A STRATEGY FOR CUTTING HUNGER IN AFRICA

Commissioned By:
The Technical Committee of the Partnership to Cut Hunger in Africa

Written by:
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Introduction from the Technical Committee of the Partnership to Cut Hunger in Africa

This paper presents a draft diagnosis of the challenges facing countries in Sub-Saharan Africa in sharply reducing hunger and poverty on the subcontinent and suggests strategic actions the United States can take to help Africans in that endeavor. The Partnership to Cut Hunger in Africa commissioned this paper as a tool to synthesize what we think we have learned about the challenges from previous studies, many of which were carried out primarily by Africans themselves. A second objective is to solicit feedback from individuals and organizations in Africa and the U.S. about the proposed diagnosis and action plan. The comments we receive will be crucial in developing a final report for presentation by the Partnership to key policy makers and stakeholders at a conference to be held in Washington at the end of June, 2001.

We ask those who read this paper to provide us their comments regarding:

a. What parts of the paper they agree with;
b. What parts of the paper they disagree with, and why;
c. Major omissions in the paper;
d. Suggestions about what actions should be taken by:
    i. The U.S. government
    ii. U.S. private sector
    iii. U.S. non-governmental organizations (NGOs) and foundations

    to help Africans reduce hunger and poverty on the continent.

We also would appreciate comments on what actions U.S. agencies and organizations should ***not*** do.

In order to facilitate the comments, we have numbered each paragraph in the paper, and we ask readers to cite the paragraph number to which their specific comments apply.

Please send comments to the Partnership Technical committee at following addresses:

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Thank you very much.

*The author is a senior African development analyst, having served over 20 years in the Africa Bureau of USAID. He was commissioned to write this paper while on leave from the World Bank, where he now serves as lead economist in the Partnership Group. The opinions put forth in the paper reflect the views of the author, with review by members of the technical committee of the Partnership to Cut Hunger in Africa operating as individuals, as well as comments received by African colleagues. Hence this paper should not be construed as reflecting the views of USAID, The World Bank, Michigan State University, The University of Illinois, Bread for the World, or any other organizations participating in the Partnership To Cut Hunger in Africa.

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Executive Summary

OBJECTIVE: The purpose of this paper is to lay out a clear and implementable strategy for cutting hunger in Africa over the next fifteen years. It may be too late to achieve the World Food Summit Goals of cutting hunger in half by 2015, but substantial progress can be made if both the African and international communities attack this problem seriously. The current paper is clearly not the end point, but a starting point, a point of departure for a new and intensive discussion between African and American academics, practitioners and political leaders, where the ideas presented here will be reformed and refined.

At the end of that discussion we hope to have achieved two major accomplishments – an agreed-upon strategy for cutting hunger in Africa, and a political commitment from both American and African policy makers to implement that strategy. On the African side, this would require major policy shifts, while on the American side it would require a new commitment to open markets further and to mobilize the resources, public and private, financial and intellectual, needed to support the implementation of this strategy.

CHANGES AND OPPORTUNITIES: Since independence, most Sub-Saharan African countries have made only limited progress in reducing poverty and hunger. Why should Africa and the international community be hopeful today after so many failed efforts in the past? The world has changed a lot in the past few decades, and Africa has as well. There are now new opportunities and new challenges.

In Africa: Old political institutions built on authoritarian models have given way to new democracies. People expect more from their governments than the rhetoric that used to satisfy them. While democratic institutions and behaviors are still nascent and weak, there are reasons to believe that public policies will become more pro-poor over time.

Economic policies have evolved as well. Most countries now understand the importance of macroeconomic stability, open markets and reduced government regulation and control. In agriculture this has tended to mean greater market liberalization and better incentives for farmers, albeit reforms are constantly in danger of being reversed.

Increased urbanization has created larger and more differentiated markets for agricultural products, while on the other hand, population pressure on a limited natural resource base continues.

Finally, the scourge of HIV/AIDS continues to affect African societies in many diverse ways, from reducing income security in old age, to increasing the number of orphans, to reducing available labor, to reducing savings and the desire to save.

World Economy: Meanwhile, the world economy is rapidly changing as well:

Globalization, the increase in economic connectedness, has become a byword. For many, globalization represents a threat to jobs, to culture, to environmental safeguards, to working conditions. For others, however, globalization presents an opportunity to find new markets for new goods at higher prices, and thus to increase both employment and wages. World trade in goods and services has grown from 21% of GDP to 28% in ten years.

Globalization has also meant the integration of financial markets and new flows of private investment funds, both directly, and in the form of portfolio investment, from the North to the South. Private flows dwarf official assistance by a factor of 10:1. However, these flows are volatile and tend to be concentrated in a few important countries.

Globalization has also meant the availability of new technologies, particularly in the areas of biotechnology and informatics, that offer the opportunity for less developed countries to skip over intermediate steps in development by, for example, eschewing the costly investment in land lines and moving directly to wireless technology.

The end of the Cold War has changed the expectations and roles of the Western countries in Africa; the U.S. is now finding new long-term rationales for its relationship, rationales built on economic partnership and global public goods.

At the same time, foreign assistance has declined in real per capita terms and become more compartmentalized; assistance has been shifted from the directly productive sectors such as agriculture to the human development sectors of health and education.

These changes provide new opportunities and new problems. The paper presents a somewhat simple syllogism:

- Hunger and malnutrition are largely caused by income poverty;

- Income poverty can be overcome by rapid, poverty-reducing economic growth as exemplified by the experiences of East and Southeast Asia;

- An important strategy for achieving rapid, poverty-reducing growth is an emphasis on accelerating agricultural growth because: (1) the majority of the poor live in rural areas, and rural livelihoods, while complex, are ultimately dependent on agricultural productivity; (2) agricultural growth has been shown to have large multiplier effects on the economy as a whole; (3) agricultural growth will help keep food prices low, and food makes up about 70% of the things the poor spend their money on; and (4) low food prices can also keep money wages low, thus allowing expansion of employment in export and import-substituting industries;

- Demand plays at least as important a role as supply in generating agricultural growth;

- A resurgent agriculture is likely to have as its most dynamic sector non-traditional exports, as has been seen in countries such as Uganda, Ghana and Zambia. However, there are important and dynamic market possibilities in adding value to traditional food crops, shifting to higher value food commodities, regional intra-African trade and even traditional exports.

A PROPOSED STRATEGY: The critical issue then is how to accelerate agricultural growth. This paper presents seven critical elements of an agriculture-led poverty-reducing development strategy:

1. Change the paradigm: African countries and their partners from the North must have a long-run vision that sees investment in the rural economy, open markets and dependence on private initiative and investment as the keys to cutting hunger and reducing poverty.

2. Continue to reform the role of the state: In the new global economy, the state has a critical role, but it is a much different role than has traditionally been practiced in Africa. The state must create the physical and institutional infrastructure (regulation, standards, contract enforcement, etc.) that is needed for markets to work effectively.

3. Develop a private sector-public sector partnership: Moreover, the state must enter into partnerships with the private for-profit and non-profit sectors to accomplish the nation's objectives. There are a number of areas, such as agricultural research, where a public-private partnership can reduce the cost and increase the efficiency of the provision of critical services which had been traditionally seen as the responsibility of the government.

4. Invest in technology and knowledge generation: Food and cash crop technology is critical to raising agricultural productivity. A related critical factor in production in the twenty-first century is knowledge. African governments must develop policies such as decontrol of telecommunications which reduce the costs and expand the availability of knowledge. African governments and their partners must invest in all levels of education and encourage private provision of education as well.

5. Invest in rural infrastructure: African governments must reverse years of urban bias and invest in rural areas, particularly in transport, water, electricity and telecommunications. High transaction costs in agriculture due to policy failures, poor infrastructure, and sparse populations undermine competitiveness.

6. Empower farmers: The new democratic experiments allow farmers to organize themselves for the first time in producer controlled cooperatives and other affinity groups which will allow farmers to purchase inputs, sell products, obtain credit, provide advice to members and lobby for policy change effectively. Governments must create the legal and political environment to encourage this development.

7. Develop more sophisticated marketing, contracting and risk-sharing arrangements: Markets in Africa remain fragmented, personalized, and uncertain. Governments must help to improve market information, become more sophisticated in ensuring standards of quality, expand the size of the market by reducing barriers to regional trade, and, above all, develop consistency in policy formulation.

UNDERLYING ISSUES: The paper also deals with three important issues that need to be dealt with if the strategy presented here is to succeed:

Resources: There has been a substantial decline in foreign assistance over the 1990s. While private investment flows have increased elsewhere, they have yet to fill the gap caused in Africa by the decline in assistance. Debt relief under the HIPC initiative will be helpful but is not sufficient. OECD countries must renew their commitment to provide flexible assistance to African countries which now, as the result of political and economic liberalization, are able to use that assistance effectively. It is ironic that foreign aid is declining just when the OECD has committed itself to achieving critical development goals and just when African countries have undertaken deep and painful reform. On the other hand, these reforms need to go deeper if African economies are going to be seen as attractive for increased investment, both domestic and foreign.

HIV/AIDS: There is no doubt that the HIV/AIDS pandemic has the potential to seriously increase poverty and hunger and reduce the capacity for accelerating economic growth in medium to high prevalence countries. At the macroeconomic level, AIDS will seriously reduce the quantity of skilled labor through both death and morbidity and reduce private savings. At the household level, the impact can be severe. Poor households have little margin in terms of savings and income. An AIDS illness can result in increased time spent on caring for the sick person, the loss of labor from the AIDS-infected family member, increased expenditures on health care and on funerals. This is not the paper for a strategy to combat HIV/AIDS. Nevertheless, it is critical that all development activities and programs in Sub-Saharan Africa be designed with conscious forethought on how HIV/AIDS will affect the program's success and how the program will affect the spread of HIV/AIDS.

Governance: Despite the changes over the last decades African governments face a host of difficult problems. How to build the nation-state out of many ethnic groups? How to make government an effective instrument for providing critical economic and social services? How to distribute the benefits of the political system fairly? How to shift allegiance from the party and the person to the state and the government? How to build institutions of accountability, including a free and responsible press? How to make the government smaller and more focused? How to move from a system of rule by men to a system of rule by law? These are extremely difficult problems, but unless Africa solves them, the struggle against poverty and hunger will fail.

So, is this a feasible strategy? Not everywhere, and maybe, not in most African countries at this time. It is probably necessary to begin working on a broad scale with a few African countries that already have some of the prerequisites for such a strategy to work – Uganda, Mali, Mozambique, Ghana, Nigeria, possibly Kenya and Ethiopia, and most importantly, South Africa. In other countries, it may not be possible to implement the full strategic agenda presented here, although many parts of the strategy can be. But this "variable geometry," should be used to Africa's advantage, an opportunity for deep learning and sharing of experiences.

Not for the first time Africa stands at a crossroads. But this may be the last, great chance Africa faces. There are huge opportunities and huge obstacles. Success could not only mean a substantial cutting of hunger in fifteen years, but also the beginning of a virtuous circle that could mean the reduction of poverty, disease and war on a broad and continuing basis. This is a chance that must be seized.

TOWARDS A U.S. RESPONSE: U.S. efforts need to help stimulate African economies, reduce poverty, and help the poor feed themselves. The U.S. must assist African nations to improve the performance of agriculture and the broader food system. Yet development involves much more than economic growth. It involves improving human welfare and allowing all people the opportunity to achieve their full potential. But without broad-based economic growth, African countries will lack the resources to finance their health care systems, schools, and safety-net programs for the destitute. Broad-based economic growth from improvements in agriculture and food can contribute significantly to these and other important development priorities.

Elements of the a new U.S. Strategy will need to be developed further based on feedback from key leaders and organizations in Africa and the U.S. And U.S. assistance to cut hunger in Africa should focus on particular U.S. expertise. There is no quick fix. Economic growth in Africa requires a sustained 15-20 year effort. Medium-term progress can be made and can be measurable by helping African nations to:

1. *Develop programs and policies that strengthen farmers, businesses, and markets to compete in the global economy.*

2. *Strengthen rural education, training, and public institutions.*

3. *Expand agricultural research and outreach to exploit science-based agriculture and information technologies, stimulate new ties with business, and avoid damage to the environment.*

4. *Improve rural governance.*

5. *Link emergency food relief with long-term development.*

6. *Coordinate food and agricultural programs with actions to combat HIV/AIDS.*

A STRATEGY FOR CUTTING HUNGER IN AFRICA

(1) **PREFACE**

(2) The purpose of this paper is to lay out a clear and implementable strategy for cutting hunger in Africa over the next fifteen years. It may be too late to achieve the World Food Summit Goals of cutting hunger in half by 2015, but substantial progress can be made if both the African and international communities attack this problem seriously. This draft strategy is based on a number of ideas that have emerged in the last decade, mostly from African practitioners and policy makers. In particular, this strategy draws on the ideas of African scholars, policymakers and businesspeople in a series of "Agricultural Transformation Workshops" held between 1993 and 1999, as well as work by the African Development Bank, a study jointly conducted by the World Bank, the Economic Commission for Africa and the African Economic Research Consortium and a series of African consultations organized by the Forum for Agricultural Research in Africa (FARA).[1]

(3) The current paper is clearly not the end point, but a starting point, a point of departure for a new and intensive discussion between African and American academics, practitioners and political leaders, where the ideas presented here will be reformed and refined. At the end of that discussion we hope to have achieved two major accomplishments – an agreed-upon strategy for cutting hunger in Africa, and a political commitment from both American and African policy makers to implement that strategy. On the African side, this would require major policy shifts, while on the American side it would require a new commitment to open markets further and to mobilize the resources, public and private, financial and intellectual, needed to support the implementation of this strategy.

(4) **BACKGROUND**

(5) Most Sub-Saharan countries gained their independence, amid high hopes, forty years ago. However, the years since have not been kind to many parts of the continent, which have been plagued with wars, military coups, droughts, famines, economic stagnation and poverty. Over that time, foreign donors have poured in over a trillion dollars of foreign assistance and African governments have borrowed another $200 billion on commercial terms and have invested another $500 billion of their own resources, all with too little impact. Africa remains almost as poor, almost as hungry, and almost as disease-ridden as it was in 1960. So why a new strategy now? What has changed to make us think that there now exists the knowledge to develop a strategy to cut hunger that will work today when all the other attempts have failed in the past?

