

What is a Poverty Reduction Strategy Without Science and Technology?

A Review of Science and Technology and Poverty Reduction Strategy Papers in Sub-Saharan Africa

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List of Abbreviations and Acronyms

ADLI	Agricultural Development-Led Industrialization
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Country
IMF	International Monetary Fund
NGO	Non governmental organization
NPEP	National Poverty Elimination Plan PRSP
PEAP	Poverty Eradication Plan
PRSP	Poverty Reduction Strategy Paper
SPA	Strategy for Poverty Alleviation
UNDP	United Nations Development Programme

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Preface

Most low-income countries are receiving debt relief under two assistance programmes of the Bretton Woods institutions, namely:

- from the World Bank, through the International Development Association
- from the International Monetary Fund, through the Poverty Reduction and Growth Facility

All countries receiving this assistance are required to develop their own poverty reduction strategies. About 70 countries are now addressing this. Many of the external development agencies have reportedly expressed strong support for developing and exploring these strategies, and have further indicated their willingness to work with the affected governments in preparing these strategies. An additional important justification for developing the strategies is that development partners have agreed in principle to adjust their own programmes to support the implementation of the strategies.¹ That is a significant step forward in the international coalition of efforts to reduce poverty substantially in the most affected countries.

Poverty is a multidimensional problem that goes beyond economic issues. Its elements include social, political and cultural considerations. Therefore, its solution can not be based solely on economic policies, but on a comprehensive well-coordinated set of measures. Although economic growth is the single most important factor influencing poverty, particularly because macroeconomic stability is essential for high and sustainable rates of growth, the strategic orientation of science and technology in facilitating the attainment of economic objectives is often overlooked. Admittedly, the capacity of sub-Saharan African countries to develop and apply science and technology is low; but the potential of bringing the benefits of science to society is greatest in such low-income countries, because modest levels of science and technology investment can leverage multiple opportunities for growth and development. Herein lies the compelling argument for integrating science and technology applications into the planning and execution of strategies for poverty reduction.

Basically, a Poverty Reduction Strategy Paper (PRSP) is expected to review the country's key sectoral policies and programmes, and ascertain how well they are functioning to reduce poverty. This should point the way to needed reforms. Analysts recognize that there are many causes of the current

¹ Jeni Klugman, *Overview to PRSP*, World Bank (May 2001)

poor performance of African economies in reducing poverty. Such analysts have generally recommended multi-directional action to be taken on both domestic and international arena. These sets of recommendations usually fall into two categories of issues:

- identification of better and more effective strategies to reduce poverty
- improved mechanisms of delivery of external assistance to reduce poverty.

These often result in fine policy recommendations. However, many such recommendations fall short of addressing the capacities that would be required to effectively implement the programmes, as well as the level and sources of the financing that can assure their timely and systematic implementation.

This paper examines the context and present approach of sub-Saharan African countries to organize and prepare the strategy papers that are required by the World Bank and the International Monetary Fund (IM F). The paper is intended to provide an opportunity for locally-based African scholars and development practitioners who are presently excluded from the process to come on board and contribute to the establishment of a sound process that is truly country-owned. The paper also contributes to the formulation of appropriate strategies and realistic programmes that could eradicate poverty in the long term.

1. Introduction

Poverty has many dimensions. The more commonly visible ones include low levels of income and consumption, low levels of education, poor health, physical insecurity, unemployment or heavy burden of physical labour, social isolation, and disempowerment. Studies and surveys in African countries continue regularly to quantify these and other dimensions of poverty, mostly in economic terms. But most of these are economic rather than policy studies; hence they proffer little in terms of the social restructuring that would be essential for a truly sustainable human development that provides a sound context for eliminating poverty in the continent.

Poverty is not only a dominant feature of sub-Saharan Africa's social and economic landscape, it is also almost always found in its several forms in both urban and rural areas, perhaps differing only in intensity. With more than 70% of the population living in rural areas, results of household surveys show that rural dwellers are usually poorer on a per capita basis than their urban counterparts. Some 60% of Africa's rural population, consisting chiefly of smallholder farmers, nomads, artisans, fishermen, and indigenous people, are said to fall below the poverty line.²

The persistent poverty of the continent has always posed a development challenge to the international community, which cannot be said to have done everything possible to eradicate poverty, either in sub-Saharan Africa or elsewhere. International concerns have been growing more rapidly than the global efforts to address poverty. The former is measurable by the multiplicity of meetings and conferences convened regularly to address the scourge, and the latter is measured by the volume of international aid directed to the implementation of poverty-reducing initiatives. A World Bank study³ reported that despite an increase in the average Gross Domestic Product (GDP) per capita in sub-Saharan Africa in the 1980s, poverty levels actually remained relatively unchanged. But experts also note that GDP growth alone cannot achieve a significant reduction in poverty in countries that continue to report negative growth in per capita consumption. The need to eliminate poverty in Africa has always been claimed to be on the national and international agenda.

² Report by International Fund for Agricultural Development (IFAD)

³ World Bank Ref.

At the International Level

Over the past decade the development community has raised its level of concern over the incidence of poverty in most developing countries, and has increasingly elevated poverty reduction to one of its highest priorities. Some of the important multilateral programmes and instruments launched to fight poverty in Africa have included the United Nations Development Assistance Framework; the United Nations Development Programme's Common Country Assessment; the World Bank's Country Assistance Strategy, Poverty Reduction Strategy Credit, and the Comprehensive Development Framework; and the International Monetary Fund's Poverty Reduction and Growth Facility.

A significant landmark in the international recognition of the global responsibility for addressing poverty is the World Summit for Social Development that was held in Copenhagen in 1995, and which culminated in the commitment of governments to the goal of eradicating poverty by promoting consensus on new welfare initiatives. These initiatives are to be taken in respect of people living in poverty, so that they could gain access to resources for improving their existence. Such resources would include land, credit, education, knowledge, essential public services, and technology.

Modest reductions in poverty have been achieved in only a few of the affected African countries, while progress has been considerably less than hoped for in others. All these point to the past failure caused by inadequate attention and practical action at the international level, the weak structure for policy planning and implementation at the national level, and the poor understanding at the community level of the dynamics of poverty. Many questions arise:

- For one, it is questionable whether the level of resources provided globally for fighting poverty in African countries was realistic in the first place.
- Secondly, it is doubtful whether targets set without secured financing could have been meaningful.
- Then there are questions about the efficacy of the delivery mechanisms of the available resources, especially the direct aid component.
- And, finally, in assessing the impact of aid on poverty reduction in Africa, did the international community engage in unrealistic expectations?

At the National Level

The primary question at the national level is about the nature of governance and the stability of many of the sub-Saharan African countries. Some of the countries are just emerging from long years of internal conflict or cross-border clashes. Security of life and property is becoming a serious concern in key countries like Nigeria and South Africa. And yet, these are the conditions that shape the environment in which poverty reduction has to be attempted.

While it is clear that most countries of sub-Saharan Africa are determined to pursue development aggressively, and are indeed engaged in serious efforts of national planning and economic policy reform, it is not so clear that all the stakeholders have been brought in to be part of the process. For example, little is documented in these countries about what roles the government allows the private sector and civil society to play, and how well the institutional structures for development function. It is

noteworthy that many countries are becoming less sensitive to the previously unpopular issue of gender equity. Much progress has been made as gender advocates have consistently scored successes in mobilizing women around political issues, and in demanding the right of their full participation in decision making, rather than just the mere privilege of women's presence in consultative forums.

Despite the persistent and pervasive nature of poverty and the visible decline in the ability of African governments to meet the challenge, sectoral ministries in many countries continue to describe their own efforts as astoundingly successful, with lavish credits to the "vision" of the incumbent government and its political agenda. Many of these assessments are usually not based on any measurable indicators or credible data, nor do they relate to any set targets or benchmarks that should have been established in the first place.

2. Background to PRSPs

A new initiative called the Poverty Reduction Strategy Paper (PRSP) was launched in December 1999 when the Executive Boards of the World Bank and the International Monetary Fund (IMF), approved it as a new policy instrument specifically designed as a framework document to serve the needs of the Bank and the Fund respectively in providing concessionary financing to low-income countries. It was intended as a basis for approving official external debt forgiveness which is normally provided by the Bank under the Heavily Indebted Poor Country (HIPC) initiative. It would similarly serve as a pre-condition for providing IMF financing to low-income countries under the Poverty Reduction and Growth Facility as well as the World Bank's International Development Association facility for concessionary lending. PRSP essentially becomes another new approach for addressing the provision of concessionary assistance to poor countries who must wrestle with the new dynamics, requirements, and conditionality of the new process. The strategy paper, when considered satisfactory, would form the country's basis for seeking external assistance and debt relief. It is also intended to help stakeholders in a country shape an appropriate framework for aid coordination, aid delivery, and monitoring of programme performance.

With this new approach the World Bank and IMF would, in effect, raise the level of their control and influence on the economic planning of participating countries. Clearly, there is now a compelling need to significantly raise the capacities of these countries to be able to meet the requirements of this new instrument; or, more usefully, to be able to translate major components of their present economic planning framework into a PRSP without sacrificing the gains of previous programme initiatives.

The PRSPs, as defined by the World Bank and IMF, consist of a comprehensive analytical framework, integrating macroeconomic, structural, sectoral, and social considerations. The framework is to lay out a set of poverty reduction measures and policies. In doing this, both institutions hope that this approach would not only be used to formulate poverty reducing plans, but also be used to strengthen local ownership of existing national policies and programmes, and to link the use of debt relief (under the Enhanced Indebted Poor Country Initiative) to poverty reduction programmes. Nonetheless, the Bank and the Fund continue to stress that the primary objective of the PRSP approach is to reduce poverty in all its forms in a given country. In order to promote in-country capacity building it is also important to expect the government to uphold the principle of a participatory, country-driven process that could better ensure local ownership of the initiative in both its formulation and implementation.

The World Bank and the IMF appropriately recognize that the process of preparing and implementing these strategies will require a lot of learning-by-doing and will, therefore, take some time to become effectively institutionalized. If this goal is achieved the PRSP approach then certainly holds much promise for reducing poverty in sub-Saharan African countries. The process could harness the internal energy and resourcefulness of these countries, if well supported with development assistance. In order to enhance these possibilities the Bank and the Fund have jointly prepared a PRSP Sourcebook which is designed to provide guidance, and also prepared analytical tools for the national task forces that would embark on a poverty reduction planning process in their country. The Sourcebook contains a collection of broad policy guidelines, examples of best practices from international experiences elsewhere, and technical notes that help to articulate or clarify major issues concerning the process.

