most unequal societies in the world. The poorest people with women being in the majority, have little or no cash income, are politically powerless, are compelled to plan their lives on very short timescales, have little control or no choice over how they live, often lack land tenure and/or legal recognition, and have little access to, and say in the provision of basic services including water and sanitation. These factors combine into a self-reinforcing process that deprives the poor of capabilities to improve their livelihoods and to access water and sanitation services on their own.

Disparities between rural and urban areas

Extreme inequalities are prevalent between urban and rural areas. Addressing this disparity requires large amounts of resources. In some countries existing financial resources for the water sector are still too heavily allocated to upgrading services for the already served-high and middle-income population in urban areas rather than the poorest and those in rural areas. In order to make progress towards the MDG target of halving by 2015 the proportion of people without sustainable access to safe drinking water and sanitation it is essential that resources are directed to the rural areas and the urban poor.

HIV/AIDS pandemic

The HIV/AIDS pandemic poses the most severe development challenge in Southern Africa. Southern Africa has the highest HIV prevalence rate in the world fuelled by high levels of poverty, and gender inequality. Although little research has been carried out on this particular issue, what is known indicates that clean

water supply and sanitation services are negatively impacted as scarce resources are diverted to meet the more urgent needs of increasing the health care capacity rather than developing water and sanitation infrastructure. Households that used to be able to access improved water supply and sanitation may lose their ability to do so when HIV/AIDS strikes the breadwinner. This reduces especially women's productivity considerably because of their role in taking care of the sick and fetching water.

Natural disasters

Virtually every country in Southern Africa is affected by occurrences of natural disasters such as flood and drought emergencies. Floods, especially, require population movements which make households lose access to improved water and sanitation. In the absence of improved water sources, rural water fetchers usually have to walk further to collect water in times of drought.

Institutional and policy challenges

In Southern Africa, institutional and policy constraints pose a serious challenge to achieving improved water and sanitation targets. Institutions are weakened by understaffing, inadequate technical capacities in key areas necessary to achieve the MDGs. Institutional weaknesses are also reflected in the inadequate capacity to monitor and evaluate progress towards achieving the MDGs in the sub-region, poor water resource management, poor coordination, regulation and enforcement mechanisms. There is need for strengthening institutional capacity, human resource development, monitoring systems and policies.

Financing challenges in Southern Africa

Adequate budgetary allocation of government resources is required to sustainably support expansion in provision of drinking water services and sanitation. In all African countries, the public finance available for water and sanitation service development is insufficient, even to provide basic services for the poor at current standards (SIWI and WHO 2005). In most countries, public expenditure for water and sanitation and aid flows have leveled off or declined (Oxfam 2004). In some Southern African countries, the budgetary allocation to the water sector is insufficient. For example in countries like Lesotho, Mozambique and Zambia donor funds as a percentage of total annual budget exceeds 50 (SADC 2003). There is need to identify innovative ways of increasing resources necessary to finance the MDGs. More efficient and effective mechanisms for financing community services are needed.

The debt burden

External debt is a serious resource constraint to achieving the MDGs. Southern African countries have a total debt stock of US\$ 78.1 billion with total annual debt service amounting to US\$6.8 billion (UNECA-SA 2005). According to UNDP (2002), some countries in sub-Saharan Africa spend more on their debt-servicing obligations than they do on the social sectors necessary to achieve the MDGs. There is need to develop debt relief strategies that do not severely constrain public expenditures required to achieve the MDGs.

Conclusion and Recommendations

Based on the findings reported in this article, some issues emerge as key to achieving safe drinking water and sanitation for the population of Southern Africa. The first is to *develop and strengthen national policies on water and sanitation and improve co-ordination and partnerships*. This involves developing and strengthening clear pro-poor, gender-sensitive and disaster-prepared national policies for water, sanitation and hygiene, as integral parts of national strategies for sustainable development and poverty reduction such as Poverty Reduction Strategy Papers (PRSPs) and National Development Plans. Training in areas such as policy-development, pro-poor strategies, gender and water issues, disaster preparedness and monitoring and evaluation should take place as appropriate. At the same time, optimal delivery of services could benefit from improved co-ordination mechanisms between government departments responsible for water and sanitation and other key stakeholders. Second, there is a need for *improved fiscal funding for water and sanitation in urban and rural areas*. Governments need to prioritize water and, more importantly, sanitation in national budgets in order to ensure the dramatic acceleration in the provision of improved services required to achieve the MDG target on sanitation in the sub-region. There is also a need to increase government expenditure on water, sanitation and hygiene for schools, households and others who cannot or will not pay and for improving coverage in rural and peri-urban areas. Specific attention is required for cost-efficient water provision in slums where many dwellers rely on expensive and often unsafe water. Investment in water and sanitation needs to be understood as an investment in disparity reduction.

Third, *appropriate technology, capacity building and increased participation of communities must be ensured*. Even if pro-poor policies are in place and financial resources are reallocated equitably, participatory mechanisms are needed to effectively provide basic services including water and sanitation, at the same time ensuring that public services are managed with a sense of accountability and belonging to communities. Decision-making on communities' basic services should involve women, the poor and the marginalized. Participatory approaches need to take into account the multiple needs of the different and diverse group of water users and need to give special attention to the impact of HIV/AIDS on households' water access. Finally, domestic measures will be insufficient, and *external resources flows for water and sanitation must be increased*. It is important for the international community to consider canceling the external debt of the poorest Southern African countries and finance new commitments through grants rather than new loans. The international community should also work in partnership with African governments to develop policies and strategies that can protect water and sanitation budgets. Countries should ensure that savings from such debt cancellation are invested in social sectors such as pro-poor water and sanitation, education and health.

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Water and Sustainable Development in the Countries of Northern Africa: Coping with Challenges and Scarcity

By Lamine Gueye¹, Mokhtar Bziou², and Oguntola Johnson³

Abstract

Water is a scarce resource that requires prudent use and efficient management. This is particularly true for the countries of Northern Africa where the demand for water is high placing high stress on scarce water resources. Moreover, the future of the water balance is rather bleak, unless the governments invest heavily on water management and on research to increase water supply. The article aims at understanding water as an important resource for sustainable development these countries, and to provide policy recommendations to ameliorating the water situation in the sub-region.

Introduction

Water is an important resource for development and the environment, and its sustainability implies long-term availability for a wide range of developmental and environmental purposes. Focussing on water and sustainable development in the countries of Northern Africa, this article argues that judicious development and management of water resources are essential for ensuring sustainable development in the sub-region. The article covers the water resources potentials, development and use of water resources, water management and water scarcity in the sub-region. It concludes with some recommendations.

This article draws on seven studies on water resources development and management commissioned by the Northern African sub-Regional office of ECA. Data and information contained in the article, unless otherwise indicated, are taken from these studies. The studies are input into the biennial African Water Development Report (AWDR). The reports were compiled based on a number of indicators already approved for the compilation of the World Water Development Report (WWDR) an offshoot of which is the AWDR, and synthesized at the sub-regional level. A peer review workshop on the reports held in Cairo, Egypt, in April 2005 showed that, among other things, water scarcity and the sustainable management of the available water resources pose major challenges to sustainable development in the sub-region.

Water Resources Potentials

One of the major challenges facing the sub-region is to ensure long-term availability of water resources for development. The cycles of drought that have continued to affect the sub-region, combined with increasing desertification and rapid urbanization, are exerting immense pressures on the water systems in all the countries of Northern Africa. Therefore, it is important to succinctly analyse the water resources potentials in the sub-region.

Renewable water

Northern Africa is endowed with an estimated 89 km³ of the annual renewable water resources. These are made up of 65 km³ of surface water and 27 km³ of underground water⁴. The distribution of the renewable water resources by country shown in table 1, indicate that Sudan, Mauritania and Egypt have high dependency ratio of 77%, 96% and 97%, respectively. The surface water in these three countries originates from outside their territories. By contrast, Algeria and Tunisia are dependent for only a small proportion of 3%

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⁴ These two numbers do not add up to the total because of overlap between the two types of water.

and 9%, respectively, while Morocco and Libya are not dependent on any outside sources for their surface water resources (see table 1).

With regard to underground water, there are about six trans-boundary aquifers (UNESCO, 2004) shared by the countries of the sub-region and in some cases with other neighbouring countries:

1. Nubian Sandstone Aquifer System shared by Libya, Egypt, Sudan, Chad. Surface area: 3,096,000 km² Storage: 3,730,000 km³. Renewable: 15,340 km³. Use: 2,173 km³/yr.
2. Northern Sahara Aquifer System (Grand Erg Oriental) shared by Algeria, Libya, Tunisia. The size of the Aquifer is 780,000 km²
3. Toudéni with a size of 500,000 km² shared by Algeria, Mauritania, Mali
4. Tin-Séririne basin in the Tassili Oua N'Aghaggar mountain complex (basin du Tafassasset) with a size of 45,000 km² (captive artesian in Niger) shared by Algeria and Niger
5. Djado-Bilma Basin shared by Libya, Niger, Chad
6. Air crystalline basement aquifer shared by Algeria, Mali, Niger

Table 1 Renewable water resources in the countries of Northern Africa

Country	Internal renewable water	Internal renewable underground water	Internal renewable surface water	Total renewable water	Dependency ratio
	Km ³ /year	Km ³ /year	Km ³ /year	Km ³ /year	%
Algeria	15.15	2.70	12.35	15.15	3
Egypt	9.00	7.5	1.50	63.00 (?)	97
Libya	0.60	0.40	0.20	0.60	0
Mauritania	0.40	0.30	0.10	7.40 (?)	96
Morocco	29.00	10.00	22.00	29.00 (?)	0
Sudan	30.00	4.00	26.00	30.00	77
Tunisia	4.85	2.15	2.70	4.56 (?)	9
Total	89	27.05	64.85	149.71	

Source: UNICEF 2004. ? indicates rough estimates

About 82% of the total renewable water resources in the sub-region are in Egypt, Sudan and Morocco. The remaining 18% are in Mauritania, Algeria, Tunisia and Libya (see table 1). With the exception of Mauritania, all the other countries of the sub-region have water potential per inhabitant that is less than 1000m³ (see table 2), the level generally agreed to represent chronic hydric stress. Three countries (Algeria, Tunisia and Libya) have already reached the threshold for absolute water stress. With rapidly increasing population size the remaining countries might reach the absolute water stress threshold in the future.

Table 2 Indicators of renewable water resources in the countries of Northern Africa

Country	Average precipitations	Contribution of precipitations	Population size	Per Capita renewable water
	Mm	Km ³ /year	Million	M ³ /hab/year
Algeria	89	211.50	32	473
Egypt	51	51.37	68	926
Libya	56	98.53	5.6	107
Mauritania	92	94.66	2.7	2741
Morocco	346	154.68	30	967
Sudan	417	1043.67	33.5	896
Tunisia	313	51.26	10	456
Total		1705	181.8	825

Source: UNICEF 2004

Desalinated Water

Counting brackish water and seawater, the sub region has a desalination capacity of about 1,410,000 m³ per day. The production of fresh water through desalination is very expensive, and for this reason it is not much used except in the Middle East, where desalination is the main source of fresh water. In fact, the Middle East has a capacity for production of desalinated water that is three times the production of all the other parts of the world. In Africa the production capacity is about a tenth of the capacity of the Middle East, and most (70%) is in Northern Africa, particularly in Libya.

With a production capacity of 700,000 m³ per day, Libya ranks seventh among the countries that produce fresh water by desalinating seawater. There is every reason to believe that Libya will continue to invest in this method of producing fresh water, given the very limited supplies of conventional water that are available to the country. Algeria produces about 340,000 m³, Egypt 200,000 m³, Morocco 100,000 m³ and Tunisia 70,000 m³ per day. The Sudan and Mauritania do not produce desalinated water.

Treatment of Wastewater

Treatment of wastewater varies considerably between the countries. Mauritania possesses a single wastewater treatment plant, with a treatment capacity of 200 m³ per day. In Morocco, around 70 million m³ of wastewater are reused each year. In Algeria, where 45 purification plants have been set up to produce 484M m³ of treated water, only 14 plants are actually operative. In Tunisia, 150M m³ of wastewater is treated annually. In Egypt, the wastewater treated and reused at present amounts to 700M m³. Libya treats and reuses about 100M m³ of wastewater per annum. In Sudan, the only experiment in using water produced by treating wastewater was apparently in the 1930s, and this was later abandoned.

Development and use of water resources: The threat of imbalance between water resources and water needs

Surface waters in Mauritania are estimated at 7.1 km³, and 54% of them are developed (3.75 km³). Given the very limited role of underground water resources, this figure can also be taken to represent the overall rate of water development. Out of the 3.75 km³ mobilised, Mauritania uses only 1.3 km³, giving a use rate of 17.5%.

In Morocco, the surface waters mobilised at present are estimated at 10.75 km³ out of 16 km³ that are exploitable. This represents a mobilisation rate of 67%. Underground water is mobilised at a rate of 67% (2.7 km³ mobilised out of 4 km³ of renewable water). Overall the exploitation rate of water resources amounts to 67% (74% if we take account of the over-exploitation of underground water). Current perspectives suggest that the balance between water needs and water supply will be maintained until 2030, by means of measures such as transfers from regions with a surplus of water to those with a shortfall, water economy measures, programmes to reduce pollution, and the use of non-conventional water sources in arid zones.

Algeria has apparently mobilised 100% of its renewable underground water, which is 3.3 km³. The country has 12.4 km³ of potential surface water at its disposal, which, if we take account of the volume mobilised by the dams (1,598 km³), suggests that the rate of mobilisation of surface water is very low. It could be estimated at between 16% and 24% if we add the quantities of water mobilised from running water, which means an overall volume of mobilised surface water estimated at between 2 and 3 km³. The total water resources (15.2 km³) would thus appear to be mobilised at a rate of only 20 to 26%, or 5.8 to 6.8 km³.

The water reserves of Tunisia are at present slightly surplus to its needs, since it has mobilised 94% of its underground water resources and 90% of its surface water resources, giving an overall mobilisation rate of 92%. Taking account of the imbalance which will soon arise between renewable water resources and water needs, Tunisia will in the future have to rely more and more on the use of non-conventional water resources, and will have to be vigilant in managing demand.

Libya, which has very limited water resources, has for a long time been in a situation of imbalance between water resources and water needs. To offset this imbalance, Libya has recourse to non-conventional water and to mining as a means of exploiting its underground water resources, which, we may recall, are non-renewable.

In Egypt, the water used in 2000 was estimated at 70 km³, which is already far in excess of the available resources. We may recall that Egypt is endowed with 55.5 km³ of water from the Nile. To reverse this imbalance, Egypt has several solutions,

which include recuperating surplus supplies from the Nile, using mining to exploit underground water at a rate of 2 to 2.5 km³ per annum, increasing the use of drainage water from irrigation, which would allow the recuperation of 2 to 2.5 km³, increasing the use of treated waste water (1 km³), and economising almost 1 km³ of irrigation water.

Sudan has access to an annual volume of 20 km³ from the Nile. When this is added to the internal water resources, it gives a total of 30 km³ of available water resources. The present demand for water is estimated at 25 km³, that of 2025 at 48 km³. These figures suggest that an imbalance between water resources and water needs will shortly arise, and that this imbalance will be considerable by 2025.

To sum up, the analysis of the major indicators of water demand and of the state of water mobilisation in the countries of the sub-region leads to the following observations:

1. Only three countries (Mauritania, Morocco and Algeria) still have some reserves to draw on for further mobilisation of surface water resources;
2. The rate of utilisation of water resources has already reached its maximum for four countries (Tunisia, Libya, Egypt and Sudan); Mauritania has considerable latitude for manoeuvre; and, Morocco will reach closure by 2025-2030. For Algeria, the rate of utilisation of water resources is very low, but this does not really demonstrate a good fit between water needs and water resources, because the country lags behind in mobilising surface water resources. It is very likely that this rate will change in the medium term, given the considerable programme of dam construction currently being carried out by the Algerian government.

Overall, water is undeniably a strategic factor for growth in Northern Africa. It requires collaboration between the different countries and long-term planning. This implies greater coordination between the policies of the various countries, in accordance with the African Water Vision for 2025. For the moment, the Moroccan government is continuing to invest in small and medium scale hydraulic works, whereas Algeria is following a policy of creating large dams, and Libya has started carrying out huge drillings in the vast Albian aquifer that lies beneath the Sahara⁵.

Water Management: The need for managing the water supply hand-in-hand with the water demand

This survey of the experiences of the countries of the sub-region shows that the development of water resources is based mainly on management of the supply that is on the mobilisation of water by means of hydraulic engineering works. This practice is favoured because of its convenience; in fact, governments find it easier to allocate resources for construction work, which can more easily be subsumed within the realisation of government programmes, than to undertake 'invisible' actions such as economising water or regulating water extraction.