(6) In the first place, over a broad range of issues, many development practitioners and academics, both within and without Africa, would agree that the problem is not a lack of knowledge, particularly at the technical level. Quite a bit is actually known about the process of development in Sub-Saharan Africa (SSA), and it is possible to lay out in broad strokes a

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[1] See Julie Howard et al, "*African Perspectives on Progress and Challenges in Transforming Agriculture to Help Cut Hunger and Poverty*" at: http://www.aec.msu.edu/agecon/fs2/africanhunger/perspectives.pdf
African Development Bank, *Agriculture and Rural Development Sector Policy,* at: http://www.aec.msu.edu/agecon/fs2/africanhunger/agripolicy.pdf
SPAAR Secretariat. 1999. *SPAAR/FARA Vision of African Agricultural Research and Development,* at: http://www.aec.msu.edu/agecon/fs2/africanhunger/visionafrica.pdf
The World Band in Partnership with various African Organizations. 2000. *Can Africa Reclaim the Twenty-First Century? at: http://wbln0018.worldbank.org/AFR/afr.nsf/General/9D48D6DCE826CCD0852568F1006DBF2E?OpenDocument*

strategy that reflects that knowledge. The knowledge exists on how to increase the production of food and the technical solutions to the problem of reducing widespread poverty are broadly agreed upon. The real problem is a political economy one – African governments have, for the most part, not devoted themselves to fighting hunger and poverty, and developed countries have not followed through with their commitments in terms of assistance, debt relief and open markets. The reasons for this are complex, but what is most important is that the context in which the fight against hunger must be conducted has changed radically, offering new opportunities and presenting new difficulties. The strategy presented below offers a real opportunity to cut hunger in Africa in fifteen years.[2] What it takes is the will to do so. But "will" cannot mean lofty words or inspiring rhetoric. It must mean both Africa and its partners making some difficult policy choices. This will has to be translated into real resources and redesigned programs.

(7) THE CHANGING AFRICAN CONTEXT

(8) **Politics and Governance**

(9) With the ending of the Cold War, Africans began demanding and expecting more accountability from their governments. A second tide of political liberalization has resulted in a pronounced shift away from the authoritarian regimes and military coups of the post-Independence period to various forms of democracy. As measured by Freedom House, the number of "free" countries in Sub-Saharan Africa increased from two to eight between 1990 and 2000, the number of "partly free" countries increased from 15 to 24, while the number of "non-free" countries fell from 26 to 13. It is important to not underestimate or overestimate the impact of this peaceful revolution.

(10) There has been a profound change. Africans now expect democratic modes of behavior, and failure to live up to those modes has led to unrest. Military coups may be successful for a time, but the pressure to return to democratic processes is the norm rather than the exception. Regimes have been changed through the ballot box, and defeated governments have left office. Parliaments and legislatures are acquiring more independence and more authority. There is, in many countries, a free and vibrant press, which includes not only the print media but the broadcast media as well. Many countries are actively pushing political and administrative decentralization. Human rights abuses, in all but the most recalcitrant regimes, are declining.

(11) The new political space, together with an erosion of state capabilities in the rural areas, has led to a dramatic increase in the number, strength and diversity of civil society organizations. Government-led and –managed cooperative societies have given way to new producer organizations which are independent and member-controlled. Increasingly these groups are not only replacing the government in input and output marketing but are raising their voices in the policy arena as well. One of the most important pieces of unfinished business that remains in Africa is the political transformation of the continent to a politics based on economic interests, and grass-roots farmer organizations are a critical part of that transformation. This is an area where the U.S. has had great experience and can be very helpful.

(12) There is, of course, another side. There remain a number of weak and failed states, beset by internal violence and external pressures. As of this writing, there remain serious conflicts in Angola, the Democratic Republic of the Congo, Sierra Leone, Sudan and Uganda, and political

[2] The World Food Summit goals call for a reduction in poverty by half by the year 2015; because of lack of progress since that goal was enunciated, it may now be unreachable; nevertheless a significant reduction in hunger by 2015 is still possible.

unrest and violence in a number of other states. Even the more stable democracies are weak, with weak institutions of governance, significant levels of corruption, and ineffective service delivery systems. Politics in many of these countries is largely based on personalities and regional interests and not on economic interests. It continues to remain difficult for farmers or for the poor to organize themselves in such a way as to affect government policy, and, as we shall see, government policy continues to favor urban centers, the wealthy and the powerful.

(13) Nevertheless, the political context is much more favorable today for broad-based development than at any time in the last forty years. Most important is the fact that people now expect their governments to be transparent and responsive to their needs. They expect to have more control at local levels over the issues that are important to them. They expect honesty and despise corruption. They are no longer fooled by theories that blame their poverty on the outside world rather than their own governments.[3] Over time these expectations will lead to more accountability in governments. So, while effective, clean, committed, visionary government won't arise overnight, governments can be expected to become more effective, more honest, more committed and more visionary over the medium term.

(14) **Economic Policy**

(15) Over the past fifteen years most African states have dramatically reformed their economic policies. This is most evident in the macroeconomic arena, where government deficits have been reduced to sustainable levels, resulting in substantial reductions in inflation (from 13.6% in 1980 to 8.4% in 1997). The median fiscal deficit in SSA (for countries in which there are data for both years) decreased from 4.8% in 1980 to 2.2% in 1997. Equally important, exchange rate regimes have been liberalized and the price of foreign exchange now, in most countries, reflects its scarcity price.

(16) These two policies are critically important for poverty and hunger. Inflation is the cruelest tax on the poor, who have no way of investing their limited financial resources in assets that maintain their value in times of high inflation. Rather, they are forced to hold their assets in cash, the value of which rapidly depreciates. An overvalued exchange rate lowers the prices of tradable and semi-tradable goods such as food and agricultural exports, and thus reduces real incomes of rural producers. Studies have shown that these policies reduce the incomes of the poor[4].

(17) Agricultural policy in Africa has improved as well, although the record remains checkered and many important reforms are being eroded. (This will be discussed more fully below). Traditionally, African countries taxed farmers and subsidized urban consumers, while at the same time under-investing in rural areas. Elimination of government monopolies of agricultural marketing, coupled with real exchange rate devaluation, has meant increases in real prices for African farmers who produce for world markets (despite falling world prices). Thus, farmers in countries such as Ghana, Uganda, Nigeria, Tanzania and Mozambique have seen the prices of their export crops increase by as much as 50% since the beginning of the 90s. Policy reform in the food crop arena has been more uneven; many controls and marketing boards have been eliminated. But the record remains quite checkered.[5]

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[3] However, Africans still raise concerns, some very legitimate, about the role of external forces in contributing to African poverty, such as high-income countries' trade policies (restricted market access to high-income countries and dumping of OECD agricultural surpluses), as well as the declining commitment in most OECD countries, not the least of which is the U.S., to official development assistance.
[4] See David Sahn et al., *Structural Adjustment Reconsidered: Economic Policy and Poverty in Africa*, Cambridge University Press, 1996; and *Economic Reform and the Poor in Africa*, Oxford University Press, 1996;

[5] See, for example, Jayne, T.S., Mulinge Mukumbu, Munhamo Chisvo, David Tschirley, Michael T. Weber, Ballard Zulu, Robert Johansson, Paula Santos, and David Soroko, 1999. *"Successes and Challenges of Food Market*

(18) Nevertheless, the economic policy environment, while still far from ideal, is now much more conducive to rural growth and poverty reduction than it ever has been. Markets are generally liberalized, agricultural taxation reduced, and opportunities for private investment more widespread. However, these changes have also raised some important issues:

- (19) Government austerity has made it more difficult to increase investment in rural areas and in key areas of public activity essential to long-term growth, such as adaptive agricultural research;
- (20) Financial institutions remain in disarray, with limited private-sector alternatives to the now defunct public sector agricultural banks;
- (21) Most agricultural research and extension systems are underfunded and incapable of performing their missions;
- (22) Government regulation of private investment remains widespread, and governance and political stability issues raise the risks for investors to levels that are often unacceptably high.

(23) **Increasing Land Pressure**

(24) Population in SSA is still doubling every 25 years, and, in many areas, farmers are moving into lands that are less productive and more fragile; in some countries soil fertility is declining appreciably.[6] For many years agricultural production in Africa has been increasing largely through the movement of populations into new lands. There are still many countries (Nigeria, Mozambique and Uganda, for example) where there remains a very large reservoir of high potential agricultural land; however, many other countries (Kenya, Rwanda, Malawi, for example), have reached the extensive limit and are experiencing a reduction in the size of land holdings, increasing landlessness, and increasing soil degradation. For all these countries, the only solution is increased intensification and productivity.

(25) **Urbanization**

(26) The urban population of SSA has increased from 82 million in 1980 to 193.5 million in 1998, an annual increase of 4.9% per year.[7] Thus, the urban market for food has more than doubled, while the available rural labor force has increased by only 50%. Of course, the market for food is not only determined by the size of the population, but by its income, and with the resurgence of economic growth levels the demand for food, particularly high valued items such as meat and dairy products, will increase as well. Also there has been an increase in the demand for processed food as the opportunity cost of time of urban residents, particularly women, increases. This leads to increased income and employment opportunities in the food marketing and processing system, while at the same time creating new stresses in that system.

Reform: Experiences from Kenya, Mozambique, Zambia, and Zimbabwe," MSU International Development Working Paper 72, East Lansing: The Department of Agricultural Economics, Michigan State University at: http://www.aec.msu.edu/agecon/fs2/papers/idwp72.pdf

[6] See Clay, D. and T. Reardon. 1996. "Rwanda case study: Dynamic linkages among population, environment, and agriculture in the highlands of East Africa." In Clay, Reardon, and Shaikh, *Population, Environment, and Development in Africa: Dynamic Linkages and their Implications for Future Research and Development Programming*. East Lansing: Michigan State University. Pp. 39-91.

[7] In contrast, the rural population of Africa has been growing at only 2.2% per year.

(27) **HIV/AIDS**

(28) There is no doubt that the HIV/AIDS pandemic has not yet crested in Africa. Current rates of HIV prevalence among the adult population range from 35.8% in Botswana to 1.7% in Senegal. Horror stories abound of the affect of AIDS on death rates, on orphans, on the undertaking business, and on the lives of women who, in many African countries, have very little power to avoid risky behavior with their partners. Current estimates are that the HIV/AIDS pandemic in high prevalence countries reduces the economic growth rate from one to two percentage points. While it is still difficult to predict with certainty the multifold impact of this pandemic on economic growth in general and agriculture in particular, the following seems likely:

- (29) The number of AIDS deaths will continue to rise for the foreseeable future, and will reach such a level, in some countries, as to actually reverse population increases;
- (30) AIDS deaths occur in economically active age groups and thus will increase what is already a high ratio of dependants to active workers in SSA;
- (31) For poor households, illness and death from AIDS often results in reduced income for an entire family, and particularly for children who are orphaned;
- (32) The economic costs of AIDS at the household level frequently results in fewer resources available for saving and investment;
- (33) High levels of HIV incidence among educated people will reduce the stock of education, even as high levels of prevalence make training and education more costly; and
- (34) In areas hit hardest by the pandemic, the labor force has fallen sharply and dependency ratios have skyrocketed, as grandparents try to care for large numbers of orphans. This shift in labor availability draws into question the suitability of the agricultural technologies developed for these areas, particularly those that are labor-intensive (such as many of those aimed at soil conservation and heavy reliance on organic fertilizers).

(35) It is uncertain what all this means taken together, except that HIV/AIDS will make the task of fighting hunger in Africa much more difficult than it is already.

(36) **THE CHANGING INTERNATIONAL CONTEXT**

(37) While events in Africa have gradually improved the opportunities for reducing hunger, the changes in the international environment are much more dramatic. The world is fundamentally different today than it was even twenty years ago, and the opportunities for broad-based development are much more prevalent now.

(38) **Globalization**

(39) Much of this change has been summed up by a word that has stirred great passion for the last several years – globalization. From a narrow technical perspective "globalization" has meant the increasing integration of the international economy, manifested in increased trade, increased capital and labor mobility, and increased flows of technology. In a broader sense, fueled by the information revolution, globalization has meant a radically increased interpenetration into traditional societies of global, almost always Western and frequently American ideas, values and culture. The outward manifestations of this interpenetration are McDonald's restaurants, Nike athletic shoes, and table grapes from Chile.

(40) Table I demonstrates some of the dimensions of globalization. Over the decade 1988 to 1998, the share of world trade in goods as a percentage of GDP increased by 33% and the share of direct foreign investment in GDP doubled. The median annual growth rate for exports over the 1990-97 period was 6.2%; while the median rate by which export growth exceeded GDP growth was 3.0%. These are very dramatic numbers. As can be seen in the table, virtually every region of the less developed world has participated in this process, although Africa has not been as successful, particularly in terms of attracting foreign investment, as other regions such as Latin America. Nevertheless, annual export volume growth in Sub-Saharan Africa has increased dramatically from a median of 2.0% in the 1980s to 7.5% in the 1990s.

(41) **TABLE I: ECONOMIC INTEGRATION**

Region	*Trade in Goods (as a % of PPP GDP)*		*Gross Foreign Direct Investment (as a % OF PPP GDP)*	
	1988	*1998*	*1988*	*1998*
East Asia & Pacific	13.3	15.5	0.4	1.3
Europe & Central Asia	9.0	21.1	…	1.0
Latin America	9.4	19.1	0.5	2.5
Middle East & North Africa	17.6	17.4	0.3	0.9
South Asia	4.2	4.8	0.0	0.1
Sub-Saharan Africa	15.4	16.8	0.3	0.7
World	21.2	28.3	1.7	3.8

Source: World Bank, World Development Indicators.

(42) Globalization thus offers substantial new opportunities, in international markets in both products and factors that are growing at historically high levels. But these opportunities require a much more sophisticated response. Exports of traditional commodities alone are not enough to lead to dynamic growth in Africa. There has been a continuous secular decline in agricultural commodity prices since 1960, with the index of agricultural prices falling from 208 in 1960 to 90 in 1999, an average decline of 2.4% per year. Some of this decline can be attributable to productivity gains in Africa's chief competitors, which underline the critical importance of investment in agriculture. Moreover, market access is becoming more difficult and more complex. Increasingly, access to world markets requires tighter product specification for agricultural and non-agricultural products, brought about by the greater role of niche markets and the desire to build brand loyalty. What this means is that international companies that buy and market products are getting increasingly involved in tightly coordinating production and marketing chains—the rise of both private and ISO standards. Success in participation in the dynamic global market for higher-valued specific products (as opposed to generic commodities) requires sophisticated management, greater human capital, a deep understanding of international market opportunities, quality control, improved packaging, faster, cheaper and more reliable transportation, attention to environmental and health standards, a welcoming environment for international capital and management, and macroeconomic stability. At the same time substantial efforts must be made to reduce marketing costs and increase productivity in Africa's traditional crops, both domestic and export.

