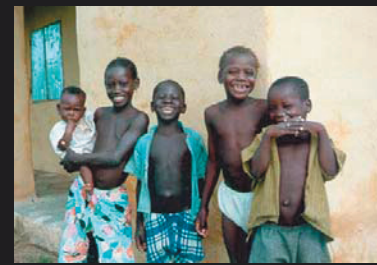




Economic Commission
for Africa



Africa's Sustainable Development Bulletin

2004



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2004

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Correspondence should be addressed to:

The Editor, Africa's Sustainable Development Bulletin
Sustainable Development Division (SDD)
United Nations Economic Commission for Africa (UNECA)
P.O. Box 3001, Addis Ababa
Ethiopia
Fax: 251-1-514416
E-mail: APDB@uneca.org

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Foreword

If Africa is to advance, we must achieve sustainable development. For us at the Economic Commission for Africa, this implies the integration of two key goals - human well-being and natural resource stewardship.

We need development that is scientifically valid, economically feasible, environmentally friendly and socially acceptable. Our analysis shows that, sustainability is positively and strongly correlated with institutional development, human and physical capital accumulation and productivity.

Besides promoting agriculture as the backbone of food security and poverty eradication in most countries, Africa also needs to use its comparatively rich endowments in natural resources to drive growth and development. African nations must seriously investigate ways to maximise use of their mineral, energy and water resources to fund sustainable modernization and rural transformation.

If that is to be achieved, the skills and energy of the people on the continent must be harnessed. Addressing the problems they face is therefore critical to the sustainable development of the continent. In an increasing number of countries, HIV/AIDS is reversing progress and eradicating hard-won development gains. This challenge must be understood and urgently tackled.

Our new Sustainable Development Bulletin sets out to demonstrate the interdependent links between different economic and social sectors and that sustainable development requires us to make simultaneous progress on multiple fronts. We are keen to work with partners in the UN system and beyond, to advance Africa's development objectives, and hope that this Bulletin will be one step in that direction.

K.Y.Amoako
Executive Secretary
Economic Commission for Africa

Editorial

This is the first issue of Africa's Sustainable Development Bulletin, (ASDB), an initiative of the Sustainable Development Division (SDD) of the Economic Commission for Africa (ECA). ASDB will be produced annually in English and French, and widely disseminated in Africa and beyond, among planners, policy makers, universities and researchers, NGOs, international organizations and experts at large. It will also be available electronically at the SDD website (www.uneca.org/sdd) and the website of the Population Information/Africa (POPIA) at www.uneca.org/popia

ASDB succeeds the five-year old Africa's Population and Development Bulletin. It aims to provide a vehicle through which SDD presents briefs on trends and policies related to agriculture and food security; population, human settlements, and natural resources and the environment in the African context. The Bulletin is also intended to be an advocacy instrument targeted at raising policymakers' awareness on these nexus issues in development planning.

Sustainable development in the African context covers the three core areas of environment, social development and economic development. To guide action, African governments have committed to the 2002 Johannesburg Summit Plan of Implementation (JPOI). Together with other instruments such as the Millennium Development Goals, the Plan of Action from the International Conference on Population and Development (ICPD), and continental declarations, these provide a framework for African countries' struggle to achieve sustainable development.

Many factors are critical to the attainment of sustainable development in Africa. The majority of the African populations derive their livelihood from agriculture-related activities. Therefore, agricultural transformation is fundamental to achieving the development goals of Africa. The first thematic section of this publication addresses the imperative of an African Green Revolution.

A clear understanding of issues related to the management and use of Africa's land, water and mineral resources, is important for policy makers and key to achieving sustainable development. These are addressed, respectively, in sections two, three and four. Powering all the different aspects of development is energy – an issue which is dealt with in section five. The essence of all development efforts is the improvement of people's livelihood. In section six, we examine the progress made in achieving the development goals set at the International Conference on Population and Development (ICPD), held ten years ago in Cairo. As we examine the different elements of sustainable development, we should be mindful of the impacts of the HIV/AIDS which is undermining Africa's development efforts, and for some countries, already throwing development in reverse. One aspect of this, the impact of HIV/AIDS on rural households, is examined in section seven.

For each of the core areas, the articles provide easily accessible information and spotlight the linkages with key international processes. In general, the articles also reflect the work of SDD and related institutions. The collection in this edition demonstrates that critical sustainable development issues are not isolated, but interlink.

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

An African Green Revolution

The Sustainable Development Division (SDD) of the Economic Commission for Africa is working extensively on issues related to achieving an African Green Revolution. Two articles on aspects of the African Green Revolution are produced in this edition of Africa's Sustainable Development Bulletin, and we invite you to access more information, available on the SDD website:

http://www.uneca.org/eca_programmes/sdd/default.htm

SDD can also be contacted using the address provided on the inside cover of this Bulletin.

Designing the African Green Revolution: Uganda Case Study

By Alex Tindimubona¹ and Jacques Hamel²

The Luwero Triangle is an area in central Uganda, which was devastated by war in the 1980s. In 1998, with the inhabitants returning after the war, researchers from the Uganda National Banana Research Program at Kawanda Agricultural Research Institute (KARI) started to assist in re-designing the Luwero farming system, using African Green Revolution principles for sustainable modernization of agriculture and rural transformation (SMART/AGRI).

The researchers found a situation of severe decline in production of banana, the main traditional food and cash crop of the area; frequent annual crop failure and food insecurity; and low farm incomes. Tracing the problems deeper to their root causes, they discovered problems of shrinkage of banana acreage; decline in yields; build-up of banana pests and diseases; frequent droughts; and exhausted soil fertility. One coping mechanism of the largely peasant farmers had been a shift to annuals like maize, millet, cassava, sweet potato, beans, ground nuts and beer bananas. The farming system was a mess.

SMART/AGRI Intervention

The proposed SMART/AGRI design, arrived at using participatory technology development and communication methods coupled with scientific and technical assessment, entailed:

- (a) reviving banana production to optimize food security and income;
- (b) introducing modern and improved varieties (MVs) of high yielding banana cultivars, which are also tolerant or resistant to drought, pests and diseases – produced through a combination of conventional breeding and modern biotechnology (tissue culture);
- (c) introducing other green revolution components like coffee and crop-livestock integration;
- (d) introducing modern scientific management practices for all the green revolution components, including agronomy, water, soil fertility, pests and diseases, as well as inculcating a business-like approach to farming;
- (e) mobilization, sensitization, training and empowerment of communities, resulting in better participation of women and youth, community and farmers' organizations, and integration with other sectors e.g. education and health (HIV/AIDS); and
- (f) linkage to market, industry, infrastructure, investments, policy makers and institutions both public and private.

In only five years, as noted by the international experts who visited the Luwero Triangle in December 2003*, the results of the SMART/AGRI design are dramatic. Over 20 per cent of the farm households have adopted improved banana technologies; food security in the region is now assured; farm yields have risen; and average farm income has improved by US\$120 p.a. Many neighbouring communities are seeking similar GR designs, technologies and training. The experts endorsed the SMART/AGRI Design methodology, and resolved to form design teams to replicate it all over Africa.

¹ Senior Economic Affairs Officer, Sustainable Development Division, ECA

² Scientific Affairs Officer, Sustainable Development Division, ECA

* The 22 experts were participating in the ECA-sponsored Field Project on Strengthening Africa's Capacity in Science and Technology for Sustainable Development: Towards a Green Revolution in Africa. A report is available on request from ECA. Write asdb@uneca.org

Harnessing Biotechnology for a Green Revolution and Sustainable Development in Africa

By Jacques Hamel

Sub-Saharan Africa does not yet appear poised to capture maximum gains of the rapid developments in biotechnology. Advances in this field are likely to revolutionize agriculture and food production with great political, social and economic implications for African countries – half of which needs food aid. Yet, biotechnology research receives little recognition and insignificant funding from African governments. The continent's scholarly and research community must be trained and put to work on those biotechnology issues that are of importance to Africa's development.

Biotechnology is the application of microorganisms, plant/animal cells and biological systems to micro-biological processes. It holds promise for increasing food production, enhancing environmental protection, improving the treatment of many diseases -including animal diseases - and creating jobs, particularly in agricultural, agro-business sectors and in related industries. These are important areas of concerns for African policymakers.

Currently, one African out of three is food insecure. Therefore, perhaps the most important benefit of biotechnology is its potential contribution to the achievement of a Green Revolution on the continent, which could eradicate the scourge of hunger in a space of 10 to 15 years. Biotechnology, for instance, would improve the ability of African developers to:

- Quicken the pace of development of new plant varieties;
- Broaden the range of crops that can be cultivated;
- Expand the spectrum of potential products, including nutritionally-enhanced products;
- Facilitate the exploitation of marginal lands, including semi-arid lands;
- Increase crop yields;
- Diagnose plant and animal pathogens;
- Reduce post harvest losses;
- Extend the storage life of commodities;
- Reduce the use of herbicides, pesticides and fungicides;
- Produce environmentally-sound biofertilizers and other inputs;
- Generate employment opportunities; and
- Help face competition from technologically-advanced countries.

There are several new important innovations taking place in biotechnology. It is currently one of the most exciting, critical and promising fields of technological development and economic opportunities. African countries must build the capacity to be able to identify these opportunities, assess the potential benefits, health and environmental risks associated with the application, and make informed decisions about how to safely harness it for the continent's sustainable development.

Application of biotechnology is global and its competitive use by the industrialized countries actually constitutes a clear threat to African agriculture, especially in the production and marketing of products like sugar, cocoa and vegetable oil. In addition, commodity exports like cotton similarly face imminent threat from the more advanced developing countries like China, India and Brazil. It is critical, therefore, for African countries to embrace the safe use of modern biotechnologies and strengthen their own human, institutional and regulatory capacities to make the most of the new technological innovations in that area.

If the promise of biotechnology is to be realized in substantial ways in Africa, the attitude of key stakeholders towards it would have to change, and decision makers would need to allocate greater priority for its development. Governments would need to provide increased recognition and funding for biotechnological research and application, so that Africa would not once again become a dependent consumer of imported goods whose production and benefits are generated elsewhere.

African policymakers and lawmakers must increase their own knowledge of the power of biotechnology and how its application can bring substantial benefits to the peoples of their countries. They need to be aware of

how, for example, molecular technologies, such as genetic splicing and marking, could lead to affordable diagnosis of infectious animal diseases, while recombinant technologies could lead to the development of vaccines against such infectious diseases. Sequencing pathogen genomes technologies could be used to identify new antimicrobials. Genetically modified crops could be used to make nutritionally-enhanced and therapeutic products and tissue culture could be used to accelerate propagation and diffusion of the new high-yielding plant varieties. All these technologies have proved their effectiveness in generating new products that could alleviate or eradicate hunger in Africa.

A number of factors have slowed the impact of biotechnological advances in the continent and have kept biotechnology research and its results from the mainstream of African academia. These factors include:

- Limited awareness of the benefits of biotechnology,
- Weak scientific and technical expertise,
- Poor research and information infrastructure,
- Inadequate technology transfer, and
- Lack of private sector participation.

Countries need to reverse these trends by formulating well-targeted policies that aim to expand the exploitation of African potentials and are integrated with overall science, technology

and innovation policies. These policies for biotechnology development must then be translated into implementable plans that are matched by adequate funding.

The universities and research institutions in African countries should rationalize their approach towards the study and use of biotechnology. Universities would need to reform their science curricula in order to bring in biotechnology research as a distinct and important strand. They should consider pooling their resources in funds and manpower in order to increase their chances of success. They should also recognize the need to involve the private sector early in their research enterprise in order to assure opportunities of commercialization.

Given the necessary political will, the proper attitudes and the right policies, biotechnologies can make a difference in advancing the Green Revolution and in reducing hunger and poverty in Africa.

Land, Food Security and Sustainable Development in Africa

By Joan Kagwanja ¹

Introduction

With the livelihoods of an estimated 70 per cent of Africa's population dependent on agriculture, access to land and security of tenure are the main means through which food security and sustainable development can be realized. Some of the land tenure issues that continue to affect food security and sustainable natural resource management include: a) unequal distribution of land; b) sub-optimal utilization of land resulting from unequal distribution, unresolved land-use and access conflicts, and short-term market policy incentives; and c) land tenure insecurity emanating from rapid socio-economic changes that disrupt traditional institutions, undue government interference, and underlying discrimination of women and other minority groups (ECA 2003).

Land-food security-natural resource management linkage and challenges

Africa's population is heavily dependent on land as an input to agriculture, tourism and mining, which are all important production sectors for African growth and ensuring food security and the sustainability of livelihoods. Many authors have attempted to show conceptual linkages between land tenure and sustainable livelihoods. For example, Maxwell and Weibe (1998) show a cyclical relationship between resources, production, income, consumption and nutritional status. They note that endowments (land and natural resources capital), determine production and exchange decisions (resource allocation), which affect entitlements (wealth and income), and which, in turn, affect consumption and investment decisions (health, sustainability). Food security is heavily constrained by, among other factors, access to quality land; increased food prices due to commercialization; poor distribution of food especially to marginal areas; decreased domestic production; erratic rainfall and droughts; population pressure and declining farm size; declining productivity; and inappropriate policies.

In addition to focusing on other factors impeding food security, land issues that constrain food production must be addressed. These issues include ensuring more equitable land redistribution; land use regulation; gender equity in land administration and allocation; and clearly defined land tenure rights. Secured access to land and clearly defined land rights can increase production and ensure food security.

The need to increase agricultural production to meet food security and other developmental challenges has forced many rural Africans to farm on marginal/fragile lands. This trend, coupled with unsustainable production practices and climatic variability, has led to the exhaustion of the productive capacity of the land. In many parts of the continent therefore, natural resource management challenges such as over-use of land, soil erosion, degradation of forests and wetlands are common. Unequal distribution of land and insecure land rights serve to exacerbate the problem of natural resource management in the region by discouraging investments in productive agricultural practices. At the global level, international logging corporations have been a source of deforestation while inappropriate policies have led to unsustainable exploitation of natural resources.

Land and natural resource related conflicts have undermined food security and led to the further environmental deterioration on the continent. These conflicts are caused by factors such as (i) land scarcity, which has seen the landless occupying land perceived to be vacant; (ii) lack of enforcement of land laws leading to dishonoring of boundaries for survival strategies; (iii) marginalization of some social groups forcing them to defy rules and regulations; (iv) political issues encouraging illegal settlements in return for political favors; and (v) armed conflicts which result in the devastating destruction of the environment. Many African governments have failed to invest in institutions for local level conflict management. In addition, fragmented and competing institutions of land administration governing access and use of land have worsened the problem of land and land use conflicts in the region.

¹Economic Affairs Officer, Sustainable Development Division, ECA

Women play a key role as managers and providers of food in African households. Research shows that women are more inclined to grow food crops, a crucial input to food security, and that they are more likely to use income generated from the land to address food security concerns. Unfortunately, the majority of African women are vulnerable to problems of land access and land ownership due to existing sociopolitical value systems and current land, inheritance and property ownership laws. Women are, for the most part, relegated to minority status, negatively affecting their rights to land. As a result, women are left out of major decisions relating to agricultural production, have limited access to credit, agricultural extension, markets and information crucial to production and marketing.

Addressing land challenges in Africa

As we have seen, land tenure insecurity is a major problem leading to food insecurity, natural resource degradation and conflicts in many parts of Africa (SDD 2003). Land tenure is governed by a bundle of regulations describing how and from whom land rights are acquired, how such rights are protected, regulated, disposed or alienated, and the rights and duties possessed on land and its resources against others. Land tenure therefore defines land rights, which are crucial to ensuring security of tenure to the individual or group claiming these rights. The two broad types of land tenure systems in Africa are: a) Customary lands (i.e. lands vested in community leaders or the state (e.g. homesteads, grazing land etc.) and b) Statutory received lands (land vested in individuals or institutions (e.g. freehold, leasehold, state land). Within these two types of tenure systems, there are different forms of land ownership, such as co-sharing, co-management, sole proprietorship, joint proprietorship and trusteeship.