However, managing the supply of water cannot in itself ensure that the needs of a country can be met in a sustainable way because:

1. On the one hand, the water potential is reaching point of closure, as is already the case for Egypt, Libya and to a lesser extent Tunisia; and,
2. On the other hand, the resources of available water may no longer be available if they are not protected, as in the case of Morocco.

The growing water scarcity is due not only to the rapid increase in demand for water, but also to the way in which the water is managed. Current perspectives suggest that managing the water supply must go hand in hand with strategies and actions for managing the demand in order to ensure the sustainable satisfaction of the water needs of the countries of the sub-region. In the light of the diversity of situations between the countries and within a single country, the major difficulties encountered in water management and the future prospects are summarised below for the countries that have mentioned these issues in their national reports.

Mauritania's comfortable position with regard to water resources is only relative; the country possesses, in the River Senegal, the possibility of extracting sufficient water to meet its needs for a few decades to come, but the geographic situation of this resource makes it difficult for the water to be distributed across the regions. Moreover, most of Mauritania is situated in an arid zone, which means that actions must be taken to manage the demand for water, but the context is not conducive to such actions: the management structures are fragile and the responsibilities of the bodies in charge of managing water have been weakened.

In Morocco, the technical solutions that can resolve the problems of water management have been identified and seem easy to put into practice at the sectoral level. However, in reality these measures face the problem of compartmentalisation of the roles assigned to the authorities responsible for the various sub sectors dealing with water, and to the inadequate coordination between these sub sectors. The result is a lack of coherence between the various sectoral programmes, with the negative consequences mentioned above. With the aim of giving their water policy an orientation that is better adapted to the changes in natural conditions and socio-economic effects that are starting to manifest themselves, the Moroccan authorities are preparing a National Water Plan that aims to put forward long term programmes of work, to be implemented in a coherent and concerted manner in order to ensure the sustainability of good water management.

In Algeria, the indicators for water resource development suggest the country should above all place emphasis on managing the supply, and in particular on making up for its slow progress in mobilising surface water resources. But in reality the surface water resources are not evenly distributed between

the country's regions, and the underground water resources, except for a small area in the north of the country, are already overexploited. Overall, Algeria therefore needs to manage the demand, which has already been done through the adoption of a new water management strategy, relying in particular on progressive price scaling, an integrated and participative management of catchments, high standard professional training, education and consciousness-raising about water problems, and efficient monitoring of water quantity and quality.

Tunisia has long had a strategy for managing demand, given the delicate balance between its water needs and water resources. This strategy consists in particular in the adoption of a price scale system encouraging water saving, ambitious programmes to combat water pollution, an integrated management of water resources, and large scale use of treated waste water.

Water Scarcity

Water scarcity is commonly defined as a situation where water availability in a country or a region is below 1000 m³ per person per year. However, the concept of water availability based on indicators derived from the renewable water resources divided by the total population is a controversial issue and should be taken with great care. This need for more care is even more pertinent for Northern Africa where extensive use of desalination and of non-renewable groundwater resources and wastewater re-use is practised to compensate for the scarcity of renewable water. However, water scarcity concept may be regarded as an incentive for promoting water resources management.

The relevance of the problem of water scarcity is evident in North Africa considering that estimates for the average annual growth of the population are the world's highest: 2.9% for the period 1990-2000 and 2.3% for 2000-2035. The water resources exploitation index is higher than 50% for Tunisia, Algeria, Morocco and Sudan, and higher than 90% for Egypt and Libya. Thus, the groundwater resources of the sub-region are vitally needed to supplement surface water resources.

Groundwater has been over-exploited through excessive uncontrolled pumping in many countries of the sub-region, particularly in the Northern Saharan and the Nubian Sandstone Aquifers exploited in Algeria, Tunisia, Egypt and Libya. In addition to over-exploitation, seawater intrusion and point and non-point sources of pollution generated from anthropogenic agricultural, industrial and urbanization activities also constitute threats. It may be interesting to note also that the issue of whether groundwater mining as is the practice in the sub-region, particularly in Libya, is a sustainable practice or not, is a controversial subject. While some authors consider the practice against the principles of sustainable development, others consider it a reasonable option under certain circumstances.

A United Nations⁵ expert group report on “Strategic Issues Concerning Transboundary Water Resources” identified the following specific characteristics of, and necessary actions concerning groundwater resources in transboundary settings, among others:

1. They have “three dimensional flow domains”, in addition to the well-accepted hydraulic interdependence between surface waters and shallow groundwater;
2. They are vulnerable to long-term, if not permanent, contamination, land subsidence and saline intrusion;
3. It is necessary to identify and protect recharge zones; and
4. Problems may arise from cross-boundary exploitation of aquifers, *inter alia* through directional drilling or over-pumping.

All these suggest the need for an integrated water resources management framework for the transboundary aquifers of the sub-region as well as need for cooperation among the riparian States within this framework.

Conclusions and Recommendations

The water resources situation in Northern Africa is likely to get worse in the future, given on the one hand climatic changes which are reducing the supply resources, and on the other hand the rapid growth in the demand for water, linked with various constraints such as pollution and the silting up of reservoirs.

Most of the countries of the sub region have until now adopted a policy of water resource management oriented mainly towards supply. The management of demand, however, offers possibilities for mobilising water resources at a lower cost. Therefore it is recommended that the governments in the sub-region undertake the following actions:

1. Measure and evaluate water resources;
2. Draw up long term plans for the development of water resources which will make it possible to assign water

resources by type of use and according to priorities, and to schedule the realisation of hydraulic work at the appropriate times;

3. Create structures for the decentralised and participative management of water resources;
4. Introduce and put into practice legislation for the efficient regulation of the use of water resources;
5. Strengthen the capacities at all levels of the water sector and all its partners;
6. Create and strengthen frameworks for cooperation over transboundary aquifers occurring in the sub region, taking into account the similarities between the water problems of the countries concerned and the considerable possibilities for exchanging experiences.

The water resources development and management strategies of the countries of the North African need to mainstream policy objectives of the First World Water Forum at Marrakech in 1997, and the World Water Vision for 2025 that was presented at the Second World Water Forum. Besides this global water policy process, sector-based, regional and sub regional visions have been drawn up. The Africa Water Vision for 2025 talks of ‘an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation and the environment’ (UN Water/Africa).

The countries will need the assistance of regional organizations such as the ECA and the African Development Bank to develop regional policy guidelines for managing the transboundary aquifer systems, incorporating aspects of development, protection and control.

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Structural Transformation for Sustainable Development in Africa¹

By Joan Kagwanja² and Josue Dione³

Abstract

The majority of Africans live in rural areas, where most live in poverty and rely on subsistence agriculture for their livelihoods. Poverty and resource degradation reinforce each other, slowing productivity and hampering development. The process of structural transformation diversifies the economy, increasing employment and output derived from sectors other than agriculture. This article argues that structural transformation is essential to achieving sustainable development in Africa, and charts challenges and possibilities for achieving it.

Introduction

The majority of poor Africans (70%) live in rural areas, relying on natural resources such as land, forests, rivers and lakes as the main basis for their livelihoods. Poverty usually makes people desperate enough to exploit these resources for food and income, without investing in the replenishment of the resources to maintain/increase their productivity. The resulting scenario in much of rural Africa is moderate to severe soil erosion, deforestation and the degradation of rivers and lakes. And, just as poverty is a cause of resource degradation, resource degradation contributes to poverty, through its adverse effects on the productivity of natural resources. Addressing rural poverty and resource degradation should therefore be viewed as complements in any rural developmental efforts. This will not only improve the livelihoods of Africans and development of the continent, but also lead to resource conservation and prudent management of natural resources to ensure that Africa's developmental efforts are sustainable over the long term. This calls for simultaneous strategies aimed at: reducing population pressure on Africa's natural resources through completing Africa's demographic transition; improving the productivity of natural resources, especially agricultural productivity; and providing other avenues for rural Africans to earn their living, particularly through industrialization and the development of a vibrant rural non-farm economy (RNFE). In other words, this calls for an accelerated structural transformation of Africa's economies.

What is Structural Transformation?

The process of structural transformation sees increasing employment and output derived from sectors other than agriculture. Over the long run there is a net resource transfer from agriculture to the other sectors of the economy (Staat, 1998). The turning point of a structural transformation is reached when the growth rate in agricultural labour force becomes negative, i.e. when the size of the agricultural labour force begins to decline (Gebre-Madhin and Johnston, 1999). This depends on the rate of labour force growth and the growth of the non-farm employment. To achieve a structural transformation, the growth rate of the non-farm employment must exceed the total labour growth rate to result in a decline in the share of labour force in agriculture. The majority of African countries have struggled to reach the 'turning point' due to their high initial proportions of labour force in agriculture, high growth rates of population and hence total labour force growth, and the slow growth rate of non-farm employment, especially the industrial sector.

Status of structural transformation in Africa

Table 1 shows some selected indicators of structural transformation for twenty sub-Saharan African countries. The countries are grouped based on their levels of fertility rates, one of the key indicators of achieving a

¹ This article draws on the ideas developed in 'Structural transformation to break away from rural poverty,' Chapter 4 of the 2005 Economic Report on Africa on Poverty and Employment.

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Table 1. Structural transformation indicators for selected African countries

	Total Fertility Rate			Agricultural Labour Force Share (%)			Labour Force Growth (%)		Agricultural value added per worker (1987 \$)		Industrial Growth (%)	
	1990-1995	1995-2000	2000-2005	1990	2000	2010	1980-90	1990-7	1979-81	1994-6	1980-90	1990-7
All Countries	6.3	5.8	5.5	74	69	64	2.8	2.6	468	463	2.9	1.6
Group A	5.1	4.5	4.0	61	56	51	3.2	2.5	667	662	2.9	2.1
Botswana	4.1	3.6	3.2	46	45	42						
Ghana	5.5	4.8	4.4	59	57	54	3.1	2.7	813	684	3.3	4.3
Kenya	5.4	5.0	5.0	80	75	71	3.6	2.7	268	240	3.9	2
Namibia	5.8	4.8	4.0	49	41	34	2.4	2.5	1295	1458	1.1	2.9
Zimbabwe	4.8	4.1	3.6	68	63	56	3.6	2.3	294	266	3.2	-0.8
Group B	6.3	5.8	5.3	71	66	59	2.9	2.7	526	523	2.3	1
Cameroon	5.7	5.1	4.7	70	59	47	2.4	3	861	827	5.9	-3.8
Côte d'Ivoire	6.3	5.6	5.1	60	49	38	3.1	2.3	1527	1354	4.4	4.2
Madagascar	6.1	5.9	5.4	78	74	70	2.5	2.8	190	178	0.9	1.1
Nigeria	6.6	6.3	5.9	43	33	25	2.6	2.8	479	684	-1.1	0.5
Rwanda	6.9	6.2	5.7	92	91	89	3.2	2.3	306	206	2.5	
Senegal	5.9	5.5	5.0	77	74	70	2.5	2.6	328	375	4.1	3.7
Tanzania	6.2	5.6	5.1	84	80	76	3.2	2.8				
Togo	6.2	5.8	5.4	66	60	54	2.6	2.7	404	461	1.1	2
Zambia	6.4	6.0	5.7	74	69	63	3.1	2.8	116	100	1	-2.6
Group C	7.2	7.1	6.9	88	86	82	2.5	2.5	216	206	3.6	2.3
Burkina Faso	7.2	6.9	6.7	92	92	92	2	2.1	155	182	3.7	1.9
Burundi	6.8	6.8	6.8	92	90	89	2.6	2.6	218	177	4.5	-8
Malawi	6.8	6.4	6.1	87	83	79	3	2.4	162	156	1.9	3.5
Mali	7.4	7.2	6.9	86	81	75	2.3	2.6	251	259	7	2.1
Niger	8.2	8.2	7.9	90	88	85	3	2.9	292	256	-1.7	1.3
Uganda	7.1	7.1	7.1	85	80	75	2.2	2.7			6	13

Data sources: World Bank, 1997; World Bank, 1998; UN/DESA, 2004a; UN/DESA, 2004b; FAOSTAT, 2005; Kirk and Pillet, 1998.

demographic transition. The five countries classified as Group A are at a stage of declining fertility rates, with their rates declining sharply by 22% from 5.1 in 1990-1995 to 4.0 in 2000-2005. In comparison, for countries in Group B and Group C, fertility rates declined by 16% and 4% respectively during the same period. It is expected that countries in Group A, which are at a relatively higher stage of their fertility transition are more likely to reach a structural transformation turning point, and hence to achieve a structural transformation.

Indeed data shows that for countries in Group A, the share of labour force in agriculture has declined by 8% from a rate of 61% in 1990 to 56% in 2000 and is projected to be 51% in 2010. For countries in Group B, the decline in the share of agricultural labour force for the same period was 7% (from 71% to 66%) while the decline for Group C countries was a

mere 2% (from 88% to 86%). The projected share of agricultural labour force in agriculture for Group B and Group C countries are 59% and 82% in 2010, respectively. With such a high projection for the proportion of labour force in agriculture, achieving a structural transformation will continue to be a major challenge for countries in Group C. Another indicator, the agricultural value added per worker also shows better performance for Group A countries than those in Group B and C. On average, agricultural value added per worker was \$662 (in 1987 dollars) in 1994-1996 for Group A countries, compared to \$523 and \$206 for Group B and C countries respectively. And at 1.6% in 1990-1997, industrial growth in Africa, here used as a proxy for non-farm employment growth, has not kept pace with labour force growth (2.6% in 1990-1997). For a structural transformation to occur, the industrial growth should be higher than the labour force growth.

Components of structural transformation: demographic transition, agricultural transformation and industrial growth

Demographic transition

Demographic transition refers to the shift from high to low fertility and mortality rates (ECA, 2001), achieved mainly because of overall modernization of the economy resulting from urbanization, education and empowerment of women. The various stages of demographic transition include: 1) the pre-transition state with fluctuating birth and death rates resulting in slight population growth rates; 2) the beginning of a steady decline in mortality while birth rates remain high with resulting high natural population growth rates; 3) a period of rapid reduction in birth rates, but still behind mortality decline, with population growth starting to decline; and 4) the post-transitional stage where death rates and birth rates stabilize at levels as low as ten per thousand, with birth rates higher than death rates to result in slow population growth.

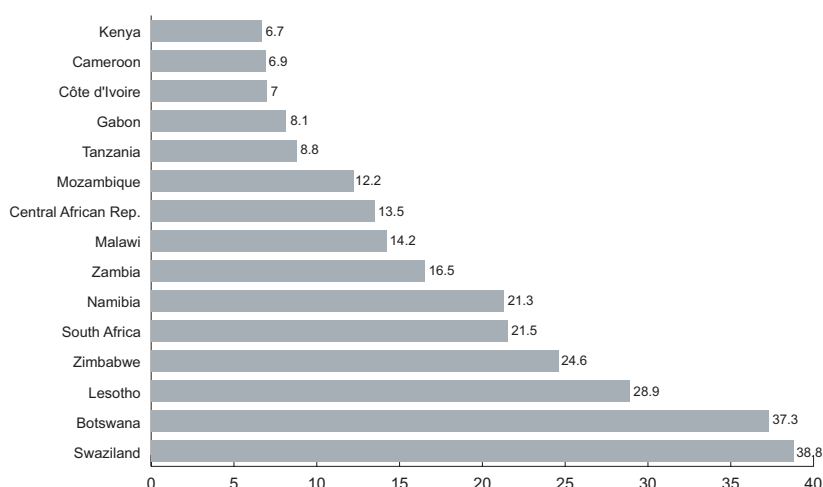
Table 2. Total Fertility Rates

	1985-1990	1990-1995	1995-2000	2000-2005	2005-2010	2010-2015
Latin America and the Caribbean	3.39	3.01	2.72	2.53	2.36	2.23
Asia	3.40	2.98	2.72	2.55	2.42	2.30
Africa	6.08	5.63	5.22	4.91	4.57	4.19
Eastern Africa	6.69	6.32	5.98	5.61	5.20	4.76
Middle Africa	6.58	6.51	6.38	6.28	5.98	5.55
Northern Africa	4.95	4.12	3.52	3.21	2.95	2.67
Southern Africa	4.05	3.59	3.10	2.79	2.54	2.35
Western Africa	6.75	6.38	5.97	5.56	5.09	4.58

Data source: UN/DESA, 2004

Africa is the only continent that has not yet completed its demographic transition. It has the highest population growth rates in the world due to persistent high fertility rates, with a consequent high increase in the labour force. Table 2 shows that total fertility rates in Africa remain high at 4.91 in 2000-2005, compared to 2.53 for Latin America and the Caribbean and 2.55 for Asia. An assessment of the sub-regional distribution of fertility rates shows that while levels will be quite similar to those of other developing countries by 2010-2015 in Northern and Southern Africa, levels for the rest of Africa will remain relatively high. Persistent high levels of fertility rates will continue to have consequences for Africa's ability to achieve a demographic transition that is conducive to a structural transformation of Africa's economies. Particularly, high population rates lead to increased pressure on natural resources, which,

Figure 1. HIV/AIDS prevalence rates



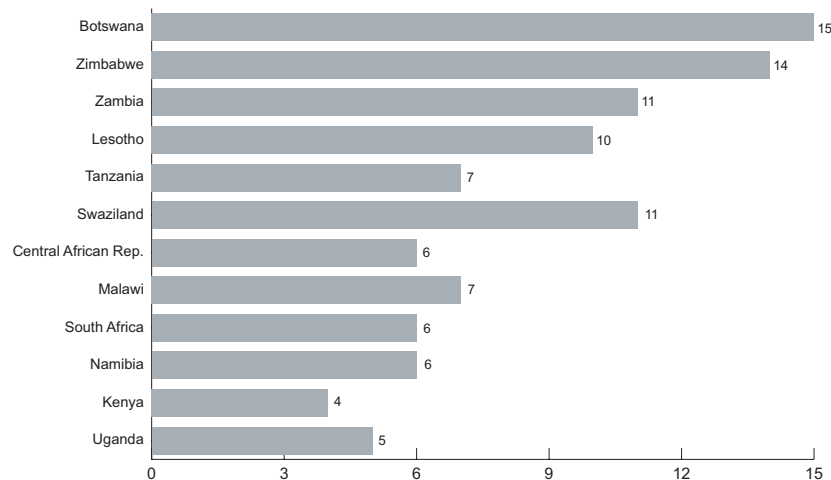
Data source: UNAIDS/WHO, 2004

coupled with poverty and the fragile nature of these resources, contributes to resource and environmental degradation. It is believed that low levels of human capital development and resource degradation are leading causes of the low productivity of labour, land and other resources, contributing to the poor performance of Africa's economies, particularly the agricultural sector.