Although the majority of low-income countries are to be found in Africa, the PRSP initiative is being undertaken by other affected geographical areas, particularly in Europe and Central Asia, Latin America and the Caribbean, East Asia, and the Middle East. It is envisaged that low-income countries could take as much as two years to prepare a satisfactory strategy paper. These countries have therefore been encouraged to first prepare an interim paper (I-PRSP) which should, at the least, include a well-articulated statement of national commitment to poverty reduction, a clear elaboration of the nature of poverty in that country, a description of past and current efforts to address poverty, and an initial proposal for preparing the full-scale strategy paper (PRSP)

Currently, as many as 34 sub-Saharan African countries are undertaking the PRSP process in one form or another. Most of them have prepared an interim paper (the I-PRSP), as a prelude to embarking upon the process for preparing a comprehensive full strategy paper. Nine of the I-PRSPs are reviewed in chapter 3.

3. Review of Selected Countries

The World Bank and the IMF have carefully detailed the issues that countries should address before they can formulate a reasonable strategy for reducing poverty within a medium term range. These are contained in their elaborate Sourcebook and Background Papers. The countries with weaker capacities were encouraged to begin the process by developing an Interim PRSP which would contain, at the minimum:

- a statement of commitment by the government to poverty reduction;
- an outline of the nature of the poverty problem, its pattern, its extent, and the main elements of the strategies and programmes that had been previously employed to address it;
- a process for preparing the full PRSP, with appropriate details of activities, timeline, budgetary implications, and anticipated sources of funding; and
- a three-year policy matrix and macroeconomic framework.

Ordinarily, the PRSPs would be subject to scrutiny and final approval by the boards of the Bank and the IMF, through a staff assessment process that expects to score the papers on the following basis:

- nature of the participatory process;
- quality of the poverty analysis with respect to its key determinants;
- setting of appropriate targets for poverty reduction;
- usefulness of the monitoring system in tracking poverty trends and evaluating programme impact;
- quality of the macroeconomic framework and its public action priorities; and
- strength of the proposals for structural, sectoral, and social policy reforms.

The assessment here, however, is not on the basis of World Bank and IMF guidelines, but in the context of how the proposed strategies can lead to real and significant reduction of poverty, and how much direct and immediate relief the process could bring to the poor communities. A different assessment would be necessary to determine how well the strategy papers meet World Bank/IMF expectations.

The I-PRSP is intended to present a broad picture of a country's poverty reduction initiatives to date, and to elaborate on the preparation of the PRSP that would subsequently be undertaken in the following months.

The strategy papers of Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Malawi, Tanzania, Uganda, and Zambia are reviewed below for suitability and effectiveness in meeting the challenge of poverty reduction in today's rapidly-advancing global development environment that is driven rather strongly by new technologies. Levels of poverty will continue to be measured by indicators that reflect non-static world standards.

3.1 Ethiopia

Ethiopia is one of the least-developed countries in the world. Even though it relies on agriculture, poverty is still wide spread, with 45.5% of the entire population reported to be below the poverty line. Although there are no concrete data on the employment situation in the country it is generally known that unemployment is very high. The government claims satisfactory availability of data on poverty, having carried out a survey of household income, consumption and expenditure in 1995/96. The government also conducted a series of annual welfare monitoring surveys between 1996 and 1998 on access to education, health, water, sanitation, etc. It has used the resulting information to produce a 1999 report on Poverty in Ethiopia. A more recent survey, begun in 2000 is still underway.

Past and Current Poverty Reduction Efforts

Ethiopia has been implementing the IMF's Structural Adjustment Programme and the government had adopted an Agricultural Development-Led Industrialization (ADLI) strategy since the mid 1990s. This strategy was expected to achieve a growth rate that would help reduce poverty in the country. The government claims that, indeed, there has been a decrease in poverty as a result of economic reform and ADLI strategy which was supported by external assistance. The data presented on macroeconomic indicators of economic performance during the 1990s tend to support this conclusion. The GDP grew at an annual average rate of 5.5%, with sectoral growth rate of 3.4% for agriculture, 7.3% for industry, and 7.7 % for services.

In 1996, the government established the Ethiopian Social Rehabilitation and Development Fund as a social investment to help improve the well being of the poor through community-based projects that strengthen social and economic assets. It is reported that more than 1,700 projects have already been completed under this fund (mostly for water supply, education, health and sanitation). There is, however, no information on the nature of these projects, nor the eventual benefits to society.

A number of sector programmes and projects have been launched since the ADLI strategy was formulated. These include multi-year programmes in road construction, education, health and energy as well as projects for rural and agricultural development.

In agriculture, a number of country-wide programmes have been attempted since 1990. The first one focused on food production in areas of high potential and reliable rainfall that allows fertilizer utilization. The government claims that the programme achieved considerable increases in crop yields, particularly for maize, wheat, millet and barley. The second country-wide programme focused on dry land agriculture where rainfall tends to be limited. The government reported mixed progress in this area, and claimed substantial improvement in soil and water conservation; but increases in

output were insignificant. The third programme was started in 1999 to cover livestock production, with significant growth predicted for the medium term. For the next five years the government intends to strengthen the existing programmes, hoping to increase productivity through additional training of extension workers and increasing the supply of improved seed varieties.

In the social sectors, education and health are given priority within the strategy to eradicate poverty. The new Education and Training Policy and Strategy focuses on expanding educational opportunities. Several hundred new primary school facilities would be constructed and existing ones upgraded. Thousands of primary school teachers would also receive pre-service training to enhance their ability to meet the standard of the new school curriculum. In the health sector, the overall goal of the government programme is to establish a strong institutional base that can facilitate the achievement of the sector's long-range goals. Recognizing that the country's HIV/AIDS infection level is among the highest in the world, and that previous efforts to arrest the expansion of the epidemic had been ineffective, the government is now formulating new approaches with World Bank funding. It has prepared a new five-year strategic plan for this purpose for the period 2000 to 2004, with projects to be organized at national, regional and local levels.

The Interim Strategy Paper

The I-PRSP is intended to present a broad picture of the country's poverty reduction initiatives so far, and to elaborate on the preparation of the PRSP that would be undertaken in the coming months. However, the paper goes further to discuss the adjustment policies that the government intends to implement, especially concerning prices and markets, subsidies, tariff reduction, and convertibility of currency. But the past two years have witnessed a considerable increase in government expenditure for defence, as the country engaged in a major conflict with Eritrea.

In attempting to follow the PRSP guidelines provided by the World Bank/IMF the country is reshaping its focus on poverty to now consist of four key elements: ADLI Strategy, judiciary and civil service reform, decentralization and empowerment, and capacity building. However, the I-PRSP does not discuss any details of how these blocks would lead to a reduction in poverty.

The ADLI brings agriculture and industrialization together into a single development framework; the development of agriculture is expected to provide a source of raw material as well as a market base for industrialization. While agricultural growth levels in crops and grains could improve the food security situation, there continues to be a significant threat of droughts which have occurred rather frequently in the country. Irrigation would therefore need to become a pillar of the agricultural development of the country. The science and technology implications of this are yet to be recognized and addressed.

As a component of the ADLI strategy, industrialization is expected to grow from existing projects in manufacturing and utilities. It is not clear if these by themselves are enough in size and number to sustain the stated expectation. As for private investment, the government intends to encourage this by taking three types of measures, namely:

- remove regulatory impediments to allow existing policies to work better
- encourage public-private sector partnership through necessary dialogue
- improve business environment and make incentives for manufacturing more attractive.

The strategy also considers the possibility of export-oriented agriculture and manufacturing. It foresees a potential for growth of income and foreign exchange if the domestic production can be mobilized for this purpose. Towards this end the government formulated an export strategy in 1998 that included the creation of a consultative forum between exporters and the government, as well as the establishment of an export promotion agency.

Capacity Building

In 1998, the government prepared a strategy and a programme framework for capacity building, based on projected external assistance. The programme was to promote human resource development and institution building with a primary focus on smallholder agriculture and the public sector. The programme would also encompass the training of farmers, supporting micro-finance institutions, and strengthening private and public sector organizations that are pursuing agricultural development. In addition, capacity building for the public sector would give priority to the judiciary, tax administration and civil service reform. The implementation plans and achievements of these projects were not elaborated upon and the level of external support so far received was not disclosed.

Preparation of the PRSP

The preparation of the Interim-PRSP was said to have been preceded by debates conducted at numerous public gatherings under the auspices of the electoral process for the May 2000 elections. Additional consultations were carried out with selected audiences in the civil service, among elected public officials, and with professionals from the non governmental organization (NGO) and private sector communities.

The process for preparing the full PRSP would build on these past efforts. An initial draft will be based on the Second Five-Year Development Plan which was formulated on the basis of the said consultations. A Steering Committee will be appointed by government to oversee the process that, among other tasks, will disseminate the draft widely at the district, regional and federal levels in order to deepen the consultations that have already taken place.

Two detailed surveys of household incomes, expenditures, consumption, and demography were apparently carried out as recently as 1999. These surveys would be used to generate data on poverty indicators and would form the baseline data for setting the targets of poverty reduction for the period 2001 to 2003.

3.2 The Gambia

The Gambia is one of the poorest countries in the world and has a very narrow resource base. The country has been addressing poverty issues with different programmes for almost 20 years. In 1985

The Gambia formulated an Economic Recovery Programme followed in 1990 by the Programme for Sustained Development, both supported generously by donors until the change of government in 1997. However, both programmes failed to achieve any significant growth rate. In 1998 The Gambia then entered into the World Bank's Poverty Reduction and Growth Facility arrangement.

Poverty in the Gambia

A 1989 study by the International Labour Organisation (ILO) showed that 60% of the Gambian population lived below the poverty line then. The 1998 Household Economic Survey classified 69% as poor. The number is believed to have worsened since then. Causes of sustained poverty in the country are said to include lack of income opportunities, high population growth rate (4.2%), and poor educational infrastructure. With income unevenly distributed by household and gender, the farming communities are hardest hit by poverty. Yet the agricultural sector is the source of income for about 70% of the Gambian population.

Past and Current Poverty Reduction Efforts

The series of studies conducted on Gambia's economy in the late 1980s led to the design of the first Strategy for Poverty Alleviation (SPA-I) which was presented to donors in 1994. Four priority programme areas were highlighted as a response to the key poverty issues raised by the ILO study. These, listed below, were subsequently implemented with external assistance:

- enhancing the production capacity of the poor
- improving access to, and performance of public services
- capacity building at local levels
- promoting participatory communication processes

A subsequent programme assessment showed that the achievements of the SPA-I were few and limited. The beneficiaries reported improvements in access to primary health care services and in the enrolment rates of primary education. They also reported improvements in food technology capacities. The African Development Bank helped to establish a programme to provide financial services to support entrepreneurship and training among the poor. The following were considered as four major outcomes of the process:

- poverty was redefined to include vulnerability, food security, and access to assets
- previously sensitive issues like gender equity and decentralization were placed on the national policy agenda
- an otherwise strained relationship between government and the NGO community improved and was strengthened
- political ownership of the strategy was enhanced.

The Interim Strategy Paper

A review of the shortcomings of SPA-I made it possible for the government to rethink its approach to poverty reduction, leading to the design of a second Strategy for Poverty Alleviation (SPA-II), which will be equivalent to the PRSP. The review paper, now the I-PRSP, reiterated government commitment to

poverty reduction, based on a review of past and present efforts, and proposed new action with hope for decisive results. It also proposed that SPA-II should be an integral part of the government's growth strategy and should adhere to the required consultative process.