(43) **New Technologies**

(44) One of the most exciting aspects of globalization is the fact that information is now more broadly available more cheaply than ever before. Capturing the information revolution is central

to being able to participate effectively in the new global economy. What opportunities does the information revolution hold for Africa?

- (45) Access to information about new market opportunities,
- (46) Access to the latest information on new technologies,
- (47) Opportunities to integrate markets by providing price and demand information instantaneously,
- (48) Opportunities to reduce risks from drought, and
- (49) Opportunities to disseminate technological information to farmers more cheaply and more effectively.

(50) This only scratches the surface. It is difficult to predict today what the future of the information revolution holds, but we do know that to seize the opportunities it may afford will require a careful and calculated effort to build the kind of capacity required to adapt to a radically changing technical environment.

(51) The same can be said about the biotechnological revolution. As with the new information technology, it is difficult to predict with certainty how biotechnology will be used to increase agricultural productivity in Africa. Biotechnology's potential for higher yields, improved pest control, greater drought resistance, reduced dependence on chemical fertilizers, shorter growing seasons, and increased nutritional value could lead to an agricultural revolution even more dramatic than the "Green Revolution" of the mid-twentieth century. But three major obstacles remain.

(52) In the first place, the majority of African research institutions and African researchers are not yet capable of taking the biotechnological advances that are being made in the West and adopting them to African circumstances. Second, most of the advances in biotechnology are being introduced by private firms that are patenting the genetic advances, rather than by public institutions that see the genetic material as public goods. This means that not only is the transmission of new technologies constrained by whether or not there are profitable marketing opportunities, but also that research is generally confined to areas of particular importance to *developed* country agriculture. Finally, the whole area of genetic engineering has raised a number of important questions of threats to the environment and human health, which, while they have often raised more heat than light, will make it more difficult to move quickly in transferring new technologies to Africa. These are not insurmountable obstacles. However, a strategy to cut hunger in Africa needs to confront these obstacles head on and be explicit about how to take advantage of the biotechnological revolution for African agriculture.

(53) **International Capital Flows**

(54) As noted above, there has been a dramatic increase in international capital flows, which now have reached levels 10 times the level of overseas development assistance (ODA). However, foreign direct and portfolio investment still lag in Sub-Saharan Africa and have been concentrated in a few countries and in a few sectors. What the international experience has shown is that capital will follow opportunities wherever they may be found, but also that international investors have many options, so that countries with high levels of political risk or macroeconomic instability or high barriers to entry will be left behind. Moreover, especially in the case of portfolio investment, international capital movements are extremely volatile. Again, this points to the fact that while globalization offers many new opportunities, it also presents increased risks, and requires concerted effort and radical change to take advantage of these opportunities.

(55) *The New Philanthropists.* The technological revolution has spawned a whole new generation of fabulously wealthy capitalists, who like the Fords and Rockefellers before them, are interested in giving back some of the wealth they have acquired. This has meant a virtual explosion of new foundations, and a generation of new philanthropists, like Bill Gates and Ted Turner, who are looking abroad as well as domestically for opportunities to which to contribute. For the most part, these new foundations have limited capacities and limited mandates, concentrating on the social sectors. However, these new foundations are still finding their way, and have not, for the most part, identified strongly with any particular development agenda.

(56) **The End of The Cold War**

(57) The end of the Cold War has changed the international political climate in important ways. For the first three decades of their independence African countries were important, albeit secondary, battlefields in the great power conflict. Many of these countries were able to play off the big powers against each other, generating substantial resources that enabled corrupt and ineffective governments to stay in power. The United States, in particular, wasted millions of dollars of foreign assistance to prop up corrupt authoritarian regimes in Sudan, Somalia, Liberia and Zaire. At the same time, the Cold War also generated an ideological conflict, one that promoted the development of dirigisme and other statist philosophies.

(58) The new international political climate makes it possible for the West to have a more mature relationship with Africa, one based on their mutual interest in reducing poverty and increasing prosperity. The United States has had great difficulty in defining a post-Cold War foreign policy, particularly with respect to Africa, and the various rationales for foreign assistance – international public goods such as health and environmental protection – always come down to the same thing – the United States is better off in a peaceful, prosperous world.[8] In Africa, peace and prosperity will only come through economic development, and a judicious and generous foreign assistance program can help promote that development.

(59) However, the 1990s have seen a sharp reduction in foreign assistance, with overall levels dropping from $56.5 billion in 1993 to $51.9 in 1998. **In Sub-Saharan Africa, real per capita aid levels fell by one-third between 1990 and 1998.** This is unconscionable in a time of unparalleled prosperity. Moreover, assistance for agriculture has dropped even more sharply. For example, World Bank lending for rural development in Africa fell from 23 projects valued at $1.0 billion in 1990 to 8 projects, valued at $224 million in 1999. As a result, just when the international community has decided to focus on poverty reduction, as reflected in the International Development Goals of the Development Assistance Committee[9] it has reduced its ability to achieve this reduction.

(60) This is a profound tragedy. Africa faces a development crisis of perhaps historic proportions. For the first time, because of political and economic reform, the opportunities for effective poverty-reducing investments are manifest. Four decades of struggling to achieve development have not been without deep learning on the part of both the African and assistance communities. The world economy is evolving rapidly and is offering new, exciting opportunities. Technological change provides hope that many of the existing problems can be solved. This is no time to turn away when the goal is so close at hand.

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[8] However, it is interesting to note that the American public believes: (1) that the U.S. has a moral responsibility to provide assistance to the poorest countries; (2) that the U.S. gives up to 10 times more in foreign assistance than it actually does; (3) that the U.S. should provide a much higher level of assistance to poor countries; (4) that the main rationale should be moral rather than self-interest; and (5) that foreign assistance is frequently ineffective. See University of Maryland, Program on International Policy Attitudes, "*Americans on Foreign Aid and World Hunger: A Study of Public Attitudes,*" February, 2001. at: http://www.pipa.org/index.html

[9]See *A Better World for All, Progress Towards International Development,* OECD, July, 2000.

(61) **Changing Donor Practices**

(62) *Changing Donor Interests and Earmarks*. Foreign assistance has always been very faddish, shifting priorities every decade or so. During the nineties, especially in response to concerns raised by domestic constituencies, an increasing proportion of donor funds were directed to specific areas which were seen to have a direct impact on poverty, such as child survival and health, or to areas which reflected domestic political concerns such as the environment and gender issues. In the context of a static or shrinking pie, this meant less was available for focus on the economic sectors, particularly agriculture and the food system.

(63) Moreover, these pressures seemed to be universal, and the idea of donor comparative advantage no longer held currency. Thus all donors shifted resources into the social sectors at the expense of the productive sectors, including donors with traditional interest in agriculture such as USAID and the World Bank. Donor pressures to push specific interests often conflicted with building a coherent national strategy, but many African countries lacked the well-trained analysts to argue these points with the donors (and lacked the discipline to turn down the donor money that came with these shifting priorities.)

(64) What has been lost is a balanced approach to development. There is no doubt that investment in human development, in the educational and health sectors in particular, is vital to sustainable growth. Moreover, education and health are important goods in their own right, as well as being absolutely necessary for agricultural growth. The same is obviously true for investments in environmental sustainability. However, the long-term capacity for improving quality and access to these critical social services depends on increased capacity for the public sector to provide these services and that depends on increasing government revenues, which depends on a growing economy. There is a clear synergistic relationship between improvements in the social sectors and those of the productive sectors. Over the past few years this balance has been disturbed, particularly in the USAID program.

(65) *Results Orientation.* Changes in strategic thinking have led to an increased emphasis on results in aid agencies. Here USAID, because of government-wide reforms as codified in the Government Performance and Results Act (GPRA), has been the leader. Unfortunately, the emphasis on results has often been operationalized as an emphasis on short-term results. Development programs with indirect or hard-to-quantify results or results that occur over the longer-term have tended to be underemphasized. This is best seen in the substantial reduction in USAID investment in long-term training and agricultural research.

(66) *Erosion of Technical Capacity*. The shift away from investing in agriculture and rural development has led to a substantial reduction in agricultural technical staff of donor agencies as well. This is a vicious cycle, where reduced programming results in reduced staff and reduced staff results in reduced programming.

(67) *Foreign Assistance and Non-Governmental Organizations (NGOs).* Increased political activism by the Private Voluntary Organization (PVO) community coupled with the erosion of state capacities have led donors to increasingly rely on NGOs to deliver assistance. This is a very complex issue, tied up in support for democratic processes and civil society and concerns about governmental effectiveness. However, the increasing concentration on non-governmental actors, to the extent that it reduces involvement with African governments, can be self-defeating. In the end, poverty cannot be reduced without effective, developmentally driven government.

(68) **Opening OECD Markets**

(69) If African countries are to make a major effort to compete in global markets, they will need some honest responses by OECD countries. While there has been substantial progress on this front in the latest round of WTO negotiations, and especially with the passage of the African Growth and Opportunity Act (AGOA) and the new open markets policy toward the least developed countries announced by the European Union, OECD agricultural policy continues to be inimical to poor countries. It has been estimated that the total sum of OECD agricultural subsidies equals the GDP of Sub-Saharan Africa.[10] These subsidies, coupled with the careless use of food aid, have undermined both domestic and international markets for African agriculture. This problem has been compounded by the loss of development assistance funds for NGOs, which now increasingly rely on monetized food aid to fund their activities and thus have become a lobby for expanded food aid. At same time, new flexibility in use of monetized funds may offer new opportunities to use food aid monetization revenues in ways that could strengthen long-term agricultural growth.

(70) **THE HUNGER PROBLEM**

(71) **The Dimensions of Hunger in Africa**

(72) According to the FAO, there are 186 million hungry people in Africa.[11] Hunger in Africa should be thought of across two dimensions – long-term and short-term. In the long-term, poor populations have limited income and are unable to purchase or produce, on a continual basis, the amount and quality of food needed for good health. This chronic condition is best measured by an indicator called "stunting," defined as a child's height relative to the normal height for the child's age. In SSA, the percentage of children who are stunted ranges from 15% to as much as 45%, even in countries that are not going through conflict or serious drought. This indicates that a large number of children are both physically and mentally underdeveloped over the long term as a result of inadequate diet.

(73) On the other hand, short-term food insecurity, frequently the result of crises or of seasonal food shortages, is measured by an indicator called "wasting," or a child's weight relative to his height. The percentage of children who are wasted and are thus in serious short-term nutritional danger, generally ranges between five percent and ten percent in non-crisis SSA countries. Table II presents data on nutritional measures in eight African countries. As can be seen from the table, progress in reducing malnutrition has been mixed at best, with wasting increasing in almost every country, and stunting decreasing in half and increasing in half. It is hard to know what to make of these figures, although there seems to be some indication that countries that are growing fast and reducing poverty (Ghana, Uganda and Zimbabwe during this period) experienced a reduction in stunting, at least in rural areas.[12] What is clear is that malnutrition, like poverty, is worse in rural areas of all the countries for which there is data.

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[10] See Binswanger and Townsend, "*The Growth Performance of Agriculture in Sub-Saharan Africa, American Journal of Agricultural Economics*, 82:5, pp. 1075-1086.
[11] FAO, *The State of Food Insecurity in the World.*
[12] As has been documented by Tefft et al. in a set of nutrition studies in Mali, sampling inconsistencies across years make this sort of longitudinal comparison problematic. (Tefft, James, Christopher Penders, Valerie Kelly, John M. Staatz, Mbaye Yade, and Victoria Wise. *"Linkages Between Agricultural Growth and Improved Child Nutrition in Mali." MSU International Development Working Paper* No. 79. East Lansing: Michigan State University Departments of Agricultural Economics and Economics: 2000. at: http://www.aec.msu.edu/agecon/fs2/papers/idwp79.pdf

(74) Of course, the situation is much worse in countries going through crises. The UN estimates that about 1% of Africa's population, six million people, are either refugees or internally displaced. In countries such as Angola, Sudan, Northern Uganda, Sierra Leone, and the Congo not only are large numbers of people displaced, but capital has been destroyed and sources of livelihood disrupted. In addition, much of Africa is subject to periodic droughts and other weather-related catastrophes such as floods. But central to the problems resulting from all these issues – chronic malnutrition, conflict, drought and famine – is one universal factor, poverty.

(75) **Poverty and Hunger**

(76) In the medium and long term the only solution to the hunger problem in Africa is reducing poverty. While hunger has a number of proximate causes such as poor health, crop failures, lack

(77) **TABLE II: NUTRITIONAL MEASURES FOR CHILDREN IN SELECTED AFRICAN COUNTRIES**[13]

Country (years)	*First Year*		*Second Year*		*Change*	
	Wasting	*Stunting*	*Wasting*	*Stunting*	*Wasting*	*Stunting*
Urban:						
Ghana (1988 and 1993)	7.3	24.6	9.1	17.0	1.8	-7.6
Madagascar (1992,1997)	3.8	40.5	5.3	44.8	1.5	4.3
Mali (1987 and 1995)	9.9	19.6	24.9	23.9	15.0	4.3
Senegal (1986 and 1992)	3.5	17.5	8.8	15.2	5.3	-2.3
Tanzania (1991 and 1996)	5.1	38.0	8.1	32.6	3.0	-5.5
Uganda (1988 and 1995)	0.6	24.8	1.4	22.7	0.7	-2.1
Zambia (1992 and 1996)	5.4	32.8	3.3	32.9	-2.1	0.1
Zimbabwe (1988, 1994)	1.4	16.0	6.5	19.0	5.0	3.0
Rural:						
Ghana (1988 and 1993)	8.5	31.4	13.1	32.3	4.6	0.9
Madagascar (1992,1997)	6.0	50.6	8.3	49.5	2.3	-1.1
Mali (1987 and 1995)	12.3	26.2	24.4	36.2	12.2	10.0
Senegal (1986 and 1992)	7.1	26.5	13.4	32.7	6.3	6.3
Tanzania (1991 and 1996)	6.4	45.0	7.3	46.1	0.9	1.2
Uganda (1988 and 1995)	2.0	45.2	3.2	40.7	1.3	-4.5
Zambia (1992 and 1996)	5.0	46.5	4.9	48.9	-0.1	2.4
Zimbabwe (1988, 1994)	1.1	34.3	5.6	25.0	4.5	-9.3

of nutritional information, conflict, etc., almost all of these proximate causes stem from one core issue – poverty. Poor people are less healthy, less educated and more vulnerable to shocks. The centrality of poverty to the hunger problem, and indeed, to all dimensions of well-being, is clearly brought out in a series of data sets that have been assembled by the World Bank from the Demographic and Health Surveys funded by USAID. Table III, which presents data from Kenya, is relatively typical.