Diseases such as HIV/AIDS, malaria and tuberculosis as well as poor healthcare and sanitation, particularly in rural areas contribute to low levels of human capital, making Africa unable to achieve significant increases in labour productivity, much needed for a structural transformation of Africa's economies.

Countries in southern Africa are especially hard hit by the HIV/AIDS pandemic as is shown in Figure 1. HIV/AIDS prevalence rates in southern Africa range from a high of 38.8% in Swaziland to 12.2% in Mozambique. Implications of the HIV/AIDS pandemic include reduced resource investments (capital, land, labour, etc.) to production due to the loss of resources (illness and death), and resource diversion as more resources are devoted to health care and the care of those who are infected (CHGA 2004). By affecting the quantity, quality and productivity of labour and other resources, HIV/AIDS has severe consequences for a structural transformation of the region and the entire continent.

Another negative impact of HIV/AIDS is its effect on the structure of African families, especially as the pandemic causes deaths of the productive adults in the household. There is evidence of increases in the number of unproductive adults due to periodic illness and an increase in the number of female-headed households, households headed by minors, and fostering of orphans. Figure 2 points to high numbers of orphaned children in Africa. For example, 20% of Botswana's children are orphans mainly due to AIDS.

Figure 2. Proportion of children orphaned by HIV/AIDS

Data source: UNAIDS/UNICEF/USAID, 2004

Agricultural transformation

More than a third of the total population and almost 90% of Africa's rural labour force are employed in agriculture. Yet compared to other regions of the world, African agriculture has failed to provide food security for Africa's population and sustainable livelihoods to those dependent on the sector. As a result, African farm owners and agricultural workers constitute some of the poorest people in the world. Research suggests that as in many countries where the majority of people are initially employed in agriculture, Africa must emphasize agricultural productivity growth and agricultural led industrialization to exploit the strong linkages between agricultural and the rest of the economy (ECA, forthcoming). These linkages occur through consumption and expenditure, measured by growth multipliers of 1.5 to 2.7% in Africa, comparable to 1.5 to 2.4% in Asian countries (Spencer, 1995). Indeed for every job created in Agriculture, two to three jobs are created in the rest of the economy. But, the sector is characterized by low total and factor productivity, and a lack of competitiveness in areas that provide the greatest potential for exploiting the linkages between agriculture and the other sectors. These areas are mainly in the domestic food and agricultural chains, including production, storage, processing and marketing.

There is immense potential for Africa to increase the value of its exports (60% are agricultural; 66% of all exports are unprocessed) and domestic production through value-added processing (Yumkella, et. al., 1999). Africa must also explore ways of, for instance, reducing exports of unprocessed static products (40% of all exports) to more dynamic agricultural products (those that have a high income elasticity of demand) e.g. dairy, meat, fish, fruits, vegetables, vegetable oils and nuts. Value-added processing of domestic food will also increase Africa's capability to compete with imported processed food. Transforming African agriculture, particularly in the face of globalization therefore, requires that Africa create growth in value-adding agro-processing, agribusiness and the service sectors. Agro-industries and

service sectors related to agriculture form a big part of Africa's industrial sector and the non-rural farm economy (RNFE). Industrial development and the RNFE must therefore be viewed as key complements of agricultural development and vital components of Africa's structural transformation

The following are some of the challenges that have continued to contribute to the poor performance of African agriculture⁴:

- i) First, reliance on rain-fed agricultural production puts the continent at a disadvantage in its quest to increase agricultural production. In spite of its many rivers and lakes, poor water resource management and low levels of irrigation hamper efforts to harness water for agriculture. As a result, only 3.8% of Africa's surface water is harnessed and only 6% of Africa's cultivated land is under irrigation, compared to 33% for Asia (FAO, 1995).
- ii) Second, fragile land and soils coupled with population pressure, insecurity of land tenure, unequal land distribution and access, as well as social conflicts contribute to unsustainable management of land, leading to low productivity and degradation. As a result, Africa contributes to 27.4% of the world's degradation. 500 million hectares of Africa's land are moderate to severely degraded with 65% of cropland and 30% of the continent's pastureland affected by degradation (UNEP, 2000; WRI et. al., 1992).
- iii) Third, poor market infrastructure and low market access constrain the marketing of Africa's crop and livestock products, leading to low returns of agricultural production. Africa's markets are fragmented along sub-regional, national and sub-national lines, leading to low profitability. Trade liberalization has opened Africa's markets to cheap products from outside the continent. And domestic subsidies of Africa's trading partners and non-tariff barriers continue to depress African agricultural exports.
- iv) Fourth, the HIV/AIDS pandemic is having a negative impact on the agriculture sector. Evidence shows that as African families are affected by the pandemic, income is diverted from agricultural production and spent on medicines and the care of ill relatives (Yamano and Jayne, 2004). In addition sale of productive assets, including livestock and land, is common as is abandoning land and losing it to relatives (CHGA 2004). The effects are especially tough for women whose property rights are less protected by both customary and statutory laws. Evidence shows that losses of agricultural production due to HIV/AIDS can reach 68% (Opiyo, 2001), when the male head of the household dies.

Industrial and rural non-farm sector growth

The RNFE forms an important part of Africa's economies, par-

⁴ These challenges are explored in further depth in other articles in this Bulletin.

ticularly since it provides an avenue for agricultural value added processing and rural employment. By acting as an employment outlet for the underemployed in agriculture, the sector helps to reduce pressure on Africa's natural resources and, consequently, reduces resource degradation. Due to the high factor productivity in the rural non-farm (RNF) sector, compared to the farm sector, RNF sector growth leads to increased labour productivity, rural wages, income and rural employment. As illustrated in Table 3, although just 10% of rural Africans are employed in the RNFE, they bring home 42% of the total rural income. This shows that there is a high potential to increase rural incomes by further developing the sectors that make up the RNFE, mainly the agro-industry and service sectors.

Table 3. Involvement in RNF employment

Region	RNF income share	% Rural workers employed	% Women of total workers	%Total in manufacturing	%Total in trade and transport	%Total in other activities	%Total in other services
Africa	42	10	26	24	22	24	30
Asia	32	24	20	28	26	32	14
Latin America	40	35	27	20	20	27	33
Eastern Europe	44	47	37	38	20	27	15

Data source: Haggblade et. al., 2002

Africa's success in structural transformation is dependent upon its ability to link industrial development (especially agricultural manufacturing) and agricultural development in order to increase manufacturing value added (MVA), productivity and competitiveness for employment and income generation. There is much room for improvement in agro-processing in Africa to meet the expected increase in demand for processed food (to double by 2025), increase Africa's share of manufactured exports, and increase employment and incomes (Yumkella et al., 1999).

Currently, post harvest losses account for about 35% of agricultural production in Sub-Saharan Africa (SSA). Only 20-25% of agricultural production is marketed in Africa and the share of processed to total production in agriculture is 10-15% compared to 80% for developed countries (UNIDO database, 1999). Four main labour-intensive sectors account for over half the employment in manufacturing and 48% of MVA: food sector (>25%), textiles (18%) beverages (6.6%), and clothing (6.5%).

Globalization has seen a doubling of the share of manufactured exports in developing countries as a whole since the 1970s, but that of sub-Saharan Africa (SSA) has declined. While SSA's growth in manufactured exports has been about 5.5% per annum since 1970, the growth for other developing countries grew at 13%. SSA therefore lost its market share (from 7% in 1970, 1.3% in 1990 and 0.78% in 1995), mainly to other developing countries (UNIDO database, 1999). Most manufactured exports in SSA (other than South Africa) are natural resource based, dominated by agricultural products such as foodstuff (24%) and clothing

(12.4%) and followed by refined petroleum (10.6%), and wood and cork products (6.9%). In 1990, export of manufactures was only 44% of MVA, compared to 68% for developed countries and 52% for the world. In terms of distribution, only four countries (Mauritius, Cote d'Ivoire, Kenya and Zimbabwe) account for over two-thirds of Africa's exports in excess of \$ 1 billion.

It has been argued that since the 1970s, globalization has led to a decline in the growth of the industrial sector, favoring growth in the service sectors. However, there are differing reasons behind this decline in growth and productivity in the developed countries and that for developing countries, particularly Africa. Investments in new plant and machinery, adoption of modern technologies and restructuring in manufacturing since the 1980s led to significant increases in labour productivity in developed countries. In comparison, high increases in the labour force without matched investments in new plant and machinery, technologies or restructuring in African industries resulted in faster growth of employment than output, leading to decreased labour productivity (Yumkella et. al., 1999). And although employment growth has now fallen to about half the rate of population growth, there is no major shift towards capital-intensive production. Low public and private investments have prevented the adequate acquisition of new state-of-the-art technologies, marketing and infrastructural development, all vital to reducing transaction costs and increasing competitiveness for growth of the industrial sector in Africa. As a result of low agro-industrial growth, Africa lags behind in efforts to diversify into high value products with high demand in domestic, regional and international markets.

Constraints to the growth of agro-industries and the rural RNFE include:

- 1) Institutional capacity and weak governance (inadequate policies and low implementation;
- 2) Low market access, particularly in light of WTO, erosion of trade preferences and increasing quality standards;
- 3) Weak private sector and few medium sized indigenous firms - unable to take up roles left by the government after economic reforms that saw e.g. the elimination of marketing boards;
- 4) Lack of support for women to sustain and expand their enterprises;
- 5) Low competitiveness due to low industrial produce, technology, high transaction costs (due to underdeveloped transport, energy, telephone, roads etc.);
- 6) Low quality skills, poor policies and general political instability.

Addressing challenges for a structural transformation of Africa's economies

Achieving a structural transformation in Africa depends on the capacity to address challenges related to: 1) achieving a demographic transition and slowing down the spread of HIV/AIDS; 2) transforming agriculture; and 3) developing a RNF sector that focuses on small to medium size agro-industries.

Achieving a demographic transition

Some African countries that have been successful in reducing fertility rates and achieve overall demographic transition, e.g. Mauritius and Tunisia did so by using gains from strong economic performances to improve education and access to health (ECA, 2001). These countries also facilitated social cultural changes, crucial to achieving a demographic transition. In order to reduce fertility rates, African countries need to: a) facilitate availability and access to contraceptives since their current demand is unmet; b) enhance education and employment opportunities for women and girls; and c) find ways to increase the age at which women have their first child. These efforts would not only reduce fertility rates but also reduce maternal mortality rates. In addition to reducing fertility rates, African governments must seek to control the spread of HIV/AIDS by scaling up their support to HIV/AIDS programs for prevention, treatment and care by mobilizing financial resources for awareness and preventive campaigns and procurement of affordable drugs. In addition, it is important to strengthen human and financial capacity to respond to needs related to prevention, treatment and care.

Transforming African agriculture

Addressing the challenges related to agriculture in order to facilitate a structural transformation requires that African countries increase public and private funding for research, technology and knowledge acquisition in order to increase productivity at all stages of the agricultural commodity chains, capitalizing on both the green- and bio-technologies. In addition, extension services should be enhanced through partnerships with farmers and the use of information and communication technologies (ICTs). It is also crucial that African countries improve the management of water resources by e.g. increasing irrigation, as well as paying attention to land policy and associated institutional reform bottlenecks through land tenure reforms. African governments also need to facilitate market development and access by putting in place institutional, legal and financial frameworks that promote private investment in small to medium size agribusiness and agro-industrial enterprises. Infrastructural development is crucial to this endeavor as is the enactment of appropriate regulations on product standards to improve the quality and increase the competitiveness of food and agricultural products. Lastly, human capital needs to be increased through reducing the disease burden, particularly that resulting from HIV/AIDS. In addition to preventing the further spread of the epidemic, the impacts of HIV/AIDS, which are already felt on agriculture, need to be mitigated. Governments can do this by, for example, developing land rental markets in order to assist afflicted households to earn revenue from renting unutilized land without the fear of losing their land. It is also vital to improve women's access to land, water and fuel through mainstreaming gender equality and minimizing other forms of discrimination in development policies and strategies, including policies related to land tenure security, access to water and fuel.

Industrial development and growth in the RNFE

Improving opportunities for employment and growth of the RNFE requires that African countries address the prevailing

supply side rigidities brought about, for instance, by infrastructural constraints, as well as demand side impediments arising from low purchasing power and inadequate financial services. Supply side rigidities (inefficient value chain, high transaction costs, infrastructure, poor management and skills level) can be turned into competitiveness through investments in embodied technology, skills development, organization, linkages with firms and institutions). Increasing government expenditure and private sector involvement in infrastructural development (roads, electricity, water) would address infrastructural bottlenecks. Governments can also play an active part in establishing the 'missing middle' to change the current structure of either foreign owned large enterprises or small informal manufacturing. Constraints that should be addressed in this regard include facilitating access to foreign exchange for e.g. spare parts, increasing local demand and providing credit. Sub-regional and industrial cooperation should be promoted and facilitated, in particular through strengthening Regional Economic Communities. Finally, science and technology must be harnessed to enhance Africa's capability to exploit comparative advantage, increase efficiency in production, meet quality standards and facilitate value addition.

Conclusion

Achieving a structural transformation of Africa's economies requires that Africa achieves a demographic transition, transforms the agricultural sector and develops a vibrant rural non-farm economy, with a view to increasing the productivity and competitiveness of all sectors and hence creating employment and increasing income. Increasing productivity and competitiveness depends on Africa's ability to develop its human resource capital through education and vocational training. In addition, increasing off-farm opportunities and the agribusiness sector is crucial to increasing the competitiveness of Africa's products through value addition. And off-farm incomes and remittances are a crucial input to agricultural investment. With fewer people dependent on agriculture, a structural transformation would lead to reduced pressure on land and land resources, reducing encroachment into fragile lands and overall resource degradation. A structural transformation is therefore a key ingredient economic growth, human development and environmental sustainability in Africa.

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AIDS and African Sustainable Development

By Bjorg Sandkjaer¹

Abstract

HIV/AIDS adds to the long list of factors that complicate sustainable development in Africa. Affecting people in their most productive age, AIDS not only kills parents and devastates families; the pandemic also takes out scarce skills, much needed to further sustainable development. The article shows how HIV/AIDS undermines African sustainable development by examining the impact of the pandemic on structural, sectoral and community levels, and how it compromises African countries' abilities to sustain economic growth and increase access to education and health, and striking at the basis of social structures: the family and community.

Introduction

While a number of factors complicate African progress, HIV/AIDS adds an extra burden on already struggling states, increasing the demand on services while diminishing supply by taking out much needed human and financial resources. With more than an estimated 25 million people living with the virus in Africa, the HIV/AIDS pandemic is already seriously affecting development in the hard-hit southern and eastern sub-regions, and seems poised to increase its impact in other parts of the continent. This article seeks to explore the ways in which HIV/AIDS undermines African sustainable development by examining the epidemic's impact on critical aspects of social and economic development, which, in turn are fundamental elements of overall sustainable development.