Preparation of the PRSP

The new strategy would build on the strengths of the existing participatory Vision 2020 process which highlights the range of industries within which the economic transformation process in The Gambia should take place. Vision 2020 and SPA-II would overlap in programme directions, especially as the former advocates the translation of the current economic growth programme into an anti-poverty strategy by a careful choice of development areas, pro-poor public investment, and promotion of private investment in labour intensive industries.

Perhaps the most relevant among the government's proposed SPA-II programme areas are:

- a. Income-generating activities in agriculture, horticulture, fisheries, forestry, micro enterprises, etc. The following programmes were identified:
 - assist small scale agri-business development
 - small scale cottage industry development
 - small scale trade and services development
 - savings and credit institutions for the poor
- b. Redistributive activities. Noting that poverty is fostered by unequal distribution of assets and access to social infrastructure, the programmes identified were:
 - ensuring budgetary allocations that favour access of the poor to vital support services
 - explicit targeting of social spending
 - improving and expanding utility services to the poor
 - providing a social safety net

The Government, therefore, envisages the design and implementation of a social investment fund, active labour programmes, and micro-enterprise development assistance.

- c. Food security. The strategy calls for actions towards the improvement of food crops and livestock yields, as well as implementation of nutrition programmes.

Institutional Arrangements

A task force has been formed, consisting of representatives from government, donors, private sector, and non-governmental organizations to undertake what is presently an interim strategy paper (I-PRSP). The task force is reviewing all existing national poverty reports, surveys and studies. Its final product would be a draft outline for the preparation of SPA-II. Under the task force, technical working groups have also been formed for the health, education and trade sectors.

SPA-II is meant to be a comprehensive national development framework that links macro-economic planning to poverty reduction. There is still a need to develop the benchmarks for performance indicators in order to monitor its outcomes. Coordination and monitoring of SPA-II would primarily be the function of the SPA Coordinating Office in the Department of State for Finance and Economic

Affairs. The office is being assisted by the UNDP to commission necessary studies. The government reports that the recently improved aid-coordination policy encourages bi-lateral and multi-lateral consultations in the design and implementation as well as monitoring of the proposed programmes.

3.3 Republic of Ghana

The Government of Ghana has declared the primary aim of its economic development programme to be the reduction of poverty and general improvement in the welfare of its citizens. The poverty reduction strategy that was developed in 1995 laid emphasis on economic growth, integrated rural development, expansion of employment opportunities, and improved access of the poor to basic public services. The main objectives of that strategy were:

- a reduction in the incidence of poverty
- strengthened capacities for the poor and vulnerable to earn income
- reduced gender, geographic, and socio-economic disparities
- a healthier, better educated, and more productive population

Poverty in Ghana

The I-PRSP claims that the percentage of the Ghanaian population defined as poor had declined from 51% in 1991-92 to about 43% in 1998-99, but most of the poverty reduction had been concentrated in the urban areas. Poverty was also noted to be highest among food crop farmers who constitute about 58% of the poor. The government is committed to establishing a continuous poverty monitoring system and has designed one within the framework of a decentralized planning system which emphasizes community and district level participation in decision making. The monitoring of poverty and social conditions is carried out through a number of instruments, including:

- the Ghana Living Standards Survey
- the Ghana Demographic and Health Survey
- the Core Welfare Indicators Questionnaire
- the National Poverty Reduction Programme
- the Social Investment Fund
- the Village Infrastructure Programme

These surveys provide data on the living standards of the population and the results cover demographic, economic, social and household indicators.

Past and Current Poverty Reduction Efforts

The government expects its Development Strategy for Poverty Reduction to be the basis for consultations with all social and development partners since it provides a clear statement of the development strategy and its intention of reducing poverty in the country. It is based on the Ghana-Vision 2020 document from which a rolling plan for 2001-2005 is being prepared.

Although the Medium Term Macroeconomic Framework is based on a set of principles and policies expected to reduce poverty and improve living standards, the government admitted that it would take much longer to reach a broad consensus on this framework. It had, therefore, tentatively selected some specific objectives to be pursued during the period 2000-2002. These included setting of targets that would enable it to achieve a real growth rate of 4.5% in 2001 and 5.5% in 2002; and also bringing down the inflation rate from 23% in 2000 to 5% in 2002.

A key component of the strategy addresses the agriculture sector for which the government has developed the Accelerated Agriculture Growth and Development Strategy that is based on the following five elements:

- promotion of selected products for improved access to markets
- development of technology for sustainable natural resource management
- improved access to agricultural financial services
- enhanced human resource and institutional capacity

Another programme, the Agriculture Services Sector Investment Programme, is expected to be used as the vehicle for implementing the strategy. This programme is aimed at reducing poverty and improving food security by supporting technological changes and innovation in crop, livestock, fishery and forestry production and also in agro-processing. Special attention is being given to the production, marketing, pricing, infrastructure, and financial arrangements for the cocoa sector. A development strategy for the sector will aim to increase cocoa production by 25% by the year 2004/5. A steering committee comprising major stakeholders in the industry was established to facilitate the implementation of the strategy.

Preparation of the PRSP

- a. The government is using the Vision 2020 and its consultative process to prepare a Second Policy Framework and Medium Term Plan (2001-05), and will rationalize the individual programmes into a Second Medium Term Development Plan and a National Programme of Action.
- b. The National Economic Forum will organize meetings to facilitate dialogue between the private sector, public sector, and the general community.
- c. Preparation of the PRSP will be integrated into the Ghana Vision 2020 since poverty reduction remains a priority under this initiative. The Inter-Ministerial Committee on Poverty Reduction will work with the National Development Planning Commission to ensure that the Strategy is reflected in the national budget.
- d. The indicative time table expected that the poverty reduction strategy would be finalized in February 2001, and the PRSP submitted to the World Bank/IMF in April 2001.

Institutional Arrangements

The government has established an institutional framework for coordinating poverty reduction initiatives. This consists of a high level Inter-Ministerial Committee on Poverty Reduction as the highest policy-making organ for this purpose, an inter-agency and multi-sectoral Technical Committee

on Poverty, and a series of sectoral working groups. There are planning coordinating units at the district level that have responsibilities for coordinating and mainstreaming poverty reduction activities.

3.4 Republic of Kenya

The Government of Kenya has prepared an I-PRSP covering the years 2001 –2003. The paper outlines Kenya's primary development goal of achieving a broad-based sustainable improvement in the welfare of its citizens. The paper acknowledges the need to establish a framework in which the private sector, NGOs, and civil society organizations can play a role alongside government in meeting the challenge of poverty reduction. It enumerates the various manifestations of poverty and calls for the formulation of multi-dimensional policies and programme interventions to seek a permanent solution.

Poverty in Kenya

The poor have been defined in Kenya as those who cannot afford basic food and non-food items. They consist of small farmers, pastoralists, agricultural and casual labourers, unskilled and semi-skilled workers, female-headed households, physically handicapped, HIV/AIDS orphans, and street children. The poor constitute 52% of the population, with women in the majority, and they mostly live in the rural areas. The national Welfare Monitoring Surveys conducted in 1992, 1994, and 1997, along with the Participatory Poverty Assessments of 1994 and 1996 all produced results that were not encouraging - the poor continue to increase in number, from 3.7 million in 1992 to 11.5 million in 1994, and estimated to be 15 million today.

Local studies indicate that women are more vulnerable to poverty than men. For example, 69% of the active female population work as subsistence farmers, compared to 43% of their male counterparts; and subsistence farmers are among the poorest in the population. Although poverty is still predominant in the rural areas, a 1997 study showed that the proportion of poor female-headed households in the urban centres was higher than male-headed ones. Women are thus more severely affected by the development process. Income distribution is also highly inequitable. And poverty adversely affects the ability of the rural population to participate in the social and political processes.

Several indicators are presented to demonstrate the depth and breadth of poverty in Kenya today. Although the government had established the goal of addressing poverty, disease and ignorance since independence, it appears that the efforts till now have been inadequate as the spread of poverty has not been stemmed. The government is, therefore, now beginning a new campaign which will incorporate wider consultation with, and broader participation of various stakeholders. This new effort is expected to culminate in the development of a long-term poverty reducing strategy that will guide the formulation of future policies and programmes for this purpose.

Past and Current Poverty Reduction Efforts

Real per capita income fell in the 1990s as the nation's economic performance weakened. Rising unemployment rapidly increased the level of poverty. Government addressed restoration of

macroeconomic growth while maintaining stability, using a medium-term macroeconomic framework.

It is difficult to see how the proposed strategy for the next three years explicitly addresses poverty reduction. It is indeed a strategy for economic growth, not unlike previous ones that continue to be amended and reformed to satisfy World Bank/IMF prescriptions. The proposed strategy aims to increase real per capita GDP growth from 3% per year (up from 1.4% in 1999) to 6% by 2003, keep inflation below 5%, increase foreign exchange reserve two-fold, etc. But the strategy also states that success in achieving these targets is predicated upon a number of other factors, including:

- visible progress in governance;
- establishment of an enabling environment for the private sector;
- effective utilization of public resources for improving infrastructure and;
- security; and
- increasing priorities given to health and education.

The strategy hopes that a pick-up in agriculture (especially food production and coffee) and tourism would spur economic growth. It further projects that major improvements in manufacturing, export-oriented agriculture, and the service sector would sustain the economic growth over the medium term. But no details are discussed about how all these expectations would be fulfilled, nor about the role of the poor communities through their supply of labour. Surprisingly, even the critical need for a health policy reform in light of the HIV/AIDS epidemic was only mentioned in passing, with no attention to the debilitating long-term effect on the nation's future manpower situation. Yet the government report claims that the interim strategy for the health sector represents a milestone by linking the objectives of the Kenya Health Policy Framework Paper (1994) and the National Health Sector Strategic Plan (1999-2004) to the Medium Term Economic Framework budget allocation.

The paper describes at some length the respective current sector programmes and priorities. It also describes measures that government is taking to improve the country's physical infrastructure as this is considered critical to economic growth, employment generation, and poverty reduction. For example: with respect to roads, the government is improving unpaved feeder roads and giving priority to the maintenance of a class of main trunk roads; in the energy sector, government is shifting the pattern of energy consumption from wood fuel to modern types; noting that agriculture is the lifeline of 80% of Kenya's rural poor, efforts are being made to achieve a sectoral growth rate of 4% to 6% per annum by building effective extension and technology delivery services, establishing rural finance and credit supply system for small holders, and facilitating the participation of women.