[13] Sahn, David E., Paul A. Dorash and Stephen Younger. 1999, "*A Reply to De Maio, Stewart and van der Hoeven,*" *World Development* 27 (3) 471-75.

(78) As can be seen, for almost all indicators, the richest quintile has indicators that are from two times to three times or more better than the poorest quintile. This is clearly true for the three nutrition indicators as well as the two health indicators. These are complex relationships and not always linear, but is clear that the relationship between poverty and nutrition, as well as those between poverty and health status and poverty and fertility are robust. Thus, any attack on hunger must be based on an attack on poverty.

(79) **TABLE III. POVERTY AND INDICATORS OF WELL-BEING IN KENYA IN 1997**

Indicator	*Household Consumption Quintiles*					
	Poorest	*Second*	*Middle*	*Fourth*	*Richest*	*Average*
Infant Mortality Rate	95.8	82.9	58.5	61.0	40.2	70.7
Under Five Mortality Rate	136.2	120.4	92.3	84.9	60.7	105.2
Children Stunted (%)	44.1	37.5	30.2	30.5	17.1	33.0
Children Moderately Underweight (%)	31.6	26.7	20.0	17.1	10.3	22.1
Children Severely Underweight (%)	7.1	6.2	3.8	3.4	2.1	4.8
Low Mother's BMI (%)*	17.6	15.5	11.5	8.1	5.5	11.9
Total Fertility Rate	6.5	5.6	4.7	4.2	2.0	4.7

* Body mass index, an index of adult nutritional status.

(80) THE POVERTY PROBLEM

(81) The severity of the poverty problem in Africa is presented in Table IV.

(82) Headcount ratio is defined as the percentage of the population below the poverty line. The poverty gap equals the distance of the mean income of the poor from the poverty line as a percentage of the poverty line. In other words, a poverty gap of 23% means that the average poor person has an income 23% below the poverty line.

(83) The table illustrates the following facts:

- (84) Poverty is wide-spread in Africa, with perhaps the majority of the population being poor;
- (85) Poverty is more prevalent and more severe in the rural areas, but is widespread in urban areas; and
- (86) Even were income better distributed, most people would not be very far above the poverty line.

(87) **TABLE IV. POVERTY IN 21 AFRICAN COUNTRIES DURING THE 1990s**[14]

Indicator	*Rural*	*Urban*	*Overall*
Headcount Ratio (%)	56	43	52
Poverty Gap (%)	23	16	22
Squared Poverty Gap (%)	13	8	12
Mean Expenditure ($ / person / year)	409	959	551
Mean Poverty Line ($/person/year)	325	558	

(88) Many of the changes, in particular the political and economic liberalization, that were described in the first section have led to some improvement in the poverty situation. For example, over a five-year period, the poverty headcount ratio fell by 25% in rural Ethiopia, 14% in Ghana, 30% in Mauritania and 21% in Uganda. In each of these countries, renewed growth led to increases in consumption per head of around 11%. In contrast, in three countries (Nigeria, Zambia and Zimbabwe) where consumption per head declined by an average of 6.5%, the poverty headcount ratio increased by 53%, 5% and 26% respectively.

(89) THE POVERTY/HUNGER SOLUTION

(90) A number of scholars have pointed out that the most effective strategy for reducing poverty and promoting economic growth is to ensure that the agricultural sector is itself growing rapidly.[15] In the first place, the rural sector is the location of the majority of the poor, so rapid growth of the rural economy is likely to have the biggest direct impact on the poor. Second, up to 80% of the expenditures of the poor are on food; a rapidly growing agriculture is based on increased productivity and thus, lower food costs. Reducing food costs raises the real income of all the poor, urban and rural. Third, reduced food costs enables workers to improve their incomes without increasing their money wages, thus enabling the economy to be more competitive in international markets. Finally, a rapidly growing agriculture increases the income of farmers that in turn allows them to purchase goods and services. Studies have shown that incomes generated from agriculture are more likely to be spent on goods and services produced domestically than imported goods and services.[16] This means that increases in agricultural incomes have larger multiplier effects on non-agricultural output and employment than does non-agricultural growth.

[14] *Can Africa Claim the Twenty-First Century*, The World Bank, p.90.

[15] See for example:

African Development Bank, *Agriculture and Rural Development Sector Report,*

Niama Nango Dembélé, "Sécurité Alimentaire en Afrique Sub-saharienne: Quelle Stratégie de Réalisation?" mimeo, February, 2001. http://www.aec.msu.edu/agecon/fs2/africanhunger/securitealimentaire.pdf

Timmer, C. Peter. 1998. "The Agricultural Transformation." In Eicher, Carl, and John Staatz (eds.) *International Agricultural Development* (third edition). Baltimore: Johns Hopkins University Press, and

Gem Argwings-Kodhek, T.S. Jayne, and Isaac Minde. 1999. *African Perspectives on Progress and Challenges in Agricultural Transformation.* http://www.aec.msu.edu/agecon/fs2/polsyn/number47.pdf

[16] Cf. Christopher L. Delgado, Jane Hopkins, Valerie Kelly et. al., "*Agricultural Growth Linkages In Sub-Saharan Africa*," International Food Policy Research Institutey, Research Report #107, December, 1998.

(91) ACCELERATING AGRICULTURAL GROWTH AS A STRATEGIC GROWTH ENGINE

(92) What is known about African agriculture?

(93) Africa is a huge continent (Figure 1) with highly varied agro-ecology. Therefore, making broad generalizations about agriculture throughout the subcontinent is often misleading. Ultimately, recommendations need to be tailored to each country and agro-ecological region.[17] Nonetheless, there are some common characteristics that stand out. The following is not an all-inclusive list, but rather a list of key features describing the structure of African agriculture and food systems:

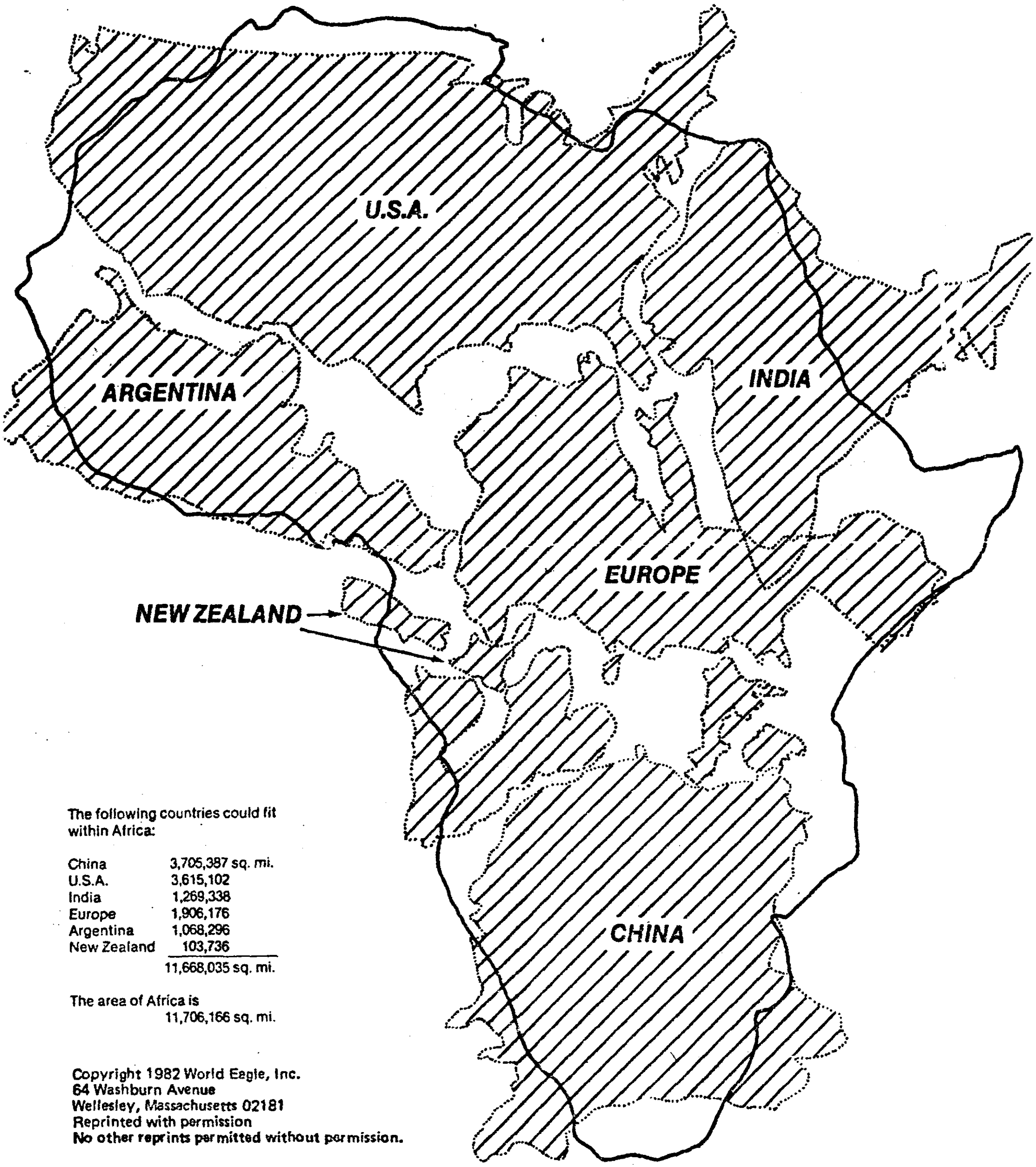
- (94) African agriculture is largely rainfed (about 4.1% of arable land is under irrigation), and subject to substantial variability in rainfall as well as periodic and severe droughts.
- (95) Despite the substantial contribution of large-scale commercial farms in southern Africa and in Kenya, the bulk of African agriculture is characterized by mixed smallholder farms, from 0.5 to 5 hectares, with limited capital inputs except for hand tools, some livestock, some trees and, in some areas, some animal traction equipment;
- (96) In most countries, women are heavily involved in agriculture, often providing the majority of the labor and sometimes making most day-to-day farm management decisions, particularly in areas where male migration to mines and other off-farm jobs is widespread. Yet women generally have poorer access to credit, extension, and other agricultural support services than do men;
- (97) On the whole, except for the ten years of crisis (1975-1985), African agriculture has grown by about the rate of population growth, 3% per year over the period since 1960-1975, 1.8% per year between 1975 and 1985, and 3% per year since;
- (98) However, Africa has lost important export market shares in many, if not most, of its traditional agricultural export crops;
- (99) Much of the increase in agricultural production has come as a result of expansion of acreage planted, and increasingly, the new lands being put into production are of lesser quality;
- (100) However, the continued rural-urban migration (which in some countries has led to urban population growth rates of 5%) has meant that the increase in production must have been accompanied by increasing productivity of agricultural labor;
- (101) Yields in agricultural production are well below world norms, despite significant yield gains from the mid-a980s resulting from investments in agricultural research;
- (102) Marketing costs are the highest in the world, because of policy problems, high transport costs, and low population density, which increases per-unit assembly and distribution costs; this reduces competitiveness, employment and real wages;
- (103) New data have shown a rather wide disparity in land holdings among smallholders, even in the same location; as a result, 80% of the marketed surplus in many countries is produced by 20% of the population; and many farmers are net buyers of basic staples (hence reducing rural-to-rural marketing costs is as important as rural-to-urban costs). There are, therefore, substantial numbers of poor in high production areas[18];

[17] Moussa Batchily Ba, et al.1999. *Workshop on Agriculture Transformation in Africa: Abidjan, Côte d'Ivoire,* September 26-29, 1995. *MSU International Development Working Paper no 75.* East Lansing: Dept. of Agricultural Economics, Michigan State University. http://www.aec.msu.edu/agecon/fs2/papers/idwp75.pdf

[18] Personal communication with Michael Weber and Thomas Jayne. See also: T.S. Jayne. 2001. "*Differential Access to Land Among Smallholders in Africa: Implications for Poverty Reduction Strategies and Structural Transformation.*" MSU International Development Paper (draft) no 80. East Lansing: Dept. of Agricultural Economics, Michigan State University.

- (104) Most smallholders do not produce enough food for themselves and depend on the market for a substantial (up to 40%) portion of their food consumption; this means that most smallholders have sources of cash income – wage labor, remittances and non-farm business income;
- (105) The smallholder sector is thus divided into two groups, a dynamic subsector, able to invest in capital goods and land improvements, to purchase marketed inputs and to adopt new technologies, and a more constrained subsector with little ability to broadly increase productivity. People in the less dynamic subsector, constrained by very limited land and other resources, ultimately will need to derive the bulk of their income from non-farm sources (including selling their labor to other farmers). But such employment opportunities won't arise unless those smallholders who do have the resources needed to expand production are empowered by providing them with the means to increase production and productivity. Increased productivity in the more dynamic group will generate new jobs (in both agricultural and non-agricultural activities) at higher wages for those in the less dynamic subsector. This is an explicit strategy to promote dynamic linkages in the smallholder sector;
- (106) Increasing income (and African countries have been growing, albeit slowly) and rapid urbanization have led to increasing demands for higher value foods – meat, dairy products, cooking oil, more processed foods, etc.;
- (107) There is a large amount of inter-African trade in agricultural commodities, much, if not most, of it unrecorded; and
- (108) African agriculture is much less capital intensive than agriculture in other parts of the developing world and uses much less fertilizer.

Figure 2. Perspective On The Size of Africa



(109) Much of this information is captured in Table V.