Insecurity of tenure in Africa arises due to the failure of existing laws and institutions to address three crucial issues related to land rights: the duration or period that the rights are held; the breadth or extent of the rights; and the assurance by the state as recognized by society, with legal guarantees. The duration of land rights in some African countries is not consistent with the expected investment benefits of the land, nor the time horizon during which these benefits are to be realized. In addition, land boundaries are rarely clearly marked and recognized, resulting in land disputes and conflict. This often occurs for a number of reasons, including high costs of land demarcation vis-à-vis its benefits. Yet another problem is that African governments have failed to provide assurance of land rights to the subjects of these rights. Assurance of land rights through enforcement institutions provides a mechanism for the legal recognition of rights as well as the assurance that rights will not be decreased or withdrawn (World Bank, 2003). In defining land rights, there should be a clear recognition of the dynamic nature of these rights. As land rights evolve, due to demographic, economic and political factors, past norms and contracts must be formalized to protect land rights over time, hence ensuring sustainability of those rights. There is a general consensus that once land

rights are clearly defined as described above, tenure security can be achieved regardless of the type of land tenure and form of land ownership.

Inequalities in land distribution in Africa continue to plague food security and natural resource management efforts. Land distribution problems center around unequal access to land by race, gender, class, ethnicity and livelihood option. Failure to address land distribution has led to the marginalization of indigenous people, women, pastoralists, immigrants and, across all groups, the poor. In some cases problems surrounding land distribution have resulted in unrest in some parts of Africa, most recently in Southern Africa, e.g. Zimbabwe. Some studies have shown that one of the root causes of the Rwandan genocide and the recent conflicts in Cote d'Ivoire is the marginalization of minority Hutus (Rwanda) and Burkinabe immigrants (Cote d'Ivoire).

In addition to land tenure security and distribution challenges, land utilization in Africa poses problems to agricultural production and land resources management. Land utilization relates to how and by whom land is used. Absence of clearly defined land use policies in Africa and a lack of enforcement of land use regulation continue to result in land use conflicts, hampering the productive capacity of land and its resources. Examples of land use conflicts include clashes between pastoralists and farmers, particularly large scale farmers/ranchers in many marginal lands in Africa; wildlife reserves/national parks and pastoralists; and miners, farmers and pastoralists. In addition there is continued encroachment into forest reserves, a trend that contributes to the loss of biodiversity and, over time, natural resource degradation and climate change.

Village-level management

It is through various institutions for land administration that land policy and legislation are implemented to ensure land tenure security and efficient means of land transfers to facilitate equitable access to land and land tenure security. Institutions of land administration play a crucial role in the management of land-based resources, including ensuring that land property rights are held under the defined tenure regime; providing the regulatory design for land management; enforcing and guaranteeing the integrity of standards for land management; providing valuation procedures and other information to use land for revenue collection; performing the cadastral function; and dispute and conflict resolution functions (land adjudication).

It is now well accepted, following the model of managing other natural resources, that land management is most effective if done at the village or community level, where most decisions are made. Unfortunately, land administration in Africa is highly centralized with most land institutions riddled by high levels of bureaucracy and corruption. Decentralizing land management would increase accountability, transparency, and expediency in land administration resulting in more efficient land policy implementation. An accountable and transparent local government, for instance, is likely to be more practical, increase participa-

tion and adequately address conflicts and disputes. Several models of decentralization are evident, ranging from setting up new institutional structures and completely dismantling traditional structures, to strengthening traditional institutions in order to increase their capacity for land administration. It is crucial to evaluate the need for new institutions versus the move to create new ones based on the efficiency and equity benefits involved. In terms of conflict and dispute resolution, traditional institutions have a crucial role to play, particularly if they are not party to the existing conflict. But in cases where local institutions are party to the conflict, or where the dispute occurs outside the jurisdiction of local institutions, e.g. with multinational companies, alternative/new institutions with different capacity may be required. But, should local land institutions be democratized? Democratizing traditional institutions may be unpopular with the beneficiaries of autocratic rule, yet democratizing local institutions may be necessary to ensure wide/ adequate representation in these bodies. A situation where a non-elected executive holds most of the power is unlikely to be as effective as an elected assembly in local governance since an elected executive may have more incentives to be transparent and accountable in a bid to win elections, for instance. Democratizing local institutions, however, should be done with caution to avoid a situation where local elites capture local government positions and then use them to serve private interests. This concern can be addressed, for example, by providing education and capacity building to the electorate geared toward management of local institutions.

The role of central government, although reduced, is vital in providing support services and an enabling environment to local institutions in terms of law, policies and programs that promote accountability and transparency to support decentralized land management. This can be done through the provision of information on rights and access to the law, education and capacity building, as well as the promotion of appropriate local dispute mechanisms.

Conclusion and recommendations for land policy reform

In response to land related problems, land policy formulation has increased in the last ten years in Africa. The main aims of most reforms are:

- Protecting land rights of individuals and groups through land laws;
- Defining rights and responsibilities of institutions;

- Ensuring that the rule of law is applied when land rights are extinguished or land is sequestered by the state; and
- Adjudicating in cases of land conflicts.

Land reform efforts in Africa include nationalization of land, freehold registration and adaptation of customary tenure. Redistributive land reforms aim to foster equity, reduce poverty and increase land productivity by transferring land from landlords/state to small-scale farmers. Land tenure reforms change the ownership of land and regularize customary land, among their other functions. Among the expected outcomes of land reforms are increases in agricultural production and increased productivity leading to poverty reduction; decongestion; racial harmony; gender equality; and land tenure security to customary land owners.

In recognition of the recent failure of market assisted redistributive efforts, which have resulted in explosive political circumstances in Southern Africa, alternative methods and incentives to address the problem of unequal land distribution should be explored. Regarding land utilization, closer coordination across government sectors, administrative levels and traditional institutions to enhance effective decision-making and conflict resolution is needed. In addition, making land use information more available to relevant institutions is crucial to providing more informed land use guidelines. Land tenure insecurity in Africa should be addressed by formalizing customary tenure, improving governance of customary owned land, decentralizing land administration and empowering marginalized land users, including women. There is a special need to harmonize reform efforts across customary and statutory law, extending reforms to other related laws and regulations while improving access to judicial systems, particularly for the poor, women and minorities.

Drawing lessons from past failures in land reform, particularly on land titling programs, African countries should acknowledge the coexistence of multiple land tenure regimes including state, communal, and individual land ownership. The complexities of these regimes must be adequately reflected in land reform programs, legislation and administration. With regard to current land reform programs in Africa, there is a positive trend among African countries addressing issues of concern to food security and sustainable development. Recent reforms which result from more participatory processes, are more comprehensive in scope and tend to advocate more rights for individual citizens than the state. Land policies should be formulated and imple-

mented within the framework of other agricultural and rural development policies in order to improve food security in Africa.

The failure of land management institutions to implement land policy is largely attributed to the centralized nature of these institutions and the lack of resources and human capacity for implementation. Current democratization efforts and calls for decentralization and power devolution have potential positive impacts on managing land resources. The benefits of decentralization need to be analyzed and recommendations made on the models of decentralization that enhance land policy implementation. To this end the Sustainable Development Division of ECA has embarked on a subsequent study aimed at providing lessons and recommendations on land policy implementation to African member States based on best practices in land policy management.

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Land Tenure Systems and Sustainable Development in Southern Africa

By Gladys Mutangadura ¹

In 2003, the Southern Africa Office of the Economic Commission for Africa carried out a study to review the current land tenure systems in selected countries in Southern Africa, identify constraints and opportunities relating to land tenure security and improvements in women's land rights and recommend strategies that can be adopted by countries to improve land tenure security. The study that focused on Botswana, Lesotho, Malawi, Mozambique, South Africa and Zambia, revealed that land tenure insecurity is still widespread in Southern Africa. It manifests itself in a number of ways:

- (i) Minority groups in Botswana and Malawi;
- (ii) Unclear or overlapping land rights and insecurity of farm workers and farm labour tenants in South Africa;
- (iii) Overcrowding in the form of high population to land ratio in Lesotho, Malawi and South Africa;
- (iv) Land alienation into leasehold in Malawi, Mozambique and Zambia;
- (v) Inappropriate and exploitative administrative practices; and
- (vi) Limited women's land rights in each of the study countries.

Analysis of the initiatives undertaken by the countries reveal that land tenure reforms have focused on changing the law and rules, however little has been done on the following important areas:

- (i) Translation of new laws into implementable programmes;
- (ii) Capacity building;
- (iii) Prioritization of resources to support land tenure reform;
- (iv) Wide dissemination of new land laws;
- (v) Provision of complementary policies and incentives;
- (vi) Addressing HIV/AIDS-land tenure related problems; and
- (vii) Monitoring and evaluation of the implementation of new land laws and policies.

An analysis of the initiatives to improve land rights of women reveals that although the initiatives being undertaken are generally progressive, they have not addressed all the major sources of discrimination against women owning land such as patriarchal attitudes, socio-economic constraints which include lack of capital and illiteracy as well as lack of harmonization of the non-discriminatory land laws with marriage and inheritance laws.

Clear recommendations on strategies that can be adopted by countries to improve land tenure security and women's land rights are suggested. Some of the key specific recommendations for implementation by governments in the sub-region include the following:

1. Develop laws that protect the land rights of minority groups and women.
2. Review and repeal all laws, including provisions on inheritance, which discriminate against women.
3. Speed up the process of converting land policies to land laws.
4. Translate new laws and policies into programmes that are implemented on the ground and prioritise resource allocation to support these activities.
5. Design and implement training programmes on new laws to ensure that change in land tenure arrangements does take place on the ground.
6. Promote stakeholder participation in all land alienation exercises to prevent related tenure insecurity.
7. Disseminate information about new land policies or laws that improve land tenure security to the public.
8. Build the capacity of men and women to appreciate women's land rights.
9. Initiate statutory provision for joint registration of customary and statutory household land rights for spouses.

¹ Food Security and Sustainable Development Officer, ECA Southern Africa Office

10. Harmonise land, marriage and inheritance laws.
11. Create an enabling framework that includes improving access to land, and provision of water rights, technology, markets, inputs, training and extension services.
12. Draw up legislation that can protect the land rights of women and orphans in the context of the HIV/AIDS epidemic.
13. Initiate more studies to identify the impact of the HIV/AIDS epidemic on land rights in countries where such studies have not been done, such as Botswana, Mozambique and Zambia.
14. Actively engage in sensitisation and education campaigns to change patriarchal attitudes. Establishing new laws alone is not enough to change the status quo; existing gendered social relations and cultural norms may quickly shape these laws.

15. Domesticating international laws that promote the land rights of women.

The complete report can be accessed and downloaded at the following link:

http://www.uneca.org/eca_resources/Publications/srdcs/Land_Tenure_Systems_and_sustainable_Development_in_Southern_Africa.pdf

No Water, No Sustainable Development in Africa

By Stephen Max Donkor¹ and Bjorg Sandkjaer²

Introduction

Water is a crucial resource with great implications for African development. The freshwater situation in Africa, however, is not encouraging. Of the around 800 million people who live on the African continent, more than 300 million live in a water-scarce environment. The importance of water for socio-economic development is well recognized globally, but with increasing population and industrialization and their demands for water for various uses, water scarcity is looming in many countries of the world. Lack of water hampers development through constraining food production, health and industrial development.

Water as a resource also faces many threats - both natural and human. The natural threats include the multiplicity of trans-boundary water basins, extreme and temporal variability of climate and rainfall, growing water scarcity, shrinking of some water bodies, and desertification. The human threats include the pursuit of inappropriate governance and institutional arrangements in managing national and transnational water basins; the depletion of water resources and health effects through pollution, environmental degradation, and deforestation; failure to invest adequately in resource assessment, protection and development; and unsustainable financing of investments in water supply and sanitation.

On a continental scale, inadequacy of rainfall is not the fundamental issue facing water resources in Africa, but the skewed spatial distribution of water resources. The key political issues are related to management of the available resources, providing water availability and access to those who need it.

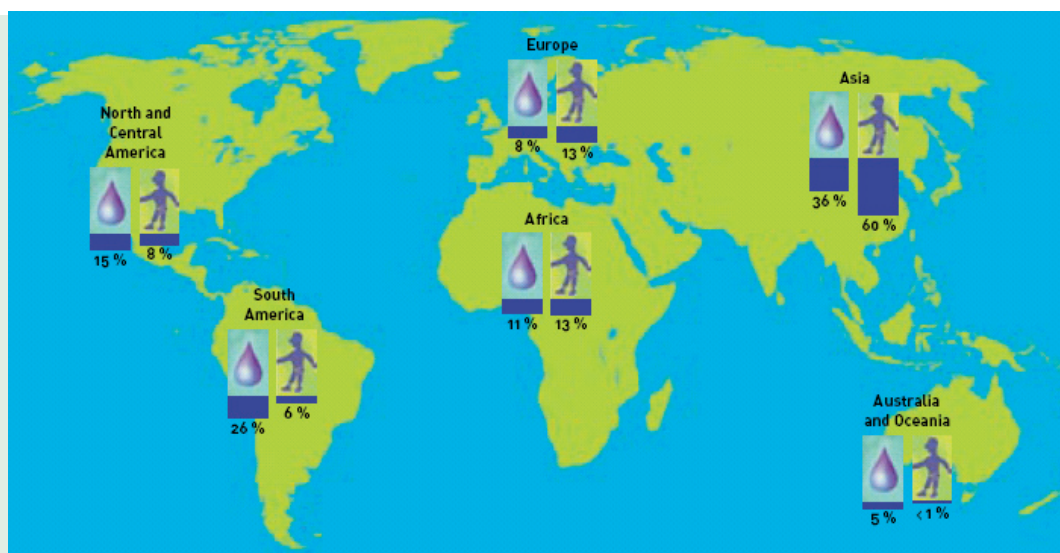
Commitment to action

African Governments have committed themselves to addressing the worsening water situation through a number of agreements and declarations. The Millennium Declaration, adopted by the UN General Assembly in 2000, resolves “to stop the unsustainable exploitation of water resources by developing water management strategies at the regional, national and local levels, which promote both equitable access and adequate supplies”. One of the eight Millennium Development Goals (MDGs) is to “ensure environmental sustainability”, with one of the main related targets being to, “by 2015, reduce by half the proportion of people without access to safe drinking water.”

¹Senior Regional Adviser (Water Resources Management) Sustainable Development Division, ECA

²Associate Demographer, Sustainable Development Division, ECA

Figure 1: Geographic distribution of water and population



Source: UNESCO/IHP Regional Office of Latin America and the Caribbean (2005)

Two years later, African governments adopted the Johannesburg Plan of Implementation (JPOI) of the World Summit on Sustainable Development. The commitment related to water echoes the MDG target: "To halve, by the year 2015, the proportion of people who are unable to reach or afford safe drinking water", by means such as the promotion of "affordable and socially and culturally acceptable technologies and practices."

A number of African frameworks have also been adopted. The New Partnership for African Development (NEPAD) has identified the need to address water issues if NEPAD is to successfully meet its objectives. In 2000, all African stakeholders including the UN system agencies (organized as UN Water/Africa) adopted the Africa Water Vision 2025 which is summarized as:

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.

Facing the Key Challenges

Meeting Basic Needs

Within these existing frameworks, the most pressing challenges relate to "Meeting basic needs". The target set is to:

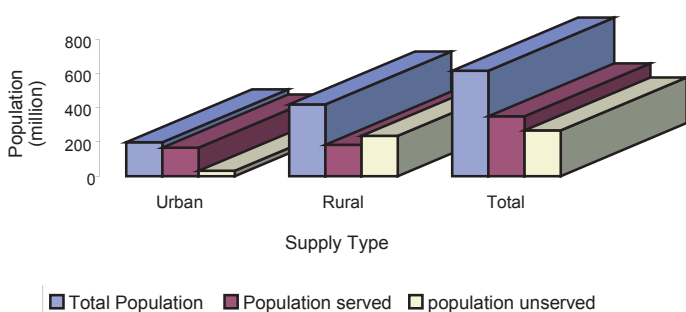
Reduce the proportion of people without access to safe and adequate water supply and sanitation

The Millennium Development Goals and the JPOI aim at halving the number of people without access to safe drinking water by 2015 as the target, while the Africa Water Vision ambitiously aims to reduce the number by 70 per cent by the same year.