Frameworks for sustainable development

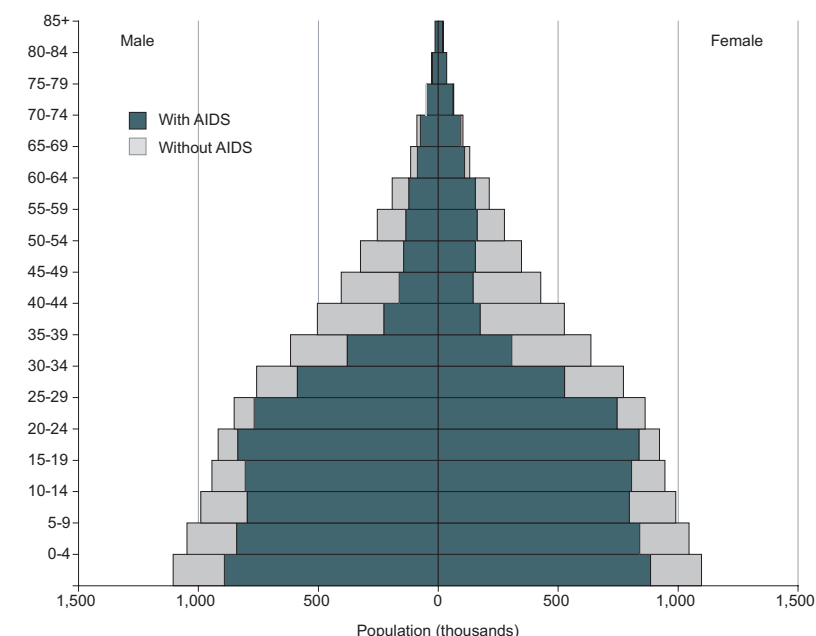
Developed over several decades, the sustainable development concept encompasses economic, social and environmental aspects, and the linkages between them. The main frameworks for sustainable development are found in the outcome documents from the United Nations Conference on the Environment and Development, held in Rio in 1992, and the World Summit on Sustainable Development (WSSD) held in Johannesburg ten years later, both of which call on countries and the international community to speed up sustainable development by integrating economic, social and environmental dimensions in development strategies, plans and actions.

Attainment of sustainable development in Africa is closely linked to achieving the Millennium Development Goals, and other international frameworks for action. The Africa Chapter of the Plan of Implementation of WSSD affirms the international community's commitment to support sustainable development in Africa by addressing the special challenges of the continent through concrete actions to implement Agenda 21 within the framework of the New Partnership for Africa's Development (NEPAD). Accordingly, the priority actions defined in the NEPAD are closely in line with the commitments for the sustainable development of Africa contained in the WSSD Plan of Implementation and the African Ministerial Declaration on Sustainable Development.

In Africa, sustainable development has remained elusive as widespread poverty affects most countries. During the last two decades, HIV/AIDS has spread rapidly in parts of Africa, further deepening poverty, complicating development efforts and adding to the pressure on already overstretched countries and communities. The pandemic particularly impacts on the social and economic aspects of sustainable development, including poverty eradication, improving human health and systems for delivering health care, changing consumption patterns, creating sustainable human settlements, and on governments' capacity to deliver services in all sectors.

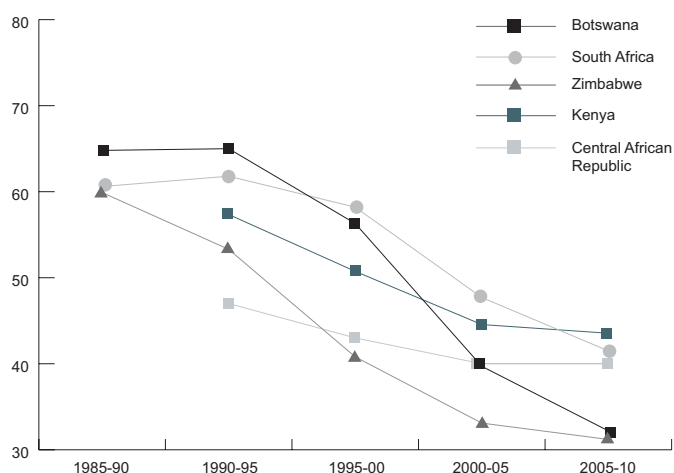
¹ Associate Demographer, Sustainable Development Division, ECA

Figure 1: Population in 2015, with AIDS and in the No-AIDS scenario, by sex and age group, Zimbabwe



Data source: UN/DESA

Figure 2: Changes in life expectancy, five African countries



Data source: UN/DESA, 2005a

Demographics underpinning development impact

One of the aspects that sets HIV/AIDS apart from other epidemics is that it targets people of productive ages. HIV/AIDS therefore impacts development through infecting and killing otherwise healthy, productive members of society. In the 38

hardest hit African countries, it is projected that there will be 19 million additional deaths due to AIDS between 2010-2015.

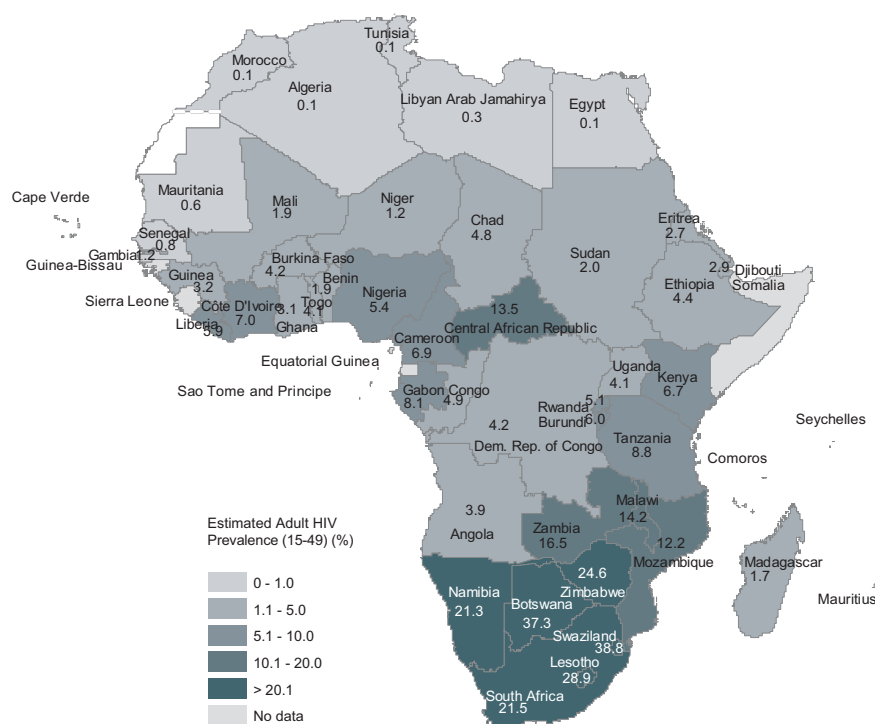
These deaths will be among the productive and reproductive age groups, reshaping population structures to such an extent that in the hardest-hit countries, there will be far fewer adults left to care for the disproportionate numbers of children and elderly (see Figure 1). This trend is likely to continue even if prevention efforts were successful in stopping new infections from occurring, as present infection levels translate into morbidity and mortality 5 – 10 years from now.

The increased mortality resulting from AIDS is also impacting on a common measure of development, life expectancy. In several countries, AIDS has slashed life expectancies by several decades, reversing an otherwise positive trend. As can be seen in Figure 2, this is not only the case in southern Africa, but also countries in other subregions, Central African Republic being the hardest-hit country in central Africa.

While southern and eastern Africa are the regions hardest hit by the pandemic, it is also slowly gaining ground in parts of central, western and northern Africa (Figure 3). HIV does not affect men and women equally – in sub-Saharan Africa, close to 60 per cent of those living with HIV are women. Young women are disproportionately affected. In some areas, up to six times more women than men are infected in the 15-24 age group (WHO-AFRO 2003). Life expectancy, for biological reasons, is generally higher for women than for men. However, in four countries – Kenya, Malawi, Zambia and Zimbabwe – the higher prevalence among women has led to life expectancy for women dropping below that of men (UN/DESA 2005b). This disproportionate impact on women frustrates development efforts further, as women are critical for the maintenance of African social and economic development (United Nations et al. 2004).

Estimated median time from infection to death is 8-10 years. Given this delayed impact of AIDS and the continued increase in prevalence, the worst of the impact of HIV/AIDS is yet to come. AIDS is therefore an immediate crisis, but also a long-term systemic condition, with profound consequences for African development (CHGA 2004a).

“Already, Africans are facing a day-to-day experience of declining standards of living, reduced capacities for personal and social achievement, an increasingly uncertain future (with important consequences for what can be achieved today), and a diminished capacity to maintain what has been secured over past decades in terms of social and economic development. As a result, HIV/AIDS is distorting the very fabric of everyday life on the continent, with profound implications for

Figure 3: African HIV prevalence, end-2003

Source: ECA, using data from UNAIDS/WHO

ners and managers under extra stress, AIDS may also lead to the numbers of these being thinned further, either through death or through those left leaving to seek better opportunities elsewhere. Finally, AIDS adversely impacts government revenues by eroding the tax base.

At the macro level, as well as at the sectoral and household levels, the impact of AIDS is not linear. Those countries which already have the structures, resources and political ability to curb the spread of HIV early are also those that are the least impacted by the pandemic. HIV/AIDS therefore exacerbates existing differences, plunging already resource-constrained countries even deeper into poverty.

Sectoral impacts: taking out human capacity and increasing costs

The impact of HIV/AIDS cuts across all sectors of society – public, private and voluntary, taking out skilled and unskilled workers.

Loss of human capacity represents a reduction

in rates of return for both private and social investment in all countries, although the impact is greatest where human capital is a significant factor of production and where lost labour is concentrated among those with skills, higher education and managerial training. The effects of the epidemic are compounded in countries where:

- HIV prevalence rises or is high in all social and occupational groups;
- More highly educated groups are affected, including health professionals, teachers, engineers, planners, managers and policymakers;
- Public services as well as private companies and civil society organizations face widespread attrition of trained and experienced staff;
- Employers are unable to replace losses owing to budget and other constraints; and
- Skill losses in primary productive activities, such as mines, farms and plantations occur at an accelerating rate².

HIV/AIDS impacts all sectors through two main paths: first, by killing skilled workers, as discussed above, and second, by increasing costs associated with health care provision, prevention efforts if this is provided, and increased costs for recruitment and training of replacements for those lost to HIV/AIDS – compromising Africa's ability to achieve sustainable development and set development goals.

The impact on the educational sector is a case in point. A number of countries in southern and eastern Africa are reporting increased mortality among teachers, as well as attrition among

both social and economic development for succeeding generations" (CHGA 2004a, p. 1).

Development impacts of HIV/AIDS

Macroeconomic implications: incremental growth reduction

Macro level models of economic impact are struggling to capture the aggregate impact of HIV/AIDS. There are two main reasons for this: first, a number of factors influence African countries' economic performance, and isolating the effects of any one of them is extremely difficult, and second, the impact of HIV on the overall economy may be slight, but incremental, and the impact will therefore only be significant and noticeable several years from now.

Recent modeling efforts have, however, demonstrated that HIV will slow economic growth in the hardest-hit countries. This reduction may be in the order of 0.5 – 2 per cent reduction in GDP growth annually. For countries with prevalence higher than 20 per cent, UNAIDS has estimated that GDP growth can be lowered by as much as 2 per cent annually. These reductions may seem small – however, if not arrested, the cumulative effect will become significant over time. A World Bank study of South Africa projects that the economy will be roughly one third smaller 75 years from now than it would have been in the absence of AIDS (cited in Poku, forthcoming).

AIDS also affects public budgets through diverting limited resources towards mitigating impact. This could for example take the form of disproportionate spending on recruitment and training to replace staff such as teachers, health professionals, agricultural extension workers or other staff lost to AIDS. Placing already limited numbers of competent financial plan-

² Adapted from CHGA (2004c).

other education sector staff to the extent that it is unlikely that the MDG educational targets can be met.

While impact in most countries is based on estimates, South Africa has carried out a study among educators demonstrating the severity of the epidemic (see Table 1).

Table 1: HIV prevalence by type of educational institution and position in educational system, South Africa 2004	
Type of institution	Proportion of staff HIV positive
Primary school	12.3%
Secondary/high school	12.5%
Position in the educational system	
Educator/teacher	14.1%
Senior teacher	9.6%
Education specialist	10.0%
Deputy principal/principal	7.3%

Data source: Shisana, 2005

While there is disagreement as to whether teachers indeed do constitute a high-risk group, it is clear that this profession is not spared the impact of the pandemic, and AIDS-related morbidity and mortality is adding to the already high educator attrition rates. Countries such as Swaziland, Zambia, Uganda and Tanzania are reporting similar trends as those seen in South Africa. Even in West and Central African countries, where HIV prevalence rates generally are considerably lower than in the hard-hit countries of the south and east, "HIV/AIDS infection among teachers results in higher mortality rates, an increase in early retirements and lower productivity" (Tamukong 2004). In addition to the direct effects of increased teacher turnover and in many cases teacher shortage, these prevalence figures have implications, although harder to measure, on staff morale, as well as intergenerational knowledge transfer and loss of training capacity in general.

The health sector is critical to the attainment of several development goals in the MDGs and other frameworks such as the ICPD Programme of Action, as well as comprising a key component of the social development aspect of overall sustainable development. This is also the sector most acutely impacted by the pandemic. Health services in most African countries were already struggling to cope with a crippling disease burden. In the context of already limited health services, the pandemic is further reducing the sector's human and financial capacity to respond, while increasing demand for health services.

All African countries have committed to Millennium Development Goals such as improving maternal health, reducing child mortality, halt the progress of HIV, malaria and other diseases, and achieve greater gender equality. Although some countries may be on track to meet some of the goals, the impact of AIDS on capacity in the education, health and other sectors is severely compromising Africa's overall ability to attain these goals (UN 2005).

Household impacts: a vicious poverty circle

At the base of the macroeconomic and sectoral impact are the infected individual, and the affected family and household. The pandemic is making itself felt most severely at the individual and household level, and the scale is staggering. If 25 million Africans are presently living with the virus, and each has five family members that are also affected, quick calculation brings the number of people directly affected by HIV to 150 million, one-sixth of the total number of Africans. If we add wider family and community members, colleagues and friends, the proportion is much greater.

The household impact of HIV/AIDS generally manifests itself through lowering household productivity and therefore also lowering income, while expenses increase when a household member falls ill and eventually dies (CHGA 2004b). HIV/AIDS therefore creates pockets of poverty in communities, pockets that, if left unchecked may grow in size until the whole community's structure unravels. In addition, the increased burden of care, for sick family members, but also for the increasing number of orphaned children, is straining traditional coping mechanisms such as the extended family and community networks. As a disproportionate number of women are infected in Africa, and as the bulk of the burden of care falls on women, HIV/AIDS is further aggravating the gender inequities in affected households and communities.

AIDS therefore creates a vicious cycle, deepening poverty and gender inequality through taking out productive members of the household and diverting household resources to caring for the sick, while poverty in turn renders the individual vulnerable to HIV infection. While the scale of this dynamic is yet to be determined, it is clear that this has serious implications for development. It will be near impossible to achieve sustainable development, or attain the goal of eradicating extreme poverty and hunger when faced with an epidemic which exacerbates both.

Conclusion and outlook

HIV/AIDS is not the only challenge facing African governments' developmental efforts today. Indeed, African countries face immense challenges in their efforts to achieve social and economic development due to several factors that include poverty, disasters related to drought, floods and disease; wars and conflicts; poor natural resource management, unfavourable international economic frameworks (terms of trade, debt), poor economic policies; and bad governance. What seems clear from examining the impact of HIV/AIDS on the macroeconomic, sectoral and household levels, however, is that the pandemic is, in parts of Africa severely, constraining progress towards achieving social and economic development. Addressing HIV/AIDS, by stopping its spread and mitigating its impact, is therefore imperative to achieving sustainable development in Africa.

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Demographic Change and the Achievement of MDGs in Africa

By Amson Sibanda¹

Abstract

The likely impact of population changes on the achievement of MDGs in Africa has not received much attention even though demographic change has significant implications for the achievement of MDGs on the continent in many ways. For instance, changing age structures, population size and growth have implications for economic performance through modifications in labour supply and productivity, national savings, capital formation, and service delivery. This paper explores the likely impact of changes in fertility, mortality and migration on the achievement of MDGs in Africa.

Introduction

Demographic change has significant implications for the achievement of development as laid down in the Millennium Development Goals (MDGs) in Africa. Changing age structures, population size and growth impact economic performance through modifications in labour supply, productivity, national savings, capital formation, and service delivery. For example, high levels of mortality among the economically active age group directly affect the pool of available human capital that is essential to the provision of public services or to boosting agricultural productivity. This group also has the highest propensity to save and high levels of attrition among this productive age group therefore undermine the savings available for investment, as well as the ability of governments to raise adequate financial resources through taxation. Consequently, these problems impact the ability of governments to raise adequate domestic financial resources to support various MDGs related initiatives. And in the group of 7 countries that are severely affected by the HIV/AIDS epidemic (Botswana, Lesotho, Namibia, Swaziland, South Africa, Zambia, and Zimbabwe), the stability of the nation state itself is being threatened. On the other hand, MDGs aim to address some of the most pressing population problems facing Africa such as high levels of child and maternal mortality, HIV/AIDS, low educational attainment gender inequality, and the growth of slum settlements (see Box 1 for the relevant MDGs). The MDG goals addressing these challenges have the potential to trigger or create an environment that is conducive to sustained economic growth if successfully implemented (UN/DESA 2005b).