The paper further suggests a rather long list of actions in almost every sector as "immediate priorities" for the government to undertake. The following are some of the highlights:

- a. Improving governance and public administration
 - strengthen operational capacities to combat corruption
 - increase effectiveness of accounting and audit procedures
 - implement code of ethics for public officials

- introduce legislation to support the rights of women
 - review salaries and benefits of public servants
- b. Raising income opportunities of the poor
- create agricultural advisory service to provide practical, cost-effective extension service to the smallholder
 - establish private marketing system for agricultural produce
 - promote rural non-farm employment
 - construct wide-spread labour-intensive roads
 - eliminate shortfall in electricity supply
- c. Improving quality of life
- promote food security
 - increase primary school enrolment
 - provide greater secondary school access to poor children
 - provide affordable essential health care to the poor
 - increase supply of water to poor communities
- d. Physical infrastructure

The Interim Strategy Paper

In its interim strategy paper the government states that a “fundamental prerequisite” for poverty reduction is an economic growth rate that is much greater than the population growth rate. With this philosophy it outlined the basic objectives of its strategy as follows:

- facilitate sustained and rapid economic growth
- improve governance and security
- increase ability of the poor to raise their incomes
- improve the quality of life of the poor
- improve equity and participation

The strategy outlined in the I-PRSP will now become the national planning framework within which sectoral priorities and programmes will be developed. It will also become the first phase of implementation of the National Poverty Elimination Plan (NPEP)⁴.

The I-PRSP was said to have been developed following “broad consultation” with various stakeholders. The nature and content of these consultations are not made available, but the climax of the process was the organization by government of a National Stakeholders Consultative Forum to discuss the paper. With more than 300 participants including women leaders, the Forum identified a set of

⁴The NPEP was reportedly formulated through “extensive participation” of civil society, the private sector, NGOs, and government agencies; but no details of the plan have been provided in the Kenya paper.

cross-cutting issues: the need to build partnerships and enhance the participation of civil society in decision-making; mainstreaming gender equity; ensuring affirmative action for the vulnerable population; the need to improve education and health; making security and good governance a priority; the need for better infrastructure; and recognizing HIV/AIDS as an issue that concerns the whole population. Significantly, the Forum also acknowledged that the poor were not represented at its deliberations and, therefore, recommended the need to decentralize the consultation process to the district and community levels.

Preparation of the PRSP

The I-PRSP represents an initial articulation of the government's response to the urgent need to reduce poverty levels in the country. It provides the objectives, targets, and timing of the individual programmes and projects that would be necessary to implement the proposed strategy. Over the coming months, the government would be undertaking the preparation of the full PRSP on the basis of a wide ranging consultative process. The implications for public expenditure will be incorporated into the next and subsequent annual Medium Term Expenditure Framework cycles.

The institutional arrangements for carrying out this exercise have not been elaborated, but it is estimated to cost KSh 70 million (IUS\$=KSh.75).

3.5 Kingdom of Lesotho

Since independence, poverty reduction has been at the core of government policies and strategies and the country has prepared several economic programmes and development projects in its attempt to foster economic growth. These mostly addressed the service sector with little attention to the development of economic infrastructure. The country also generally assumed that the programmes and projects would ultimately impact on the poverty level, particularly in the rural areas where most of the population resides. It is important to note that since the 1970s, the main source of household income in the rural areas was the labour remittances of Lesotho mine workers in South Africa. Since 1995, the government has formulated two comprehensive strategies for poverty reduction, namely:

- Pathway Out of Poverty - An Action Plan for Lesotho
- Poverty Reduction within the Context of Good Governance.

These declared strategies were supplemented by more specific sectoral policies and projects defined in the various national development plans. But it is still not clear that these strategies have made any contribution to the alleviation of poverty in Lesotho.

During the 1990s, the country reportedly experienced a period of economic boom that resulted from the expansion of the manufacturing sector and the construction taking place under the Lesotho Highlands Water Project. Between 1988 when the government entered into the Structural Adjustment Programme of the World Bank/IMF and 1997, the GDP reportedly grew at an average rate of 6.3% per annum. But since 1998 the economic performance of the country has dropped considerably. It

is estimated that the net private investment dropped by about 50% in that year. Government finances also weakened further in 1999, registering a 13.4% deficit for the 1999/2000 financial year.

The Government of Lesotho has responded to this situation with a series of macro-economic policies to bring economic growth rate back to about 3% per annum and keep inflation down to 6% a year. Nonetheless, the government believes that the country's medium term economic outlook will be dominated by external circumstances, particularly by the structural changes that may occur under the SADC Free Trade Area Protocol.

Poverty in Lesotho

Lesotho is one of the poorest and lowest-income countries of the world. Poverty in the country is measured not only in terms of income but also by the extent to which individuals are deprived of access to food, shelter, health services, education, and other basic human needs. A major feature of the country's poverty situation is the high inequality with which income is distributed. However, in Lesotho, the statistical base for analyzing the poverty situation is said to be underdeveloped. Therefore, an additional requirement of the PRSP process would be to develop the necessary instruments for the systematic monitoring of the poverty situation.

Defining the poor as those with monthly incomes below M 80, it is estimated that 68% of the population is poor. This is a large increase from the 49% level in 1990. It is further estimated that 49% of the entire population is actually destitute, making a monthly income of less than M 40. Poverty is highly concentrated in the predominantly rural and remote mountainous and river areas where more than 80% are characterized as poor or destitute.

Past and Current Poverty Reduction Efforts

Several national development programmes have been implemented by the Government of Lesotho over the years, but these did not explicitly target poverty reduction as a primary goal. The highlights include the following:

1. *Rural Road Construction*

This project has reportedly reduced rural-urban migration which would have overburdened social services. Due to the seasonal nature of unemployment in subsistence agriculture, it was possible to use the available labour force for road construction.

2. *Education*

The first elaborate plan to develop education was formulated in 1991 within the framework of the Fifth National Development Plan. Focusing on primary education, it provided for better classrooms and facilities, supply of trained teachers, and expansion of the educational infrastructure. Yet enrolment levels in primary schools did not improve. The government is now committed to the provision of basic education for all by the year 2006, under a new Free Primary Education Policy.

3. *Health*

A Health Sector Plan was developed in 1994 to address emerging health and social welfare problems like HIV/AIDS, impact of increasing urbanization, and unemployment. With poor

results from this, a new Health Sector Reform Strategy was formulated in 1999 to increase access to quality preventive, curative and rehabilitative health care services. This was made possible by the long-standing cooperation between the government and the Christian Health Association of Lesotho (which owns 49% of the country's health facilities, and receives some subvention from the government to be able to provide subsidized services to the poor). More recently the government prepared a National HIV/AIDS Strategic Plan which aims at controlling the spread of the disease and mitigating its impact.

4. *Private Sector Development*

Since 1995, the government has encouraged small and medium scale industrial projects with provision of skills-upgrading programmes, NGO credit centres, etc. that are geared to reducing poverty by improving employment opportunities. Foreign investment in the clothing and footwear industries alone created some 8,000 jobs between 1991 and 1998. In the meantime, about 50 state-owned enterprises and parastatals have been identified for privatization but the process is proceeding very slowly and the outcome doubtful.

5. *Agriculture*

Since 1980, the agricultural sector has formulated and implemented more programme initiatives than any other in a constant battle to achieve food sufficiency. The primary goal has always been to reduce the country's dependence on South Africa for the supply of staple food items, particularly maize, sorghum and wheat. The goal, however, has been rather difficult to achieve. A major effort made in 1995 towards the establishment of an Agricultural Sector Development Programme defined the following six programmes which currently form the focus of government planning for the sector:

- Agriculture Policy and Strategy Formulation
- Privatisation and Market Liberalisation
- Land Reform and Natural Resource Management
- Agriculture Diversification
- Agricultural Support Services Provision
- Capacity Building

Other efforts included programmes to address tourism, culture and sport, the environment, and gender dimensions of poverty. It is noteworthy that policies and procedures have been revised to ensure that socio-economic activities that were male-dominated before are now accessible to women. In summary, it does not appear that all the said programmes and projects have succeeded in reducing poverty.

Interim Strategy Paper

The Government of Lesotho adopted poverty reduction as its highest development priority during the preparation of its Sixth National Development Plan in 1996. The objectives have remained unchanged for the Seventh National Development Plan which is currently being implemented. In launching its budget for the 2000/2001 fiscal year, the government also outlined a strategy for consolidating democracy while helping the poor. This, in effect, is the government's declaration of commitment to poverty reduction.

Lesotho's declared objective of the PRSP is to promote comprehensive poverty reduction strategies that are country-driven, results-oriented, partnership-based, and situated within a medium term macro-economic framework. First, the government established a Technical Working Group in February 2000 to prepare the interim PRSP. The group comprises government representatives, the private sector, non-governmental organizations, National University of Lesotho, and the UNDP. When the I-PRSP is accepted by "all stakeholders" it will be forwarded to the World Bank and the IMF.

Preparation of the PRSP

The government envisaged that preparation of the full PRSP would be completed by June 2002 under the following three-phase work plan:

1. Preparation Stage
 - a. Evaluation of the I-PRSP process
 - b. Data collection and analysis
 - c. Assessment of poverty programmes
 - d. Preparation of working documents
2. Consultative Stage
 - a. Meeting with the rural poor
 - b. Meeting with civil society organizations
 - c. Meeting with Parliament and local authorities
 - d. Meeting with the business community and other interested groups
3. Finalization Stage
 - a. Editorial committee set up (June 2001)
 - b. Production of first draft report (October 2001)
 - c. Submission of full PRSP to the Cabinet (May 2002)
 - d. Submission of full PRSP to World Bank/IMF (June 2002)

Institutional Arrangements

The government is committed to preparing the strategy paper through a process of consensus-building within the public sector, and in full consultation with the rural poor, civil society organizations, lawmakers, and the business community. The process will be overseen by a high level Poverty Council, a Technical Working Group, and a Poverty Forum. The Poverty Council will be the apex organ to manage the process. It will be chaired by the Minister of Finance and Development Planning, and its membership would include the Governor of the Central Bank of Lesotho. It will provide policy guidance, drive the consultations within the public sector, and ensure that the Technical Working Group gains adequate access to all necessary material and human resources. The Council will also promote public and private sector partnerships.

The Technical Working Group, reporting to the Council, will identify the key players and implement the consultative mechanism at all levels. The Working Group will link with the civil society and other stakeholders at the district and grass-roots levels through a Civil Society Poverty Reduction Forum to be established by the non-governmental organizations. This forum is a mechanism for maximizing stakeholder participation in, and ownership of, the PRSP process. The consultations carried out at

district and community levels would culminate in the national forum, and in the elaboration of a broad vision of poverty problems and of policies and strategies to combat them. The final result would be the PRSP.

The resource requirements for carrying out the PRSP exercise was estimated at M1, 375,000.

3.6 Republic of Malawi

The government of Malawi articulated its commitment to poverty reduction in its Poverty Alleviation Programme of 1994 and has since been implementing an economic structural reform programme. The government sees the World Bank/IMF request for this strategy paper as an opportunity to take stock of its economic programmes and evaluate their impact so far. This could lead to a re-focusing of government priorities and development options.