Water supply and sanitation services are inadequate across Africa. About two-thirds of the African population live in rural areas, where water supply coverage is the poorest (see Figure 2). African governments therefore need to invest significantly in rural water supply, if they are to increase accessibility to safe drinking water so as to achieve the above-mentioned water targets by 2015.

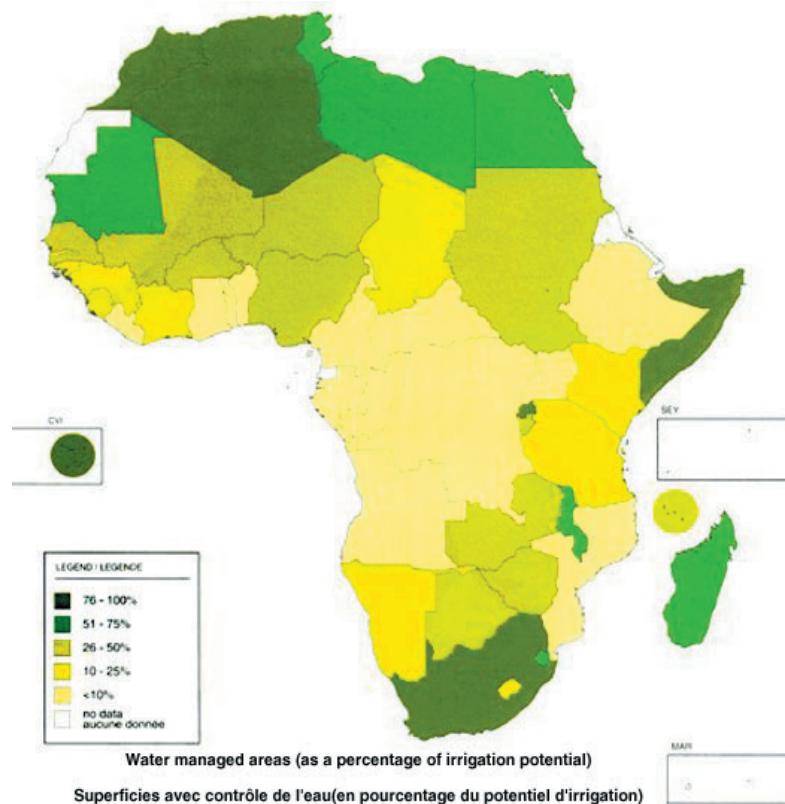
Urban areas, with generally more developed infrastructures, are better served but a significant proportion of urban dwellers also lack access to safe water and adequate sanitation.

Figure 2: African water supply coverage



Source: UN Water/Africa (2004)

Figure 3: Water-managed areas as percentage of irrigation potential



Achieving Food Security by Expanding Irrigation

Water for achieving food security by increasing productivity of rainfed and irrigated agriculture and increasing the size of irrigated areas (by 30 and 50 per cent respectively as desired in the Africa Water Vision by the year 2015).

Irrigation is key to achieving increased agricultural production which, in turn, is important for economic development and food security. Presently, as Figure 3 shows, the vast majority of African countries are not tapping into the potentials of irrigation agriculture. This is partly due to a lack of infrastructure and technology, predicated on availability of financial and human resources.

Investing in the development of Africa's potential water resources

Increase in the development of the water resources potential by five per cent in 2005, 10 per cent in 2015, and 25 per cent in 2025 as recommended in the Africa Water Vision to meet increased demand from agriculture, hydropower, industry, tourism & transportation at national level. Currently less than five per cent of Africa's internally renewable resources and about the same percentage of its hydropower potential are developed.

Table 1: Regional Distribution of Water Availability and Withdrawals in Africa

Sub-Region	Area Rainfall			Internal Renewable Resources (IRR)			Withdrawals for Agriculture, Community Water Supply and Industry			
	1000x km ²	km ³ /yr	mm/yr	km ³ /yr	mm/yr	% of rainfall	km ³ /yr	mm/yr	% of rainfall	% of IRR
Northern	5753	411	71.4	50	8.7	12.2	76.3	13.3	18.6	152.6
Sudano-Sahelian	8591	2878	335.0	170	19.8	5.9	24.1	2.8	0.8	14.1
Gulf of Guinea	2106	2965	1407.9	952	452.0	32.1	6.1	2.9	0.2	0.6
Central	5329	7621	1430.1	1946	365.2	25.5	1.4	0.3	0.02	0.1
Eastern	2916	2364	810.7	259	88.8	11.0	6.5	2.2	0.3	2.5
Islands	591	1005	1700.5	340	575.8	33.8	16.6	28.1	1.7	4.9
Southern	4739	2967	626.1	274	57.8	9.7	18.9	4.0	0.6	6.9
Total	30027	20211	673.1	3991	132.9	19.7	149.9	4.0	0.7	3.8

Source: Adapted from FAO (1995) in UN Water/Africa (2004)

In order to increase access to safe drinking water and sanitation, as well as the size of irrigated areas, enough water must, obviously, be available. Availability of water in an area mainly depends on two factors: rainfall and internal renewable resources. The two are linked: the renewable resources are replenished by rainfall, and if the rains fail, then groundwater stocks are not replenished. For water management to be sustainable, withdrawals must be carefully managed in order to ensure that water is not overused. However, as shown in Table 1 actual withdrawals for agriculture, community water supply and industry in all but the Northern sub-region are low as proportions of available water. There are, therefore, ample water resources available that when developed and managed sustainably, will enable Africa reach its water-related goals.

Protecting the meagre gains of economic development, and reducing human fatalities

Effective management of droughts, floods and desertification (to be operational in 50 per cent of countries by 2015 and 100 per cent of countries by 2025 as recommended by the African Water Vision).

Water-related climatic fatalities, such as droughts, floods and desertification have serious implications for African countries' development. The single worst African drought disaster killed 300,000 people in Ethiopia in 1984. In 2002, 14.3 million people were affected by drought in the same country. In economic terms, the cost of droughts in Africa is enormous. For example, the economic impacts of the 1991/92 drought in Southern Africa included GDP reduction of \$3 billion, reduced agricultural production, increased unemployment, heavy government expenditure burden and reduced industrial production due to curtailed power supply. A decade later, the 1992-2001 La Nina-related drought in Eastern Africa cost the Kenya economy alone about \$2.5 billion.

A final set of commitments that governments have made centre on conservation and restoration of the environment, biodiversity and life-supporting ecosystems, through (i) the allocation of sufficient water for environmental sustainability (to be implemented in all countries by 2015 as recommended in the Africa Water Vision), and (ii) the conservation and restoration of watershed ecosystems. (This is to be implemented in 50 per cent of countries by 2015.)

Clarion call for action

In order to meet these pressing challenges, Africa must manage its water and water resources in a visionary and integrated manner to match demand and supply both temporally and spatially in quantitative and qualitative terms. One of the major constraints to achieving the set objectives is the lack of sustainable finance. Most African countries depend on donor funds for almost all their water development budgets. Even in developing Poverty Reduction Strategy Papers (PRSPs), which are intended to make available financial resources for poverty reduction, water issues have been submerged into other sectoral priorities such as Health and Agriculture, which makes the integrative approach much harder to implement.

The Pan African Implementation and Partnerships Conference on Water held in Addis Ababa in December 2003 resulted in concrete commitments to action by all from Ministers to NGOs to Development Partners and led to the launch of many initiatives such as the African Water Facility, EU –Africa Strategic Partnership on Water, Water for African Cities Phase II and Rural Water Supply and Sanitation Initiative.

Without the timely implementation of these initiatives and others, sustainable development in Africa will become a hollow phrase. It is therefore appropriate to conclude: "No Water, No Sustainable Development".

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The Importance of Mainstreaming Gender in Water Management in Africa

By Saskia Ivens¹

Introduction

Whereas water management in general receives attention in Africa, the perspectives used by water practitioners do not always acknowledge the multiple water needs of the different users and the dynamics involved for each user to access water. Unequal access to water is a major reason for low productivity in income-generating activities, especially by women. Therefore mainstreaming gender in the management of the resource would contribute to sustainable development. During the fourth World Conference on Women in Beijing in 1995, gender mainstreaming was defined as a strategy for making women and men's concerns and experiences an integral dimension of the development of policies and programmes. This article describes women and men's water concerns, indicates what has been done to integrate these concerns in policies and programmes and discusses future challenges.

Women and men's water concerns

As water access is limited for the majority of people in Africa, a main concern is how to fulfil each person's water needs. Limited water access results in considerable time spent by urban and rural women on fetching water, low school attendance by girls, health hazards, and contributes to food insecurity, shown in Box 1. Productivity for income-generating activities, especially by women, is severely hampered.

Access to water is unequally distributed among people due to lack of recognition of all water users and their multiple water needs. Water needs depend on people's ascribed responsibilities within society, which are dependent on the person's sex, socio-economic and marital status, and age. These factors in turn contribute to differences in power for decision-making resulting in the lack of involvement of women and poor men in traditional and project settings in both urban and rural areas. Notwithstanding water decision-makers' best intentions, many water activities are based on assumptions about water users' needs only. An example is the case of Burkina Faso (see Box 2), where women's agricultural water needs were not realized initially, thereby seriously hampering productivity. In addition, water rights are often linked to land ownership instead of actual land use; yet only a small percentage of women own land.

¹Associate Gender Expert, ECA Southern Africa Office

Box 1: Gender and water facts

- Many urban women wait hours queuing for water supplies while others, due to privatisation, face deterioration of the quality of water or depend on friendly neighbours because they are cut off from the resource due to the high costs. An example from a township in South Africa indicates that water prices went up by 300%. *UNEP, Women and the Environment, 2004.*
- Many rural women in Africa are caught up in the routine of fetching water from distances of 3-6 kilometres, spending several hours a day fetching water, the depletion of energy for other activities sometimes being reduced by 50%. *UNECA, Integrated Water Resources Management: Issues and Options in Selected African Countries, 1999.*
- Fetching water is a major reason for girls' school dropout, low attendance rate and girls' lack of attention to homework. A World Bank's Morocco Rural Water and Sanitation Project showed that primary school attendance by girls had more than doubled a year after a new water supply system had begun operating. *World Bank Gender and Development Group, Gender Equality & the Millennium Development Goals, 2003.*
- Only 64% of the water sources in Africa are seen as 'improved water sources' and only 60% of the population has access to proper sanitation. *UN, World Water Development Report, 2003.* This negatively impacts on women, as diseases are likely to occur and women use to take care of the sick. The weight of the carried water and the direct contact with contaminated water further contribute to health hazards for young girls and (pregnant) women. *UNEP, Women and the Environment, 2004.*
- Despite the high levels of food insecurity in Africa, two thirds of African countries have developed less than 20% of their potential for irrigation expansion. In all but four countries in the region, less than 5% of the cultivated area is irrigated. *UN-Water/Africa, African Water Development Report, 2004.*

This shows the importance of mainstreaming gender in water management, e.g. the development of water policies and programmes. The best way to make women and men's concerns and experiences an integral dimension of these policies and programmes is to involve all water users in the design, implementation, monitoring and evaluation of these policies and programmes. Young and old women and men from different social and economic backgrounds, including those from female and male-headed households, displaced women and men, refugees, migrant workers, and immigrants, should all be involved.

Mainstreaming gender in policies and programmes

Many current development agendas pay attention to mainstreaming gender in water management. But actual implementation at community level is still a challenge.

The Beijing Platform for Action (UN Fourth World Conference on Women, Beijing, 1995) highlighted the importance of women's involvement in the design, development and implementation of natural resource management policies and programmes; the role of women in water-related activities and the importance of safe water.

The Millennium Development Goals (MDGs) indirectly focus on gender and water management. The target of Goal 7 is to halve the proportion of people without sustainable access to safe drinking water and sanitation by 2015. MDGs 1, 2, 3 and 4 indirectly focus on the access^{*}, by women to improved and nearby water sources as this will alleviate poverty, save time for girls to go to school and improve health conditions. Unfortun-

nately, Africa, in general, is lagging behind in the achievement of the MDGs.

As indicated in Box 3, many water-related conferences made clear commitments to gender and water. In Africa, NEPAD subscribed to the outcomes of the 2002 World Summit on Sustainable Development and the MDGs, thereby indirectly recognising the need for mainstreaming gender in water management. The African Union acknowledged Africa Water Vision 2025. One of the targets of this vision, presented during the Second World Water Forum in 2000, is to mainstream gender concerns in all national water activities. Furthermore, it highlights the importance of women taking up key positions and functions in decision-making bodies.

As a means to implementing adequate water activities at national level, most African countries developed national water policies. While many of the water policies acknowledge the unequal access to water, only a few propose adequate action taking into account the gender differences. South Africa's water policy sets the example to the region for a gender sensitive water policy. However, equal access to water and women's effective participation in water management decision-making at community level are not automatically achieved due to cultural barriers (see box 4). Box 5 shows possible ways to encourage effective participation at community level.

Future challenges

The above exposé calls for mainstreaming gender in water management in Africa, making use of a participatory and integrated approach, thereby contributing to sustainable develop-

* 1: Halve between 1990 and 2015, the proportion of people whose income is less than one dollar a day and the proportion of people who suffer from hunger; 2: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete primary schooling; 3: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015; and 4: Reduce by two-thirds, between 1990 and 2015, the under-five mortality.

Box 2: The need to take women's water needs into account

In Burkina Faso, women and men each had their own organization with rights to water and land for agriculture: the women in the river valleys, the men on higher ground. When the state took over the land for irrigation, it only gave out plots and water rights to male heads of households and only male water users groups were created. These men did not maintain the water supply system, as unlike women they were used to dry agriculture. The women lost their production and harvest rights, saw their traditional organization not recognised and lost motivation to spend much energy on agriculture. When the government realized this, new plots were given out to the women and productivity as well as operation and maintenance of the watercourses, improved.

Koppen, Barbara van, *Waterbeheer en Armoedeverlichting*, 1997 in: UNDP, *Mainstreaming Gender in Water Management, a practical journey to sustainability: a resource guide*, 2003.

Box 3: International water-related conferences with clear commitments to gender in water management

- Global Consultation on Safe Water and Sanitation for the 1990's (New Delhi, 1990);
- International Conference on Water and the Environment (Dublin, 1992);
- UN Conference on Environment and Development (Earth Summit, Rio de Janeiro, 1992);
- International Conference on Freshwater (Bonn, 2001);
- World Summit on Sustainable Development (Johannesburg, 2002);
- The three World Water Forums (Marrakech 1997, The Hague 2000 and Kyoto 2003).
- The Pan African Implementation and Partnership Conference on Water (Addis Ababa, 2003).

ment. The concept of Integrated Water Resources Management (IWRM) is encouraging. It promotes the active participation of the multiple water users and is recommended in many Declarations and statements. Women's central role and representation at all levels in the provision, management and safeguarding of water is recognized. It further encourages revision of policies and laws. However, it is still challenging to achieve true stakeholder involvement in decision-making and the danger exists that women are seen as one uniform group of stakeholders, ignoring each woman's specific but multiple water needs. A further challenge is to integrate land and water issues because of the small number of African women land owners and the linkage of land ownership to water access.

The UN 'International Decade for Action – Water for Life', from 2005-2015, could be a good incentive to advocate for mainstreaming gender in water management, especially because of the Decade's focus on ensuring women's participation in water-related development efforts.

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Box 5: Ways to encourage women's effective participation in water management decision-making at community level*

- Ensure that times and locations of meetings are suitable for both women and men;
- Ensure that both women and men are informed about meetings;
- Arrange proper seating arrangements so that all can hear and understand;
- Facilitate speaking out by women by arranging that they sit together, internal breaks for discussion, and selection of spokeswomen;
- Use a language understandable to all;
- If needed, organize one meeting for women only during which background and terminology of the water body is explained;
- Encourage women to become office bearers;
- Educate project staff in gender issues and guarantee a reasonable proportion of female project staff.