Over the past few decades, Africa has been undergoing marked demographic changes in some areas. Mortality levels have been rising mostly south of the Sahara, while much less dramatic declines in fertility levels are underway in several countries. The age and sex composition as well as the size and growth of populations is undergoing conspicuous change primarily as a result of increasing death rates and declines in fertility. The term “demographic transition” is not explicitly used in this paper. This is because the devastating impact of HIV/AIDS in Eastern and Southern Africa has disrupted the normal course of the demographic transition – from high to low levels of mortality and fertility. The gains in mortality that much of Africa had made since the 1950s have been reversed thereby resulting in the failure to produce a “boom generation” that would have occurred if countries had transitioned from high to low rates of mortality and fertility (Bloom et al. 2001). In fact, the few countries in Southern Africa that had entered the early phases of this transition are now witnessing high rates of mortality and low fertility rates at the same time.

Migration is also having an impact on the age structure of some populations. In addition, countries in Eastern and Southern Africa are experiencing marked declines in life expectancy at birth as well as phenomenal increases in the number of orphaned children. The contribution of international migration to the size and growth of national populations is still minimal even in the two largest sub-regional migrations systems in Africa that are centered around the economies of South Africa and Cote d'Ivoire (Zuberi and Sibanda 2004). However, in spite of these demographic changes, the overall growth of Africa's population will not slow down in the immedi-

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ate future. In fact, sub-Saharan Africa’s population is projected to increase by 38 per cent during the period 2000 and 2015 as a result of the effect of population momentum (UN/DESA 2005a).

As a result of these changes, this paper examines the effects and influence of population change on the achievement of MDGs in Africa².

Box 1. The Millennium Development Goals
Goal 1: ERADICATE EXTREME POVERTY AND HUNGER <ul style="list-style-type: none">Target 1. Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a dayTarget 2. Halve, between 1990 and 2015, the proportion of people who suffer from hunger
Goal 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION <ul style="list-style-type: none">Target 3. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling
Goal 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN <ul style="list-style-type: none">Target 4. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015
Goal 4: REDUCE CHILD MORTALITY <ul style="list-style-type: none">Target 5. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
Goal 5: IMPROVE MATERNAL HEALTH <ul style="list-style-type: none">Target 6. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio
Goal 6: COMBAT HIV/AIDS, MALARIA, AND OTHER DISEASES <ul style="list-style-type: none">Target 7. Have halted by 2015 and begun to reverse the spread of HIV/AIDSTarget 8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
Goal 7: ENSURE ENVIRONMENTAL SUSTAINABILITY <ul style="list-style-type: none">Target 9. Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resourcesTarget 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitationTarget 11. Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers

Impact of mortality changes on achievement of MDGs

The biggest demographic changes in Africa since the late 1980s have been due to substantial increases in HIV/AIDS related mortality. Since the outbreak of the HIV/AIDS epidemic in the 1980s, the size and age structure of African populations has been significantly reshaped by increased mortality in the most productive age group (15-49 years)³. Demographic changes of this magnitude undoubtedly have major consequences for African countries as they strive to pull millions of people out of extreme poverty and hunger.

Beside HIV/AIDS, other major causes of death such as mater-

² See also Joan Kagwanja’s article ‘Structural Transformation for Sustainable Development in Africa’ for more how demographic changes impact Africa’s possibilities to develop.
³ See Bjorg Sandkjaer’s article ‘AIDS and Sustainable Development in Africa’ for more on the impact of AIDS on African social and economic development

nal mortality, malaria, and tuberculosis are also eroding the ability of African countries to deliver essential public services. Many professionals in the health, education and public service sectors have died as result of these diseases. This has created a vast skills shortfall that is required to meeting the MDGs, particularly efforts directed at reducing poverty, and educating the continent’s growing numbers of school children. And in the agricultural sector, the rise in adult mortality is also eroding the supply of agricultural labor. This has resulted in the decline of agricultural productivity, thereby negatively impacting the ability of counties to eliminate extreme hunger and poverty.

Since Thomas Malthus published his famous essay more than two hundred years ago, demographers, economists and other social scientists have debated whether high rates of population growth curtail economic growth and related efforts to eradicate poverty. There is no consensus on the issue. Neo-Malthusians contend that rapid population growth is detrimental to economic growth; others contend population growth promotes economic growth and others argue that economic growth can occur independently of population. Indeed there is some evidence to support all three views (Bloom et al. 2001). However, it does seem clear that in countries not heavily affected by HIV/AIDS, the goal of eradicating poverty and achieving food security is being made more difficult by population growth rates that tend to be much higher than economic growth rates, thereby straining public services such as education and health (FAO 2004).

Impact of fertility changes on achievement of MDGs

With a few exceptions, fertility rates have not declined dramatically in most parts of sub-Saharan Africa, although such a decline could play an important role in the achievement of MDGs in Africa. For instance, declines in fertility can lead to reductions in the proportion of the school-age population. Fertility decline is strongly associated with improvements in women’s reproductive health. Hence improving women’s reproductive health is essential in the fight against poverty (ECA 2004).

Because of high levels of fertility, the share of the working age population continues to rise in many sub-Saharan African countries, particularly those less affected by HIV/AIDS. These countries include Ethiopia, Niger, and Mali. Such a relative increase in the population of working age can create a ‘demographic dividend’, as this large working-age population can be harnessed to increase productivity and improve economic growth, which in turn is associated with increased human development an fertility declines. However, these countries are not in a position to benefit from this window of opportunity, unlike several East Asian countries, where this ‘demographic dividend’ triggered faster economic growth in combination with pro-growth, health and human capital development policies (Bloom et al. 2001; Ross 2004). Rather, these African countries with high levels of fertility tend to spend substantial amounts of national resources on demographic investments (e.g. provision of health and educational services). More importantly, a large proportion of the population in such countries does not fall within the pro-

ductive working ages; hence there are limited opportunities created for a demographic dividend induced economic growth and improved household welfare.

Because of population momentum, the potential student population in most African countries will continue to burgeon; hence the financing of and the capacity of educational systems across the region will have to be significantly scaled-up if African countries are to meet the education MDGs. For instance, it is estimated that sub-Saharan Africa's total school age population grew from 84 million to 106 million between 1990 and 2000. And this number is projected to increase to 140 million by 2015 (Bella and Belkachla 2005). In addition to such past high fertility-induced pressures on educational systems, there are also other factors that can have an impact on the ability of countries to achieve universal primary education by 2015. These factors include conflicts, budgetary constraints, and diminishing household resources as a result of HIV/AIDS related adult mortality.

High numbers of children per woman do not also bode well for the educational prospects of the girl child (Haddad et al. 1996). Because of the boy-girl discrimination and age biases in intrahousehold allocation of resources in African households with many children, it is often the girl child who is forced to forgo her education so as to give the boy child the opportunity to continue with schooling. This male bias in the structures of households and society undermines prospects for achieving gender equality in education. Consequently, the lower levels of literacy among females contribute to their more limited access to formal employment opportunities as well as information about HIV/AIDS and other comprehensive reproductive health services and commodities.

Impact of migration and urbanization on achievement of MDGs

The African continent is also witnessing some of the most rapid urban growth in the world. Africa's urban population was estimated at 199 million in 1990 and is projected to rise to 489 million by 2015. And by 2030, Africa will have 748 million urban dwellers (UN/DESA 2004). This rapid growth is largely a result of natural increase and rural-urban migration. Such high rates of urban growth do impact the achievement of some Millennium Development targets. The inadequate provision of decent housing has led to the mushrooming of slum settlements. In addition, the inadequate provision of other urban amenities such as schools, health facilities and sewage and waste disposal facilities undermines the ability of governments to meet the universal primary education and health related Millennium Development targets⁴.

Besides high rates of internal migration, regional and international migration flows have also been growing. The International Organization for Migration (2004) estimates that there are 3.6 million Africans in the diaspora. Of these, more than 2 million

Box 2 Remittances to developing countries

International migration has the potential to generate much needed remittances that can help improve the livelihoods of families left behind as well as communities. It is estimated that in Lesotho, Morocco and Uganda, official remittances constitute 26.3 percent, 9.6 percent and 8.5 percent of GDP respectively (IOM 2004). The growing significance of the migradollar across Africa is reflected by the fact that an increasing number of countries are putting in place mechanisms that involve their diaspora populations in national development strategies and processes (IOM 2005).

For instance the Bank of Ghana reported that Ghanaians living in the diaspora remitted \$1.3 billion in 2002. These remittances nearly match the total revenue generated from merchandise exports (US\$1.94 billion). Of course it is possible that the \$1.3 billion in remittances is an underestimate given that a large proportion of remittances does not pass through official channels (Yaw 2003).

In Zimbabwe, the government has introduced a "Homelink" program that is designed to meet the money transfer and investments needs of Zimbabweans living in the diaspora. Since the "Homelink" money transfer system was introduced in 2004, Zimbabweans living in the diaspora have transferred more than US\$56 million in less than a year (Reserve Bank of Zimbabwe 2005).

The Central Bank of Kenya also recently launched "The Kenyans Abroad Investment Fund". The goal of the fund is to assist Kenyan nationals living abroad to invest directly at home or transfer money to their families. The government estimates that Kenyans living in the diaspora send close to \$600 million every year to their families and for investment purposes (Kelley, 2005).

If these diaspora resources are properly harnessed, they can be agents to fight poverty as well as an agent of community and national development in many African countries. This is particularly so in those countries where remittances exceed ODA flows.

are in North America and in the European Union. Consequently, these African immigrants have become a key factor integrating African countries into the global economy. More importantly, as the size of the African diaspora grows, remittances are becoming critical resources for the sustenance strategies of families back home. Families that receive migradollars tend to use the proceeds primarily for current consumption (food, clothing, medicines) as well as paying for school fees and investing in some small business or in agricultural production (see Box 2).

However, migration is also associated with 'brain drain' and increased vulnerability to disease. The growing significance of migration streams both on and off the continent therefore has both direct and indirect bearings on the achievement of MDGs⁵.

Impact of demographic change on environmental sustainability

Demographic changes occurring across Africa are also compromising the ability of future generations to meet their own needs. The impact of demographic change on environmentally sustainability in Africa is generally perceived as a major concern even though the region is generally considered under populated. This is in part attributed to the high rates of population growth that the continent has witnessed since the 1950s.

In most countries, a growing number of human settlements as well as high rates of population and urban growth have indeed increased the demand for water, fuel wood and other natural resources (IOM 2005). The growth of slum settlements in and around African cities and towns is also posing serious environ-

⁴ See Hassan Yousif's article 'Rapid Urbanization in Africa: Perspectives on Housing and Poverty' for more on urbanization in Africa.

⁵ See Israel Sembajwe's article 'International Migration in Africa: Opportunities and Challenges' for more on the significance of migration for African sustainable development.

mental challenges such as those related to waste disposal. Inadequate sewage and waste disposal systems in slum areas undermine efforts to meet the MDGs related to people's well-being and health such as reducing child mortality. Population induced changes in land use patterns are also leading to biodiversity loss in some local areas.

The forced displacement of people is also a major cause of environmental degradation. Refugees and internally displaced populations tend to overexploit forests and other natural resources. For instance the International Organization for Migration (2005) estimates that 1 million refugees were forced to flee Rwanda and settle in Goma, in the Democratic Republic of Congo within a period of three days. This sudden large-scale resettlement had a huge impact on the local environment as refugees harvested the local environment for firewood as well as timber for building shelter. It is estimated that sub-Saharan Africa has almost half of the estimated 25 million environmental refugees in the world (Myers 1994). Environmental refugees are generally defined as people who are forced to migrate by environmental factors such as degraded agricultural land, desertification, drought or deforestation (de Souza et al. 2003). Growing rural populations in ecologically sensitive areas are also a key catalyst for environmental refugees.

Conclusion

Will demographic change and slower population growth be beneficial to the achievement of the Millennium Development Goals and to overall economic development in Africa? While there is no straightforward answer to this question, it is reasonable to conclude that demographic changes – changes in fertility, mortality, and migration – do influence the achievement of MDGs. However, Africa has some way to go to really tap into the 'demographic dividend' that a young population could bring, and simply achieving reduced maternal mortality or improved child mortality will not automatically translate into sustainable development. However, in the context of factors such as good governance, fair trade policies with the developed markets and the disciplined and focused pursuit of sound social, economic and agricultural policies, demographic changes can have a direct bearing on poverty reduction, universal primary education, reductions in child and maternal mortality and ensuring environmental sustainability.

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International Migration in Africa: Opportunities and Challenges

By Israel Sembajwe

Abstract

Migration is a critical issue in all parts of Africa. This article makes an attempt to link international migration to sustainable development by discussing the opportunities and challenges it presents to both sending and receiving countries in their effort to reduce poverty. Secondary data are used to explore: 1) some selected advantages and disadvantages accruing from international migration; 2) the refugee factor; 3) the response by African Governments to international migration; and 4) the way forward.

Introduction

Migration and sustainable development are closely linked in a number of ways. For example, a country making concerted effort to reduce poverty, achieve universal education, and improve the provision of health services would face insurmountable challenges if at the same time that country is losing its well trained professionals in economic planning, education and health through emigration (or the brain-drain). The reverse would be true for a country with an environment that attracts required trained professionals. On the other hand, if sending and receiving countries can adopt partnerships, strategies and common policies to yield optimum results from migration, such partnership may yield benefits through brain-circulation, properly harnessed remittances, an environment of free movement of their populations, and better planned and sustained development. Hence, the success of all development strategies, including those based on PRSPs, and the achievement of the Millennium Development Goals (MDGs) requires the adoption of development approaches that recognize that "orderly international migration can have positive impacts on both the communities of origin and the communities of destination, providing (for example) the former with remittances and the latter with needed human resources" (see ICPD-PoA, Chapter 10 in United Nations, 1995). Therefore, orderly management of international migration is important for sustainable development, and effective for utilizing Africa's human resources as well as improving their quality of life.

This article uses secondary sources of information to discuss: 1) some selected advantages and disadvantages accruing from international migration in Africa; 2) the refugee factor; 3) the response by African Governments to international migration; and 4) the way forward.

Background

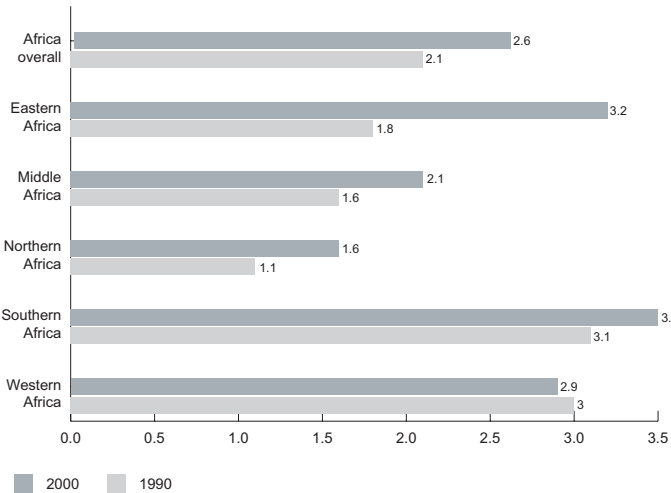
About 175 million people in the world – three per cent of world population - lived outside their country of birth in 2004 (UNFPA 2004). Consequently, "there is a growing interest from governments, civil society, the private sector and many other groups affected by migration, to look further into how the benefits of migration can be maximized, while minimizing negative effects" (ibid., 8). This interest comes with international and regional frameworks that are targeted at reducing poverty and promoting sustainable development such as the Millennium Summit and related MDGs. Migration would be related to all the MDGs as their fulfillment both impacts and is impacted by efforts to effectively manage migration, but more particularly to the eradication of extreme poverty and hunger; the promotion of gender equality and empowerment of women; and the need for developing a global partnership for development.

The status of international migration in Africa can be summarized as follows:

- International migrants in Africa numbered 16.2 million people in 2000 (2.1% of total population) and Figure 1 shows that the proportion of migrants to total population varied from 1.6 per cent in Northern Africa to 3.5 per cent in Southern Africa. There was a notable increase over the period 1990 to 2000 in

- all the sub-regions¹;
- The proportion of female migrants changed from 42% in 1960 to 47% in 2000;
- The number of refugees changed from 79,000 in 1960 to 6.4 millions in 1995, dropping to 3.6 million in 2000. Figure 2 shows that refugees have been a significant proportion of migrants in all the regions except in Southern Africa, largely due to political instability and related conflicts;
- Other priority issues arising from international migration in Africa include labour migration, brain-drain, and trafficking in human beings; and
- The response of African Governments to international migration has been limited and can be reflected by availability of limited migration policies and limited adoption of the convention on migrant workers.