Malawi's approach to the preparation of the PRSP is to forge a focused policy document that aims to promote rapid economic growth and ensure equitable distribution of the benefits of this growth. Even though poverty alleviation was said to have been the over-arching theme of the government's prior programmes, the apparent trend of escalating poverty levels now compels the government to review and improve its macro-economic framework and sectoral strategies. The review should reflect a detailed analysis of the macro-economic and sectoral policies and the most recent data on poverty. It should also set targets and priorities and make recommendations for public expenditure.

Poverty in Malawi

The Qualitative Impact Monitoring Study and consultations with the poor carried out by the government have helped to give a clearer picture of poverty in the country. Available information indicates that more than 60% of Malawi's population lives below the poverty line. The population density is high and income distribution is highly inequitable. Also, 24% of households are headed by women. Prevalence of HIV/AIDS is high and life expectancy has fallen drastically, from 48 years in 1990 to 43 years in 1997. The major factors contributing to poverty in the country are low agricultural productivity, rapid population growth, absence of off-farm employment opportunities, low educational levels, poor health service system, and poor access to credit and productive assets.

The government's current approach to poverty reduction is predicated on the following three elements:

- emphasis on smallholder agriculture in order to raise the productivity and income of the rural poor
- promotion of private sector growth to expand off-farm employment
- expansion of social services

Although the government has implemented a number of programmes and policies to combat poverty, a series of institutional and structural obstacles have limited the impact of these initiatives. The obstacles include inadequate human capacity at all levels, poor incentives for the civil service, difficulty of targeting programmes to the poorest households, and poor linkages among reform programmes.

Past and Current Poverty Reduction Efforts

In 1999, the government developed and evaluated three possible options for growth and poverty reduction. The first is an agricultural approach that focuses on sectoral interventions and strategies that directly target the poor. These include improving land utilization, increasing agricultural productivity, and developing safety nets for the poorest people. The second option aimed to stabilize the macroeconomic environment and increase investment to promote economic growth. This would focus on strengthening the financial sector, promoting industrialization and exports, and commercializing agriculture. The third option focused on social development, especially through the provision of infrastructure, investment in human capital, and raising productivity and living standards. This would include promotion of good governance, provision of basic social services and support for environmental and natural resource development.

The government's analysis of the three potential growth options revealed that none of them by itself was sufficient to achieve the goals of national development, and all three of them would have to be applied simultaneously. This called for resource prioritization with respect to the recommendations of Vision 2020. The major constraints to economic growth were also identified as the HIV/AIDS epidemic which is undermining the performance of all sectors, high population growth rate, and the unattractiveness of the country's investment environment due to high internal and external transportation costs, unreliable power supply, and deteriorating public security.

The Interim Strategy Paper

Malawi is embarking on a preparatory process that would include the following:

- an updated analysis with a gender perspective
- an examination of public expenditure and its poverty impact
- a commitment to poverty reduction
- an agreement on a sound economic framework
- detailed consultation on specific poverty reduction strategies and outcomes

The process will also draw upon work already carried out or in progress to collect data or articulate development strategies, particularly those that have led to the conclusions and goals specified in the country's Vision 2020 document. These include:

- Reaching the Vision: An Analysis of Growth Options
- Policy Analysis Initiative
- National Strategic Framework for HIV/AIDS
- Draft Policy Framework Paper
- Public Expenditure Review
- The Medium-Term Expenditure Framework

A number of other detailed analyses, particularly at the sector level, would also be pertinent to the work that is being planned in order to make the final outcome a full reflection of recent government thinking on development in the country.

Preparation of the PRSP

The government has approved a road map for the preparation of the strategy paper. The map lays out the structure of the paper and the issues to be addressed. The broad vision statement would draw on the consultative meetings, the Vision 2020 document, and other previous economic analysis papers that were prepared for other purposes. It would define the degree to which poverty should be reduced by 2020 and propose a multi-sectoral strategy for assisting the poor. Specific sectoral strategies would be developed on the basis of sectoral analysis of poverty.

Institutional Framework

The institutional framework that is proposed for implementing the process is firmly rooted in government ministries which would supervise the contribution of decentralized local authorities and implementing agencies. This is expected to ensure national ownership of the programming exercise. The framework would be headed by a ministerial-level national Steering Committee, assisted by a committee of Principal Secretaries. The latter would, in turn, oversee the work of a Technical Committee that would be responsible for carrying out the nation-wide consultations, conducting the analytical work, and drawing up recommendations and strategic options.

The process is planned to be iterative between government and other stakeholders on the one hand, and between the Technical Committee and the thematic working groups on the other. Preparation of the strategy paper is expected to include a broad range of stakeholders who would participate through: membership or representation in the thematic working groups; in workshops and roundtables; or through written submissions or other contributions on specific issues.

3.7 Republic of Tanzania

The Government of Tanzania views the PRSP as its response to the requirement for reaching an agreement with the World Bank and the IMF to be able to qualify for benefits under the Initiative for Heavily Indebted Countries, as well as World Bank lending. At the same time it hopes the strategy would be sufficient to attack the country's pervasive poverty by raising growth levels and increasing the participation of the poor in the development process. It is estimated that half of Tanzania's population of 34 million live below the poverty line.

Poverty in Tanzania

The government has rightly concluded that poverty in Tanzania is so pervasive that it cannot be eradicated in the short to medium term, but rather, will require a long term strategy that aims to achieve a higher growth rate, improve economic opportunities for the poor, and build human capital. For this purpose, the government decided on a number of policy actions:

- Prepare a Poverty Reduction Strategy Paper by August 2000
- Conduct 50% of district-based school mapping by December 2000, aimed at increasing the net enrolment rate and the quality of primary education.

- Adopt specific short-term actions to improve health care, particularly to carry out immunization of children against measles, diphtheria, polio and tetanus, and to increase awareness of programmes to combat the HIV/AIDS disease.
- Implement a Household Budget Survey as well as a pilot labour force survey for updating preliminary estimates of poverty and monitoring the performance of current poverty reduction measures.

To sustain the gains in macro-economic stability of the past few years, the government is said to be planning additional actions to sustain improvement in economic governance and in private sector development.

Past and Current Poverty Reduction Efforts

The Government of Tanzania had reportedly set poverty reduction as its main goal since independence in 1961. As late as 1997, the government adopted the National Poverty Eradication Strategy which articulated a vision of a Tanzanian society without poverty. In 1999, the government published "Poverty and Welfare Monitoring Indicators", a document that serves as a basis for monitoring the implementation of poverty eradication programmes and evaluating their impact. The government is reportedly now developing the Tanzania Assistance Programme as a strategy to guide the application of external assistance to the country, with the objective of improving ownership, partnership, and the effectiveness of aid.

The Interim Strategy Paper

The I-PRSP prepared by the Government of Tanzania describes in general terms the various plans of government ministries and agencies, with respect to the conduct of their individual sectoral functions. The paper outlines the policy objectives of the sectors along with intended measures and actions to be taken towards those objectives. The policy matrix for the period 2000 to 2002 is a consolidated list of projects under each proposed objective of the agencies in each sector.

Preparation of the PRSP

The government indicated that the strategy paper would not substitute for existing sectoral programmes but would strengthen the prioritization of activities within and across all sectors that are addressing poverty. Its preparation would seek contributions from all stakeholders. The process would also try to mainstream poverty and welfare-monitoring into the budgetary systems such as the Medium-Term Expenditure Framework. It is, therefore, intended that the PRSP will:

- assemble baseline data on poverty in order to develop a national poverty line;
- set medium-term poverty reduction targets, with monitorable indicators, that can be achieved within ten years;
- set targets for each of the priority sectors, especially health, primary education and agriculture; and
- shift budgetary resources as necessary in order to meet specified poverty reduction targets.

It is expected that the preparation of the PRSP will gather broad-based support by drawing on the experience of previous participatory arrangements that had been implemented along with stakeholders.

Institutional Arrangements

The institutional arrangements for preparing the strategy paper will be headed by a high level committee established in October 1999, consisting of ministers and the Governor of the Bank of Tanzania. This committee will be assisted by an inter-ministerial Technical Committee that will be responsible for conducting the activities of the PRSP process, and for integrating its work into the established macro-economic framework. The Technical Committee will also coordinate the consultations with the donor community and other stakeholders.

The Technical Committee's draft work plan was approved by government in February 2000. The work outlines project that preparation of the PRSP should be completed by June 2000, submitted to the cabinet in July, and to the World Bank/IMF in August 2000.

3.8 Republic of Uganda

The over-arching national planning document for Uganda is the Poverty Eradication Action Plan (PEAP), through which the government has identified poverty eradication as its fundamental goal. The PEAP is appropriately located within the context of Vision 2025, although it is not a blueprint for sector activities. However, it is conceptually connected to all other major government programmes (sector plans and district plans) as well as donor programmes, especially the NGO programmes and private sector initiatives. The main sector plans include the 3-year Medium Term Expenditure Framework and the Annual Budget, with corresponding counterparts at the district level. The government is carefully nurturing a bottom-up participation of districts in the planning and monitoring processes, including participation in poverty assessments and in providing essential feedback on progress towards poverty eradication goals.

Poverty in Uganda

In 1997, about 44% of the Ugandan population was classified as poor. Income levels are generally low across the country, often leading to poor health and limited education. Apart from the persistent low rates of economic growth, the effects of civil disorder of the recent past are also important historical factors exacerbating the poverty situation. At the household level, poverty correlates with rural dwelling, land shortage, educational level, market access limitation, and household headship by widows and old people. Yet the country is able to report encouraging data which show clear evidence that the poverty situation is improving. For example:

- the vulnerable population in consumption poverty fell from 56% in 1992 to 44% in 1997
- National Accounts data confirm that household consumption rose annually, and by 17% between 1992 and 1997
- expenditure of the bottom 10% of the population rose by 29% and the next 10% of population by 23% over the same five-year period

- increase in coffee prices made a significant contribution to poverty reduction among farmers

Past and Current Poverty Reduction Efforts

A number of initiatives have been taken in recent years to strengthen the planning process in Uganda. These include major consultative exercises to deliberate on the country's long term goals and objectives. One such exercise is the Vision 2025 which describes the national aspirations as expressed through a widely consultative process. Another is the 1997 Poverty Eradication Action Plan which is now being used as a national planning framework to guide medium-term sector plans, district level planning, and the national budget allocation process. It is claimed that efforts to use a Medium Term Expenditure Framework to formulate detailed sector-wide plans as well as investment programmes are achieving varying levels of success as they near completion.