Box 4: Women's participation in water management decision-making, the case of South Africa

South Africa's water and sanitation policy sets quotas for participation of women in water management issues and the Government has established institutions to support gender mainstreaming at all levels, e.g. the Gender Commission and the Office of the Status of Women. However, a study revealed that a quota system alone did not guarantee meaningful participation of women in decision-making because women were reluctant to voice their opinions in mixed groups due to cultural constraints, lack of appropriate knowledge and poor self-concept. (Mjoli, 2003).

* Adapted from IRC (2004).

Mainstreaming Mineral Wealth in Growth and Poverty Reduction Strategies

By Antonio Pedro¹

Introduction

Africa is well endowed with mineral resources, which have the potential to spur socio-economic growth and development. Yet, in most African countries, which are highly dependent on mineral production and exports, mineral resources have not fulfilled their development potential.

This section aims to raise awareness among policy makers and practitioners about the development issues and public policy challenges of managing mineral wealth, securing that it is mainstreamed towards growth and poverty reduction. It also discusses global trends and available policy options and strategies to address the identified challenges. The article is based on an ECA policy paper with the same title. It draws on ECA's own analytical work, the joint ECA/UNCTAD Modules on Management of Mineral Wealth and best practices from Africa and other regions.

Views on mining: The natural resources curse argument

There is considerable debate and an extensive body of theoretical and empirical literature on the role of mineral resources in economic development, and its impact on industrialisation and sustainable economic growth. The schools of thought are divided between those who argue that in general, natural resources endowment does not lead to economic growth, despite the windfalls that mineral extraction generates, and those who consider mineral resources an endowment that leave poor countries poorer if not exploited.

Those who are not convinced of the role of mining as a growth engine, argue that most mining in developing countries is foreign-owned, operated largely by expatriate workers, and that its inputs (especially equipment) are largely purchased abroad. Output, income and employment multipliers in mining, as well as its learning-by-doing potential² are lower than in other sectors, particularly manufacturing. The boom and bust nature of mining is said to engender thwarted development performance, substandard welfare social indicators, regional inequalities leading to conflict, the Dutch Disease³, and cycles of feast or famine due to fluctuations in revenue collection.

Conversely, others argue that the reported negative outcomes in mineral economies are case-specific, and that economic performance is mixed, heterogeneous and should not be generalized. Mineral resources are recognized to have played a key role in the industrialization and economic diversification of a number of economies, such as Australia, Canada, Sweden and Finland. Among African mineral economies, there are fast growing economies (e.g. Botswana) and those with negative growth (e.g. Zambia). There does not seem to be consistent statistical evidence that shows that mineral dependence, by itself, leads to either faster or slower economic growth. Rather, the problems associated with mineral dependence seem to be political rather than economic. Governed efficiently, wealth generated through mining has the potential to further economic and social development.

To mine or not to mine?

Without getting caught in the back and forth debate on the natural resource curse, this paper advocates that mineral resources can be exploited and managed to contribute to growth and poverty reduction in Africa. This position is premised on the recognition that mineral resources are part of the stock of natural capital that Africa has been endowed with, which if exploited under appropriate conditions can spur development on the continent. Hence, the issue is not whether to mine or not to mine, but where mining should happen and how to ensure that it contributes as much as possible to growth and poverty reduction.

¹Senior Economic Affairs Officer, Sustainable Development Division, ECA.

²Learning-by-doing leads to lower production costs over time, and as a result greater productivity and profitability.

³The effects of the Dutch Disease include (i) high inflation and currency appreciation (triggered mostly when mineral exports are a large share of total exports); (ii) rise in input costs, especially wages; (iii) expansion or shrinking of the non-traded goods and services sector due to growth-inhibiting effects of rising input costs, or growth-promoting effects of higher incomes and demand respectively; and (iv) reallocation of resources (financial and human), from less attractive sectors such as agriculture and manufacturing to the booming minerals sector, with the resulting loss of competitiveness in those sectors.

In articulating options to mainstream mineral wealth in growth and poverty reduction strategies, the different roles that large and artisanal small-scale mining play in African economies need to be recognised. Large-scale mining has the potential to:

- (i) Generate foreign exchange and other mineral rents as windfalls to supplement local budgets and free financial resources that can be allocated for poverty reduction;
- (ii) Contribute to local economic development through the provision of basic infrastructure (roads, power grids and ports), public goods and social services (water, health and education);
- (iii) Spur the development of minerals clusters comprising of minerals goods and service inputs sector (e.g. capital equipment, consumables, contracting, consulting, etc.), downstream processing and beneficiation industries, and centers of knowledge creation and innovation; and
- (iv) Facilitate the creation of local human and social capital.

Small scale mining has the potential to:

- (i) Create employment in rural areas;
- (ii) Stem rural-urban migration;
- (iii) Generate additional income to supplement local economies;
- (iv) Be a precursor to major mines;
- (v) Enable the exploitation of what would otherwise be uneconomic reserves; and
- (vi) Provide a route to the creation of micro mineral clusters in rural areas.

There is also need to recognize that (i) mineral resources are finite and unevenly distributed; (ii) they are location-specific and must be exploited where they are discovered; and (iii) social, economic, cultural and environmental consequences of their exploitation are difficult to manage. It is therefore important to understand these attributes of mineral resources, the daunting public policy challenges that they pose, as well as the limitations that they impose on policy makers and other stakeholders. These challenges are linked to:

- Creating a viable integrated and diversified mining industry, sustaining mineral wealth without compromising environmental, social and cultural considerations, and ensuring a regulatory framework that encourages mineral creation.
- Investing revenues to ensure lasting wealth.
- Distributing benefits from mining equitably, balancing local and national-level concerns and interests and promoting pro-poor growth.
- Establishing sound systems of governance and ensuring macroeconomic stability policy to curb rent seeking and corruption, address the Dutch Disease and externalities such as unstable commodity prices, and enhance public interest in wealth conservation.

What can we learn from experience?

There are few cases in Africa where mining has fulfilled its potential. These cases include Botswana, Morocco, Namibia and South Africa. In these countries, success was rooted in sound management of the sector; good governance; respect for the rule of the law; good infrastructure and capable institutions, and an overall favourable environment for business development. On the opposite extreme and in not so distant past, the cases of DRC, Sierra Leone and Liberia depicted lost opportunities, corruption, conflict and mismanagement of resources. Furthermore, in most countries, linkages between the mineral resource sector and other sectors of the economy are still weak. In addition, most development approaches and outcomes have been government-centred with very little participation of stakeholders, including local communities affected by the exploitation of mineral resources.

Mineral resources-driven diversification strategies or resource-based industrialization (RBI) are not a new mantra. The vision that mineral resources could be used to catapult Africa to modernization has been articulated in many African plans and development strategies at national and regional levels (e.g. Lagos Plan of Action, SADC Mineral Sector Programme, Mining Chapter of NEPAD, and, most recently, the Africa Mining Partnership). However, most of those plans and strategies failed. They were centred in developing ambitious and grandiose projects (e.g iron and steel mill in Ajaokuta, in Nigeria) designed with a very narrow “mining box” mentality and limited to the initial mineral resource factor endowment. These projects were very capital intensive and dependent on foreign inputs. Reasons for failure include (i) inefficiency and poor management; (ii) projects not embedded in the local economy; (iii) tariff escalation, trade barriers and other market imperatives; (iv) lack of capacity to innovate due to weak local knowledge; (v) lack of supporting infrastructure; and (vi) lack of competition.

Learning from both positive and negative experiences cited above, there is need to develop a minerals cluster development strategy that covers the full development spectrum, from the macro, meso to the micro cluster level. In this regard, even small-scale mining has the potential to engender multiplier effects and spillovers at local, community and rural levels. The strategy looks at broadening the economy base and developing linkages between mining and other sectors at the upstream, backstream and sidestream value chain ladder and at maximising development and social outcomes (see Box 1). It includes all industries and services that gravitate to mining such as financial services, transport, communication, energy, water, engineering and design, other consultancy services, knowledge and R&D centres, providers of capital goods and consumables.

Policy options and strategies to improve mining development outcomes

What options do governments have? The strategies discussed here are based on the recognition that mineral resources are

finite. Mineral wealth therefore needs to be invested to create new wealth, public goods and forms of renewable capital, such as human, social and physical capital, which are key to achieving sustainable development beyond the currency of mining. Also it is important to develop minerals clusters, intensify local utilization of minerals and their derived products and create opportunities for growth of lateral or downstream businesses. This would create additional resource rents, the so-called value-added resource rents. Furthermore, especially in the case of artisanal and small-scale mining, there is need to articulate solutions that go beyond technology. These should facilitate the creation of alternative livelihoods to mining which help to diversify income sources and broaden non-mining incomes.

Given the current societal-oriented development paradigm, the development of mining should be people-centred and not only profit-motivated. In this quest, new partnerships, conscious of the need for change, are emerging and being built between governments, the corporate world, civil society, local communities and other stakeholders. Guidelines, protocols, codes of practice, organizational policies and management systems, voluntary undertakings and statements of principle are being drafted and enforced to help effect this transition and improve the social and development outcomes of mining at the local level.

However, more needs to be done to achieve change. Policies, legal and regulatory frameworks to facilitate equitable participation by local businessmen, communities and other stakeholders in mining activities should be in place, as well as tools to improve revenue (derived from royalties, income taxes, land taxes, lease rents, etc) distribution at local level. Many examples of these new approaches abound (ECA, 2004). Nevertheless, because each country is different and specific, the approaches described below should serve only as guiding references. Therefore, in developing a framework for facilitating public participation at country level, there is need to consider and factor the local context and peculiarities:

- The Papua New Guinea Act of 1992, which stipulates that a minimum of 20 per cent of royalties received by the government, should be paid to landowning communities of the mining lease area (In this case royalties are paid directly by mining companies to the agreed beneficiaries and then reconciled to central government for audit).
- Special Support Grants (also in Papua New Guinea) paid to a given provincial government, which represent about one per cent of the gross value of mineral sales of companies operating in the said province.
- Preferred Area Status (also in Papua New Guinea), which require companies to provide preferential treatment in terms of employment, education and training and business development assistance to communities located in the area where the company mines.
- The holding of mineral rights to platinum and other

resources in the Merensky Reef in Northwest South Africa by the baFokeng tribe. The tribe is a shareholder in the Impala Platinum Holdings Ltd, which is the second largest producer of platinum in the western world. The company has four mines, namely baFokeng North and South and Wildebeestfontein North and South.

- Local impact and benefits agreements (IBAs) involving mining companies, government and communities where mining development occur within traditional aboriginal lands or remote communities in Canada. The IBAs can range from ensuring employment and training of members of the local community to equity participation and profit sharing.
- The "Scorecard for the Broad-based Socio-economic Empowerment Charter for the South African Mining Industry", which sets targets for South African mining companies to transform the face of the mining industry in the country in terms of human resources development; employment equity; migrant labour; mine community and rural development; housing and living conditions; procurement; ownership and joint ventures; beneficiation; and reporting.

A cause of major concern in managing mineral revenue is the price volatility of mineral commodities and its impact on local budgets. Uncertainty in revenue collection mostly due to commodity price fluctuations, have led many to advocate the use of stabilisation funds as means to achieve fiscal stability and discipline. Although it can be argued that these funds apply more to the oil and gas sectors due to the sheer magnitude of the revenue flow accrued to producing countries, the same concept and principle could also apply to the minerals sector. In addition, tools such as commodity loans, bonds, swaps, and derivative markets such as futures, forwards and options should be considered as solutions to managing revenue volatility and hedging against exposure to commodity price risk for short and long-term horizons.

Natural Resources Funds (NRFs) including future generation funds and trust funds have been established in many countries as tools to insulate economic activities from fluctuations in mineral resources revenue (Stabilisation motive); save wealth for future use on grounds of inter-generational equity (Savings motive); and manage uncertainty on the likely path of future mineral revenues or on the ability of the economy to absorb spending efficiently (Precautionary motive). For example, as part of the conditions for developing the Chad oil fields and fund the Chad-Cameroon oil pipeline, and in an effort to prevent waste and corruption and promote transparency in the use of oil revenues, the World Bank imposed the establishment of such a fund in the two countries.

These funds are, however, not a panacea to wasteful use of mineral rents (see Box 2). To ensure that they contribute to improving fiscal discipline, fostering transparency in the management of mineral-derived savings as well as promoting equitable share of benefits between national, regional and local stakeholders,

there is need to promote good governance, improve accountability, strengthen oversighting, auditing, reporting and monitoring mechanisms and capacity. In establishing these funds, it is, therefore, important to ensure that an independent, accountable and capable body manages them. It is also essential that information about how mineral revenue is used is publicly available and timely disseminated to all stakeholders.

Of equal concern is how to manage the effects of the Dutch Disease. Several strategies should be considered including:

- Using conservative price estimates in budgeting;
- Channeling export windfalls into stabilisation funds to reduce impact on domestic income and on the real exchange rate;
- Using appropriate monetary intervention (e.g. sterilisation of receipts) and appropriate fiscal policies to curb over-heating in the economy and to prevent inflation;
- Allocating increased income into productive investment in other sectors and into financial assets; and
- Using sound and disciplined fiscal policies and manage-

ment (e.g. constraining liquidity; consolidated budget framework; and restraining public sector spending).

Conclusion and outlook

Available statistical evidence shows that mineral-based economies are diverse (in terms of geography, per capita income, growth, life expectancy, adult literacy). Some mineral-rich nations have high growth rates; others have negative growth. Some nations are the poorest in the world; others are the richest. Furthermore, data show that there is nothing inherent in mineral resource abundance that condemns countries to either growth or non-sustainability. Therefore, poor performance is not inevitable. It is possible to reconcile mining with the objectives of equitable growth and development and poverty reduction while observing the highest environmental and social standards. Good governance is a fundamental prerequisite to turn Africa's mineral endowments into a blessing that can promote growth and poverty reduction. Other key requirements are good mineral policies, laws and regulations and a balanced fiscal regime

Box 1: Natural resource based development in Richards Bay, South Africa

By Antonio Pedro and Bjorg Sandkjaer

Over the past three decades, Richards Bay has evolved from a small fishing village into one of the major industrial hubs in South Africa. Six large-scale, natural resource-based industries dominate the industrial activities in the town. These are of national importance, generating considerable revenues through exports and offering attractive opportunities for foreign investment.

One of these businesses is an aluminium smelter. One of the critical challenges facing the aluminium industry is the need to grow locally as well as through exports. The local market is too small to absorb all the output. The smelter in Richards Bay has managed to become internationally competitive, and the industry cluster has developed a favourable development spiral, where a number of actors reinforce each other's development.

'Upstream' suppliers of raw materials have a market for their products. Business opportunities are created for 'sidestream' suppliers, such as service networks, vendors and key contracting firms. Mutually reinforcing each other, the big businesses in Richards Bay are actively involved in promoting local economic development and sustainable job creation in the area by directly supporting and incorporating small and medium sized enterprises (SME) into their activities. The big businesses also increase their skills base through providing training programmes. While presently most of the 'downstream' or further processing of smelter products is done outside South Africa, a new initiative geared towards manufacture of aluminium-based tourist items, as well as components for the aluminium industry, will further increase the cluster's economic significance.

Success factors include a combination of high quality raw materials and other input factors, a favourable policy environment, a highly qualified base of employees and potential employees - brought about by the interaction between businesses, as well as between businesses and policy makers, and between businesses and the community.

Box 2: Phosphate Mining in Nauru: An example of bad investments

By Antonio Pedro

Nauru is a 21 square kilometres island state in the South Pacific Ocean. Nauru's phosphate deposits began to be mined early in the 20th Century by a German-British consortium. In the 80's and early 90's, Nauru boasted one of the highest per capita incomes in the world. However, the consequences of intensive mining during the past 90 years have been extremely detrimental. 90 per cent of the island has been reduced to a barren moonscape and unfarmable wasteland, threatening limited remaining land resources. There is no arable land, no crops, and no woodland. The stock of fish has been reduced significantly. All food and bottled water has to be imported. There is little employment in the island and Nauruans are now poverty-stricken and unhealthy.