(110) Why has agricultural and food system development been so difficult in Africa? Are there geographic, climatic, demographic or social factors that make accelerating agricultural growth more difficult in Africa than in other regions of the world? To be sure, there are a number of factors that differentiate Africa from Asia, and make the "green revolution" experience less relevant. Of particular importance are the following factors: [19]

- (111) Declining real prices for traditional export crops;
- (112) Limited infrastructural services in rural areas, which not only raise marketing costs, but also inhibit the development of rural-based agro-industry;
- (113) A high level of vector borne and viral disease, particularly malaria and HIV/AIDS, which reduce the productivity of rural labor;
- (114) Declining natural resource base, including substantial deforestation and declining soil fertility;
- (115) Complicated land tenure systems which often have limited transferability and sometimes offer limited security of tenure;
- (116) High post-harvest losses;
- (117) Weak rural financial intermediation;
- (118) Poor participation by end-users in development project design and agricultural policy formulation;
- (119) A much more differentiated agriculture, with many more crops and many more ecological zones than the mono-cultural rice and wheat areas of Asia;
- (120) A much more dispersed population, increasing infrastructural and marketing costs;
- (121) A dependence on rainfed agriculture, rather than irrigated agriculture like most of Asia; and
- (122) A less educated rural population than that of Asia at the beginning of its rapid growth;

(123) These factors make increasing productivity more difficult, and probably reduce the rate of return of many investments. However, they do not mean that most African countries cannot increase agricultural production from three percent to five percent per year, the rate required to rapidly reduce poverty. Indeed, several countries are experiencing this type of rapid growth, but there is still a wide gap between potential and actual.

(124) Despite the above, the most important set of factors inhibiting African agriculture has been the set of economic policies which African states have followed for most of the post-Independence period. These policies have been characterized by macroeconomic instability, urban bias, and inconsistency and policy reversal. For the most part, African countries have taxed rural producers and subsidized urban consumers, although more so in West Africa than in East and Southern Africa. In the latter areas, at least where there was European settler agriculture, policies were put in place to protect the Europeans from outside competition, both by Africans and from imports. Many of these policies have continued in the post-independence era, leading, for example, to high import tariffs on maize in Kenya. African governments have underinvested in rural areas while providing services disproportionately to urban areas. They have controlled agriculture markets, subsidized inputs (thus making access to inputs and credit a political process), and under-financed key institutions such as national agricultural research institutions.

[19] Much of this list is derived from African Development Bank, *Agriculture and Rural Development Sector Report*, pp. 7-11.

(125) **TABLE V. AGRICULTURAL INDICATORS FOR AFRICA, ASIA AND LATIN AMERICA**

Indicator	*Africa*	*Asia*	*Latin America*
Agricultural GDP (billions of dollars) 1997	62.4	400.1	143.2
Agriculture/GDP (percent) 1995	30	25	10
Agricultural Labor Force (as percent of total) 1995	70	72	29
Agricultural Exports (as percent of total) 1995	40	18	30
Agricultural Production Index (1961-64 =100)			
1965-1969	113	115	115
1975-1979	135	154	153
1985-1989	166	230	200
1995-1998	221	338	253
Agricultural Production Per Capita Index (1961-64 = 100)			
1965-1969	100	103	102
1975-1979	92	110	106
1985-1989	84	135	112
1995-1998	87	169	120
Cereal Yields (Kg per hectare), 1994	1,230	2,943	2,477
Cereal Output per Capita (Kgs), 1993-1996	133	285	256
Agricultural Land per Worker (hectares), 1994	5.9	1.3	24.8
Fertilizer per Arable Land (Kg per hectare) 1993-1996	15	180	75
Irrigated area as Percent of Arable Land, 1994	6.6	33.3	9.2
Tractors/arable Land (Number per 1000 hectares), 1994	290	804	1165
Road Density (km of road per square kilometer), 1995	.06	.37	.16
Paved Roads (percentage of total roads), 1995	15	29	25
Population Density (people per sq kilometer), 1995	25	146	24
Rural non-farm income as percent of total rural income	42	32	40

Source: *Can Africa Claim the Twenty-First Century*, The World Bank, 2000

(126) Beginning in the mid-1980s many African countries, under pressure from the donor community, began the process of structural reform. Budget deficits were reduced, foreign exchange markets liberalized, subsidies removed, trade regimes made more open, prices decontrolled, public enterprises privatized, financial markets liberalized and agricultural marketing boards eliminated. These changes have taken a long time, and are far from completed. Recent years have seen some backsliding, particularly in East and Southern Africa. This will be discussed in greater depth below.

(127) **AN AGRICULTURAL-BASED STRATEGY FOR CUTTING HUNGER**

(128) The argument of this paper to this point may be recapitulated as follows: (1) hunger is largely a result of low levels of income, so a strategy to cut hunger substantially must be based on reducing poverty and raising the incomes of the poor; (2) revitalizing agriculture is central to

such an effort; (3) African agriculture has been stagnating largely because of poor government policies including underinvestment in the sector; (4) political and economic liberalization on the one hand, and globalization on the other, offer a new opportunity for turning agriculture around, but only if OECD countries open their markets more to African products, particularly agriculturally-based value added products; and (5) competing in the international economy of the twenty-first century will require an entirely new approach by both African countries and their partners in the North because the international economy is more complicated and more demanding than it was even ten years ago. The opportunities are there, but the task will not be easy.

(129) A resurgent agriculture, in most African countries, must be market-oriented and demand led. The sources of this resurgent demand include both domestic and international markets. Domestically, this involves:

- (130) Increased food production for both urban and rural markets (including taking advantages of opportunities for import substitution when economically feasible);
- (131) Increased domestic markets for higher value foods; and
- (132) Increased value added through processing of agricultural commodities.

(133) **Staple Food Markets**

(134) The crux of this argument is simple. Increased production of basic food crops without increased demand results in reduced prices and little change in farmer income. The demand for basic foods is income inelastic. However, given continuing high levels of population growth and rural-urban migration, the demand for basic food commodities, even in the absence of rapid overall economic growth, is likely to grow at between three and four percent per year. Reducing marketing costs, even without increasing on-farm productivity, could reduce the price of food for consumers and thus increase demand a bit more. However, given the high transport-to-value costs of most staple foods and existing OECD food policies, export markets in staple commodities will likely be limited to regional markets. A robust staple food market is foundational for agricultural growth, but working alone it cannot be a leading sector.

(135) This is not to say that there is not a critical role for staple food production and therefore for investments to increase productivity in this sector. On the demand side, there may be scope to displace food imports through the development of more reliable information systems and grades and standards for regional trade. Lack of such information and standards acts as a non-tariff barrier to local trade and raises the price of agricultural goods produced in the region relative to extra-African imports.

(136) **Higher Value Domestic Food Product Markets**

(137) While staple foods have low income elasticity, higher value foods such as edible oils, meat, fish and dairy products all have high income elasticities. The 1994 devaluation of the CFA franc allowed Sahelian cattle producers to recapture coastal West African meat markets previously lost to subsidized meat imports from Western Europe. Here, given EU beef subsidies, it may be important for African countries to provide tariff protection for nascent beef and dairy industries from dumping by developed countries.[20] This is especially true since these products tend to be largely consumed by the higher income groups, and thus tariffs will not greatly affect the poor. Moreover, given the regional distribution of economic activity, the

[20] Pressure to re-institute EU export subsidies on beef will likely grow because Europe is currently accumulating very large stocks of unsold beef due to the sharp drop in demand for beef in Europe because of Mad Cow Disease.

strengthening of the regional beef and dairy market in West Africa will tend to increase incomes for the poorer Sahelian regions.

(138) **Agro-Processing**

(139) There is now a clear understanding that agricultural development must be seen from the perspective of the food and agricultural system, not just the farm. "The constraints to assuring sustainable growth and food security lie both on and off the farm. In many countries well over half the consumers' costs of food come from post-harvest operations and purchased inputs. Improving productivity of input and output marketing, storage and processing are therefore critical."[21] Increasingly, busy urban households are seeking foods that require less time for cooking and which maintain freshness in urban environments. Many of these processed food requirements are met from imports rather than domestic sources. Here again, development of regional markets will create the scale economies needed to make higher levels of processing profitable.

(140) **Export Strategies**

(141) While domestic markets will continue to be the most important segment of overall demand for agricultural produce, they will tend to be less dynamic than external markets. The international market is growing more quickly than the world economy and more quickly than the non-agricultural sectors of most African economies. Moreover, most commodities produced by African countries for world markets are of higher value than commodities produced for domestic consumption. Agricultural transformation in Africa requires a virtuous circle of increased production of higher valued commodities, increased agricultural incomes, increased demand for rural non-agricultural services, increased demand for staple food products and increased productivity in food production.

(142) Moreover, producing for world markets has other important benefits. For example:

- (143) Competing in the world market is hard and requires muscular industries; this competition forces African producers to cut costs and improve efficiency, and thus increases total factor productivity;
- (144) Competing in the new global economy puts a premium on knowledge as a factor of production, and there is a huge amount of knowledge that is cheap to obtain, although some specific elements of knowledge may be quite costly; and
- (145) Competing on world markets is more likely to attract foreign private investment and technology, since demand is somewhat independent of the vagaries of the domestic economy.

(146) **The African Agricultural Export Experience**

(147) Overvalued exchange rates, taxation and under-investment have undermined Africa's traditional export agriculture sector (Table VI). Three things are important to note from this table:

1. (148) In every commodity, except tea, Africa's share of world trade has declined;
2. (149) In four of the ten commodities, African exports in 1997 were actually less than they were in 1970; and
3. (150) With the exception of tobacco and bananas, world trade in all of these commodities increased by between 2.2% per year and 0.8% per year, hardly the dynamic segment of

[21] Howard *et al., op. cit.,* p. 2.

world trade. Yet they are still important to Africa, and can represent important opportunities if Africa stays competitive.

(151) **TABLE VI: AFRICA'S SHARE OF WORLD TRADE FOR ITS MAIN EXPORT CROPS**

Crops	*World Exports (000 metric tons)*		*African Exports (000 metric tons)*		*Africa's Share of World Trade (%)*	
	1970	*1997*	*1970*	*1997*	*1970*	*1997*
Bananas	5,730	14,512	394	429	6.9	3.0
Cocoa	1,136	2,061	867	1,403	75.8	67.9
Coffee	3,282	5,074	1,010	808	30.8	15.9
Cotton Lint	4,000	5,677	672	869	16.8	15.3
Groundnuts	983	1,218	677	61	68.9	5.0
Palm Oil	906	12,297	178	156	19.6	1.3
Rubber	2,661	4,668	201	292	7.6	6.3
Sugar	21,861	37,883	1,515	1,386	6.9	3.7
Tea	752	1,352	109	313	14.5	23.2
Tobacco	1,200	5,733	88	289	7.3	5.0

Source: FAOSTAT

(152) On the other hand, some African countries have been able to exploit non-traditional niche markets (Table VII).

(153) In each of these countries, non-traditional exports (NTEs) have, over a short period of time, increased their share of total exports, and have exhibited very rapid growth. Not all of these NTEs are agriculturally based, but a substantial proportion of them are.

(154) **TABLE VII. NON-TRADITIONAL EXPORTS FROM SELECTED AFRICAN COUNTRIES**

Country	*Share of Total Exports (percent)*		*Average Annual Growth (percent)*
	1994	*1998*	*1994-1998*
Cote d'Ivoire	13.5	17.4	16.4
Ghana	9.7	19.2	35.5
Madagascar	64.1	86.1	11.9
Mauritius	67.2	68.9	2.9
Mozambique	5.6	17.8	50.3
Senegal	11.5	13.3	9.3
Uganda	5.6	34.9	101.5
Zambia	14.7	33.0	16.5

(155) Africa's export strategy must be balanced across three important market segments: traditional exports, non-traditional exports and regional exports. As noted above, prices in

traditional export markets have fallen for almost half a century. Nevertheless, for many commodities, Africa still has comparative advantage in these markets, and increased export intensity can increase incomes (labor and land productivity remain higher in traditional export crops than in staple food production). Moreover, comparative advantage is a dynamic concept, and while Africa lost market share in crops such as palm oil and coffee because of, *inter alia*, under-investment in these crops, it could regain market share by reinvesting wisely. Africa is still largely a lower-cost producer of traditional crops than the rest of the world at the farm level, but the advantage is often lost because of policy and marketing impediments.[22]

(156) Regional trade in agricultural products is already quite robust, although little of this trade appears in official statistics.[23] Studies conducted by USAID in East and Southern Africa demonstrated that cross-border trade, much of it agricultural products, was many times larger than officially reported.[24] For example, in 1994-95 uncounted agricultural exports from Uganda to Kenya were equal to 60% of total official agricultural exports. The informality of this trade, in part to escape customs duties, but in larger measure to avoid delays and extortion at border crossings, increases costs and thus reduces returns to farmers. Frequently, shipments are carried in bulk to the border, broken up into head or bicycle loads, and then re-assembled once the border has been crossed. What this means is that efforts to reduce intra-African trade barriers, if successful, will reduce transactions costs, and thus lead to expanded trade, but may not always create new markets that didn't exist before. Great care should be taken in thinking through the development of sub-regional market spaces in Africa, particularly in agriculture.[25]

(157) Nevertheless, regional trade may become a stepping stone, in some cases, to entry into new non-traditional markets. Regional trade is often easier to capture than overseas markets and can serve as an apprenticeship in learning what is needed (in terms of system organization, quality standards, etc.) to be competitive in external markets. Traditionally, in the pre-globalization economy, industries developed by first serving the domestic market, then the regional market and finally the international market. In this way production and marketing skills became more finely honed as the level of competition increased. However, with international capital and technology more mobile, the way is open for producing directly for the international market without going through these intermediate steps.

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[22] Patricia Kristjanson, Mark Newman, Cheryl Christiansen and Martin Abel, *"Export Crop Competitiveness: Strategies for Sub-Saharan Africa"* APAP #109; USAID #PN-ABG-776; July 1990.