The Interim Strategy Paper

The I-PRSP submitted by the government is a synthesis of the PEAP which has guided the government's policy formulation since 1997. The PEAP will now be revised to constitute the required PRSP. In doing so, the government aims to transform the country into a modern economy. Its philosophical approach is reportedly based on a number of conditions:

- Structural transformation of the economy, to include modernization of agriculture, development of new industries, and strengthening of the legal and financial institutions
- Participation of the poor in national economic growth by expansion of smallholder agriculture and increased employment in industry and services
- Sustainable economic growth that is broadly based and of high quality
- Attention to non-material aspects of poverty, especially insecurity, illness, isolation, and disempowerment

Preparation of the PRSP

The government of Uganda is approaching its consideration of poverty reduction on the basis of certain principles. These can be summarized as follows:

- Role of the public sector:
 - to intervene in areas where markets function rather poorly or would produce inequitable outcomes.
 - when it intervenes, to apply the most cost-effective methods, including the use of NGOs for service delivery where appropriate.
- Partnership with Stakeholders:
 - to integrate the poverty eradication efforts of government with those of other stakeholders, especially its development partners.
- Government policies:
 - all policies should reflect the importance of regional distribution as well as gender equity, rights of children, and environmental impact.
- Public action:

- each aspect of public action is to be guided by the formulation of desired outcomes, as well as the design of the inputs and outputs to promote them.

On the basis of these principles, the government established its poverty eradication strategy on four pillars.

These are:

a. Creating a framework for economic growth and transformation:

A crucial component of the PEAP is accelerating economic growth which, along with employment-generation, are necessary conditions for poverty eradication. Local research has projected the growth of incomes and investment over the next 20 years, using a model with only three components - an investment function, a balance-of-payments constraint, and a production function. The research further showed that a GDP growth rate of about 7% per annum is feasible, but calls for the essential elements of macroeconomic stability, macroeconomic incentives, equitable and efficient collection and use of public resources, and private sector competitiveness.

b. Good governance and security:

Consultations with the poor revealed that insecurity was one of their most pressing concerns, especially as armed conflict had been a decisive factor in the impoverishment of some parts of the country. The internally displaced population reportedly topped 622,000 in 1999. Conflict resolution, therefore, becomes a necessary component of efforts to eradicate poverty.

c. Actions which directly increase the ability of the poor to raise their incomes:

- as most Ugandans are self employed, mainly in agriculture, modernization of the sector becomes crucial for poverty eradication.
- employment outside agriculture can be promoted through microfinance, advisory services, and vocational training.
- labour-intensive methods of road building would generate more employment.
- restocking economically-viable assets like livestock could reduce poverty.
- promoting the use of more efficient cooking technologies and providing subsidies for rural electrification would also assist the poor and encourage private investment in power infrastructure.

d. Actions which directly improve the quality of life of the poor:

Introduction of free primary education for up to four children per family has reportedly led to large increases in enrolment. The government now faces the challenge of providing low-cost classrooms and ensuring quality education. Healthcare is being addressed through a new health strategic plan which aims to improve service delivery by better training of practitioners, better salaries, and better infrastructure. Population growth and the prevalence of HIV/AIDS are receiving attention as cross-cutting issues.

3.9 Republic of Zambia

Despite recent efforts to introduce strong macro-economic initiatives, Zambia has not achieved the necessary sustained economic growth for reducing poverty. The current medium-term economic goal of the government for the period 1999 to 2001 is to achieve a growth rate of 5% or more and reduce inflation to under 10%.

Poverty in Zambia

Evaluation of poverty levels in Zambia was conducted with a Priority Survey in 1991 under the Social Dimension of Adjustment Programme. The result categorized an estimated 70% of the Zambian population of eight million as poor. While only 49% of urban dwellers were considered poor, as much as 88% of the rural population fell below the poverty line. These consisted mainly of small-scale farmers of which 90% were poor. Poverty among female-headed households was more prevalent and more severe than in male-headed households.

Past attention to poverty has included successive surveys conducted to monitor poverty. These, in particular, were the Priority Survey of 1993, the Living Conditions Monitoring Survey of 1996 and that of 1998. The latter showed that poverty levels in the country were rising: estimates for 1998 put the poverty level at 73% of the population.

Although the country seems to be in possession of good data that have been generated on poverty and its associated indicators, it does not have the specialized expertise that is required to determine whether the data are actually adequate. Current data show that the factors that have contributed to both rural and urban poverty are many and diverse. Because agriculture plays a dominant role in the lives of rural dwellers, its stagnation leads to lack of food, money and other assets, and therefore to increased poverty. In the urban areas, lack of employment opportunities, poor living conditions, and lack of access to water and sanitation are all major factors that have made poverty intractable. Petty trading is the predominant occupation of the urban informal sector, and women are the majority of its practitioners. More children now tend to be kept out of school to help boost family income. Nonetheless, primary education is said to have witnessed rapid expansion in its physical infrastructure.

Past and Current Poverty Reduction Efforts

Measures to fight poverty in Zambia reportedly began right after independence. These were mainly aimed at promoting rural development. The measures included credit schemes, re-settlement schemes, integrated rural development, and rural reconstruction schemes. Despite all these as well as the substantial resources poured into them, there has been little improvement in the lives of the rural population.

With the assistance of the World Bank and the IMF, Zambia has also been implementing a number of economic reform programmes since 1991 in pursuit of macroeconomic stability. The government has taken steps to remove key structural obstacles to its economic performance, and has particularly pursued privatization of the copper industry. In addition, several related project activities have been undertaken by both government and NGOs to alleviate poverty. These include public welfare

assistance schemes, micro-financing programmes, and food-for-work programmes. However, the majority of these programmes were not sustainable as their short-term nature made it difficult to incorporate them into the overall economic framework.

The government did supplement these short-term programmes with longer-term perspectives in order to economically empower communities. Among such initiatives are the Agricultural Sector Investment Programme which aimed to provide an infrastructure for small scale farmers, the Environmental Support Programme, the Basic Education Sub-Sector Investment Programme, and the Social Action Programme.

In 1998, the government consulted widely with key stakeholders in the public sector, civil society and the donor community, and then prepared a National Poverty Reduction Strategic Framework which listed its goals as:

- achieving broad based economic growth through agriculture and rural development
- providing public physical infrastructure
- increasing the productivity of urban micro enterprises and the informal sector
- developing human resources
- coordinating, monitoring and evaluating poverty reduction programmes and activities

These broad objectives were then translated into programmes under a newly formulated National Poverty Reduction Action Plan that focused on six priority areas:

- efficient management of the economy
- sustainable economic growth
- human resource development
- targeted interventions
- crosscutting priorities
- urban development

The Plan consisted of 33 sector wide programmes to be implemented in three phases, with a total financial requirement of \$4.9 billion. It is reported that Zambia has received commitment of 43% of this amount. The government is projected to be able to provide 3% of the required finances.

The Interim Strategy Paper

Zambia has prepared an interim I-PRSP which describes the country's past efforts to fight poverty and also details its arrangements for future action that would be taken through a full PRSP that is now under preparation. This interim document is to enable the country present her case for substantial debt relief under the Heavily Indebted Poor Country facility at the earliest possible opportunity. Government admits that the process for preparing the I-PRSP should have involved as many stakeholders as possible. However, the urgent need to quickly submit the paper as an input in the country's request for debt relief made it necessary to limit consultations for the I-PRSP to selected government institutions. At a later date, the preparation of a full PRSP would be embarked upon to

map out the country's development goals and identify the strategies to be employed in meeting those goals.

The government would present the full PRSP to the World Bank and IMF in June 2001, in fulfillment of the requirement for accessing concessionary lending. But anticipating that preparation of the PRSP could take several months, the government would use this I-PRSP as a transitional instrument to allow the country's economic programme and the associated World Bank and IMF assistance to continue running smoothly.

Preparation of the PRSP

The Zambian government is reportedly in the early stages of preparing the PRSP but has declared its commitment to making the process widely consultative. The National Poverty Reduction Action Plan which itself was prepared with wide stakeholders' participation would serve as the basis and reference point for preparing the PRSP. In addition, the current macro-economic framework (1999-2002) along with a variety of approved structural and sector policies would be used as reference material. The work promises to be process-intensive.

Institutional Arrangements

The institutional arrangements for conducting the exercise has been established. A PRSP Steering Committee, made up of ministers, would head the management structure, providing policy guidance and ensuring the highest political will for the process.

A technical committee comprising permanent secretaries, and reporting to the steering committee, would coordinate the preparation of the paper and the consultative process to involve various stakeholders. This committee would also provide for the formation of sub-committees and thematic working groups which would have representational membership from civil society groups, academics and the donor community. Focal point individuals would be appointed from relevant government ministries to facilitate the work of the technical committee, especially in procuring necessary information and data, promoting awareness at the local or institutional level, and assisting the preparation of the paper.

4. An Assessment of sub-Saharan PRSPs

Many countries of sub-Saharan Africa have been engaged in the formulation of their National Development Plans as well as some form of poverty reduction strategies since gaining their respective independence from colonial rule. The current effort to prepare another special poverty-focused strategy underscores the new urgency that the international community is placing on this intractable and persistent poverty situation in the continent.

The I-PRSPs of nine countries have been reviewed to get a sense of how sub-Saharan Africa is responding to this new approach. The interim papers are supposed to establish the framework for undertaking a full-fledged process of formulating a purposeful national strategy to be pursued for the long term. This assessment will address issues of content as garnered from the strategy papers, as well as issues relating to the PRSP process itself.

A prime advantage of the PRSP is that it is raising the priority of poverty reduction in many African countries, and has the potential in such countries of influencing policy-making by stressing its pro-poor outcomes. If it succeeds in sharpening the national focus on the poor and establishes benchmarks, targets, timeframes and monitorable outcomes, then it would have achieved its promise and could lead to significant improvements in the poverty situation of countries.

World Bank/IMF Guidelines

The World Bank/IMF guidelines and requirements put a lot of pressure on African governments to produce an acceptable document full of the right mix of textbook policies, even if these governments lack the internal capacity to implement the programmes they advocate. Little attention has been given in the I-PRSPs to developing the required capacity.

The objective of the World Bank/IMF to use this approach to link the use of debt relief under the Enhanced Indebted Poor Country to poverty reduction raises an unintended contradiction: on one hand the PRSP is to be a country-owned programming framework; and on the other hand, it is to serve as a basis for the World Bank/IMF scrutinization and approval of lending. This promises to be a tough examination for the countries. In fact, the requirement shifts emphasis to passing the examination, hence the I-PRSPs tended to be unrealistic in their proposed programmes covering all sectors, and their descriptions of past performance read like political propaganda.

There is also apparent haste on the part of the countries to prepare the interim strategy paper, probably because they are linked to decisions on debt relief. The stakeholder consultations already

carried out do not appear deep or thorough enough, and would call the intended country-ownership of the process into question.

National Approach

A review of the current I-PRSPs of the nine countries shows that there is a critical need to establish a more systematic approach to poverty reduction. First, it is important for countries preparing PRSPs to fully grasp the thrust of this new initiative and to appreciate the political consideration that the Bretton Woods institutions would be using these papers as additional items for the certification of a country's progress towards prescribed economic reform. For this purpose the affected countries need to seek clarification from the Bank and the IMF about how the process would play out, what alternative arrangements would be permissible, and how poverty reduction strategies can be made central to the pursuit of economic growth as demanded earlier by these institutions. The nine country I-PRSPs reviewed in this exercise have given little indication that they sought or received necessary clarification on these issues.