Where did the phosphate revenues go? More than US\$1bn was invested in property around the Pacific Rim, equity in a range of businesses and in many ill-advised financial schemes. Little investment was made in the local economy and local people were not consulted on the investment done elsewhere.

Phosphate reserves are close to exhaustion. In anticipation of this, phosphate export royalties have been invested in offshore Trust Funds to help cushion the transition and provide for Nauru's economic future. Unfortunately, the government has been borrowing heavily from the trusts to finance its fiscal deficits. In 2003 Nauru had no budget and the country slumped into chaos. Now the island reportedly is a major centre for offshore banking and money laundering. Some of the operations closed recently.

that promotes the creation of mineral wealth. In addition, to promote equity and fair distribution of the benefits of mining, there is need to enhance transparency in the management of mineral revenue flows and decentralization of revenue sharing. Furthermore, the industry needs to be unbundled because increased local beneficiation and value addition, and local procurement and outsourcing of goods and services would help diversification and creation of more employment and value added rents and wealth. Governments have to play a proactive role in this effort. Sustainability of mining can be enhanced if mineral wealth is invested during the currency of mining on human and social capital creation and partly on an income-generating portfolio of financial assets that yield higher returns than mining. Development outcomes of mining can be also enhanced if coalitions of change with increased, informed and meaningful participation of local communities and other stakeholders in the decision-making and implementation of extractive industry projects are promoted. This should be coupled with better understanding and factoring of local context and specificities and better integration of mining in local economies, development plans and poverty reduction strategies (e.g. PRSPs). For this to be done efficiently, there is need to strengthen institutional capacities and competencies (at government and other levels) for efficient long-term planning for sustainable development, prudent management and smart spending, savings and investments of mineral wealth. This is not easy to achieve, for there is no easy panacea and universal recipe.

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Mainstreaming Sustainable Development into Development Strategies of African Countries: The Role of Natural Resources Accounts

By Kwadwo A. Tutu¹

Introduction

A range of development strategies have been undertaken by African countries since the time of independence, ranging from socialist to more market-driven paradigms. The longest strategy, initiated in the 1980s and phased out in the late 1990s, was the Structural Adjustment Programs (SAPs) supported by the World Bank and IMF. At the end of the SAPs, it was evident that although some improvement in terms of macro-economic stability, and in some cases growth, had been achieved, poverty had increased (ECA, 2002; Tutu, 1992). This resulted in the need to reduce poverty. Aiming to address this, a large number of African countries have designed Poverty Reduction Strategies, also supported by the World Bank and the IMF.

The 1992 Earth Summit and the WSSD, realizing the increased poverty and lack of development in most countries, have called on countries to embark on sustainable development strategies (UNDESA, 2002). The economic growth in most African countries during the adjustment period has also resulted in social problems of poverty, unemployment, resource depletion and increased pollution and poor sanitation.

It is clear, therefore, that some economic growth and institutional strengthening had been achieved at the cost of social and environmental problems. This calls for a need to pay attention to the environmental aspects since the Poverty Reduction Papers are intended to address the social problems.

The Need for Natural Resources Accounts

Sustainable Development is development that does not only consider the welfare of the present generation, but also that of future generations. This can only be achieved by considering economic, social, environmental and institutional aspects of development.

Natural Resource Accounting (NRA) is a modification of the System of National Accounts to incorporate the use or depletion of natural resources. NRA can also be referred to in several ways such as Environmental Accounting or System of Integrated Economic and Environmental Accounting (SEEA) or Green Accounting.

The System of National Accounts (SNA) is a set of accounts which national governments compile yearly to trace the performance of the economies. It looks at the main sectors of Agriculture, Industry, Services, Exports and Imports. However, the SNA does not include the full value of environmental resources or the role they play in productive activity:

- Expenditures made to protect the environment from harm or to mitigate such harm cannot be identified from the data in the accounts. Expenditures such as pollution control, medical expenses arising from environmental damage and many others are found in the income accounts, but cannot be traced as cost of environment degradation.
- Non-marketed products such as fuelwood, building materials from forests, and medicinal plants, are in most cases not accounted for as benefits from the environment. Where they are valued, they are placed in income accounts, even though natural resource accounts would account for these as environmental costs.
- Non-marketed services such as watershed protection or soil enrichment by forests, water filtration by submerged vegetation and others are not included in the SNA, or at best indirectly through the increased agricultural output from soil replenishment.

¹Environmental Affairs Officer, Sustainable Development Division, ECA

- The consumption of natural capital is not taken out as depreciation from the SNA although consumption of physical capital, machines and other equipment is seen as depletion, not income. Natural capital, like physical capital, becomes depleted and should be accounted for in national accounts. This is even more serious in the case of natural capital where some resources such as minerals are depletable. If proper accounting is not taken of such resources, future generations will be worse off through the use by the current generation.

It is evident from this section that an important sector of the economy that promotes increased growth in the economy is not taken care of when accounting for economic performance. Accounting for this sector in the national accounts will enable better policies to be made to ensure sustainability of development.

Environmental accounts measure the contribution of the environment to the economy and the impact of the economy on the environment. They enable governments to set priorities, monitor economic policies and enact effective environmental policies and resource management strategies.

Evidence of Natural Resource Accounts in some Countries

Work on environmental accounts started in the 1970s by the United Nations. A draft "Handbook for Integrated Economic and Environmental Accounting" has been prepared (UN, 1993) which forms the basis for some countries' natural accounts using this methodology. Over the past twenty years, some 25 countries have experimented with environmental accounting.

A few European countries, such as Norway and the Netherlands, have established physical accounting systems that are routinely compiled and applied to economic and environmental policy-making. Many other countries have undertaken more limited or one-time experiments and case studies with monetary environmental accounts focusing on issues such as forestry, soil erosion and minerals depletion.

Many countries concentrate on resources which are important and compile physical accounts for policy purposes. For example, Indonesia was the first country for which forest depletion was calculated and integrated into a "green GDP". Norway has compiled physical accounts on energy resources and air pollution. These accounts are used as inputs into a macro-economic model to explore the environmental and economic feasibility of different growth strategies.

African Efforts

The ECA has undertaken a training workshop in Kigali for some five eastern African countries in Environmental Accounting. The IUCN, World Conservation Union and the Southern African Environmental Accounting Forum have also undertaken train-

ing and research into environmental accounting and continue to do so.

In Africa, countries that have undertaken environmental accounts include Ghana, Namibia and Zimbabwe, South Africa and Botswana. An analysis of Ghana's integrated environmental and economic accounts for 1991-93 showed that the environmentally adjusted national income of Ghana was between 5 per cent and 15 per cent of the SNA national income.

A study of natural resources use as well as non-marketable goods in Botswana, Namibia and South Africa indicated more accurate indicators of national wealth and provided information for managing national wealth (Lang et al., 2003).

Conclusion and Recommendation

It has been argued that the SNA does not capture the environment and its resources in a way that helps in policy-making. This leads to a situation where sustainable development is not promoted. Integrating environmental accounting into SNA accounts will correct this distortion and ensure sustainable development.

It is recommended that efforts are undertaken to either compile regular environmental accounts or physical environmental accounts in areas significant to countries.

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Energy for Sustainable Development

By Pancrace Niyimbuna¹, and Jacques Moulot²

Introduction

No physical system either natural or artificial can function without energy. Energy is required for complex living beings as well as simple to sophisticated industrial systems. Therefore development, viewed as the ability to generate growth within a society in a manner that promotes human well being, cannot be achieved without the provision of the proper energy service. Unfortunately, the current pattern of energy usage poses serious threats to the present and future human development, either because of the decreasing availability of the resources in some of the most fragile part of the world, or because of its deleterious impact on the local and global environment.

One of the major challenges facing the world today is the need for an adequate supply and access to energy in a reliable, affordable and environmentally safe way so that there is no harm to the human ability to grow and prosper in this generation and the future ones. This fact has practically come to bear to the international community since the Rio summit in 1992, where the nations of the world recognized that energy intertwines with all issues fundamental to sustainable development.

What is energy?

Despite its overwhelming presence in every human activity, energy is an elusive concept to most people. A striking example is the total absence of energy targets in the 2000 Millennium Declaration. While it is clear that virtually none of the 18 targets³ could be reached without sustainable access to energy, the world failed to identify a central development target on energy. This may be due to the fact that energy takes a variety of forms (including heat, light, torque, mass, chemical, sound) and is mainly perceived when it changes its form (for instance heat produced when burning coal). Therefore energy is commonly associated with either the service it provides (for example lighting, refrigeration, displacement, heating) or the useful commercial form it takes (such as electricity, heat, fuel, cooking gas.)

But what is energy? It is an immaterial concept measurable through the production of work (moving, heating, cooling, lifting.). Any physical system capable of doing work contains energy. Before it is released, energy is stored in various intensities in so-called energy sources, in a form called “primary energy”, such as coal, crude oil, wind, solar, biomass, or natural gas. Usually, energy is not efficiently usable in these forms, and must be converted through appropriate technologies into “final energy” such as electricity. In order to suit the need of various applications, the final energy can be further transformed or packaged as useful energy or energy service, such as transportation using gasoline-powered car-engine, illumination and street lighting using electric lamps, and cooked food burning charcoal or liquefied petroleum gas (LPG) fuel in cooking stoves.

Energy and sustainable development issues

The concept of sustainable development as defined by the World Commission on Environment and Development (the Brundtland Commission) refers to “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” The Brundtland definition implies a very important shift from an idea of sustainability, as primarily ecological, to a framework that also emphasizes the economic and social context of development. Sustainable development has therefore social, economic and environmental dimensions.

¹Energy Affairs Officer, SDD

²Scientific Affairs Officer, Energy Specialist, SDD

³MDG: www.undp.org/mdg/

Energy is essential to economic and social development and improved quality of life. However, sustainable patterns of production, distribution and use of energy are crucial, because the way in which energy is produced, distributed and used affects the economic, social and environmental dimensions of any development to be achieved.

There are close linkages between energy and the three pillars of sustainable development, which are: economic growth, social equity and environmental protection.

Energy and economic issues

Energy production and use is strongly linked to the first pillar of sustainable development, which is economic growth. Energy is essential for creating jobs, developing industries, enhancing value-added economic activities and supporting income-generating activities. Fuels are essential for heat-using processes, transportation and many industrial activities. Electricity is an essential input to modern productive activities as well as communication and service industries. Energy must be available at all times, in sufficient quantities and at affordable prices to support the goals of sustainable development.

Interruptions of energy supply can cause serious financial, economic and social losses. From a balance-of-payments perspective, energy imports are currently one of the largest sources of foreign debt for many of the poorest countries. In addition, investments made in high-cost centralized conventional energy systems have contributed to the growth of foreign debt of many developing countries.

Attention to energy security is critical because of the uneven distribution of both fossil fuel resources and the capacity to develop other energy resources. Development of indigenous energy resources and diversification of energy supply (energy supply mix) can reduce long term dependence on imported oil and can lower national debts, thereby improving economic conditions and benefiting the poor.

An important current issue linked to the economics of energy is the need to make markets work better so that energy prices reflect the actual cost of producing and distributing energy. It is increasingly recognized that distortion factors such as subsidies and taxes must be reformed so as level the playing field for all energy carriers and stakeholders, especially the private sector.

Energy and social issues

Energy is directly related to the most pressing social issues which affect sustainable development: poverty reduction, and access to basic human needs, including food, water, health care, education, shelter and employment⁴. Poverty is the overriding social issue and poses one of the main threats to political stability in many developing countries. Energy and poverty are linked. Means to reduce poverty such as health, income generation, food, water and habitat systems all require appropriate

and sustainable energy supply to be developed (see Box 1).

The energy use patterns of the poor, especially their reliance on traditional biomass fuels, tend to keep them in a poverty cycle. Increased income would not by itself address their needs and concerns, which include reducing physical labour for household chores, having access to safe drinking water, and reducing the need for women to collect cooking fuels. Improving access to adequate, reliable and affordable modern energy services for the poor is the most appropriate way of addressing these needs and concerns.

It is estimated that about two billion people in developing countries do not have access to electricity, and the same number use traditional biomass fuels (fuelwood, agricultural residues, and cow dung) for cooking and heating. Millions of women, particularly in sub-Saharan Africa, spend hours every day gathering and carrying fuelwood and water, and then spend additional hours cooking in poorly vented spaces. The cooking stoves used are source of indoor pollution that has harmful impacts on the health of women and young children.

Energy can help improve educational facilities and services, allowing both children and adults to become literate or improve other skills. For example women and girls could spend less time gathering firewood, fetching water and cooking and instead focus on education. Access to communication services is particularly important for improving the quality of life in rural areas, and radio and television, which are the primary modes of communication, require adequate electricity supply.

Although the Millennium Development Goals (MDGs) set to reduce poverty do not make any specific reference to the role of energy, access to energy services is a crucial element in achieving the goals (see Table 1).

Box 1: How can energy contribute to poverty alleviation?

According to the conclusions of the World Bank/ESMAP sponsored workshop on "Energy and Poverty: How can modern energy services contribute to poverty reduction?" held in Addis Ababa, Ethiopia, in October 2002, access to modern energy services can contribute directly to poverty alleviation by:

- Improving the quality of life through, among other things, better lighting, access to cleaner cooking fuels and safe drinking water, etc.
- Improving productivity and enabling income generation through improved agricultural development (irrigation, crop processing, storage and transport to market), and through non-farming employment, including micro-enterprises;
- Improving effective delivery of social services, such as health care and education, through ensuring reliable heating, lighting, refrigeration of vaccines and other medicines, and sterilization of equipment in health centers, as well as providing lighting to schools, thereby allowing people to study at night, improving their employment prospects, and opening up opportunities for income-generating activities.

⁴World Bank Report, 1997

Energy and environmental issues

The production and use of energy degrades the environment in the immediate and long term, and represent, according to many experts, the single most severe threat to sustainable development, particularly to developing countries. Its impact can be localized (desertification, acid rain, fumes and air pollution) or global (Ozone layer depletion, or global warming climate disruptions).

The combustion of fossil fuels (oil, coal, natural gas) used to power industries, transportations, and electric power plants is the most important source of emission of Green House Gases (GHG). GHGs are responsible for global warming with consequences such as erratic climatic changes leading to flood, drought, sea level increase, etc. To mitigate these negative effects and help developing countries adapt, 124 countries⁵ have ratified the Kyoto protocol.

Another threat on human health, especially on women and children in developing countries results from indoor pollution due to burning firewood and other biomass fuels for cooking in poorly vented traditional kitchens. Fumes from cooking fires contains dangerous amounts of toxic substances and can also lead to respiratory problems.

Energy production from large hydroelectric dams is also a source of concerns. Key environmental questions have to do with displacement of existing settlements due to inundation of the reservoir area, disruption of the culture and sources of livelihood of local communities and threat to biodiversity. This has prompted a strong controversy around the development and the financing of such hydropower projects.

Global response to the challenge of energy and sustainable development

• Global awareness

In its section on “Sustainable development for Africa”, the Johannesburg Plan of Implementation (JPOI) adopted at the World Summit for Sustainable Development (WSSD) in September 2002 recognizes that since the United Nations Conference on Environments and Development (UNCED), sustainable development has remained elusive for many African countries.

JPOI calls upon the international community to help address the special challenge facing Africa’s efforts to achieve sustainable development and give effect to a new vision based on concrete actions for the implementation of Agenda 21 and outcomes of the Summit in Africa. JPOI also recognizes that NEPAD provides a framework for sustainable development on the continent to be shared by all Africans.