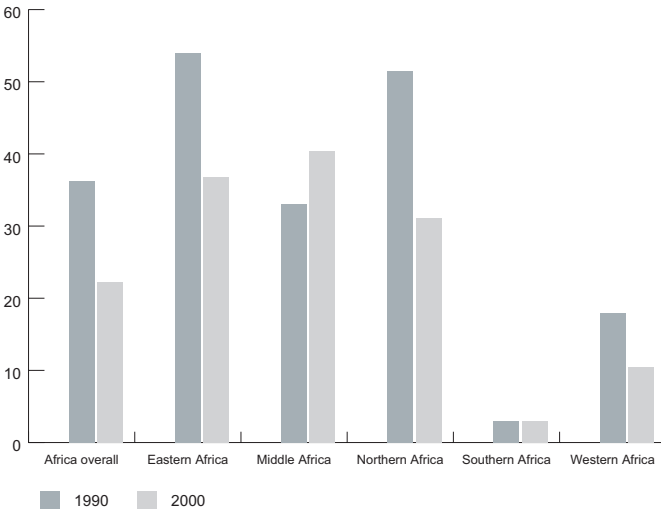
Figure 1: Migrant stock as a percentage of population, Africa and sub-regions



Data source: UN/DESA 2002.

¹ This article employs the UN Population Division subregional country groupings, where Eastern Africa comprises Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Réunion, Rwanda, Seychelles, Somalia, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe; Middle Africa comprises Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe; Northern Africa comprises Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Sudan, Tunisia and Western Sahara; Southern Africa comprises Botswana, Lesotho, Namibia, South Africa, Swaziland; and Western Africa comprises Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, St. Helena, Senegal, Sierra Leone, and Togo.

Figure 2: Refugees as a percentage of migration stock in Africa and sub-regions, 1990 and 2000



Data source: UN/DESA 2002.

Migration: Selected advantages and disadvantages

It is generally acknowledged that migration has the potential of facilitating the transfer of skills and contributing to cultural enrichment (United Nations 2002). Moreover, the vast majority of migrants are making meaningful contributions to their host countries; and many of them send remittances to their families back home which contribute substantially to national income and the welfare of entire households/families. For example, workers’ remittances to developing countries amounted to US\$72.3 billion in 2001, while for Africa, it is estimated that such remittances amounted to 12 billion in 2002 with 4 billion flowing to sub-Saharan countries (Global Coalition for Africa 2005). It is also suggested that the volume of migrant remittances to Africa is more than recorded official flows since the use of informal transfer mechanisms is widespread, especially for transfers at the family level.

But labour migration and related international remittances continue to raise a number of questions regarding benefits to sending and receiving countries. For sending countries, international remittances, defined as the share of remittances in a country’s GDP, are said to yield a strong, statistical impact on reducing poverty (Adams and Page 2003). It is stated that on average, a 10 per cent increase in the share of international remittances in a country’s GDP will lead to a 1.6 per cent decline in the share of people living in poverty. In addition, the International Organization for Migration (2003) estimated that over the last 20 years, annual official remittance flows to many African countries surpassed inflows of official development assistance (ODA) and foreign direct investment (FDI). For example, as a proportion of total financial inflows, remittances amounted to 66% in Morocco, 51% in Egypt and Tunisia, 35% in Cape Verde, 30%

in Nigeria and 27% in Benin and Burkina Faso².

On the negative side, international migration can lead to significant hemorrhaging of national skills in critical development sectors such as education and health. For instance, it is estimated that South Africa has lost 0.3 per cent of its qualified professionals or 4,600 professionals every year over the past decade as a result of the brain drain (Meyer et al. 2000). A growing number of African trained doctors, nurses and pharmacists are also emigrating to North America, Europe and the Middle East, worsening the doctor-patient and nurse-patient ratios across the continent. It is estimated that three quarters of all doctors trained in Ghana and Zimbabwe immigrate to Western Europe within a few years after graduating from medical school (New York Times 2004). The brain drain has been blamed for an annual loss of US\$500 million to Africa in what is termed the reverse technology transfer (Ndiaye 2003). Thus, one big obstacle to achieving the health MDGs is the shortage of such health professionals – a consequence of the growing significance of international migration.

Migration is also associated with the spread of HIV/AIDS and other diseases. For example, several case studies have shown that labor migrants tend to have higher HIV infection rates than nonmigrants (UNFPA 2003). In the case of Southern Africa, some researchers contend that South Africa has been turned into an AIDS hot spot primarily because of the nature and magnitude of circular labour migration in the region (Barnett and Whiteside 2002). Moreover, it is also argued that migration may cause political, economic or social tensions in countries of destination, often leading to xenophobia (this is a problem starting to emerge in South Africa). In addition, demands for workers of various types in some countries have opened a window for illegal actions related to migration such as human smuggling and trafficking.

However, many questions related to concerns about international migration cannot be clearly answered due to lack of adequate data and information on international migration. But the concerns usually raised suggest that there is a need for countries (whether sending, transit or receiving countries) to formulate policies and promote partnerships that would lead to harmonization and beneficial utilization of human resources involved in migration.

The refugee factor

According to UNHCR (2004), data on the origin of refugees suggest a close linkage between economic development and the risk of becoming displaced. By the end of 2002, 82 per cent of the world's refugees originated from developing regions, whereas 10 per cent came from the developed world. Sub-Saharan Africa contributed one-third of all refugees and South Asia contributed 28 per cent. In terms of gender, it is reported that out of 10 million refugees, 49 per cent are females of all ages (ibid, 57). Girls constitute 50 per cent of the children under

5 years and 49 per cent of children aged 5 to 17 years. Among the population aged 18 to 59 years, 51 per cent are women.

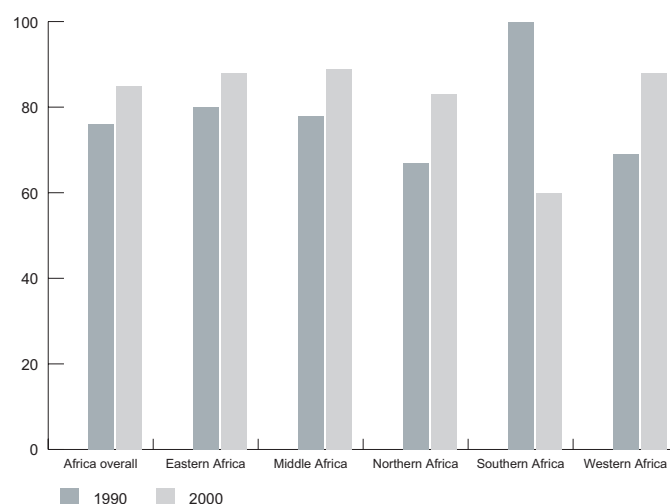
Refugees have been a significant proportion of migrants in the past and continue to be in all the sub-regions of Africa, largely due to political instability and related conflicts, with Southern Africa as the exception. The large number of refugees and internally displaced persons (IDPs) in Africa is attributed to conflicts, human rights violations, lack of democracy and strong democratic institutions, and natural disasters (Ndiaye 2004).

Subregional trends on refugees as a percentage of migrant stock clearly show that around the 1990s, Eastern and Northern Africa were hotspots for refugee movements. Around 2000, however, there were significant changes by sub-region, with the most important hotspot for refugees as a high component of migrant stock shifting to Middle Africa (the only region to have had this substantially increase over the period, as opposed to declines in the rest of the regions and for Africa as a whole). Figure 2, cited earlier, shows these changes. The findings confirm the need for Africa to intensify the process of conflict resolution, and the strengthening of democratic institutions.

The response of African Governments to international migration in the past

As already noted, the African Governments' response to international migration has been limited. For example when we examine the availability of migration policies in the region, it is observed that Governments have, in the past, regarded the immigration levels as satisfactory in all the sub-regions of the continent, and the proportion regarding immigration levels as satisfactory increased between 1990 and 2000. The exception is the Southern African sub-region, where, during the same decade, progressively fewer countries regarded the immigration levels as satisfactory (see Figure 3).

Figure 3: Percentage of Governments viewing migration as satisfactory in Africa and sub-regions, 1990 and 2000.

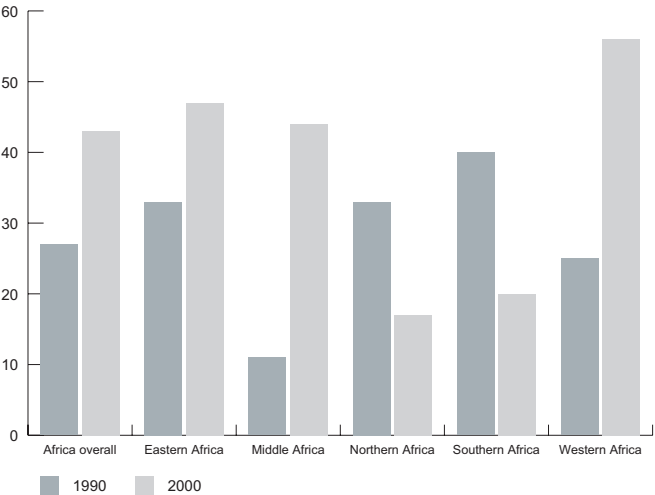


Data source: UN/DESA 2002.

² See Amson Sibanda's article "Demographic Change and the Achievement of Millennium Development Goals in Africa" for more on the scale and importance of remittances.

Consequently, countries taking a position of no intervention on immigration were in the majority (see Figure 4).

Figure 4: Percentage of Governments with a policy of no intervention on immigration in Africa and sub-regions, 1990-2000

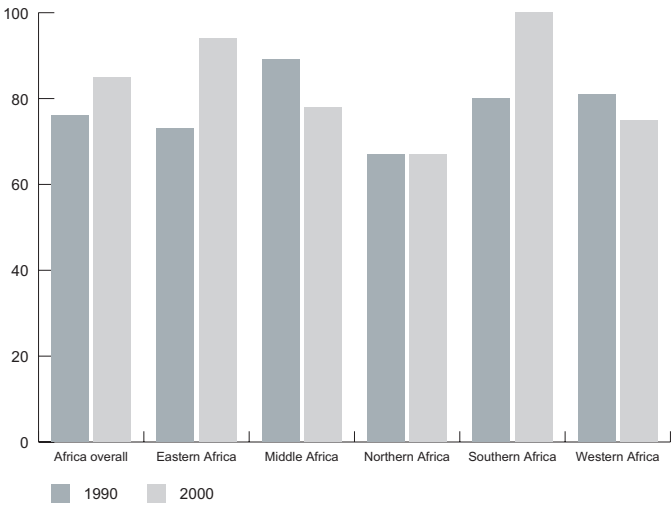


Data source: UN/DESA 2002.

But for Southern Africa, where countries are experiencing political transformation, stability and steady economic progress (especially in the case of South Africa), about one-third of countries which had previously not taken any action on immigration adopted policies to reduce immigration. Northern Africa was one other sub-region enjoying almost the same political and economic conditions as Southern Africa. It is, therefore, not surprising that it was the only other sub-region where countries decided to take action on immigration.

In the case of emigration, all the sub-regions, except Middle Africa, increased or had almost constant proportions of countries viewing emigration as satisfactory between 1990 and 2000 (see Figure 5).

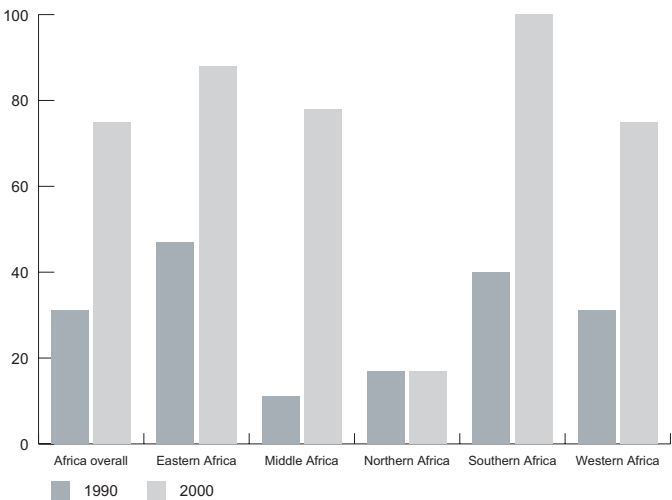
Figure 5: Percentage of Governments viewing emigration as satisfactory in Africa and sub-regions, 1990 and 2000



Data source: UN/DESA 2002.

In the majority of sub-regions, including Middle Africa, the proportion of countries taking a position to not intervene on emigration increased (see Figure 6). Northern Africa was the only exception in this case since the proportion of countries that do not intervene on emigration remained relatively uniform.

Figure 6: Percentage of Governments with a policy of no intervention in Africa and the subregions, 1990 and 2000



Data source: UN/DESA 2002.

In the case of honouring international instruments on migration, the response of African countries was better before 1990 than from 1990 up to 2000. For example, for Africa as a whole, at least 48 countries (89 per cent) were parties to the 1951 Convention and the 1967 Protocol relating to the status of refugees (see table 1).

Table 1: Parties to United Nations Instruments on migration, Africa and sub-regions (number and percentage of countries that have ratified)

Instrument	Africa (total)	Eastern Africa	Middle Africa	Northern Africa	Southern Africa	Western Africa
1951 Convention relating to the Status of Refugees	48 (91)	14 (82)	9 (100)	5 (83)	5(100)	15(94)
1967 Protocol relating to the Status of Refugees	49 (89)	13 (76)	9 (100)	5 (83)	4 (80)	16 (100)
1990 International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families	8 (15)	2 (12)	0 (0)	2 (33)	0 (0)	4 (25)
2000 Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children	5 (10)	0 (0)	0 (0)	0 (0)	2 (40)	3 (19)
2000 Protocol against the Smuggling of Migrants by Land, Sea and Air	5 (10)	0 (0)	0 (0)	0 (0)	2 (40)	3 (19)

On the other hand, only 5 to 8 countries (10 to 15 per cent) were parties to the 1990 International Convention on the Protection of the Rights of all Migrant Workers and their Families; the 2000 Protocol to prevent, suppress and punish trafficking in persons, especially women and children; and the 2000 Protocol against the smuggling of migrants by land, sea and air; with better commitment reported in Southern Africa (40 per cent). Yet, the relatively recent instruments are related to the emerging and increasing challenges of dealing with the evils of trafficking in human beings as well as smuggling them for financial gain on the part of the traffickers and smugglers, and the need to protect the rights of migrant workers and their families, all of which are important to Africa.

More recently, however, in the ECA ICPD+10 Survey of 2003 (ECA 2004), it was revealed that less than 50 per cent of the governments in the region (21 out of 43 responding countries) have taken any measures or adopted strategies including changes in legislation to facilitate the reintegration of returning nationals in their communities and development activities (ECA, 2004). In addition, less than one third of the governments (12 out of 43 countries) had ratified the Convention on the Protection of the Rights of Migrant Workers and Members of their Families at the time of the survey. Even fewer countries had started implementing the Convention; namely Algeria, Kenya, Lesotho, Mali, Mauritius, Rwanda, South Africa and Sudan. What is encouraging, however, is that more countries in the region have started the process of taking international migration seriously in their policies and programmes. This is strengthened by the initial steps being taken to discuss migration within the ambit of the regional economic communities (RECs), as well as moving "Towards the Establishment of a Strategic Frame-

work for a Policy of Migration in Africa" (ECA, 2004). The future is in the "open borders", and this "open border" policy has been enjoyed for a long time by the people in the East African Community (EAC) and recently declared between Mozambique and South Africa. Just as reducing constraints on trade in goods made the world richer in the second half of the 20th Century, so reducing the constraints on the movement of people could be a powerful enriching force in the first half of the 21st Century.

The way forward

It is envisaged that with increasing integration and globalization, more and more countries are going to integrate migration issues into their policies and programmes. But in formulating and implementing such policies and programmes, there will be a need to:

- Adopt standard definitions and share knowledge on international migration (partnerships);
- Set up and strengthen mechanisms for collection, analysis, dissemination and utilization of data and information on international migration;
- Take note of changing patterns of international migration and the necessary policy and programmatic measures to promote labour export and to utilize remittances more effectively as a development tool (for sending countries), and measures to respond to changing international migration dynamics (by receiving countries);
- Set up mechanisms for managing the brain-drain and to possibly transform it into brain-circulation, especially within the African region;
- Adopt appropriate measures to deal with population displacement within and across national borders as a result of conflict, natural disasters, and poverty, especially for humanitarian purposes with regard to refugees and IDPs (another clear need for partnerships);
- Devise mechanisms to deal with undocumented migration, especially the trafficking in women and children, as well as security concerns; and
- Address the 'push' factors for refugees by strengthening institutions for democracy and governance, which, among other things, could respond to natural disasters more effectively.