[23] One exception is work done on regional trade in West Africa following the CFA franc devaluation. Cf. Yade, Mbaye, Anne Chohin-Kuper, Valerie Kelly, John Staatz and James Tefft. 1999. *"The Role of Regional Trade in Agricultural Transformation: the Case of West Africa Following the Devaluation of the CFA Franc."* Paper presented at the Tegemeo/ECAPAPA/MSU/USAID Workshop on Agricultural Transformation, Nairobi, June 27-30, 1999. *MSU Agricultural Economics Staff Paper No.* 99-28, June 1999 < http://www.aec.msu.edu/agecon/fs2/ag_transformation/atw_yade.pdf> and James Tefft, Mbaye Yade, John Staatz et al. *Food Security and Agricultural Subsectors in West Africa: Future Prospects and Key Issues Four Years After the Devaluation of the CFA Franc.* Policy Briefs (covering the Cotton Subsector, the Beef Subsector, Horticultural Subsectors, and Consumption). Bamako: Institut du Sahel, November, 1998 (http://www.aec.msu.edu/agecon/fs2/sahel/index.htm)

[24] See "Unrecorded Cross-Border Trade Between Kenya and Uganda: *Proceeding of a Workshop Held at the Mayfair Hotel, Nairobi, Kenya,* December 6, 1996". July 1997. Chris Ackello-Ogutu and Protase Echessah. (USAID AFR/SDTechnical Paper No. 58. http://www.afr-sd.org/publications/59trade.pdf

[25] The literature has much to say on the efficacy of trading blocks, and the problems of trade diversion as opposed to trade creation. Given the degree of subsidization of OECD food products, there are efficiency arguments for creating a regional protected space to offset the price advantage that these subsidies bring. However, a contrary argument, that African countries should accept the subsidization of their consumers by OECD taxpayers, has some cogency. Given the importance of food in the commodity bundles of the poor, there are distributional as well as efficiency arguments to be considered. If labor were mobile, and farmers had other opportunities, then the anti-protection argument would dominate. However, labor is relatively immobile, and farmers' opportunities in the short-run are constrained.

(158) Non-traditional agricultural exports should become the most dynamic sector of the economy, both because of market demand and the importance of knowledge as a factor of production. That this is happening is demonstrated by the rates of growth presented in Table VII above. Although these growth rates are probably overstated because they begin at such a low base, nevertheless they demonstrate that it is possible to substantially diversify export production in a relatively short time. However, breaking into non-traditional markets takes new skills and a higher degree of sophistication than has been necessary for competition in traditional export markets. These skills will also be useful in adding value in domestic markets and in competing in regional markets.

(159) COMPETITIVENESS IN THE NEW GLOBAL ECONOMY

(160) So how to shift African agriculture from its low-input, low investment, low-value model, to a high-input, high-value, high-investment model? There are seven steps necessary to make this transformation:[26]

1. (161) Change the paradigm;
2. (162) Continue to reform the role of the state;
3. (163) Develop a private sector-public sector partnership;
4. (164) Invest in knowledge and technology generation;
5. (165) Invest in rural infrastructure;
6. (166) Empower farmers; and
7. (167) Develop more sophisticated marketing, contracting and risk-sharing arrangements.

(168) Changing the Paradigm

(169) In the Book of Proverbs it says, "My people perish for lack of vision." That verse has been particularly true of Africa, where, for the most part, the vision that has motivated most politicians has been the short-term one of maintaining power. Until recent years, in very few countries has there been a broad-based political debate, let alone a political consensus, on the direction the country should take. There has been an ability to take vague positions on a halcyon future, but little willingness to transform these positions into an effective plan or strategy. This lack of a transforming strategy has meant two things: (1) a concentration on the short-term over the long-term and (2) a failure to challenge the dominant ideology. Many times, donor policies have reinforced this focus on the short term because of pressure on the donor agencies to "move money" and "show results." During the Cold War, as noted earlier, the U.S. and the Soviet Union provided aid largely for strategic purposes, often without challenging the economic policies of their African allies. As a result, either governments developed policies and programs aimed at maintaining their political base (and in Africa this frequently meant using the government as a system for dispensing economic and political favors in ways that undermined good governance) or they developed policies and programs based on deeply flawed economic and political paradigms.

(170) For most of the independence period, the operating paradigm was based on state-led, import-substituting industrialization. African opinion leaders spoke of "capturing the commanding heights of the economy" and were supported in those efforts by many donors. The leaders felt that modernization and industrialization were synonymous and that the only way to promote industrialization was to protect the industrial base from external competition. Moreover, they distrusted private capital, because most of it was foreign, either in the form of large corporations owned by the former colonial power or smaller firms owned by minority

[26] Much of this discussion is derived from Howard et al. *op.cit.*

ethnic groups such as the South Asians in East and Southern Africa or the Lebanese in West Africa.

(171) The new development paradigm turns the old one on its head. It is export-promoting as well as import-substituting, it emphasizes agriculture as an engine of growth rather than just industry, and it must be based on private-sector-led growth rather than state-led growth. By and large, much of Africa has adopted this model – the Washington consensus. But this is a late-twentieth century paradigm. It is not visionary, and it doesn't fully reflect the changes that globalization is bringing about. A twenty-first century development model must, in dialectic terms, bring some kind of synthesis between the old and the new. In particular, it must be based on a role of government that is much less than that envisaged by statism, but much more than that envisaged by the Washington consensus. Equally important, it must move beyond traditional models of comparative advantage, to models described by Michael Fairbanks as those of "competitive advantage," models that see competition in the world economy not as passive and responsive merely to price incentives, but models which actively seek out market opportunities, models in which firms and government cooperate to build the institutional base for competition.[27] Finally, and most important, the new paradigm sees regional and global opportunities as no longer based on traditional factors of production such as land and labor, but as based on knowledge and information.

(172) The following example may help describe the differences between the new and the old paradigms.

(173) *The Uganda Flower Industry.* The world's leading exporter of cut flowers has little land, extremely high priced labor and poor weather. What the Netherlands does have is first-class technical expertise, market recognition, low transport costs, heavy capital investment, and a deep, diversified industry (9,350 cut flower nurseries and 1,900 exporters). The Netherlands not only produces more flowers, it produces more varied and valuable flowers, each year coming up with new breeds of tulips and gladiolas. Uganda, on the other hand, has wonderful weather, plenty of cheap land, low-wage labor, high transport costs, limited market recognition, and rudimentary technical expertise. It produces mainly roses, competing on price rather than quality. The Netherlands exports $2.8 billion in cut flowers, while Uganda (with only 17 growers) exports $25 million. (The world flower market is about $5 billion, compared to a coffee market of $14.0 billion). In order to develop its non-traditional agricultural export industries, Uganda has had to radically reform its macroeconomic policies, deal with the export monopoly its airline held on airfreight charges, strengthen export institutions, develop its own packaging industry, and build cold storage facilities near Entebbe airport. Recently, Makerere University has developed a degree program in flower cultivation. Clearly, Uganda understands that if its cut flower industry is to prosper it needs to begin developing the skills and knowledge that will allow Ugandan flowers to become more differentiated, more desirable and more valuable.

(174) **Continue to Reform the Role of the State**

(175) African countries have made major strides in creating a policy environment that is more favorable to rapid growth. As was noted above, this is especially true in terms of macroeconomic policy. However, there has been some recent slippage, and countries are finding it hard to maintain fiscal discipline. And in agricultural policy there have been some

[27] See Michael Fairbanks and Stace Lindsay, *Plowing the Sea.* Harvard Business School Press (Boston, Ma. 1997). For an African perspective see Yumkella, Roepstorff, Viranchianchi and Hawkins, "*Globalization and Structural Transformation in Sub-Saharan Africa*," presented at the Workshop on Agricultural Transformation in Africa (June, 1999); http://www.aec.msu.edu/agecon/fs2/ag_transformation/atw_yumkella.pdf

substantial policy reversals, particularly in East and Southern Africa. What is the policy regime critical for promoting African development in the twenty-first century?

- (176) **Macroeconomic stability.** Africa is going to require increasing levels of private investment (current levels are less than 10% of GDP), both foreign and domestic. Such investment, except in extractive industries, is unlikely to come forth when there are high levels of inflation.
- (177) **Policy stability.** Even more important than getting policies right is making them predictable. The private sector can adapt to bad policies; it cannot adapt to rapidly changing policies. Countries need to develop a consistent vision that lays out their policy framework, both the general direction of the policies they intend to take, and the mechanisms by which policies are formulated.
- (178) **A clearly delineated and strategic role for the public sector.** Governments must lay out the roles they see for themselves in the productive sectors – by and large they should stay out of businesses that do not have the nature of "public goods." In particular, governments should facilitate the working of private markets.
- (179) **Let markets work.** Government regulation should be limited to health and safety, protection from fraud, and to areas where there are monopolistic practices that could hurt the economy. Prices should be market-determined and subsidies eliminated. This policy advice needs to apply to the OECD countries as well as their African partners. Frequently, the OECD countries, including the U.S., preach liberalization to their African partners while their own markets for agricultural products remain highly protected from imports from Africa.
- (180) **Protect private property and private contracts.** An important role of government is to ensure contracts are enforced; in most SSA countries, the legal system is ineffective in guaranteeing contract enforcement.
- (181) **Open up the economy.** Government policy must eliminate quantitative restrictions and other restraints on international trade, and use tariffs solely to raise revenues, not to direct economic behavior. There should not be any system of exemptions. Again, this advice needs to apply to Africa's OECD partners as well.
- (182) **Develop a fair, predictable and low marginal rate tax system.**
- (183) **Provide a facilitating environment for the formation of professional organizations that can help provide "semi-public goods."**

(184) **Develop a Private-Sector/Public-Sector Partnership**

(185) However, it is not only a matter of what countries shouldn't do, but also what they should do. They must first, as a Deputy governor of the central bank of Malaysia once said, "See the private sector as their partner. When the private sector grows, then the public sector benefits as well." The problem in Africa has been that most governments do not see the private sector as a partner, but rather as a competitor. Governments must look at their policies, strategies and programs from the point of view of how they will further the goal of private sector-led, poverty-reducing growth.

(186) Following are a number of examples of how such a partnership might work.

(187) *Agricultural Research and Extension.* A number of studies have demonstrated that investments in agricultural research and extension in Africa have high economic rates of return.[28] African agricultural research has generally been the province of the public sector,

[28] James F. Oehmke and Eric W. Crawford.1993. "*The Impact of Agricultural Technology in Sub-Saharan Africa: A Synthesis of Symposium Findings.*" MSU International Development Paper No. 14. East Lansing: Michigan State University. http://www.aec.msu.edu/agecon/fs2/papers/idp14.pdf

although there are a number of examples of private-sector-funded research, or indeed, of private-sector research institutions. In general, private-sector research is focused on crop breeding, especially for cash crops, whereas public-sector research should be focused on farming systems, farming practices, environmental sustainability, etc., areas where information is not embodied in a product for sale. This definition would also include breeding of open-pollinated varieties of food crops, where seed retention by farmers reduces the private sector's incentive to invest in developing new varieties.

(188) Currently, a team of leaders from African National Agricultural Research Systems (NARS) is preparing a set of recommendations to guide the needed restructuring of the International Agricultural Research Centers so these organizations will better serve African public as well as private sector interests in developing new food and cash crop technologies.[29] Careful attention needs to be given to results from these deliberations to guide future investments in developing food and agricultural technology and related extension/delivery systems.

(189) There also needs to be some rebalancing in many countries between basic and more adaptive research. Few of these countries have the resources to do basic research and need to be in the role of borrowing and adapting technology. There is also much work to do on developing basic biosafety protocols before adoption of biotechnology can become more widespread. There has been too little work on the post-harvest side of the equation – storage, transport and processing, and here there is particular scope for private-public partnerships, especially given the large post-harvest losses of traditional crops and the vast opportunities for value added industries in agribusiness. This involves some serious reorientation of the way agricultural research institutions work since typically these institutions have viewed farmers as their main clients, and have neglected clients such as traders, processors, or consumers.

(190) What would be the nature of such partnerships? On the public sector side they would consist of the general policy prescriptions of macro-stability, reduced regulation and trade openness, as well as more positive steps of ensuring the provision of key infrastructural elements, effective phytosanitary regulation and a fair tax regime. Developing the relationships requires the government sitting down with potential agribusiness firms and discussing what these firms need in order to invest profitably, and then, excluding special privileges, filling those needs.

(191) *Information Technology*. African governments and donors must have a visionary perspective with respect to information technology. Currently, many governments view the internet and the telecommunications system as a monopoly they should control. Governments everywhere in the world worry about the free flow of information and try, for good reasons as well as bad, to regulate and limit the free flow of ideas. However, the power of a free market in ideas is difficult to envisage even at the beginning of the twenty-first century. Governments need to understand that the benefits of regulation and control need to be balanced against the power of an untrammelled market in ideas. Governments need to privatize telecommunications, develop a regulatory capacity, eliminate tariffs on computers and telecommunication equipment (many governments have treated computers as consumption goods in their tariff schedules), and license and sell off cell phone frequencies. Information is the engine for economic growth, and visionary governments will do everything they can to reduce costs and promote broad access. Governments should also develop strategies for expanding access to information technology, including the use of targeted subsidies.

[29] SPAAR Secretariat. 1999. *SPAAR/FARA Vision of African Agricultural Research and Development,, op. cit. and forthcoming SPAAR/FARA plenary session to be held from April 2-7 in Addis Ababa, Ethiopia*

(192) *Transportation Infrastructure.* Transportation is the life-blood of an economy. A number of countries have created public-private partnerships to manage a road fund, financed by gasoline taxes and other user fees, so as to ensure maintenance and rehabilitation of critical roads. Governments must site road construction and improvement in areas with high growth potential. Governments need to get out of the direct government construction business and contract out their construction needs. Key elements of transport infrastructure – particularly airlines, ports and railroads –should be either privatized or handed over to private management.

(193) *Export Policy.* It is no longer enough to have eliminated quantitative restrictions, liberalized the exchange rate regime, and made tariffs low and uniform. Governments and the private sector now need the capacity to deal with the plethora of international institutions and regulations engendered by the WTO system, and in particular those on agriculture and on phytosanitary regulations. They need to have the capacity to represent their interests effectively in the WTO. They need to have the ability to take information on the opportunities that WTO agreements provide and develop export strategies based on these opportunities. They need to work together with the private sector to provide critical assistance for penetrating new markets. Given the small sizes of these economies and the limited technical staff available, developing this type of information in a cost-effective way requires regional cooperation.

(194) B*iotechnology Policy.* African countries need to have a forward-looking biotechnology policy. Biotechnological advances offer tremendous opportunities for increasing yields, reducing pest damage, protecting the environment and improving the nutritional value of many crops. In order to make the best use of genetically modified varieties, governments need to (1) develop the capacity to facilitate the implementation of biosafety guidelines and regulations and (2) develop and strengthen policies, information systems and training in biotechnology. There is also a need to begin a broad discussion on the costs and benefits of biotechnology.