The central issues related to energy for achieving sustainable development that were identified by the ninth Session of

the Commission on Sustainable Development (CSD-9) and confirmed at the World Summit on Sustainable Development (WSSD) in the JPOI are:

- Increasing access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources, since more than 80 per cent of people in sub-Saharan Africa lack access to modern energy services and continue to rely on traditional biomass fuels and technologies.
- Improving energy efficiency, particularly at the point of end-use.
- Increasing the proportion of energy obtained from renewable energy sources by putting in place an enabling environment, including phasing out subsidies for fossil fuels and factoring in the environmental costs into the price of energy.
- Diversifying energy supply through advanced, cleaner, more efficient, affordable and cost effective energy technologies.
- Implementing transport strategies for sustainable development since the transport sector is the fastest energy-consuming sector and energy-linked emissions pollute and degrade the environment and produce adverse health effects.

According to the framework for action on energy prepared within the WEHAB Initiative⁶, actions that are needed to achieve tangible progress in addressing these issues would include:

- Building capacity and facilitating information dissemination related to energy for sustainable development;
- Integrating national energy policies with the economic, social and environmental goals of sustainable development;
- Ensuring equitable access to energy services, with particular focus on energy needs of the poor people;
- Accelerating rural energy development, including electrification of rural areas through grid extension and through decentralised renewable energy options;
- Directing market forces towards environmentally optimal solutions by creating an enabling policy environment and regulations so that markets can work better;
- Developing locally available energy resources for greater energy security through diversification; and
- Improving access to and transfer of environmentally sound technologies.

With regard to the strategy for implementing sustainable development for Africa, JPOI calls for dealing effectively with energy problems in Africa through, among other things, establishing and promoting programmes, partnerships and initiatives to support Africa’s efforts to implement NEPAD objectives on energy, which seek to secure access for at least 35 per cent of Africa’s population within 20 years, especially in rural areas.

⁵As of September, 2004 see unfccc.int

⁶The WEHAB Initiative was proposed by UN Secretary-General Kofi Annan as a contribution to the preparation WSSD. It seeks to provide focus and impetus to action in the five key thematic areas of water, energy, health, agriculture and biodiversity (WEHAB) that are integral to a coherent international approach to the implementation of sustainable development and that are among the issues contained in the Plan of Implementation endorsed by the Summit.

Table 1: Role of energy services in achieving the MDGs

Goal (s)	Direct and indirect contribution of energy services to achieving the MDGs
To halve extreme poverty	<ul style="list-style-type: none"> • Access to energy services facilitates economic development, including micro-enterprise, increased productivity from being able to use machinery, income-generating and livelihood activities beyond daylight hours from lighting, and locally owned businesses creating employment in local energy service provision and maintenance, fuel crops, etc. • Access to clean and efficient fuels reduce the large share of household income spent on cooking, lighting and space heating. Access to modern energy services can also assist in bridging the “digital divide” from ICT
To reduce hunger and improve access to safe drinking water	<ul style="list-style-type: none"> • Energy services can help improve access to pumped drinking water and cook food since the majority of staple foods (such as rice, grains and green bananas) need cooking before they can be eaten and need water for cooking. • Energy services can also improve productivity throughout the food chain (tillage, planting, harvesting, processing, transport, etc.), and reduce post harvest losses through better preservation (for example, drying and smoking). • Energy for irrigation helps increase food production and access to nutrition. • Clean water helps improve health. • Increased health and nutrition open up opportunities for employment and income generation.
To reduce child and maternal mortality; and to reduce diseases	<ul style="list-style-type: none"> • Energy services are needed to provide access to better healthcare facilities, including lighting operating theatres, refrigeration of vaccines and other medicines, sterilization of equipment and transport to health centers/clinics. • Electricity in health centres enables night availability, helps retain qualified staff and allows equipment use, including vaccination and medicine storage for prevention and treatment of diseases and infections. • Access to energy services can help in the provision of nutritious cooked food, space heating and boiled water thereby contributing towards better health. • Access to modern energy services can also help improve health condition of women and children because (i) gathering traditional fuels and preparing food exposes young children to health risks and reduces time spent on child care; and (ii) excessive workload and heavy manual labor (carrying heavy loads of wood fuel and water) may affect a pregnant women's general health and well-being.
To achieve universal primary education; and to promote gender equality and empowerment of women	<ul style="list-style-type: none"> • Energy services reduce the time spent by women and children (especially girls) on basic survival activities, such as gathering firewood, fetching water, cooking inefficiently, crop processing by hand, manual farming work, etc. • Good quality lighting in households permits home study. • Lighting in schools allows evening classes and helps retain teachers, especially if their accommodation has electricity. • Reliable energy services offer scope for women's enterprises.
Environmental sustainability	<ul style="list-style-type: none"> • Access to cleaner, more efficient fuels will reduce greenhouse gas emissions, which are a major contributor to climate change. • Efficient use of energy helps to reduce local pollution and improve conditions of poor people
Source: Adapted from DFID Report on “Energy for the Poor: Underpinning the Millennium Development Goals”, Department of International Development, August 2002	

Therefore, it appears that the ultimate sustainable development objective of both JPOI and NEPAD objectives on energy is to contribute to achieving the Millennium Development Goals (MDGs) and poverty reduction through improved provision of adequate, reliable and affordable energy services⁷.

ECA's role in raising awareness on issues related to energy for sustainable development

The eleventh session of the Commission on Sustainable Development (CSD-11) held in April 2003 made a number of decisions that might have direct and indirect relevance to and implications for the programme of work and priorities of the regional com-

missions. It emphasized the role and capability of the regional Commissions to lead the regional process for the implementation of JPOI.

The ultimate objective of both WSSD Plan of Implementation and NEPAD Initiative is to contribute to achieving the Millennium Development Goals (MDGs) and poverty reduction. According to WSSD and the JPOI, this can be achieved through support to the implementation of NEPAD, other established regional and subregional efforts and other nationally owned and led strategies for poverty reduction and sustainable development.

Therefore, ECA's work has been directed towards assisting

⁷Regional Follow-up to WSSD/JPOI and NEPAD Energy Initiative, an ECA paper presented at the African Ministerial Meeting on Energy, Nairobi, Kenya: 7-8 May 2004

member States and policy makers in their effort to improving access to reliable and affordable modern energy supplies for poverty reduction and achieving the MDGs and fostering regional energy cooperation and integration as a means of ensuring security and reliability of energy supplies in a cost-effective manner.

ECA has contributed to raising awareness and building consensus on the importance of increasing access to reliable and affordable modern energy services as means to achieving the MDGs and poverty reduction. For example, ECA presented a paper to the third meeting of the Committee on Sustainable Development (CSD-3) in October 2003, on “Renewable energy technologies (RETs) for poverty alleviation”.

Other past and on-going awareness raising activities carried out by ECA are:

- Building consensus on the need for fostering regional cooperation and integration in order to promote cross-border energy trade;
- Capacity building in the area of integrating sustainable development considerations into planning of energy consuming infrastructure; and
- Policy analysis of sustainability of power sector reforms, including mitigation of negative economic, social and environmental impacts of the reforms.

ECA has been convening annual regional consultations of UN Agencies working in Africa with a view to ensuring coordination and collaboration among the entities of the UN system in support of NEPAD. Under the cluster approach adopted for these consultations, ECA is the convener of the Cluster on NEPAD infrastructure development, which includes the sub-cluster on NEPAD Energy Initiative.

At the initiative of the High-Level Committee on Programmes (HLCP), an ad hoc task force of UN experts in energy was convened in Rome, April 7-8, 2004. The task force decided to create UN-Energy, an inter-agency collaborative mechanism on energy with mandate to develop collaboration links with non-UN energy stakeholders. At a meeting of the Energy sub-cluster of the Annual Regional Consultative of UN Agencies working in Africa held in July 2004, ECA and other UN sister institutions decided to create UN-Energy/Africa.

The Way Forward

Energy for sustainable development; industrial development, air pollution/atmosphere, and climate change have been chosen as the thematic cluster by CSD for the 2006-2007 cycle. Energy issues will include access to energy services, energy efficiency, diversification of energy supply, energy resources management and renewable energy. ECA will prepare a regional report on “Assessment of progress in implementation of action plans and programmes and identification of constraints for 2006.”

ECA will also continue to convene the annual regional consultations of UN Agencies working in Africa aimed at ensuring coherence and synergies of the United Nations system’s support to NEPAD. UN-Energy/Africa, the sub-cluster on energy in support of NEPAD, aims at finalizing and implementing the UN-Agencies’ common actions for the development of energy as a tool for sustainable development in Africa. ECA will also have a critical role to play in the preparation of assessment report referred to above on implementation of JPOI and NEPAD objectives on energy (NEPAD Energy Initiative) as an input of the Africa region to CSD-14.

ICPD @ Ten in Africa: Some Key HIV/AIDS and Reproductive Health Findings

By Amson Sibanda¹

Introduction

This section examines the progress made by African Governments to translate, develop and reorient their HIV/AIDS and reproductive health policies and programmes towards the goals of the historic 1994 International Conference on Population and Development Programme of Action (ICPD-PoA) during its first decade. In particular the section focuses on reviewing and assessing progress made in three areas; (a) levels of political commitment, (b) policy and legislative changes and (c) improvements in the provision of pertinent information and services. The section also examines some of the constraints that African Governments have faced in implementing the ICPD-PoA in these areas.

The principal objectives of the ICPD-PoA regarding HIV/AIDS are to prevent, reduce and minimize the spread and impact of HIV infection; to increase awareness of the disease; to ensure that people living with HIV/AIDS are not discriminated against and that they receive adequate counselling and treatment services. With regard to reproductive health, the objectives of the Programme of Action are to ensure that all individuals have access to a full range of reproductive health services, including comprehensive and factual information, education and communication services through the primary health-care system. In addition, the PoA also urges Governments to promote family planning programmes that help individuals and couples meet their reproductive goals, prevent unwanted pregnancies, promote male involvement in family planning as well as make quality family planning services easily accessible and affordable.

The present review is based on information on HIV/AIDS and reproductive health issues garnered from the 2003 ECA ICPD at 10 survey which was part of the global ICPD at 10 review process. This survey was directed at African Governments, thus the findings in this paper are a summary of Government responses to the ECA ICPD at 10 survey. A total of 43 African Governments out of 53 completed the ECA field survey, yielding a response rate of 81 per cent².

The major findings of the ICPD at 10-review process in Africa show that Governments have taken major steps and actions to implement the recommendations that came out of Cairo and have strongly reaffirmed their commitment to the further implementation of the Programme of Action (see below for full text). For instance, African Governments have adopted public health policies and programmes that focus on improving the reproductive health and reproductive rights of women as well as confronting the HIV/AIDS epidemic and gender-based violence in an integrated way. In addition, African Governments have made substantial progress in creating enabling reproductive health and service environments that take local cultural contexts into account. The measures taken are also responsive to the service and information needs of women and men, including the sexual and reproductive health needs of adolescents.

Political Commitment

The continued spread and the devastating impact of HIV/AIDS on governance, the economy and the social fabric of society have galvanized a large number of African Governments. Consequently, the level of political commitment and concerted response geared towards tackling this unprecedented epidemic is at an all-time high in the region. Out of a total of 43 African countries that responded to the ECA ICPD at 10 Survey almost all countries (98 per cent) have increased political commitment. Heads of State and Government have established multisectoral institutional frameworks addressing HIV/AIDS. In these countries, coordination bodies have been established at different levels within the government structure to tackle HIV/AIDS-related issues. In 56 per cent of the countries, the body is located in the President's office while in 70 per cent of the countries AIDS Councils, Commissions or Desks have been established at the ministerial level. In 37 per cent of the countries, these structures are also located in government departments.

¹Population Affairs Officer, Sustainable Development Division, ECA

²For a detailed analysis of this survey, see ECA (2004) ICPD 10th Anniversary: Africa Regional Review Report, eca/sdd/cm.icpd at 10/2, 18 May 2004

These findings indicate that decision-making bodies dealing with HIV/AIDS issues in some countries are located at more than one level within the Government structure. In a large majority of cases, these Government decision-making bodies work with non-governmental organizations (NGOs), networks of people living with HIV/AIDS, the private sector and civil society. As a result of these developments, AIDS coordination bodies in Africa are now more likely to receive higher political attention and human and financial resources. This level of political commitment is a marked sea change when compared to the slow political and policy response that was observed in the 1980s, an era when many political leaders and decision makers either denied or kept silent about the existence of HIV/AIDS. This was partly due to lack of appropriate information and of understanding the etiology and impacts of the epidemic. The denial stage is now part of history. Governments have now moved to advanced stages of adopting the right policies and installing the needed programs of addressing the HIV/AIDS and its impacts on the economies and communities.

National Responses: Policy and Programme Changes

Although there are regional variations in the spread and impact of the HIV/AIDS epidemic as well as the degree of concern, the majority of countries have adopted key multisectoral national policies, measures and strategies, including changes in legislation as part of overall national HIV/AIDS prevention and treatment programmes. For instance condom availability and use as well as information, education and communication programmes (IEC) on HIV/AIDS and reproductive health issues have been widely promoted across the region. Other important measures that are increasingly being implemented include voluntary counselling and testing, targeted intervention, behavior change communication, management of sexually transmitted infections, prevention of mother-to-child transmission and to a limited extent providing care, support and treatment to people living with HIV/AIDS. The wide variety of measures and strategies that are being implemented by Governments clearly demonstrate that HIV/AIDS and reproductive health policies in the majority of African countries have been reoriented towards the ICPD-PoA and the ICPD+5 key actions. Most policies no longer have a narrow health sector focus that was characteristic of the pre-ICPD era. However, despite these important policy and programme changes, the HIV/AIDS epidemic continues to grow in many parts of the region, particularly in southern, eastern and central Africa.

Progress in integrating HIV/AIDS into primary health care systems has been quite high. Of 43 countries responding to the ICPD at 10 Survey, 88 per cent (38 countries) have incorporated HIV/AIDS into primary health care provision at both the policy and implementation levels. Forty countries (93 per cent) have also integrated HIV/AIDS into reproductive health programmes in various ways such as improving family planning and health care services, providing antenatal, maternal and childcare services as well as providing sexually transmitted infections treatment. Over half the States have adopted policies to prevent

discrimination against people living with HIV/AIDS. Governments have also established programmes designed to enhance behavioral and epidemiological surveillance in tracking the progression of the epidemic and the impact of interventions.

There is increased public awareness of HIV/AIDS in many countries. Diverse HIV/AIDS prevention efforts such as delayed sexual debut, and condom use have been put in place particularly for the youths aged 15-24. Voluntary counseling and testing services that were not readily available in 1994 are being expanded throughout the region. African Governments have also instituted condom promotion policies and as a result condoms have become readily available in 98 per cent of the countries in the ECA survey over the past decade. Services and programmes for prevention of mother-to-child transmission of HIV are being provided in several countries as well. Community care and support programmes for AIDS orphans and vulnerable children are being developed particularly in the hard-hit southern and eastern sub-regions. Care and support for people living with HIV/AIDS is increasing with considerable expansion in home care services primarily as a result of the work of NGOs and faith-based organizations.

As regards meeting the reproductive health needs of their populations, African Governments have taken major strides over the last ten years to ensure that their populations have access to a broad range of reproductive health services as well as reproductive rights. In 98 per cent of the responding countries, this goal has been achieved by integrating reproductive health into primary health care provision. In addition, Governments have also adopted strategies and measures including changes in legislation in areas of reproductive health such as family planning, enhancing the role of men in sexual and reproductive health, reducing maternal and infant mortality, management of complications arising from abortion, prevention and appropriate treatment of infertility as well as managing and treating sexually transmitted infections. All these measures are designed to make reproductive health services easily accessible to and affordable to large segments of society. The reproductive health and reproductive rights of adolescents are also being addressed in several countries. For instance, 81 per cent of the countries in the ECA survey report providing youth friendly reproductive health services. In terms of addressing adolescent sexual and reproductive health issues, 98 per cent of the responding Governments report adopting specific measures designed to prevent and control sexually transmitted infections including HIV/AIDS. Other specific measures include the promotion of hotlines and the creation of youth focused NGOs.