First, most of the papers have described in great detail all the government economic programmes undertaken over the past five to ten years as part of their national development planning process. Second, none of them reported in any detail on the economic activities of their private sectors, even though these may actually be more relevant to employment creation and poverty reduction. Third, the papers have generally included a "policy matrix" which often turns out to be a summary listing of all policy statements as declared by each sectoral authority, even though many such statements carry little chance of eventual implementation.

In a sense, such a review of the past attempts and initiatives for economic development is useful for putting together a credible knowledge base and analysis of past results and experiences. But a more important question is whether the preparation of a PRSP requires such a task. The dubious claims of success and the rosy pictures often painted by these government reports perhaps reflect the inadequacy of the assessment process, or otherwise a lack of serious commitment to mitigating the long-term effects of poverty. It could also be the result of a systemic problem of the weak capacity of the public service to undertake rigorous analysis and planning.

Some Common Threads

- Governments still tend to see the work of national development as their own exclusive function, with gracious invitation to selected non-governmental participants. Hence their own assessments of past policies and programmes were sometimes defensive, but also sometimes framed in positive and flattering language that is not always corroborated by data or physical evidence.
- Each country claims to have undertaken some form or other of stakeholder consultations on a variety of issues, some of which could be cross-cutting. But there is generally no reference to the nature or content of what was discussed or agreed upon. It is not clear if these consultations are leading to a better public understanding of poverty and its consequences.

- It is significant that all the countries reported that women bear a greater burden of poverty than men. Data on income distribution by gender shows a highly inequitable profile for both urban and rural populations. (For example, in The Gambia women receive less than one-third of their male counterparts' earnings. Even in the agricultural sector where 84% of rural women are subsistence farmers with less access to mechanization, they continue to hold lower status than men, and have unequal access to education, control over assets and decision-making)
- The laudable policy proposals and measures that are being advocated by many countries were not supported by complementary budgets. Information was also not supplied about how past budgets have been used to build towards a sustainable future. It is therefore difficult to contemplate neither how these new initiatives would be funded nor the expected sources of such funding. Two countries provided cost estimates for the preparation of the PRSP: Kenya estimates KSh 70million (about \$700,000) and Lesotho estimates M1, 375,000 (about \$172,000).

Past and Current Efforts

The overall poverty reduction strategies of the countries were not clear from the descriptions of their past and current efforts. The various policies were not explicitly targeted at poverty but rather at economic growth and stabilization. Some of the countries have respectively proposed a policy matrix that covers all sectors of the economy; these are only a little more than a shopping list approach. They present no proper identification of linkages in programme activities and no strategic plan of action .

Upon close examination of the various multilateral programmes and initiatives foisted on African countries, there appear to be too many co-existing instruments that are not systematically linked and, therefore, create an unnecessary additional burden on the weak capacity of these low-income countries. Even as the governments keep trying to attend to them all, it is clear that the demands take away policy coherence.

Achievements

Most of the papers could not demonstrate that past measures have led to any significant reduction in poverty. Only Uganda was able to claim real success, reducing its poverty level from 56% in 1992 to 44% by 1997, with household expenditure of the lowest 10% of the population rising by 29% during the same period. Lesotho, on the other hand, acknowledged that its programmes and projects did not succeed in reducing poverty because they "lacked necessary focus" and were embedded in a top-down approach at the planning, formulation, implementation, monitoring, and evaluation stages.

Planning Capacity

Zambia claims to have good data on poverty but not the specialized expertise to determine if the data are adequate. The lack of sufficient local capacity to conduct full and comprehensive surveys and to process the information appropriately seems to be a general weakness across the countries. This is

manifested in unrealistic planning or inadequate appreciation of the demands of such an exercise. (For example, the Technical Committee in Tanzania planned to complete the full PRSP process within four months.)

Role of Other Development Partners

Even though the World Bank and IMF say that other international assistance agencies are committed to the PRSP process and are eager to work with the governments in preparing the strategies, there is no indication from the country papers on how these are responding to the preparation efforts. There is need for a clear allocation of responsibility accompanied by expectations to define the role of other partners, especially the multilateral and bilateral donors, and the foundations.

5. Science and Technology in Poverty Reduction

Technology is used to empower people, allowing them to expand the choices in their daily lives. The absence of a science and technology culture at the community level retards the ability of the poor to recognize ordinary scientific applications to their daily chores, and therefore limits the prospect for innovation and prosperity. It is the absence of this culture that shuts the gate to a community's ability to summon for its own use and welfare, those simple and common technologies that are not only available but also affordable. Developing countries elsewhere are using such technologies to establish cottage industries and provide jobs.

The efficacy of any poverty reduction mechanism depends largely upon its ability to maximize the application of knowledge and skills towards its purpose. This essentially means its ability to embrace technology and harness the opportunities that it presents effectively. This understanding has been largely missing in the present strategy documents that African countries have so far prepared as they enter a process of formulating new strategies for combating poverty among their peoples.

In a direct response to the poverty situation in sub-Saharan Africa, it is necessary to integrate science and technology policies and plans into all levels of the national planning framework. In particular, specific provision needs to be made for technologies that take advantage of cheap labour which is abundantly available, and which is a characteristic of poverty itself. Such technologies carry several advantages. For one, they create employment; and secondly, they improve local skills and bring incremental modernization to the society.

The Role of Policy Studies

A number of science and technology policy studies have been carried out in sub-Saharan African countries by local and external scholars. What is not certain is the extent to which the study findings and recommendations have been taken seriously, or taken at all. Many of these studies have addressed the nature, extent, and characteristics of poverty. They have also addressed the inherent weaknesses and poor performance of the various development programmes that have been implemented, and have made recommendations on how to increase their impact or multiply their benefits. But there has been no systematic approach to the formulation or execution of such research studies and their findings in a manner that could compel the attention of policymakers, or sustain the interest and funding of key stakeholders in this endeavor.

Perhaps a new effort is needed to make science and technology relevant to poverty reduction in each country, by preparing a compendium of past policy studies with respect to their sectoral objectives, findings, and subsequent policy action, if any. Such an exercise would help to identify current gaps in knowledge and action; it would also suggest a direction for new initiatives.

Policy studies become a vital source of knowledge and information in the planning of new strategies that can achieve meaningful results and visible improvements in a country's poverty situation. The study findings must be widely disseminated among stakeholders and should form an important part of the agenda for the proposed consultative process. The study recommendations should become a basis for consensus building in terms of a future strategy and possible action in the various sectors.

As the ATPS chapters in Ghana, Nigeria, Tanzania, and Zimbabwe have demonstrated, a compendium of policy studies could become the lightning rod for convening national sectoral working groups that would consist of scholars, practitioners, and policymakers, with a common goal of raising the visibility of science and technology and bringing the benefits of science to society. This time, the goal would become one of arriving at some consensus on programmes and priorities that can be recommended as part of the national strategy on poverty reduction.

Technology: A Priority for Human Capital Development

The importance of technological change and adoption has increased tremendously due to the rapid pace of globalization and the unrelenting nature of the information revolution. The development and transfer of new technologies and the creation of the enabling environment that can facilitate their adoption require clear policies and plans, a strong political will, and human capital development.

Essentially, all countries in sub-Saharan Africa have already adopted, or are reforming, certain policies designed to accelerate their social and economic development. For many of them, development planning results in the establishment of aggregate targets, sectoral programmes, and some specific projects. These projects often place emphasis on raw materials, equipment, and manpower requirements; but they hardly address the technological aspects or the policy needs of their development planning. The priority for technology application is to be found in every sector.

For example: in agriculture, research that is supported on a long term and consistent basis provides rich rewards in increased crop yields; in education, provision of quality primary and secondary training and the conduct of research enable workers to attain higher levels of productivity; in industry, entrepreneurial success is associated with higher levels of education and possession of adequate technical skills; and in health, technological breakthroughs are eradicating diseases, increasing life expectancy, and improving nutrition.

It is significant that only three sectors - agriculture, industry, and energy - account for more than half of sub-Saharan Africa's Gross Domestic Product (GDP). These sectors are the major employers of labour, and the main sources of export earnings. It is equally significant that agriculture's share of

regional GDP rose only 1% between 1980 and 1997, while its share of total employment declined.⁵ Recognizing that there are many challenges facing the development of Africa's productive sectors, it must be noted that these challenges are particularly complex in the case of the agricultural sector which is not only the major source of food for the continent but also the largest employer of labour. For these reasons, discussion of the possible role of science and technology in poverty reduction will concentrate on the agricultural sector, as an example of the strategic orientation of science and technology in African development.

Poverty and the Digital Divide

The digital divide between rich and poor countries is creating new framework for classifying communities according to their knowledge intensity and prospects for development within the new world economic order. The rapidly-advancing global revolution brought about by the application of new information and communication technologies (ICTs) is widening the gap between sub-Saharan Africa and the developed world in a manner by which globalization benefits the world at the expense of African interests. The only credible response is for Africa to seize the opportunities created by the same revolution and apply these technologies as tools for solving Africa's problems.

ICTs provide access to information that help to create employment opportunities, improve basic services, reduce illiteracy and enhance education, and facilitate rapid improvement in the health and human welfare systems of countries. ICTs can be used to improve the lives of the poor, especially if governments apply these technologies to improve service delivery to the poor. ICTs, in short, can play a significant role in broadbased development that includes economic management and governance, security and the environment, health and education, infrastructure, rural development, and income generation. More importantly, ICTs can interlink activities within these programmes to create a comprehensive and internally-consistent approach to national development. Hence the compelling need to introduce the application of these technologies into the planning of any national strategy for the reduction of poverty.

Experience from more advanced developing countries as well as reports from some African countries show that ICTs carry several opportunities for the poor, especially if the application is broadbased. For example:

- Information access of the poor is often limited to the radio. A recent survey of 21,000 farmers in radio-based farms in Zambia reported that 90% of the farmers claimed that the facility was relevant to their achievement of more than 50% increase in crop yields.⁶
- In education, particularly in primary and secondary schools, radio, television, and satellite transmission become important to the rural poor for the training of teachers.

⁵ African Development Report 1998, (Fig. 2.1, Fig. 2.2)

⁶ Dodds (1999)

- Similarly, in the health sector, public health education is facilitated in dramatic ways by ICTs. Reports claim that among health workers, 54% in Uganda and 20% in Kenya have done radio-backed training courses, and the participants reported improved knowledge and better attitudes.
- Small scale entrepreneurs and manufacturers of traditional handicrafts find that ICTs can assist their marketing and distribution locally and beyond. In Kenya, a manufacturer of wood carvings, pottery and baskets claimed that his revenue jumped from \$10,000 to \$2,000,000 in two years by going on line.⁷
- ICTs multiply opportunities in trade and investment.
- Establishing telecentres is a significant means of creating jobs. In India's Punjab region 10,000 such centres reportedly sprang up in 1996 with an average gross revenue of \$9,000 per centre; while in rural Bangladesh, introduction of a telephone line reportedly reduced business costs by a factor of 13 times the cost of installation.⁸
- With more than 10 million workers carrying out data entry tasks in North America⁹, it is possible to train low-income literate workers in Africa to similarly expand the reach of the technology.
- By increasing the awareness level and education of the people and improving the warning capacity, ICTs reduce the impact of natural disasters on the poor.