(195) **Invest in Knowledge and Related Technology Generation**

(196) The new global economy is an information-based economy. This is true in ways both obvious and subtle. The knowledge economy is more than computer chips and the internet. It is, importantly, the use of product and market knowledge to produce high-value items for specific markets. For example, to go back to flowers; success in the world flower market requires technical knowledge (such as how to develop flowers which can maintain quality while being shipped long distances); marketing knowledge (what do consumers in Germany want this year?); and organizational knowledge (how can we get flowers cut today to Amsterdam tonight)? Clearly, the first step in building a knowledge-based economy is developing the human talent necessary to manage production based on technology, language and symbols. Helping develop African research capabilities, including the public-good food crop technology area, is especially strategic to the process of helping farmers capture emerging local and global market opportunities.

(197) African countries and donors must make investing in education their most important long-term priority, and within that priority must put more emphasis on quality than quantity. The past decades have seen the erosion of quality at all levels of African education systems, and particularly of universities. There must be a renewed emphasis on math, science and technology with a commitment to hook up universities and schools to the internet. Public-private partnerships in the financing of technology centers are critical to success.

(198) Reform of the education system will be as difficult as other structural reforms. In most countries, the option of restricting access in order to maintain or improve quality is not politically viable. It may be possible to use modern information technology, particularly radio, as a mechanism for upgrading pedagogical inputs into the classroom. Parent participation,

objective standards of performance, and more decentralization of responsibility and authority may all act to bring higher levels of accountability at the school level.

(199) Reforming universities, particularly in the area of more self-financing by students, is a political nightmare, with students being among the most politically active segments of the population. Yet the high level of subsidization of students without any means testing, has both shifted unnecessarily high proportions of the governments' limited education budgets into the tertiary sector and at the same time resulted in reducing available resources to levels that have adversely affected quality. Infrastructure is deteriorating, faculty are underpaid, books and journals unavailable. Yet there is hope. Makerere University in Uganda has demonstrated that carefully structured reform programs are possible, and that many students are willing to pay for quality education. Moreover, the decline of public universities has provided space, in many countries, for the rise of private universities and other tertiary institutions.

(200) Strengthening agricultural research systems, particularly to focus on adaptive research, remains a major challenge. With support from USAID and other donors in the 1980s, many African countries made major strides in streamlining their systems. Yet with the reductions in donor and domestic budget support in the 1990s, many of the systems have lost key personnel and remain strapped for operating funds. Regional research networks across countries help gain economies of scale by allowing different countries to focus on particular crops and then sharing results across the region. But regional networks are complementary to, not substitutes for well-functioning national research systems. Without a renewed dedication to strengthening agricultural research systems within Africa, the productivity growth needed to spur broad-based economic development will be unlikely to emerge.

(201) **Invest in Rural Infrastructure**

(202) For too many years African governments and donor agencies as well have underinvested in rural infrastructure (see Table VIII). Although data are hard to come by, "in most African countries the [agricultural] sector receives less than ten percent of public (recurrent and investment) spending but accounts for 30-80 percent of gross domestic output."[30] Even when investment in rural infrastructure, particularly roads, is added to the total, the proportion of public spending on the rural economy is much less than would be indicated by its importance to the economy. A strategy that is focused on agriculture as the primary engine for cutting hunger must increase in a major way the stock of public capital in the rural area.

(203) *Roads.* African marketing costs are the highest in the world. This is partly a result of geography. Bloom and Sachs have identified a number of geographic features (sparse populations, a large proportion of which lives very far from the sea, a small coastline relative to total area, the barrier of the Sahara) that makes transport expensive.[31] But it is also partly due to bad policy, including an inability to maintain roads. For most Africans living in rural areas, good roads are a lifeline to markets, health facilities and to other critical services. Poor road infrastructure reduces farm-gate prices and, thus, wage rates. This is a critical area that needs redressing by public policy makers.

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[30] *Can Africa Claim the Twenty-First Century, op. cit.*, p.189

[31] Bloom, David E. and Jeffrey D. Sachs, "Geography, demography and Economic Growth in Africa," *Brookings Papers on Economic Activity 2.*

(204) **TABLE VIII. INFRASTRUCTURE INDICATORS BY REGION**

Country Group/Region	*Electric Power Consumption (kw-hours)*	*Telephone Mainlines Per 1,000 People*	*Paved roads (% of total roads)*	*Dollar cost of three minute call to U.S.*	*Population with access to safe water (%)*
	1996	1997	1997	1997	1995
Low and Middle Income	851	60	30	6.22	75
East Asia and Pacific	624	50	10	5.60	77
Europe and Central Asia	2,788	204	83	4.33	---
Latin America and Caribbean	1,347	110	26	4.42	75
Middle East and North Africa	1,166	75	50	6.02	---
South Asia	313	18	41	---	81
Sub-Saharan Africa	439	16	16	8.11	47
Sub-Saharan Africa (exc. South Africa)	146	10	---	---	46

Source: World Bank. *Can Africa Claim the Twenty-First Century?*

(205) *Water.* In much of Africa women provide most of the labor in agriculture. But women also must cook, care for children, gather firewood and haul water. Surveys in Burkina Faso, Uganda and Zambia have found that African women move, on average, 26 metric ton-kilometers per year, compared with less than 7 metric ton-kilometers for men.[32] While improved roads can reduce the time spent on transporting crops and fuel wood, improved provision of water will have many benefits, not the least of which will be the release of women's time for agriculture. Moreover, these infrastructural investments will also free the time of girls as well, thus making it more possible for them to attend school.

(206) *Irrigation.* Africa has the lowest level of irrigation of any region in the world. Moreover, the returns to irrigation, have in many cases been low largely because of poor government policy. Nevertheless, there are substantial opportunities for small-scale irrigation (which does not require public management), particularly for higher value crops. Here again, the key constraint is lack of resources.

(207) *Electrification.* A vibrant rural economy requires vibrant market towns, towns that buy food, process agricultural commodities, and market consumer goods and agricultural inputs. Electrification of these towns will enable the small- scale manufacturing sector to grow. It is the synergies between agriculture and non-agriculture that lead to rapid poverty-reducing growth. In many countries, there is a need to open electrical markets to greater competition, as the poor performance of national monopolies have slowed the growth of electrification.

(208) **Empower Farmers**

(209) As was noted above, one of the most promising changes that has taken place in Africa has been the progress in moving from authoritarian to democratic regimes. An important aspect of

[32] *Can Africa Claim the Twenty-First Century,* p.140.

this change has been the increased empowerment of non-governmental groups, of what is called "civil society." This empowerment has several faces:

- (210) increased space to make one's own decisions;
- (211) increased influence over public sector decisions; and
- (212) increased collective action.

(213) *Increased Space to Make One's Own Decisions.* This area of empowerment has largely occurred as the public sector has reduced its direct control over the economy. This is particularly true in the area of marketing where, with the caveats discussed above, the public sector's monopoly over marketing has been reduced, if not eliminated entirely. However, regulatory uncertainty has meant that the private sector has not always rushed in to fill the void left by the abolition of public monopolies.

(214) *Increased Influence Over Public Sector Decisions.* This area of empowerment takes two forms: macro and micro. At the macro level, farmers joining together into farmers' associations have the potential to influence government policy. This has yet to happen in any systematic way in most countries. While democracy has meant that political parties have to fight for votes, the political process in most of Africa has not yet evolved into one where economic issues and interests define the political parties. Thus, farmers need to use other mechanisms besides elections to influence public policy. Increasingly, donor assistance to farmers' organizations to enable them to understand the implications of economic policy, to articulate positions and to bring their positions before the political leadership will be an important mechanism for reordering public priorities.

(215) *Increased collective action.* There may have been more progress at the micro level, where governments and their donor partners are attempting to allow beneficiaries of public investments to have increasing influence over project choice, design and implementation. This has resulted from what seems to be a widely-accepted belief that projects work better with the active involvement of the beneficiaries. With increased decentralization on the one hand, and the reduction of central government capacities on the other, the space for local control has expanded in two ways – first, through increased influence on government programs and second, through the assumption of responsibility by local, private groups for services and functions formerly provided by government.

(216) It is this latter process, increased collective action by farmers' groups to take control over their own futures, which offers important hope for an agricultural transformation. Historically, cooperatives in Africa were state-controlled. It is only in recent years that we have seen the emergence of truly independent cooperative societies and other farmers' organizations. These groupings of producers not only offer the possibility of greater influence on public policy, but also provide an avenue for members to do things collectively that they couldn't do efficiently individually—buy inputs, obtain credit and market crops. The failure of government marketing systems has left a vacuum, and producer organizations are beginning to fill that vacuum, striking their own deals with banks and agribusiness firms. This is a very salutary development and it offers real hope for a middle way between inefficient public and sometimes monopolistic private marketing systems.

(217) Empowering traders and processors, particularly those operating on a small or medium scale, through the creation of professional groups, can have similar salutary effects. If the rules governing such groups are carefully designed so as to avoid collusion, collective action by trader and processor groups can help improve contract enforcement, develop grades and standards, facilitate group investment in infrastructure, and promote regional trade through the

improvement of market information and creation of political pressure to reduce non-tariff trade barriers.

(218) **Develop More Sophisticated Marketing, Contracting And Risk-Sharing Arrangements**

(219) It has been demonstrated that liberalization of agricultural markets per se does not necessarily lead to sharp increases in either production or productivity in Africa.[33] Market institutions in most African countries are generally characterized by:

- (220) Forms of exchange involving high transactions costs;
- (221) Reliance on personalized trading relationships;
- (222) A semi-subsistence agricultural production structure;
- (223) High market risks and ineffective coordination, which depress incentives to invest in productivity-enhancing technology;
- (224) Uncertain enforcement of property rights;
- (225) Limited vertical coordination or integration between input delivery, farm finance and crop sales;
- (226) Limited market information;
- (227) Limited product grades and standards;
- (228) Transport constraints;
- (229) Institutional constraints in linking African farmers to foreign markets;
- (230) Tradeoffs between market liberalization and government's need to mobilize fiscal resources; and
- (231) Distrust of traders by government and of government by traders.

(232) Most of these problems arise from the structure of markets in African countries. This structure is characterized by semi-commercial production of food crops, high transactions costs, and high degree of uncertainty with respect to government policy. Marketing is marked by high costs and low investment because there are limited scale economies, financial markets are weak, and trade is largely carried out by traditional, small-scale entrepreneurs. In the export sector, institutions are more highly developed, either because of the historic role of state export companies, or because the nature of the trade itself requires more sophisticated markets.

(233) How to break out of what is a low-level equilibrium trap, where low levels of market articulation stem largely from low levels of income and commercialization? There are some areas where government action can improve things; in particular, more consistent and stable government agricultural policy, investments to improve market information, infrastructural investment that reduces transactions costs, and improvements in the implementation of the rule of law. In addition, any actions to increase the size of the market through regional integration will also be helpful.

(234) **CONCLUSIONS**

(235) To recapitulate the argument that has been made above: Cutting hunger can only be accomplished by reducing poverty, and reducing poverty depends on rapid agricultural-led growth. Such growth can best come about by taking advantage of the new opportunities

[33] This section is largely derived from Jayne, et. al, "Improving the Impact of Market Reform on Agricultural Productivity in Africa: How Institutional Design Makes a Difference," *MSU International Development Working paper no. 66*, 1997. http://www.aec.msu.edu/agecon/fs2/papers/idwp66.pdf

provided by a rapidly growing international market – seeking new, higher value agricultural export markets. However, succeeding in these markets will be difficult and requires a number of radical changes. Most important, countries need to develop a new vision of development that puts the economic diversification agenda at the center of their strategies. Second, countries need to radically reform their economic policies to center them on encouraging the development of the new global, private sector-led economy. Third, governments must develop new active partnerships with the private sector to develop new institutional mechanisms to solve a number of thorny questions. Fourth, governments and external donors must invest in knowledge generation in a much more intensive and effective way than they have so far. Fifth, governments and donors must invest heavily in rural infrastructure – roads, water, telecommunications, power and irrigation. Sixth, governments and donors must empower rural producers to find solutions for their own problems through collective action. And finally, governments must work together with the private sector to develop more sophisticated and highly articulated market institutions. In conclusion, the approach advocated thus does not see a "retreat" of the state, but rather a redefinition of the state, with the state playing a key, but different, catalytic role in helping energize market-oriented development.

(236) This paper has been about what to do rather than how to do it. There are three important "how" questions that have not been dealt with. And while the paper offers no solutions, it is important to at least discuss these tough questions more fully.

(237) **Resource Mobilization.**

(238) In many ways, the strategy presented here is not primarily based on massive new flows of resources, but rather on a radical restructuring of resource use. Nevertheless, rapid growth requires higher levels of investment and saving than is currently the case. Africa is currently investing 17% of GDP, the lowest level of any developing country region. Of this 17%, 15 percent of GDP comes from domestic savings (again the lowest level of any developing country region), while 2% comes from foreign sources. What are the likely sources of new savings in Africa?

(239) The most important source is from the people themselves. A critical issue here is government, which, on the one hand needs to be able to raise sufficient tax revenues to provide a critical level of public goods, while on the other hand not crowd out private investment.[34] Traditionally, African governments have been running deficits of around 6.5% of GDP, of which 4% has been financed by donor assistance and 2.5% by borrowing domestically. While there are no good figures on public investment, it is unlikely to be more than 5% of GDP, meaning that the government is a net borrower.

(240) That means that the private sector must provide between 20 and 25% of GDP in savings and investment if the economy is to have the kind of growth needed to cut hunger quickly. This is not that great a stretch, although it may not occur quickly. Domestic savings rates are around 20% in most of the developing world (they are an incredible 37% in East Asia). Opening up the economy to new investment opportunities will engender new saving and investment. There is substantial capital that Africans hold abroad because of political and economic instability. Moreover, there have been times when the capital flight out of Africa has reversed itself, as economic conditions in certain countries became more favorable. Moreover, the new

[34] But if government can raise 16% of GDP through efficient tax collection, and if donors provide an additional 4%, then it should be possible to provide the necessary public expenditures (in percentage of GDP – 5% for education, 2% for health, 6% for infrastructure and agriculture, and the remainder for general administration, defense and internal security) without borrowing. Of that 20%, the ratio of recurrent to capital expenditures should probably be on the order of three to one, 15% recurrent and 5% investment. That would enable the government to be a net saver, rather than a net borrower.

globalization era means that there are substantial amounts of international private finance looking for good investment opportunities.