Taking all priority issues on international migration into account in policy making and programming, will be one of the important strategies for fighting poverty and achieving all the MDGs in the short-term, and sustainable development in the long-term. In terms of promoting a global partnership for development on international migration, it is encouraging that countries in the region have taken the initial steps of discussing migration within

the ambit of the RECs, as well as through a “Strategic Framework for a Policy of Migration in Africa” coordinated by the African Union.

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State of Awareness on Ageing in Africa and Related Policies and Programmes

By Israel Sembajwe

Abstract

The populations of African countries are increasingly growing older. Simultaneously, changing family structures may mean that the elderly find that they have less support from their families, while they still take on care giving roles for the ill and the young. This article uses secondary sources to map the awareness of ageing as a development issue for African States, and provides examples of relevant policies adopted and implemented.

Introduction

Increasing numbers and proportions of aged people in the populations of African States call for national government action to recognize their needs, and to adopt policies and formulate/implement programmes aimed at addressing these needs. The elderly may increasingly: (1) receive no support from their family; and (2) take on care giving roles for own children and grandchildren as the middle generation falls ill and dies (be it from HIV/AIDS or other epidemics/diseases). This happens at a stage in life when their potential to actively participate in economic activities and earn adequate incomes is greatly diminished. Thus, the elderly and their dependants become increasingly vulnerable, especially if there is no corporate effort (whether public or private or by both) to provide for their needs. Consequently, improvement in indicators focused on assessing their welfare, constitutes some of the most important barometers for tracking progress in achieving sustainable development.

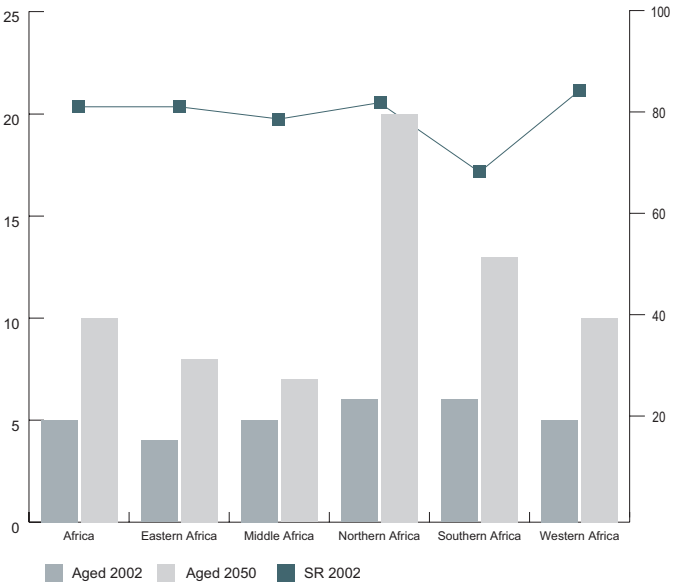
In this article, an attempt is made to use secondary sources of information to explore: 1) the extent of awareness of planners and policy makers in Africa on selected issues on ageing; 2) information on existing policies and programmes that incorporate the needs of the elderly; and 3) the nature of cooperation among countries in the region to promote sub-regional, regional and international partnerships for effective implementation and management of policies and programmes focused at meeting the needs of the elderly.

Ageing in Africa: The challenges

The critical challenge of an ageing society is not so much how to accommodate the older population, but how to ensure the productivity of future workers, regardless of age (Friedland and Summer 2005). Although such a statement may sound more appropriate for more aged populations such as those in Northern America and Europe, it summarizes what needs to be done in all nations or societies in order to achieve a society for all ages, with sustainable livelihoods. While Africa has the youngest population among all world sub-regions, the number and proportion of aged people in the population is increasing and is largely composed of females whose access to resources is usually more limited than that of males (see Figure 1).

Between 2002 and 2050, the number of older people will more than quadruple in the region, and proportions of the elderly will double in Africa as a whole as well as in Eastern and Western Africa. For Northern and Southern Africa, the proportions will more than double, while in Middle Africa the proportion will fall short of doubling although at the same time the sub-region will record the fastest change in the number of older persons (from 4.9 million to 22.9 million, almost a five times change). This change calls for appropriate policies, programmes and development strategies for meeting the needs of the elderly in Africa, and some countries have started identifying concerns in order to direct policies (see Box 1 for concerns related to ageing in Tanzania).

Figure 1: Percentage of population aged 60+ in 2002 and 2050 and related sex ratios in 2002.



Box 1: Ageing-related concerns in Tanzania

A Help Age research conducted on social service accessibility in 12 villages in Magu district, Mwanza region in 2000, showed the following general problems for elderly: 1) difficult access to water (due to increased distance in dry season and high cost of commercially sold water); 2) difficult access to appropriate medication (unavailability at community health care provider sites increased the cost); and 3) growing incidence of witchcraft accusation to elderly women, which resulted killings.

The elderly, themselves, stated problems related to: 1) food shortage; 2) lack of drinking water; 3) inadequate clothing; 4) lack of firewood; and 5) lack of financial means to pay for health services.

On the other hand, caregivers stated problems related to: 1) lack of government assistance when medical treatment is needed; 2) lack of local government support towards old people in terms food and housing; and 3) lack of security among the elderly due to witchcraft accusations.

Source: United Republic of Tanzania, 2003: 5-6

Building on the 1982 First World Assembly on Ageing, the 2002 Second World Assembly on Ageing generated the Madrid International Plan for Action on Ageing (MIPAA) which reflected that world governments spoke with one voice on the need for an international response to the opportunities and challenges of population ageing in the twenty-first century. What is not clear, however, is how countries have been able to translate the proposed actions into policies and programmes and to actually implement them.

Awareness of ageing as a development challenge

Available information indicates that Africa’s awareness on ageing as a development challenge is increasing. Thirty two (78 per cent) of the 41 African countries that responded to the

2003 ECA ICPD @10 survey question on whether ageing was a development concern in the context of the family (Table 1), answered in the affirmative (ECA 2003). In addition, in an overview of population policies and population dynamics in 35 African countries, the United Nations found out in 2003, that 17 of these countries (49 per cent) considered ageing of the population as a major concern (United Nations 2004).

Regionally, the positive responses from the ECA survey on ageing as a development concern varied from 40 per cent in Middle Africa to over 80 per cent in Northern, Southern and Western Africa.

Table 1: Percentage and number of countries viewing ageing as a development concern, Africa and sub-regions

Sub-Regions	Countries and Percentage Stating that Ageing is a Development Concern	Total Responding
Northern Africa	Algeria, Morocco, Sudan, Tunisia (90%)	5
Eastern Africa	Burundi, Eritrea, Ethiopia, Madagascar, Rwanda, Seychelles, Uganda (70%)	10
Middle Africa	Cameroon, Central African Republic (40%)	5
Southern Africa	Angola, Botswana, Lesotho, Mauritius, South Africa, Zambia, Zimbabwe (86%)	8
Western Africa	Benin, Cape Verde, Cote d' Ivoire, Ghana, Guinea, Mali, Niger, Nigeria, Senegal, Sera Leone, Gambia, Togo (92%)	13
Africa, overall	32 (78%)	41

Data source: ECA ICPD + 10 Survey, 2003

Existing policies and programmes related to ageing

The number of countries with policies and programmes that incorporate the needs of the elderly is increasing over time. For example, whereas in 1994 at the time of the International Conference on Population and Development (ICPD) only two African countries included ageing issues in their policies and programmes, the 2003 UNFPA Global Survey on ICPD+10 revealed that the number of such countries had increased to twelve (UNFPA 2003).

Actions taken by 31 countries that provided responses in both the ECA survey and the UNFPA survey on measures taken to respond to the needs of the elderly indicate that: 42 per cent promoted policy development; 35 per cent promoted provision of institutional care; and 23 per cent promoted provision of social security/pension schemes as the main measure (Table 2). As a secondary measure, 13 countries promoted one of the following: provision of institutional care (Benin, Morocco, Niger and Senegal); provision of social security/pension scheme (Cameroon, Seychelles and Togo); and promotion of policy development (Algeria, Cote d'Ivoire, Ghana, Guinea, Mali and Tunisia). Only Togo took a third measure to promote policy development.

Table 2. Main measures taken by countries to address the needs of the elderly

Measures	Number of countries (%)	Countries
Provision of institutional care	11 (36%)	Nigeria, Cameroon, Burundi, Cape Verde, Cote d'Ivoire, Guinea, Mali, Seychelles, South Africa, Togo, Tunisia
Provision of social security/ pension Scheme	7 (23%)	Botswana, Ghana, Lesotho, Serra Leone, Gambia, Zambia, Zimbabwe
Policy development	13 (42%)	Angola, Benin, Central African Republic, Ethiopia, Madagascar, Mauritius, Morocco, Niger, Nigeria, Rwanda, Senegal, Sudan, Uganda
Total	31 (100%)	All Countries Promoting a Measure

Data source: ECA ICPD + 10 Survey, 2003

From the information provided, it was not possible, however, to determine to what extent the actions reported to have been taken, were actually implemented. This requires a different analytical approach by looking at different instruments for development to determine the degree of integrating issues on the elderly into policies, programmes and development strategies. Moreover, limited data and information continue to be major constraints in providing clear answers to questions on development challenges. They, therefore, provide major constraints to policy and programme implementation, monitoring and evaluation.

Venne (2004) states that tools and techniques for successful mainstreaming of ageing in policies and development programmes include data collection and analysis; awareness raising, advocacy and education; identification of performance indicators; inclusion of ageing in the social budget; evaluation of current laws and mainstreaming of concerns into new legislation and policies; and promotion of national coordination and international cooperation. For Africa, Mauritius is cited as the country with a best practice on mainstreaming ageing. Ageing with Dignity (2001), a comprehensive national policy on the elderly, covers retirement, health and nutrition, social protection, housing, income security, employment, education, intergenerational relationships, social welfare and leisure as well as institutional care, with gender as a crosscutting issue. It is encouraging that other countries in the region such as South Africa (see Box 2) are beginning to follow this good example.

Box 2: Policy and strategy related to older persons in South Africa

Apart from reflecting, and being integrated with, the Government's other policies and strategies (e.g. through the Reconstruction Development Programme (RDP) and Constitution), the South African policy and strategy regarding older persons can be seen to be premised on the following statement by the South African Minister of Social Development at the United Nations Second World Assembly on Ageing in Madrid: "Older people are the custodians of our traditions, our heritage and our cultures. They reflect our past and are the mirrors of our future. They have the right to a healthy, productive life, to live in a caring environment and to be treated with respect."

The South African Cabinet has also approved the ratification of the guiding principles regarding older persons as specified in United Nations Resolution 46/91. Various commissions of inquiry have, furthermore, informed policy and strategy regarding older persons. These include the Inquiry into Comprehensive Social Security for South Africa (e.g. the section on financing old-age security provisions) as well as the report of the Ministerial Committee on Abuse, Neglect and Ill-Treatment of Older Persons.

Various legislative measures promote the best interests of older persons. For example, to redress past discriminatory practices, democratize the management structure of homes for the aged, and criminalize the abuse and neglect of older people, the Government has made various amendments to the Aged Persons Act of 1967 (Act 81), and has developed a Draft Policy and Older Persons Bill after consultation with stakeholders in the field of ageing, the Parliamentary Portfolio Committee on Social Development and the Select Committee on Social Services (National Council on Provinces). The aim of this bill is to provide a comprehensive legislative framework for the protection of older persons, and more specifically a framework that will "facilitate accessible, equitable and affordable services to older persons and to empower them to continue to live meaningfully and constructively in a society that recognizes them as important sources of enrichment and expertise". It recognizes the argument in the South African Declaration of Ageing that "older persons themselves have played and continue to play an active role in their own development and in the development of their communities... (and that older persons) embody the spirit of volunteerism that permeated our struggle for democracy." The proposed new Bill, amongst other things, recommends the establishment of a National Consultative Forum on Ageing and the appointment of an Ombudsman for Older Persons. To ensure timely and contextualized service rendering, a national research plan and communication network are to be established, besides routine accountability mechanisms.

Source: South Africa, 2003: v-vi

Developing partnerships

In the past, African nations have been party to the adoption of international frameworks on sustainable development and related issues and they are aware of the need to develop partnerships to facilitate effective implementation of actions emanating from such frameworks. But the question is how far have they gone to actually promote such partnerships?

In the area of ageing, the African Union Policy Framework and Plan of Action on Ageing (AUPFPAA) provides a partnership, dealing with the needs of the elderly. It binds all member States to develop policies on ageing and to use it as a guide in the formulation of national policies to improve the lives of older persons. It also recognizes that fulfillment of the basic needs of older persons is a prerequisite for African governments in mainstreaming the key international instruments and United Nations Conventions on Protection of Older People (HelpAge International, 2003). The instruments range from the 1982 United

Nations Plan of Action on Ageing to the MIPAA. The AUPFPAA will therefore guide member States to design, implement, monitor and evaluate appropriate integrated national policies and programmes to meet the individual and collective needs of older persons. It calls on all stakeholders to be actively involved in the design, development and implementation of national policies and plans of action on ageing, and emphasizes the need for strategic partnerships at all levels involving individuals, communities, NGOs, donors, the private sector, the media, Governments, religious bodies and other civil society groups.

The main areas of concern on ageing in Africa around which partnerships should be galvanized include rights; information and coordination; poverty; health; food and nutrition; housing and living environments; family; social welfare; employment and income security; crises, emergencies and epidemics; ageing and migration; education and training; and gender. These issues, and actions taken to deal with them, will contribute to the achievement of the goals of the international frameworks, especially the MDGs and sustainable development in general.

Way forward

To meet the needs of the elderly and the entire population in the context of sustainable development, Africa needs to:

- Translate into operational activities the actions adopted in global and regional frameworks/instruments on the issues of ageing;
- Increase institutional and human capacity in member States to design and implement policies and programmes that incorporate ageing in sustainable development;
- Increase policies and programmes on ageing;
- Strengthen policy and programme implementation, monitoring and evaluation mechanisms; and
- Enhance cooperation and promotion of sub-regional, regional and international partnerships for providing social, economic and health support to the elderly.

Adopting these recommendations and planning and implementing related activities will contribute to the achievement of the objectives related to the MDGs such as those on poverty; com-

bating HIV/AIDS, malaria and other diseases; and developing a global partnership for development. In a broader sense, the activities will therefore contribute to the attainment of sustainable development.

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Rapid Urbanization in Africa: Impacts on Housing and Urban Poverty

By Hassan M. Yousif¹

Abstract

Africa is experiencing the most rapid urbanization in the world. This article studies the pace and growth of urbanization in Africa, their variations at the regional and sub-regional levels, and their impacts on the progression of the African cities from small urban centers to large agglomerations to mega-cities. The repercussions of these rapid changes are evidenced in the high demand for urban shelter and widespread urban slums, and in increasing urban poverty. The article argues that unaccompanied with sustained high economic growth and demographic transition; rapid urbanization presents considerable challenges to achieve the MDGs in Africa on the targeted dates. Urbanization also presents unlimited opportunities for economic growth and human resources development. The challenges and opportunities require strategic urban development policies and a visionary planning approach for urban futures.

Introduction

Presently, Africa is experiencing rapid urbanization. The history of urbanization indicates that the process transformed the European traditional agrarian rural-based societies into modern urban-based industries, manufacturing and services. These transformations were accompanied with economic growth and with the well-known European demographic transition. This experience documents the role of population movements and the demographic transition in urban development, and in the transition of societies to industrial modernity (Fields 1999).

In this article² the focus is on Africa where the emergence and growth of modern cities are linked to the history of commercialization of agriculture, and to the emergence of mining industries. However, most of the African economies are still predominantly based on agriculture, while urbanization is continuing at a rapid pace. Moreover, the great majority of the countries in Africa have neither sustained high economic growth nor achieved a full-fledged demographic transition³. The main problems with the urbanization process in Africa are the magnitude, quality and time span of the change to urban living. Undoubtedly, massive population movements to live in urban areas during a short period of time will have to be matched with high economic growth and prudent planning, governance and management of urban areas. This does not seem to be happening in Africa, where urbanization is rapidly increasing in the midst of low income and increasing poverty.

The article seeks to illuminate the complexities of urbanization in Africa, through understanding its growth and rates at the regional and sub-regional levels. It studies the impacts of rapid urbanization on the growth of the African cities and towns, and on their progression on the urban hierarchy. Based on these analyses, the article highlights the implications of rapid urbanization for housing, slums and poverty, and concludes with some remarks on the conceptualization of urbanization issues for future research and policy analyses. The analyses are based on data obtained from the *World Urbanization Prospects: The 2003 Revision* (UN 2004).

How rapid is urbanization in Africa?