Progress has also been made in promoting the elimination of female genital cutting. Close to 53 per cent of the countries in the ECA survey reported that they have taken the necessary steps to eliminate this practice. About 35 per cent of Governments have adopted legislative measures to deal with this problem; another 51 per cent stepped up information and sensitization campaigns to eradicate the practice. Other measures include the use of IEC campaigns against female genital cutting

in schools as well as providing alternative sources of income to female genital cutting practitioners as an inducement to stopping their practice.

Given the magnitude of the AIDS epidemic, widening disparities in health and the various reproductive health problems in the region, many Governments have adopted measures to promote partnerships with the private sector, NGOs, civil society, as well as educational and youth institutions. As a result of these partnerships, capacity building efforts have expanded, and both domestic and external resource mobilization efforts have grown significantly. Close to 95 per cent of Governments are now working in partnership with national NGOs. In addition, 91 per cent of Governments have also formed partnerships with international NGOs and civil society organizations for the purpose of garnering additional financial and human resources and reproductive health supplies needed to implement programmes more successfully.

Major Constraints

The implementation of HIV/AIDS and reproductive health programmes in the region has been constrained by several factors. Low levels of condom use, widespread poverty, and the increasing feminization of poverty make it extremely difficult to fight the spread of the epidemic. This situation is often compounded by other constraints such as gender inequality, negative social and cultural values such as wife inheritance, conflicts and forced population displacements, insufficient human and financial resources and the lack of significant economic growth in many countries. Stigma and discrimination against people living with HIV/AIDS also remain widespread, and openness about the epidemic, while increasing, remains limited. Governments have also not been able to prioritize and re-allocate scarce resources to ensure that funds are available for the provision of comprehensive and affordable reproductive health services. In addition, possible synergies between measures taken to enhance the provision of

adequate reproductive health services and to prevent and treat HIV/AIDS have not been fully exploited. These constraints call for a redoubling of effort, reassessment of strategies and priorities as well as continued political commitment.

Conclusions

Although African countries have made substantial progress over the last ten years to translate the goals of the ICPD-PoA into life saving and quality of life enhancing programmes for all people, there is still more to be done. Governments should continue to develop, enact and reorient national laws, policies and programmes towards the broad objectives of the Cairo consensus. They should redouble their efforts to prevent and treat sexually transmitted infections including HIV/AIDS, bring down high rates of maternal and child mortality, as well as eliminate all barriers that hinder access to comprehensive reproductive health services and information, including family planning. The HIV/AIDS and reproductive health challenges facing the region are much larger than the level of financial and investment commitments so far made by Governments. Therefore there is need to increase the level of investment in health, through increasing government expenditure, encouraging the private sector to invest in health, and attracting foreign direct investment in health. In addition, Governments need to address the shortage of health and medical personnel and the low quality of their level of training. Besides the mobilization of additional financial and human resources, achieving these goals will also require the fuller integration of reproductive health and HIV/AIDS prevention and treatment programmes into primary health care provision.

References

United Nations Population Fund. 1996. Programme of Action adopted at the International Conference on Population and Development, Cairo, 5-13 September 1994. E/3,000/1998/R-2,500/2002

Final Declaration

ECA Ministerial Conference on ICPD at 10 1 June 2004

We, the African Ministers responsible for population and development, assembled in Dakar, Senegal, on 11 June 2004, to consider the implementation of the Dakar-Ngor Declaration (DND) adopted in 1992 and the Programme of Action (POA) of the International Conference on Population and Development (ICPD), held in Cairo in 1994 and the Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development adopted in 1999;

Welcoming with satisfaction the ten year review of the implementation of the DND and the ICPD POA, as contained in the report entitled "ICPD 10th Anniversary: Africa Regional Review Report" and its findings on the progress made, constraints encountered and the way forward;

Recognizing the persistence of extreme poverty and the existence of socio-economic inequalities, high levels of HIV/AIDS infection and high levels of maternal and infant morbidity and mortality;

Recognizing the continuing gender inequalities and gender-based violence;

Recognizing that armed conflicts in our region seriously affect our development efforts, in particular programmes serving women, adolescents and children;

Recognizing the problems associated with the imbalance in the distribution of the population, rapid urbanization and international migration;

Further recognizing the inadequacy of the integration of population into development for achieving sustained economic growth, sustainable and equitable development and poverty reduction;

Noting the inadequacy of data, for planning, programming, monitoring and evaluation of population and development activities;

Welcoming the continued commitment of countries, through the establishment of enabling environments, particularly the adoption of policies and legislation and increasing financial support for the implementation of population and reproductive health programmes;

Welcoming the strategic support provided through international cooperation for the implementation of population and reproductive health programmes;

Welcoming the establishment of the World Solidarity Fund to eradicate poverty and to promote social and human development in developing countries;

Welcoming with satisfaction the mechanism set forth by the

African Union to prevent and manage conflicts which have contributed greatly to the worsening of reproductive health, gender-based violence and economic degradation in the region;

Welcoming with satisfaction, the New Partnership for Africa's Development (NEPAD) to place the continent on a path of sustainable growth and development, within the context of the Millennium Development Goals;

Welcoming with satisfaction the partnership among African countries to share their experiences in population and development through South-South cooperation;

1. Reaffirm the strong commitment of the African countries to the principles, objectives and actions contained in the Programme of Action of the International Conference on Population and Development and in the document "Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development",

2. Recognize that the Millennium Development Goals cannot be achieved unless further action is taken to ensure the full implementation of the Programme of Action of the International Conference on Population and Development and of the "Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development",

3. Reaffirm the need to achieve gender equality, equity and the empowerment of women as a highly important end in itself and as a key to breaking the cycle of poverty and improving the quality of life of the people of the continent,

4. Reaffirm the right of couples and individuals to reproductive health information and services to enable them to decide freely and responsibly the number, spacing and timing of their children, to attain the highest standard of sexual and reproductive health and to make these decisions free of discrimination, coercion and violence,

5. Reaffirm the rights of adolescents and youth to access information, counseling and youth-friendly services, as well as the need to involve them in the design, implementation, monitoring and evaluation of youth programmes,

6. Decide to intensify efforts in the following key areas, building on progress made in our countries in the last 10 years, in order to achieve the goals of the Dakar/Ngor Declaration, the International Conference on Population and Development and the Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development:

(i) Integration of Population into Development: strengthen efforts to integrate population concerns into poverty reduction and socio-economic development programmes and strategies;

(ii) Poverty Eradication: support efforts to eradicate poverty in

line with the Millennium Development Goals and in the context of the NEPAD; promote food security and sustainable development, as well as good governance and monitor achievements, taking fully into account population issues;

(iii) Reproductive health and reproductive rights: redouble efforts to promote, strengthen and improve universal access to quality and comprehensive sexual and reproductive health information and services including reproductive health commodity security ; adopt and implement legislation guaranteeing reproductive rights, and incorporate information on reproductive rights and respect for such rights in national reports, including reports submitted to the Committee on the Elimination of All Forms of Discrimination Against Women;

(iv). HIV/AIDS: intensify efforts to prevent, diagnose and treat HIV/AIDS and other sexually transmitted infections, within the context of sexual and reproductive health; address the gender dimensions of HIV/AIDS; provide support to families and orphans affected by HIV/AIDS; guarantee access of young and adult men and women to information, education and services required to prevent HIV infection; and provide access to diagnostic services and care to persons living with HIV/AIDS, including to pregnant women and their children to reduce vertical transmission of the virus, and eliminate stigmatization of persons living with HIV/AIDS while ensuring their privacy, confidentiality and freedom from discrimination;

(v) Maternal and infant mortality and morbidity: redouble efforts to reduce maternal and infant mortality and morbidity through basic services and comprehensive reproductive health care, taking into consideration the multiple factors contributing to maternal morbidity and mortality such as unsafe abortions, lack of access to quality family planning and essential obstetric care, obstetric fistula; and taking steps to deal with these issues as well as dealing with the health impact of unsafe abortion as a major public health concern and managing the complications arising from unsafe abortion ;

(vi) Gender equality, equity and empowerment of women: strengthen institutional mechanisms for gender mainstreaming in population policies and poverty reduction strategies; eliminate discrimination against women and girls in all sectors and develop policies and programmes to support gender equality, equity and the empowerment and rights of women; strengthen education for girls; continue to take legislative and administrative reforms to give women equal rights with men to resources such as land, credit and appropriate technology ;

(vii) Violence against women: intensify all necessary legislative, public education and other measures, including severe and enforceable punitive measures, and eliminate all forms of violence against women including, inter alia, harmful practices such as FGM/FGC; and violation of human rights in situations of armed conflict, in particular systematic rape ;

(viii) Adolescents and youth: reinforce the strategic importance

of fostering quality public education as a vehicle for upward social mobility in promoting productive employment and heightening its contribution to the reduction of poverty; redouble efforts to recognize, promote and protect the rights of adolescents and young people, to information, education and user-friendly sexual and reproductive health services, safeguarding the right of adolescents and youth to privacy, confidentiality and informed consent, and involving them in the design, execution and evaluation of these programmes ;

(ix) Families: promote gender equality, protect the human rights of all family members and undertake socio-cultural research on the family as a basis to continue to formulate policies and programmes to support families, including parents, legal guardians and other caregivers and to facilitate the fulfillment of their responsibilities and duties in the care and upbringing of children;

(x) Migration: increase efforts to address the imbalances in the geographic distribution of our populations, including the rapid increase of urban populations, and its consequences and pay particular attention to the socio-economic consequences of both internal and international migration; and address the root causes of undocumented migration, increase efforts to reduce the number of undocumented migrants, while ensuring that their basic human rights are protected.

(xi) Refugees and displaced persons: increase support to resolve the underlying causes of conflicts, to prevent such conflicts and address the effects of crises situations on our populations through intensification of assistance to refugees and displaced persons, with special attention to the reproductive health and other needs of refugee women, children and the elderly, and promote legislation to ban the forced utilization of children as soldiers in armed conflict and support programmes that promote the reintegration of war orphans and former child soldiers.

(xii) Data for development: support research and intensify the collection, analysis, dissemination and utilization of qualitative and quantitative population, health and socio-economic data, disaggregated by sex and age, for actionable policies and programmes, and for monitoring and evaluation, with particular emphasis on data at the decentralized levels;

7. Resource mobilization and partnerships

(i) Call for the intensification of the mobilization and allocation of national resources, both public and private and on the international community to increase its financial support, including through the World Solidarity Fund, to accelerate the implementation of the Programme of Action of the International Conference on Population and Development and the Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development, and the internationally agreed development goals, including those contained in the United Nations Millennium Declaration,

(ii) Call on all countries to support mechanisms to build and

sustain partnerships with non-governmental organizations, in a manner that does not compromise their autonomy, in view of the important and complementary role they play in, inter-alia, policy development and implementation, delivery of services and in promoting reproductive rights and sexual and reproductive health;

(iii) Urge all Governments and other relevant actors, including bilateral and multilateral donors, the United Nations system, international financial institutions, NGOs and civil society and the private sector, to pursue efforts, including through strengthened partnerships, at all levels, to intensify the implementation of the Dakar-Ngor Declaration and the Programme of Action of the International Conference on Population and Development and the Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development;

(iv) Urge all countries, including development partners, to increase resources to UNFPA with a view to enhancing its abil-

ity to provide increased support to efforts to implement the commitments made in Dakar and Cairo, recognizing the vital role played by the United Nations Population Fund, in supporting the implementation of the DND, and the Programme of Action of the International Conference on Population and Development,

8. Decide to exert maximum efforts to implement the recommendations contained in the report entitled "ICPD 10th Anniversary: Africa Regional Review Report" and call on Africa's development partners to support these efforts,

9. We adopt the report entitled "ICPD 10th Anniversary: Africa Regional Review Report" and this Declaration as Africa's blueprint for the further implementation of the Dakar-Ngor Declaration and the Programme of Action of the International Conference on Population and Development and the Key Actions for the Further Implementation of the Programme of Action of the International Conference on Population and Development in the coming years and agree to regularly review their further implementation.

UN Regional Commissions on ICPD: Positions and Outlook

By Bjorg Sandkjaer

All UN regional Commissions have held, or will hold, review sessions on the ICPD, adopting plans for future action and follow-up. While responding to concerns in their particular regions, all Commissions reinforce the ICPD PoA, calling for more resources and commitment to implementation of the plan of action. What follows are summaries of the Declarations developed by the regional Commissions.

ECLAC calls for resources to fight inequality

The Economic Commission for Latin America and the Caribbean (ECLAC) has held a number of ICPD at ten-related consultations resulting in the Santiago Declaration, which was endorsed by the Ad Hoc Committee on Population and Development and ECLAC at a meeting in July 2004.

In the Santiago Declaration, countries reaffirm their commitment to the ICPD goals, and the importance of the goals to achieve the Millennium Development Goals. Countries call on the international community to implement commitments for increased financial flows, made through the Financing for Development process.

While much has been attained in implementing the ICPD plan of action, the Declaration particularly emphasizes the need to focus on the following areas:

- Gender equality and women's rights;
- Population and demographic concerns in sustainable development policy and programmes;
- Support for the family in all its forms, including single-parent families;
- Revision and implementation of legislation on reproductive health and rights;
- Incorporation of reproductive rights in health sector reform policies;
- Strengthening of efforts to reduce maternal and neonatal morbidity and mortality;
- Prevention and elimination of violence against women; and
- Prioritization of data collection and improve statistics.

The countries also expressed their concern for the negative social effects of structural adjustment programmes. These include fragmentation of social policy, and spending on external debt servicing which underpin the persistent poverty and inequality in the region.

www.eclac.org/celade

ECE appeals for funds to achieve global population and development goals

The Economic Commission for Europe (ECE) and UNFPA jointly organized the European Population Forum in January 2004, ending with a plea to mobilize the funds needed to achieve the goals laid down in the ICPD Plan of Action.

The Forum identified lack of adequate resources for population and reproductive health programmes as the primary obstacle to achieving the Cairo objectives. Participants emphasized the importance of Europe keeping its promises to mobilize resources for population and reproductive health as a key contribution to international development. Annual global assistance for these sectors falls nearly USD 3 billion short of the requirements agreed at Cairo.

Regional issues discussed included persistent low fertility, ageing populations and declining work forces, migration, and high mortality and morbidity. Special attention was given to the social, economic and health challenges facing countries in transition in Europe, the Caucasus and Central Asia. Other concerns identified included widespread human trafficking and gender-based violence. The Forum also called for empowering young people to fully enjoy healthy sexual and reproductive lives as a key priority in a region with

rising rates of HIV/AIDS and other sexually transmitted infections. It emphasized the need to integrate HIV/AIDS prevention and treatment fully within reproductive health programmes, and underscored the importance of the Cairo Agenda for achieving the Millennium Development Goals.

<http://www.unece.org/ead/pau/epf/Welcome.html>

ESCAP: Population is Key to Achieving Millennium Development Goals

As a follow-up to ICPD, the Economic and Social Commission of Asia and the Pacific (ESCAP) adopted the Plan of Action on Population and Poverty at the fifth Asian Population Conference in December 2002. The Conference is held every ten years, and co-hosted by UNFPA. The Plan addresses population issues as a key contribution to reducing poverty in the region, and meeting the UN Millennium Development Goal of halving the number of people living on less than \$1 a day by 2015.

In order to address the continuing problem of poverty in the region, the Plan urges Governments to ensure that demographic and population factors are fully integrated into national, sectoral and local-level planning, in particular, addressing the needs of the poor and the disadvantaged. It emphasizes human capital formation and infrastructural development, paying special attention to inequalities and disparities in access to education, health, employment and micro-credit.

On reproductive rights and health services, a hotly debated topic, the Plan calls on member countries to strengthen reproductive health policies and implement comprehensive integrated reproductive health care including family planning

services, throughout the health care system, focusing on the impoverished and other vulnerable groups. On HIV/AIDS, the Plan urges governments to establish comprehensive surveillance systems, develop and implement national and HIV/AIDS policies and action plans, establish national prevention programmes and integrate them into reproductive health programmes. The Plan also recommends Governments to support community-based home care initiatives, and help families and communities to address the economic and psychosocial needs of AIDS-affected children, including orphans.