Technology in the Agricultural Sector

It is estimated that 70% of sub-Saharan Africa's population lives in rural areas, and 80% of these households are subsistence farmers. This strongly suggests that poverty reduction mechanisms need to allocate a considerable portion of their efforts and resources to address the material and non-material needs of rural farming. While most of the mechanisms would focus on agriculture, others would need to attend to accompanying human welfare: security, health, education, shelter, and access to water. Transforming agriculture and expanding its productive capacity is probably the most important prerequisite for improving living standards in the continent.

Agricultural growth in sub-Saharan Africa is constrained by a variety of influences ranging from inappropriate policies to a lack of diversification, slow pace of technological progress, and weak infrastructure and finance facilities. The problems facing agriculture now are not simply ones of increasing output. In the longer term it would be crucial to also raise productivity.

A variety of enhanced farming technologies that have been successfully used in other developing countries are available for adaptation and application in sub-Saharan Africa. But there needs to be a planned, coordinated and consistent implementation of any strategy to introduce these technologies.

⁷ *Africa Business*, (1999)

⁸ International Telecommunications Union (1999)

⁹ Schware and Hume (1996)

It is well known that the peasant farmer and the small-scale commercial farmer use mainly the traditional mode, characterized by labour-intensive techniques. While the knowledge component is considerable, the tools are simple and powered by human or animal energy. On the other hand, the medium and large-scale commercial farmers use modern technologies which consist of power-driven machinery and a wide variety of chemicals and other inputs. The large majority of African farmers fall into the first category. Strategies to be designed to nurture them should significantly boost their production capabilities and thus reduce their poverty levels.

In the processing of agricultural products, there are opportunities for employment creation based on the choice of technology. The choice between capital-intensive and labour-intensive technologies is directly related to employment policy whether at the state or at the firm level. Availability of choice, therefore, carries with it the opportunity to implement pro-poor policies. Several examples abound, but the following is a sample from the food-processing sub-sector:

- product storage and infestation control
- cereal and legume processing
- vegetable and animal oil processing
- vegetable and fruit processing
- meats, fish, eggs, and poultry preparation
- dairy products
- plantation products processing (tea, coffee, cocoa, spices, rubber, etc.)
- fermentation of assorted products

There are technological opportunities that poverty reduction schemes can target. A consideration of such opportunities can make an input into strategies that are being planned in various countries towards poverty reduction. Some examples are:

1. Food Security

The approach of many countries has often included the importation of staple foods and crops. This drains the country's scarce foreign exchange resources. There are technologies that can save time and reduce waste especially in harvesting, processing, transportation, and storage. African science and technology institutions like the African Regional Centre for Engineering Design and Manufacturing, in Ibadan, and the African Regional Centre for Technology, in Dakar, have designed and produced prototypes of functional medium-level technological tools and machinery which can be replicated and mass produced by willing countries. The organization and management required to put this into effect is currently a limiting factor.

2. Irrigation

The rate of technological innovation in the agricultural sector has been slow, partly as a result of over dependence on rain-fed agriculture and weak research and extension facilities. Small scale, labour-intensive and easy-to-manage schemes such as surface irrigation from wells, controlled flooding,

and development of inland valleys and basins are opportunities of introducing low-to-medium level technologies that will also enhance the skills of low-income workers. Existing irrigation schemes can be improved and new ones established to reduce over dependence on rain-fed agriculture.

3. Improved Crop Varieties

New technologies and crop varieties that are disease, pest and drought resistant are also available from the laboratories of agricultural research centers across the continent, especially the CGIAR system. But there is need to provide incentives to local farmers to adopt these technologies. New strategies can be considered for achieving this objective. Credit policies have generally not been helpful to smallholder farmers; access by the rural population to credit must therefore be improved by building on documented strengths of indigenous savings and credit societies in the informal sector.

4. Increasing Crop Yields

Improved seeds have been introduced at various times in a number of countries. But other non-seed problems (including drought, poor soil quality, pests, timing, etc.) have frustrated the expected results. Improvement in soil quality and environment through irrigation, fertilizers, cultivation, etc. are often inefficient and can be greatly improved by other technological means of delivery. The capacity to properly manage both the technological processes and tools is another factor that has limited the prospects of potential scientific benefits.

5. The Promise of Biotechnology

Sub-Saharan African countries do not appear poised to take maximum advantage of developments in biotechnology. Advances in this field, especially through research, are likely to revolutionize agriculture and food production in ways that could alleviate food and nutrition shortages in African countries. Yet, biotechnology research gets little recognition and insignificant funding from African governments. The continent's scholarly community similarly pursues biotechnology more as a field of human curiosity and academic challenge rather than as a veritable means to an end. If the promise of biotechnology is to be realized in Africa in substantial ways, the attitude of key stakeholders towards this field would have to change, and decision-makers would need to allocate greater priority to its development. Otherwise, the fate of Africa would once again be that of a consumer of imported benefits whose production is determined elsewhere.

6. Recommendations

1. The World Bank/IMF guidelines argue that microeconomic stability is necessary for growth because it is the cornerstone of any successful effort to increase private sector development and economic growth. Indeed, macroeconomic instability would hurt the poor more than anyone else. But it is the sectoral contribution to growth that would most determine the impact on poverty. Because agriculture is the sector that would have the dominant effect on the poor in sub-Saharan Africa, it is recommended that greater emphasis and priority be accorded this sector in any new strategies that are being contemplated.
2. Preparing an acceptable strategy paper with the World Bank/IMF guidelines would require that the country task forces possess certain high and technical skills if they are to meet the standards of their counterparts in Eastern Europe, Asia, Latin America, and India. There is clearly a need for capacity strengthening, not just to submit an acceptable paper this time, but also to provide a strong base for establishing a sound and sustainable national planning framework for development. The international development assistance community should see an opportunity here to channel their assistance to this compelling need. Theoretical macroeconomic planning is not sufficient to reduce poverty; skills in managing complex and interlinked sets of development problems, under harsh and externally-induced changing conditions, are going to be critical in formulating new strategies. Also, the human resource base available in most countries for undertaking these important activities is very narrow, stretching thin their capacity to meet the demand for their skills and expertise.
3. It appears from the interim strategy papers that the countries are responding to a World Bank/IMF questionnaire without necessarily planning new measures to fight poverty. The countries have provided data to characterize the poverty situation but have not demonstrated a clear understanding of the dynamics of poverty and the particular nature of its components. It is recommended that the governments be assisted to adapt the World Bank/IMF guidelines to suit local circumstances and culture. As long as the governments set their priorities on securing concessionary funding, the World Bank/IMF agenda will continue to drive the process.
4. It is recommended that the countries recognize the need to involve donors from the early stages of the planning process, especially since such donors may help to identify the gaps in local capacity, and help to strengthen the national effort to fill such gaps. The process of

preparing a PRSP should normally include consultations with donors. But, on the one hand, the World Bank and IMF have led countries to believe that if a strategy paper is satisfactory to them, then donors will embrace it. On the other hand, donors are not necessarily in agreement with all World Bank/IMF policies. It is possible that aspects of PRSP that are formulated with a huge donor perspective may not satisfy World Bank/IMF expectation. This would create a dilemma for the country.

5. It is also recommended that the governments be assisted to fully appreciate the role and potential contribution of the private sector and civil society in fighting poverty, and to accord them corresponding responsibility and opportunity to make a difference. Until now, government approaches tend towards poverty alleviation (which is immediate and temporary) rather than towards poverty reduction (which is permanent but longer term).
6. The consultative process in some of the countries appears rather perfunctory for now. It is recommended that this be deepened and organized more purposefully in order to achieve the necessary impact. The targeted participants need to be carefully selected and sensitized, so that they are adequately prepared for the tasks that they would be called upon to do. Such participants need to be able to appreciate the nature of their responsibility and its consequences, as well as the importance of their role in a consensus-building national approach. They would need to be provided in advance with the tools and materials to make their participation in the meetings useful and concrete.
7. It is necessary to reduce and harmonize the several economic planning instruments and frameworks which presently co-exist in many of the countries. First, it is recommended that these be sharpened to become mutually consistent in terms of their policy prescriptions. Secondly, it is recommended that the institutional requirements of these instruments be fine-tuned to allow greater flexibility in implementation, more capacity building opportunities, and better capacity utilization.
8. A crucial dimension of the PRSP is its implementability which would be largely determined by the resources, human and financial, that would be available to undertake its prescriptions. It is important that countries be aware that poverty elimination may be an ambitious goal, and that a poverty reduction strategy could be a long term but realistic process which requires a sound foundation. Striking the right balance between a politically-induced quick-fix programme and a realistic, truly pro-poor policy approach is a challenge that the PRSP must overcome.
9. Much attention needs to be given to the financing of poverty reduction strategies. It is recommended that country task forces re-examine the macroeconomic linkages and constraints within the country and draw out possible scenarios of trade-offs. Full costing of the financial implications of any proposed strategy should be undertaken along with a realistic assessment of domestic and external sources of funding. The provisions of the

Medium Term Expenditure Framework, (for example, as in the case of Ghana and Uganda), may not be a suitable context for this purpose.

10. It is recommended that conscious efforts be made to seek appropriate economic opportunities where scientific and technological intervention could spur rapid growth. Poverty reduction strategies should thus include the removal of barriers to access to technology, to new products, or to investment.
11. Public/private partnerships in science and technology have been shown to lead to greater investment and significant economic improvement in other developing countries outside Africa. It is recommended that these lessons be translated into an African setting. The framework for this would include the following:
 - Making better use of national and regional science and technology institutions by drawing on their talents and expertise for the application of rural-friendly and pro-poor technologies
 - Making African universities and their scholars active partners in fighting poverty by involving them more directly in the planning and implementation of poverty reduction projects. (This could be accompanied by non-monetary incentives like academic recognition and promotion.)
 - Identifying science and technology assets that could be harnessed for the direct benefit of the rural poor
 - Giving a stronger role to NGOs and building upon their existing grassroots and community infrastructure
12. It is recommended that the enormous potential of new technologies, particularly biotechnology and information and communication technologies, be actively harnessed. Country task forces need to appreciate the beneficial consequences that may be triggered by policy reforms in this sector. International comparison shows, for example, that telecommunication policy reform in Eastern Europe, India, Peru, and Thailand have led to dramatic growth in privately operated telecentres for rural inhabitants. In sub-Saharan Africa there is still an urgent need to take the first step of providing the appropriate infrastructure.

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One of the objectives of the network is to disseminate research results to policy makers, legislators, the organized private sector, civil society, mass media and farmers' groups through publications, dialogue and advocacy. Among its range of publications are the Working Paper Series (WPS), Research Paper Series (RPS), Special Paper Series (SPS) and the Technopolicy Briefs.

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