Currently Africa is the least urbanized continent in the world, yet it is experiencing the highest urban growth and the most rapid rate of urbanization. During years 1950 to 2005 the urban inhabitants in Africa grew by an average annual rate of 4.3% from about 33 million to 353 million persons (see Table 1). Consequently,

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² This article has been extracted from a long paper titled "Rapid urbanization in Africa: Consequences and implications for sustainable urban development in Africa" delivered by the author to the African Ministerial Conference on Housing and Urban Development" held in Durban, Republic of South Africa, 31 January-4 February 2005

³ See also Joan Kagwanja's article 'Structural Transformation for Sustainable Development in Africa' in this Bulletin for more on the components of a transformation of African economies.

the share of the urban areas in the total population (the rate of urbanization) in Africa increased from 14.9% in 1950 to 39.7% in 2005. Future prospects indicate these trends will continue unabated such that by year 2025 about half of the population in Africa will be living in urban areas (UN 2004).

Table 1: Indicators of urbanization in Africa 1950-2030

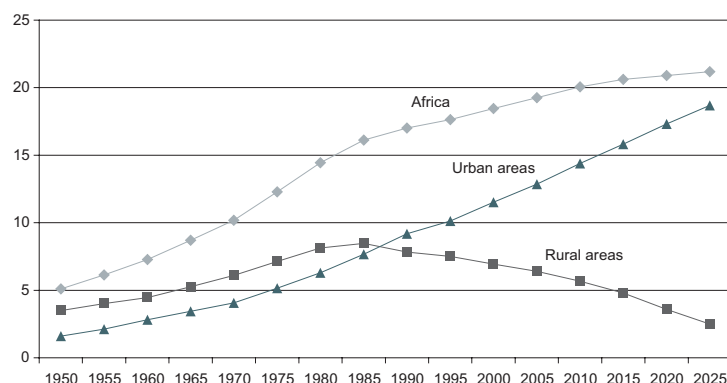
Year	Urban Population (millions)	Rate of urbanization (per cent)	Urban growth rate (per cent)
1950	33	14.9	4.4
1975	103	25.2	4.5
2000	296	37.2	3.6
2005	353	39.8	3.4
2015	489	45.1	3.0
2030	748	53.5	2.7

Data source: UN/DESA 2004

The pace of urbanization in Africa is reflected in rapidly increasing annual incremental change in the number of urban inhabitants. Defined as annual additions to the stock of urban dwellers, this annual change increased from 1.6 million persons in year 1950 to 5.2 million in 1975 and 13 million in 2005. It will reach 16 million persons by year 2015 and 19 million persons by year 2025 (see Figure 1). With this pace, approximately 395 million inhabitants will be added to the urban areas in Africa over the next 25 years.

Population movements to urban areas in Africa are indeed rapid and massive. Rapid urbanization implies that the urban areas will progressively absorb most of the population growth in Africa. Consequently, the continent will witness increasing urban population densities. Moreover, rapidly growing African cities and towns will progressively move upward the urban hierarchy from small towns (less than one million inhabitants) to city agglomerations (one million to less than 5 million inhabitants) to mega-cities (5 million or more inhabitants). The rapid progression of cities on the urban hierarchy is an interesting process that accompanies rapid urbanization, and is analyzed below.

Figure 1: Annual incremental change in population size



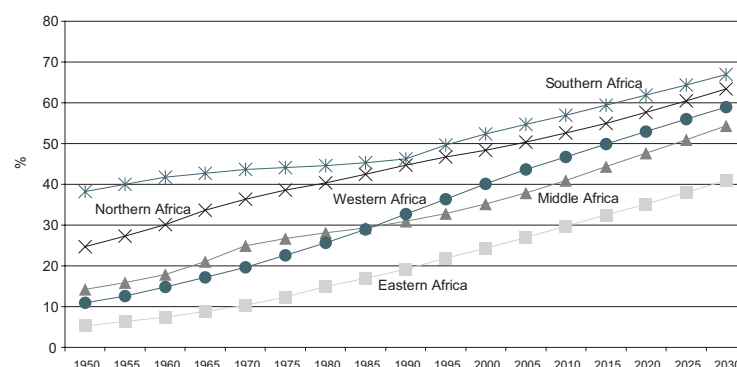
Data Source: UN/DESA 2004

Sub-regional variations

Mirrored against the sub-regions⁴, rapid urbanization in Africa reveals significantly contrasting urban pictures. Southern Africa is the most urbanized sub-region, followed by Northern Africa. These two sub-regions have the highest urbanization rates since the 1950 (see Figure 2). Currently, 54.7% of the population in Southern Africa lives in urban areas, followed by Northern Africa (50.4%), Western Africa (43.6%), Middle Africa (37.9%) and Eastern Africa (27%). While Western Africa and Middle Africa will reach the 50% point mark by years 2015 and 2025, respectively, Eastern Africa will still remain below this point by year 2030.

These five sub-regions also vary significantly in terms of urban growth rates. Between years 1950 and 2005 the urban inhabitants of Eastern Africa grew by an annual average rate of 5.6%, followed by Western Africa (5.0%), Middle Africa (4.3%) Northern Africa (3.5%), and Southern Africa (2.5). With high growth rates, the currently least urbanized sub-regions of Eastern Africa, Western Africa and Middle Africa have the largest potential for higher rates of urbanization in the future.

Figure 2: Trends in urbanization rates. Africa Sub-regions (1950-2030)



Data source: UN/DESA 2004

⁴ This article employs the UN Population Division subregional country groupings, where Eastern Africa comprises Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Réunion, Rwanda, Seychelles, Somalia, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe; Middle Africa comprises Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe; Northern Africa comprises Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Sudan, Tunisia and Western Sahara; Southern Africa comprises Botswana, Lesotho, Namibia, South Africa, Swaziland; and Western Africa comprises Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, St. Helena, Senegal, Sierra Leone, and Togo.

Growth and progression of the urban settlements

Rapid urbanization affects urban human settlements through changing their size, growth, and progression on the urban hierarchy. Most of the urban inhabitants in Africa live in small settlements less than a million persons. With an annual average growth rate of 3.7 percent, the inhabitants of small urban settlements in Africa grew from 67.1 million persons in 1970 to 242 million in 2005. They will reach 318.4 million by year 2015 (See Table 2). However, their percentage share of the total urban population in the continent declined from 81 percent in 1970 to 68.6 percent in 2005, and it will decline to about 65 percent by year 2015. This declining share is partly due to the progression of small urban settlements to urban agglomerations. About 27 of the small urban settlements in Africa in 1970 progressed very rapidly to the level of urban agglomerations by 2000.

Table 2: Inhabitants by classes of settlements in Africa 1970-2015

Size class of settlement	Number of inhabitants in millions			
	1970	2000	2005	2015
Small urban settlements	67.1 (81%)	206.6 (69.9%)	242 (68.6%)	318.4 (65%)
Urban agglomerations	10.1 (12.2%)	69.7 (23.6%)	82.9 (23.5%)	126.2 (25.8%)
Mega-cities	5.6 (6.8%)	19.1 (6.5%)	27.9 (7.9%)	44.5 (9.1%)
Total Urban inhabitants	82.8 (100%)	295.4 (100%)	352.9 (100%)	489.1 (100%)

Data source: UN/DESA 2004

As a consequence of rapid urbanization Africa is experiencing an increase in the number of the urban agglomerations and mega-cities. With an average annual growth rate of 6.1 percent between years 1970-2005, the inhabitants of urban agglomerations reached about 83 million in year 2005, and are expected to reach 126.2 million by year 2015. Their distributional pattern by sub-region changed significantly over years 1970-2005, and will change further in the future such that by year 2015 about 53.2 percent of the inhabitants of urban agglomerations in the continent will be residing in Eastern and Western Africa.

The inhabitants of mega-cities are also increasing as a result of urban growth and the progression of the agglomerations. There was one mega-city (Cairo) in 1970, increased to 2 (Cairo and Lagos) in 2000 and to 3 (Cairo, Lagos and Kinshasa) in year 2005. By 2015 there will be 4 mega-cities in Africa (Cairo, Lagos, Kinshasa and Khartoum). Their inhabitants increased five times from 5.6 million in 1970 to 27.9 million in 2005, reflecting an average annual growth rate of 4.6 percent during these years. By year 2015 they will reach 44.5 million inhabitants. Box 1 shows how the city of Lagos in Nigeria progressed from a small urban settlement to a mega-city.

Box 1: Progression of Lagos

The city of Lagos, Nigeria, was a small urban center with about 290000 inhabitants in year 1950. It became a large urban agglomeration with about 1.4 million inhabitants in 1970, 2.6 million in 1980, 4.8 million in 1990 and 6.4 million in 1995. By the turn of the century the inhabitants of Lagos city reached 8.7 million. They reached 11.2 million in 2005, and will reach 17 million in year 2015. By then, Lagos will outnumber Cairo by about 4 million inhabitants. Worldwide, Lagos will become the ninth largest city in 2015, up from the 24th rank in year 2000.

Source: UN/DESA 2004

Urbanization and economic development

Generally, the macroeconomic indicators are weakly linked to the rate of rapid urbanization in Africa. Becker and Morrison (1995), for example, attribute only 6 to 8 percent of the variation in the urban population growth in Africa to modern manufacturing and employment. The fragility and low contribution of manufacturing industries to economic development is documented in a policy research report published recently by the ECA⁵. The report found the manufacturing industries to contribute less than 14 per cent of the GDP in most of the countries (ECA 2004). Moreover, high unemployment rates, particularly among youth, are documented in most of the African cities (Sommers 2003).

It is therefore pertinent to conceptualize rapid urbanization in Africa in the frame of population movements that are driven by urban-biased development activities, government expenditure and public policies, and concentration of private and informal sectors' activities in urban areas. Also conflicts, drought and rural poverty in Africa have driven millions of people out of their homes to live in slums and in the vicinity of the cities and towns as refugees and internally displaced persons.

Moreover, the conceptualization of rapid urbanization in Africa must be placed in context of the immense pressures put by population movements on the fragile city systems to provide shelter, freshwater, food, energy, and health and education services, among others. Combined with lack of sustainable economic growth, and with urban bias of public and private policies, these factors will further augment and complicate the prevalence and spatial distribution of challenges such as HIV/AIDS and poverty. Current trends affecting urbanization in Africa also include globalization, democratization and rapid decline of the nation-states (Hjerpe and Berghall 1996). The following sections briefly examine the implications of rapid urbanization on housing and poverty in Africa.

⁵ The report is titled *Assessing Regional Integration in Africa*. The Economic Report on Africa (ERA) 2000: *Transforming Africa's Economy* (ECA 2001) called for structural transformation of the African economies so as to achieve sustainable economic growth and to reduce rural and urban poverty. Also, the ERA 2004 documented the weak trade performance of the African economies, and therefore called for unlocking of Africa's trade potentials (ECA 2004).

Rapid urbanization and housing

Rapid urbanization and growth of the cities and towns in Africa will undoubtedly intensify their implications for urban housing, and for the quality of life of the urban inhabitants. Yet, high urban population growth and rising poverty levels, combined with low income levels, will lessen the abilities of governance, economic, health, and social institutions to provide infrastructure, housing, services, and opportunities, such as employment. Consequently, the likelihood of achieving the MDGs targets will be greatly influenced by rapid urbanization.

The impact of rapid urbanization on housing in Africa is manifested in increasing demand for decent shelter. The inability to meet this demand is reflected in widespread of slums inside and in the vicinity of cities. About 188 million slum dwellers lived in African cities in 2001 (UN-HABITAT 2003). The great majority of them (166 million) lived in Sub-Saharan Africa. As a percentage of the urban population, slum dwellers constituted about 72 % in SSA and 28% in Northern Africa in year 2001. Slums in Africa grew at an annual rate of about 4.5% between years 1990 and 2001. With such a high rate, and unless action is taken, African cities will experience an explosion of slums' dwellers.

Rapid urbanization and poverty

Rapid urbanization in the developing countries is accompanied with increasing poverty. This does not mean that urbanization in itself is a cause of poverty, but rather that the flux of the rural poor to the urban areas often lead to rapid increase in urban poverty; a process which is now known as the "urbanization of rural poverty". It is estimated that nearly one billion urban residents in the cities of the developing world are poor. Increasing urban poverty in developing countries is due to lack of access to shelter and land for housing, increasing income inequalities, poor urban infrastructure, among other factors.

Poverty in Africa has for a long time been associated with the rural areas. Studies on Poverty Reduction Strategy Papers (PRSP) pinpoint the overwhelming focus of these PRSPs on rural poverty in Africa. Though some countries are concerned with their urban poverty, the difficulties with regard to its scale and depth arise from lack of understanding of rapid urbanization as well as from measurement of poverty. The income-based measures of poverty tend to not take into account the higher income levels to survive and avoid living in big cities. On the other hand, the basic needs measures of poverty neglect accessibility of the urban poor to social services.

Though there are limitations in knowing the scale and depth of urban poverty in Africa, available data indicate that a large number of the urban inhabitants are poor. Table 3 shows high urban poverty in many countries in Africa. Above half of the urban inhabitants in Mozambique, Chad, Zambia, Niger and Madagascar are below the national poverty line. The results suggest that poverty is higher in the cities of Sub-Saharan Africa than in Northern Africa. In view of rapid urbanization

and low-income levels urban poverty might actually be much higher than the rates shown in table 3. Therefore, addressing the urban challenges, such as developing urban-based social services (health, education, electricity, water, transport, etc.) and upgrading of slums, is important for poverty alleviation in Africa (Sachs *et al* 2004).

Table 3: Urbanization and urban poverty in Africa

Country/Sub-region	Percentage of the population below the national poverty line				Urbanization rate in year 2005
NORTH AFRICA	Year	Total	Rural	Urban	
Algeria	1998	12.2	16.6	7.3	50.4
Egypt	1996	22.9	23.3	22.5	60.0
Mauritania	2000	46.3	61.2	25.4	64.3
Morocco	1999	19	27.2	12	58.8
Tunisia	1995	7.6	13.9	3.6	64.4
WEST AFRICA					
Burkina Faso	1998	45.3	51	16.5	18.6
Gambia	1998	..	61	48	26.1
Ghana	1998	39.5	49.9	18.6	46.3
Mali	1998	63.8	75.9	30.1	33.7
Niger	1993	63	66	52	23,3
Nigeria	1993	34.1	36.4	30.4	48.3
CENTRAL AFRICA					
Cameroon	2001	40.2	49.9	22.10	52.9
Chad	1996	64	67	63	25.8
EAST AFRICA					
Ethiopia	2000	44.2	45	37	16.2
Kenya	1997	52	53	49	41.6
Madagascar	1999	71.3	76.7	52.1	27.0
SOUTHERN AFRICA					
Mozambique	1997	69.4	71.3	62	38.0
Zambia	1998	72.9	83.1	56	36.5
Zimbabwe	1996	34.9	48	7.9	35.9

Source: World Bank Africa Database 2004

Conclusion

People are increasingly becoming more concentrated in urban areas in Africa, and during a relatively shorter period of time compared to the classical European urbanization. Meanwhile, most of the African economies have not yet demonstrated the kind of economic growth and transformations often associated with rapid urbanization. Therefore, rigorous conceptualization, research and analyses are paramount for understanding the complexities and issues involved, and for informing planning and policymaking on the consequences and implications of rapid urbanization in Africa. At the outset, urbanization presents challenges that require prudent management and governance of the urban economies, to devise effective urban resources management policies and to address the rapidly increasing

demands for water, shelter and employment opportunities. Urbanization also presents opportunities resembled in expanding urban markets and human resources concentrations that would need to be properly exploited to improve the welfare of the populations. Such challenges and opportunities require strategic urban development policies and a visionary approach for urban futures, as discussed in several international and regional meetings and conferences (see Box 2).

Box 2. Some international and regional events on urbanization, housing and poverty

1. International conference on Urban Poverty, Recife, Brazil 17-21 March 1996
2. United Nations Conference on Human Settlements (Habitat II) Istanbul, Turkey, 30-14 June 1996
3. International Forum on Urban Poverty. Florence, Italy 9-13 November 1997
4. International Forum on Urban Poverty. Social Integration and Social Security for the urban poor. Nairobi, Kenya 11-14 October 1999
5. International Forum on Urban Poverty. Productive and inclusive cities. Towards Cities for all. Marrakech, Morocco 16-19 October 2001.
6. World Urban Forum. Barcelona, Spain 13-17 September 2004
7. African Ministerial Conference on Housing and Urban Development, Durban South Africa 31 January- 4th February 2005.

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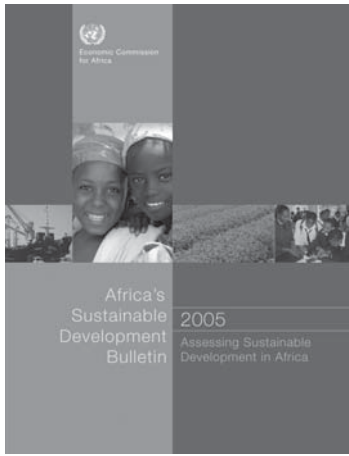
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