Cost and lack of funding remain a major obstacle to achieving the goals set out in the ICPD PoA. The Plan therefore urges developed countries to make concrete efforts toward reaching the UN target of 0.7 per cent of GNP as Official Development Assistance.

<http://www.unescap.org/esid/psis/population/5appc/index.asp>

ESCWA: consultation held in November

The Economic and Social Commission of Western Asia (ESCWA) held its ICPD review session in November 2004. Called the "Arab Population Forum" it was organised in collaboration with the League of Arab States and UNFPA. The Arab Population Forum took place after ASDB had gone to press. For more information on the Forum and its deliberations, please go to: <http://www.apf.org.jo/>

Implementing ICPD: The Way Forward for Africa

By *Benoit Kalasa*¹

Africa still exhibits poor performance in attaining the goals set in Cairo in 1994. Challenges include early and frequent childbearing, low levels of contraceptive use, and low access to reproductive health services – exacerbated by the high levels of HIV/AIDS and poverty, and low levels of education, especially for girls. How can Africa meet these challenges?

For the United Nations Population Fund (UNFPA) in general and UNFPA in the Africa Region in particular, the challenges call for a regional strategy that is a framework aimed to guide UNFPA's contribution to poverty reduction and sustainable development in the region through addressing population and development issues. Poverty is defined as having three interrelated dimensions: a) income poverty which is symbolically measured by the proportion of the population living on less than one dollar a day; b) quality of life, understood as having living conditions below acceptable standards, and inadequate access to basic social services; and c) capacity, understood as the empowerment of individuals, institutions and communities to respond to their needs for the improvement of the quality of life.

The specific strategic interventions to address these three dimensions of poverty constitute the three pillars of the UNFPA Africa regional strategy:

- Improving access to quality basic social services, mainly reproductive health services and girls' education;
- Improving livelihood opportunities and income particularly for the vulnerable segments of the population; and
- Developing capacity of stakeholders at all levels for optimum results through a better understanding of population and development linkages, evidence-based policy dialogue and advocacy, and sound programme management.

Lessons learned from the implementation of UNFPA country programmes show that increased individual and household income will result in improved access to and utilization of basic social services, including health and education. This, in turn, will facilitate the development of a critical mass of human capital and institutional capacity to improve labour productivity and improve the performance of the economy, thereby creating the conditions conducive to poverty reduction and sustainable development. The resulting empowerment of individuals, families and communities puts them in a better position to increase family welfare, reduce vulnerability and gender disparities, and promote equity.

¹Regional Advisor on Population and Development Strategies, UNFPA Country Support Team/Addis Ababa.

Mitigating Impact of HIV/AIDS on Rural Households

By Bjorg Sandkjaer

Introduction

Presently, more than 25 million people are estimated to live with HIV/AIDS in Africa, and the number is rapidly increasing (UNAIDS 2004). As is well known, one of the aspects that sets HIV apart from other epidemics is that it targets people of productive ages. HIV morbidity and mortality are therefore not only a personal tragedy, but also have far-reaching implications for the survival of affected families, households, and communities. About two-thirds of the African population live in rural areas, and HIV/AIDS is affecting rural livelihoods in a number of ways, undermining sustainable development efforts and achievements.

This section of the Bulletin will first discuss the impact of HIV on rural households in Africa, paying particular attention to what is known about the effect on food security. Second, the section will investigate the different strategies adopted by families and households to mitigate the losses incurred. Third, some policy responses by governments will be presented, providing some ideas for a possible way forward on the policy level.

Impact on rural households and communities

Macro level models and data are struggling to capture the aggregate impact of HIV, both in terms of economic indicators and food production (CHGA 2004).

At the micro level, however, illness and death of the productive members of households, impact those households' ability to sustain production and consumption necessary for the households' survival. HIV thus creates pockets of poverty in communities, pockets that, if left unchecked, may grow in size until the whole community's structure unravels.

The effects of HIV on households are not linear. Already poor households are affected disproportionately, as these have fewer resources to buffer the shock that HIV represents. On top of this, poor households that have to struggle for survival, are less able to participate in social networks and support schemes, and may therefore be further marginalized.

HIV does not affect men and women equally. The face of HIV in Africa is the face of a young woman. There are two main sets of reasons for this. First, for biological and cultural reasons, more women are infected than men in sub-Saharan Africa. More women are therefore ill, and more women will die. Second, the lion's share of the additional burden of responding to the impact of HIV on the household falls on women. Women are already traditionally the main producers of food, and also provide the bulk of the care in the household (FAO 2003). This needs to be considered when mitigation strategies are developed and evaluated.

While much remains to be understood about the complex interrelationship between HIV/AIDS and rural livelihoods, understanding these issues is pertinent at this time when there are renewed efforts to achieve food security and eradicate extreme poverty and hunger on the continent.

What do we know, then, about how HIV/AIDS impacts rural households? The starting point of the analysis here is that productive and skilled farmers are taken out, through falling sick and subsequently dying, and the consequences¹ include:

- a. Decline in the supply of labour for food and livestock production

The twin effects of the illness and death of people living with AIDS, and the time spent by household and family members caring for the sick, diverts labour from food and livestock production. Studies have found that adults in AIDS-affected households spend significantly less time on farming activities than adults in non-affected households. This underpins the other negative effects of HIV on rural livelihoods. Although this

¹Framework for analysis adopted from UNDESA (2004).

Table 1: Loss in agricultural labour force due to AIDS, 1985 - 2020

	Estimated loss, agricultural labour force 1985 - 2000	Projected loss, agricultural labour force 1985 - 2020
Namibia	-3.0%	-26.0%
Botswana	-6.6%	-23.2%
Zimbabwe	-9.6%	-22.7%
Mozambique	-2.3%	-20.0%
South Africa	-3.9%	-19.9%
Kenya	-3.9%	-16.8%
Malawi	-5.8%	-13.8%
Uganda	-12.8%	-13.7%
Tanzania	-5.8%	-12.7%
Central African Republic	-6.3%	-12.6%
Ivory Coast	-5.6%	-11.4%
Cameroon	-2.9%	-10.7%

Source: FAO 2002

is very difficult to estimate, Table 1 gives an indication of the projected loss of agricultural labour force due to HIV/AIDS in some of the most affected countries.

b. Significant reduction in food production in AIDS-affected households

A key consequence of declining time spent on farming activities is reduction in farm output, including food production. Related consequences, which also exacerbate this, are reductions in area of land under cultivation as available labour declines, and declining yields per unit of farmed land. Studies also show a decline in crop variety and changes in cropping patterns, particularly a shift from more to less labour-intensive systems. Together with less intensive livestock production, as well as lower maintenance of cultivated land, this increases household food insecurity and vulnerability to shocks.

c. Shifts in production from cash crops to food crops

AIDS-affected households report shifting from income-generating cash crops to growing food for self-sustenance, resulting in lower household incomes and lack of funds to buy other essential items for the household, or pay for non-labour inputs necessary to maintain agricultural yields. This, in turn, contributes to lower food production, and together with lack of other resources to buy food, contributes to food insecurity.

d. Loss of knowledge about farming methods, and a reduction in skilled and experienced labour

A growing, major concern is the loss of skilled and experienced labour, as well as the decline in intergenerational transfer of farming methods and skills. As knowledgeable members of rural households fall ill and die, essential knowledge and skills are not passed on to their children, who will subsequently be unable to farm the land to its full potential.

Response: are households coping?

Households and the public sector have, of necessity, adapted

and adopted strategies to mitigate the impact of the epidemic. An overview of these is provided below.

1. Household coping strategies

Households faced with the challenges outlined above adopt a number of coping strategies. The following have been identified (Tumushabe 2004):

Labour

- Relocation of labour within the household, including removal of children, especially girls, from school, and increased reliance on orphan labour;
- Relying on the elderly, children and extended family networks to cover for ill or deceased adult household members;
- Relocation of household members, especially children and orphans to wider social networks. Thus the burden is shared more widely. However, the capacity of the 'extended family' to absorb ever-growing numbers of children is becoming overstretched; and
- Diversification of household activities towards less labour demanding farm work, and off-farm income generating activities such as trade. This can spread the labour requirement more evenly throughout the year, thus minimising problems associated with labour bottlenecks.

Agriculture

- Shift in the composition of crops, from labour intensive to less labour intensive, from cash to subsistence crops, from vegetables to survival foodstuffs for carbohydrates, from a wide range to a narrower range of crops;
- Complete loss of livestock or shifting composition of animal stock from cattle (large stock) to pigs, goats and chicken (small stock);
- off-season, usually late, planting, increasing vulnerability to pests and diseases and lowering output;
- Compromising critical land conservation and soil protection activities such as mulching, terracing and fallowing

and replacing these with bush burning and abandonment of weed and pest control. There is evidence for the deterioration of controlled agricultural environments as a result of HIV/AIDS;

- Reduction in household food quantity, quality and variety, leading to both adult and child malnutrition;
- Withdrawal from marketing activities in favour of household-based pure subsistence. When households reach this stage, impact mitigation measures such as micro-credit for off-farm income-generating activities, become much more difficult or even impossible; and
- Where families were originally economically better endowed, there are cases of replacing human labour with technology, e.g. through oxenisation and increased use of fertilisers to replace loss of male labour. It should be noted that when a better-off household ceases to employ labour, the effect on poor non-AIDS afflicted households in the neighbourhood can be severe.

Public sector responses

Faced with the HIV/AIDS epidemic, African governments have responded with a number of measures, although most of these have been criticized as being too little too late. It is evident that the epidemic represents a crisis for the countries that are most affected, and will lead to crisis in a number of presently low-prevalence countries if efforts to curb its spread are not scaled up. A crisis response is therefore merited. However, HIV/AIDS is also a systemic condition which governments have to find more permanent ways of dealing with (CHGA 2004). For the foreseeable future, AIDS is here to stay.

African governments have committed themselves to fighting HIV/AIDS through a number of Declarations, such as the UNGASS Declaration of 2001, and the Abuja declaration (2001). What, then, are governments doing? Data collected by the ECA Sustainable Development Division from 43 out of the 53 ECA member countries show that all but one of these governments have put in place measures to mitigate the impact of HIV on families and communities, although the data do not reveal to what extent these measures are successful, nor how far they reach. Thirty-six out of the responding countries report having formulated Poverty Reduction Strategies, incorporating HIV/AIDS as an area in these. Forty-two countries indicate having in place multisectoral frameworks to address HIV/AIDS (ECA, 2004)². The ECA also hosts the UN Commission for HIV/AIDS and Governments in Africa which will further map out both the governance needs and chart possible responses.

Agricultural and other policy response

The response in terms of effects of food production is closely linked to changes in agricultural policy. African agricultural policies are designed with a number of objectives in mind. These include raising incomes for farmers, producing enough food

to feed the population, and producing cash crops to earn foreign currency through export. AIDS adds another dimension to agricultural policy (Jayne et al., 2004). Governments in the hardest-hit countries are still struggling to understand the exact effects of the epidemic on agriculture, and therefore also on how to mitigate these effects. However, some policy changes are underway that directly or indirectly mitigate the effects of HIV/AIDS on agriculture and rural livelihoods.

The factors envisioned to affect agricultural systems' vulnerability to the effects of HIV/AIDS include poverty, the availability of surplus labour to fill gaps left by people who died from AIDS-related diseases, cropping patterns and agricultural systems flexible enough to facilitate substituting labour, the extent to which survivors in AIDS-affected households are allowed to retain land and productive assets, and lastly, the availability of life-prolonging treatment. These factors will now be examined in turn³.

a. Treatment

Life-prolonging treatment for HIV/AIDS exists, but is generally not available to the majority of Africans living with HIV. The treatment is expensive and difficult to administer, and in underfunded and poorly developed health care systems, treatment, barely available in urban areas, has not trickled out to rural areas. However, a number of initiatives are under way to make treatment available across Africa, including in rural areas, and this will help mitigate the impact of HIV/AIDS.

b. Poverty reduction

As a large share of the population in most African countries earn their income from agriculture, raising agricultural income will be critical to achieving economic development. AIDS and poverty exacerbate each other in a vicious cycle, and AIDS affects poor households disproportionately. Policies to increase rural incomes, such as those put in place in Uganda and Mozambique, have a positive effect, both in reducing vulnerability to HIV/AIDS, and in mitigating the effect of the pandemic.

c. Availability of surplus labour

Some studies have found that the effects of AIDS on agricultural systems in Africa were mitigated by households' ability to draw on additional labour. This again depends on availability of underemployed labour, and rural population densities. In general, more densely populated areas are likely to have more labour-intensive agricultural systems.

d. Systems that are flexible in terms of factor substitutability

Some agricultural systems are more able to flexibly adjust the inputs of land, labour, capital, and knowledge, in response to changes in input scarcity and costs. HIV/AIDS could, for exam-

²For more on the results of this survey, please see Amson Sibanda's section on ICPD at ten in Africa

³This framework is adapted from Jayne et al. (2004).

ple, lead to scarcity in labour and capital. Households and communities which are unable to substitute these factors may find it difficult to maintain existing cropping patterns and/or cultivated land, and rural poverty alleviation programmes need to pay particular attention to such communities.

- e. Norms and social rules that allow retention of household land and productive assets

Households become vulnerable to land and asset robbing after an AIDS-related death. This may be condoned by local norms and social rules. Women and children are particularly vulnerable if the male head of household dies. Systems and legal reforms are underway to help remaining members of the household keep their land and assets, but more needs to be done to secure ownership rights.

Conclusion and outlook

HIV/AIDS has an impact on household and community food security in the hardest hit countries in Africa. In the near future, prevalence is expected to either level off at fairly high levels, or increase, and coupled with the delayed impact of HIV/AIDS, we know that the impact of HIV/AIDS will only increase in the coming years. The impact, however, is not uniform across affected households, and data are localised. However, some emerging trends can be discerned.

On the household level, those already affected adopt a number of coping strategies. The already poor have more difficulties adapting to the blow of an HIV/AIDS-related illness and death. HIV impacts household food security through taking out productive members of the household, and therefore lowering availability of valuable labour and knowledge, which in turn may lead to lower productivity, reduced income and reduced household food security.

On a systemic level, the impact of HIV is only starting to make itself felt. Governments have, for this and other reasons, been slow to react, but some policies have been put in place. It seems that the most effective policies are those aimed at increasing income and alleviating poverty, which in turn enable households to better cope with HIV/AIDS-related morbidity and mortality. Making life-prolonging treatment available will also contribute lowering the impact. Direct agricultural policies that would help are those aimed at helping households and communities adopt appropriate agricultural technology, recognizing the varied resource constraints AIDS-afflicted households face (Jayne et al. 2004).

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The Commission on HIV/AIDS and Governance in Africa

By Nana K. Poku¹

HIV/AIDS marks a severe development challenge for African states - with profound implications for state stability and the very existence of certain states on the continent. UN Secretary General, Kofi Annan, puts the position this way: 'The impact of HIV/AIDS in Africa is no less destructive than warfare itself. By overwhelming Africa's health and social services, by creating millions of orphans, and by decimating the educated elite, HIV/AIDS is causing social and economic crisis which in turn threatens political stability and economic development.'

To address these challenges, the Secretary-General launched the Commission on HIV/AIDS and Governance in Africa (CHGA) in 2003. Based at the ECA, CHGA is chaired by the ECA Executive Secretary, Mr. K. Y. Amoako, and is served by twenty eminent Commissioners, fuelled by a common concern to respond to the HIV/AIDS epidemic rapidly, effectively and at scale.

The central focus of the Commission is to provide African policy makers research-focused mitigation strategies and policy options to combat the impact of the epidemic on state structures and economic development. It is also marked by a spirit of activism, seeking to engage with a wide range of stakeholders at all levels during its lifetime, and thereby spurring action. CHGA has a two-year life span, and the final report is due in 2005.

For more information, please see www.uneca.org/chga

¹Research Director, Commission on HIV/AIDS and Governance in Africa, ECA