(241) But the real issue is less the quantity of investment than the quality of that investment. In large measure that means a reduction in the public-sector share and an increase in the private-sector share. But it also means a pronounced improvement in the quality of public expenditure. This will be discussed below in the section on governance, but a little arithmetic is helpful. Growth is the product of investment times the effectiveness of that investment (traditionally, the capital-output ratio). An economy that invests a net 20% of GDP and has a capital-output ratio of four will grow at 5% per year. For each 1% increase in the investment rate or 1% improvement in the capital-output ratio, the growth rate will increase by 1%. However, improvements in the capital-output ratio that result from deregulation, improved quality of government expenditure, etc. could also improve the efficiency of the capital already invested, increase the private rate of return, and encourage more investment. So efficiency improvement, all things being equal, has broader effects than quantity improvement.

(242) This is also true of donor assistance, which has been provided to the wrong countries for the wrong reasons in the wrong sectors. For Africa to see a reduction in hunger, donors must redress the imbalance of the past decade when they abandoned the rural economy and abandoned public investments in rural infrastructure. Given shrinking donor resources, donors must be much more strategic. Unfortunately, increasingly, donors are being driven by narrow domestic constituencies which push for one or another “silver bullet” interventions, and fail to see the overall picture. Unless this is turned around, Africa will not receive all the help it needs to avoid more decades of development failure.

(243) A word on debt. It is estimated that African countries carry about $230 billion in international debt, and pay about $14.1 billion in debt service, or $22 per capita. There has been a lot of public discussion of this debt, but the fact remains that actual African debt service is the lowest in the world as a share of GDP and of exports. Moreover, this debt service is offset by $28.0 billion annually in overseas development assistance, which, even in net terms, is higher than that received by any other region in terms of per capita assistance ($44), share of GNP (4.1%) and share of gross domestic investment (22.3%). These numbers are even larger if we exclude Nigeria and South Africa, both of which receive little aid.[35] While there is no tradeoff between debt relief and reduced foreign assistance, it is important to recognize the magnitude of these net flows, even in the face of substantial debt service.

(244) **Human Capacity In The HIV/AIDS Era**

(245) There is no doubt that the HIV/AIDS pandemic has the potential to seriously increase poverty and hunger and reduce the capacity for accelerating economic growth in medium to high prevalence countries. At the macroeconomic level AIDS will seriously reduce the quantity of skilled labor through both death and morbidity and reduce private savings. While it is hard to quantify the impact of these effects, several studies estimate that they could shave one to two percent off of overall economic growth, and from 0.3% to 1.0% off per capita growth.[36] To cut hunger substantially by 2015 requires per capita growth rates of 4-5% per year and overall growth rates of 7-8%, so the impact of AIDS could mean needing to increase the non-AIDS growth rate by at least a third.

[35] For SSA, excluding Nigeria and South Africa, net ODA equals $13.4 billion or $27 per capita, 7.6% of GDP and 38.5% of gross domestic investment.
[36] Lori Bollinger and John Stover, “The Economic Impact of AIDS,” (The Futures Group, 1999)

(246) At the household level the impact can be severe. Poor households have little margin in terms of savings and income. An AIDS illness can result in increased time spent on caring for the sick person, the loss of labor from the AIDS-infected family member, increased expenditures on health care and on funerals. The end result is sharply reduced consumption. For example, in Cote d'Ivoire, average consumption fell by 44% in the year following the death or absence of the AIDS-infected household member. Moreover, the impact of AIDS on the household is a long-term one, as families lose the vibrant middle, and children are forced to leave school because they are orphaned or are needed to replace lost household labor, and older people are left without their children to support them in their old age.

(247) Much of this leads to a fall in agricultural production. In Zimbabwe, for example, an AIDS death to a breadwinner has been estimated to reduce farm-level agricultural output by 61% for maize and 47% for cotton. In Tanzania, a household with an AIDS patient lost from between 29% and 43% of its labor supply during that year.

(248) So what can be done? This is not the paper to present an AIDS prevention strategy. Nevertheless, there has been success, both in Africa and in the developing world at large, in combating AIDS. What is needed is the highest level of political commitment, and a broad approach that examines the impact of every development activity on the pandemic and the impact of the pandemic on the activity. This does not mean, however, that every development project needs an HIV/AIDS component, as this may create parallel structures duplicating each other's efforts, but none reaching a critical mass. It may be better to concentrate resources on a more systematic national HIV/AIDS program. For example, because of HIV/AIDS it may be important to concentrate on labor-saving technologies, such as moving away from relying principally on natural methods of providing soil nutrients to the broader use of chemical fertilizers, the development of better hand tools, such as mechanical tillers, and the increased investment in labor-saving infrastructure such as piped water, better wheeled transport, etc.

(249) **Governance**

(250) The most enduring reason for the high levels of hunger in Africa is the poor governance the region has experienced since independence (Table IX). As Table IX demonstrates African states have the worst governance records of any region in the world, with over 50% in the two lowest quintiles, and only 13% in the two highest. A critical question that needs to be addressed is what are the causes of this poor governance. It is merely a matter of bad leadership? Does it have its roots in Africa's colonial experience? Are there cultural issues at play? Geography?

(251) There have been a number of studies of what are called in the literature "weak states." These studies suggest that the problems that African states face are organic, embedded in their history and geography, and in some cases, their culture. Most African states are made up of a number of different ethnic groups, and the central political task they have faced is to build a national identity, or at least a stable political majority. The early attempts at nationalism, coming out of a fight against colonialism, centered around the symbol of the "big man." These heroes – Nkrumah, Kenyatta, Nyerere – were men of great international stature. For many of them, *l'etat, c'est moi,"* was a reality, and their faces could be found everywhere – on the currency and on the walls of every public building.

(252) **TABLE IX. DISTRIBUTION OF GOOD GOVERNANCE**

Country Group/Region:	*Governance Quintiles (% of Quintile)*					
	Highest	*2nd Highest*	*Middle*	*2nd Lowest*	*Lowest*	*Sample*
East Asia	8.6	2.9	2.9	2.9	0.0	3.4
Africa	2.9	14.3	38.2	32.4	42.9	25.9
Middle East & North Africa	0.0	25.7	11.8	5.9	14.3	10.9
South and Southeast Asia	0.0	14.3	8.8	17.6	14.3	10.9
Europe and Central Asia	14.3	17.1	14.7	20.6	22.9	19.5
OECD	65.7	5.7	0.0	0.0	0.0	14.4
Latin America and Caribbean	8.6	20.0	23.5	20.6	5.7	14.9

Source: D. Kaufmann, A. Kraay, and P. Zoido-Lobaton, 1999. "Aggregating Governance Indicators." World Bank Working Paper #2195 . See document for definition of governance indicator. (http://www.worldbank.org/research/growth/corrupt_data.htm)

(253) Many of these leaders were revolutionaries, steeped in socialist thinking, fighting the economic power embedded in multinational companies. Their economic philosophy was import-substituting industrialization, and they saw the state as the instrument of transformation. The state also became the instrument for maintaining political power, and the dispensing of state favors was more important than the coercive power of the state. This use of the state was no means just an African phenomenon, but coupled with the traditional network of obligations to kith and kin, the state apparatus was quickly politicized, and the bureaucracy often de-professionalized.

(254) Thus, African states became characterized by the identification of the leader and his party with the nation-state itself, ethnic tension, lack of a coherent national vision, the use of the state to dispense political favors, the expansion of the state's role beyond its administrative capacity, and the erosion of the professionalism of the civil service. Without a tradition of strong institutions of accountability, it became commonplace in many countries for both politicians and bureaucrats to use the power they controlled to enrich themselves.

(255) Over time, the promises and hopes of self-determination began to fade, and the inability of the political system to transform the economy became more evident. Governments, responding to their development failures, became more coercive and lost legitimacy. The military stepped in, and each succeeding generation, from generals to colonels to sergeants, saw the coup as a way to achieve power and wealth. Ethnic tensions were exacerbated and sometimes broke out into civil war. The oil crises in 1974, and especially 1979, exposed the economic weaknesses of these societies and plunged them into an economic freefall, but not before they had managed to borrow and squander billions of petro-dollars.

(256) Structural adjustment and political liberalization followed. But the new liberal economic and political systems still face the same problems. How to build the nation-state out of many ethnic groups? How to make government an effective instrument for providing critical economic and social services? How to distribute the benefits of the political system fairly? How to shift allegiance from the party and the person to the state and the government? How to

build institutions of accountability, including a free and responsible press? How to make the government smaller and more focused? How to move from a system of rule by men to a system of rule by law?

(257) Too many of the forty years following independence have seen much too little progress in successfully fighting poverty, and African countries face the same problems in a much more difficult environment – reduced natural resources, rapidly growing populations, high levels of urbanization, the specter of HIV/AIDS. The strategy presented in this paper will only work if these political and governance problems can be solved.

(258) So, is this a feasible strategy? Not everywhere, and maybe, not in most African countries at this time. It is probably necessary to begin working on a broad scale with a few African countries that already have some of the prerequisites for such a strategy to work – Uganda, Mali, Mozambique, Ghana, Nigeria, possibly Kenya and Ethiopia, and most importantly, South Africa. In other countries, it may not be possible to implement the full strategic agenda presented here, although many parts of the strategy can be. But this "variable geometry," should be used to Africa's advantage, an opportunity for deep learning and sharing of experiences.

(259) **TOWARDS A U.S. RESPONSE**

(260) U.S. efforts need to help stimulate African economies, reduce poverty, and help the poor feed themselves. The U.S. must assist African nations to improve the performance of agriculture and the broader food system. No country has been able to reduce poverty substantially and spur economic transformation without first sharply increasing productivity in its agricultural and food system. This focus will help avert future crises and generate the resources within Africa to address ongoing humanitarian concerns, such as improving health, nutrition, and education.

(261) Development involves much more than economic growth. It involves improving human welfare and allowing all people the opportunity to achieve their full potential. Particularly important is addressing the needs of those most excluded from the benefits of the current system, who are disproportionately women and children. But without broad-based economic growth, African countries will lack the resources to finance their health care systems, schools, and safety-net programs for the destitute. Employment opportunities for the poor, especially women, in micro-enterprises, will wither because of a lack of purchasing power among the mass of the population for the products of these small firms. And the natural environment will suffer, as people exploit whatever resource they can to assure day-to-day subsistence.

(262) Broad-based economic growth from improvements in agriculture and food can contribute significantly to these other important development priorities. Use of cost-effective techniques to promote child survival, such as vaccinations and oral rehydration therapy, can only be sustained over the long-term if the economy is growing enough to help finance these services and if families have the income to get access to them. Better education (especially for girls) and nutrition programs similarly require local economic growth to be sustainable. Environmental protection will be enhanced because increased agricultural productivity reduces pressures to expand farming into fragile environments and increases carbon sequestration in more luxuriant biomass. Chemical fertilizers used in conjunction with organic inputs and herbicides, in a no-till system, can greatly reduce labor requirements in farming, thus allowing households whose main breadwinners have been killed or incapacitated by AIDS to continue to produce some of their own food. Political stability will be enhanced by expanded employment opportunities for the burgeoning labor force and more stable prices for basic staples.

(263) Elements of the a New U.S. Strategy (These elements will be developed further based on feedback from key leaders and organizations in Africa and the U.S.)

(264) U.S. assistance to cut hunger in Africa should focus on particular U.S. expertise. There is no quick fix. Economic growth in Africa requires a sustained 15-20 year effort. Medium-term progress can be made and can be measurable by helping African nations to:

- (265) ***Develop programs and policies that strengthen farmers, businesses, and markets to compete in the global economy.*** African countries need to continue to open their economies to the private sector and make policy processes more transparent. They need assistance in strengthening local capacity to analyze and formulate programs and policies that will enhance public-private partnerships and foster broad-based growth. Particularly important will be increasing agricultural production and making African products more internationally competitive. Rapid urbanization and growing regional and international trade will offer both new opportunities for farmers as well as put existing marketing arrangements under stress. Transportation infrastructure upgrades are needed, but these may be best done through multi-lateral assistance.

- (266) ***Strengthen rural education, training, and public institutions.*** Education is especially critical for rural economic progress and a better quality of life. Women, particularly, need improved literacy, better education for careers, and basic skills to improve the health and nutrition of their families. African economies are constrained by declines in scientists, educators and extension specialists, and the lack of institutions to train them. One major casualty of the short-term focus of USAID is the decline in long-term training and institutional strengthening, particularly for agriculture. Training and institution building were the major contributions the U.S. made to the economic development of Asia and Latin America in the 1950s and 1960s. The progress of many African countries in the 1990s was due in part to the contributions of scientists and policy analysts trained earlier in the U.S. New information technologies offer expanded opportunities for lower-cost training and building institutions, for example, through partnerships linking U.S. and African universities in agriculture, biotechnology, and policy analysis.

- (267) ***Expand agricultural research and outreach to exploit science-based agriculture and information technologies, stimulate new ties with business, and avoid damage to the environment.*** Food and agricultural research in Africa remain weak, in spite of recent substantial reforms. Research and extension must be responsive to the needs of farmers and to market demands. Biotechnology offers special opportunities for increasing yields, refining crops for local conditions, and decreasing environmental damage. Once improved agricultural technology is developed, it needs to reach farmers, traders, and processors. Greater use of private-public partnerships, competitive grants, and links with the U.S. agricultural research community are all means of better developing and disseminating vital new knowledge. New information technologies offer special opportunities to extend these collaborations.

- (268) ***Improve rural governance.*** Many African countries are decentralizing services, creating local units of government, and growing vibrant civil society. In rural areas where most Africans live, these changes allow greater local initiative through farmer organizations, local school and health boards, and county and township governments. The U.S., through knowledge of federalism and strong extension services, is well suited to helping Africans improve these local organizations.

- (269) ***Link emergency food relief with long-term development***. Humanitarian emergencies will remain. The United States Government has made substantial progress in recent years in framing its relief operations within a longer-term development outlook. This emphasis needs to continue.

- (270) ***Coordinate food and agricultural programs with actions to combat HIV/AIDS.*** The growing tragedy poses a huge challenge. FAO projects up to ***one-quarter*** of agricultural workers may be lost by 2020 in the nine countries (all in Eastern and Southern Africa) hardest hit by HIV/AIDS. Agricultural technologies need to be developed with attention to the special needs of these severely constrained rural economies. Agriculture and food can contribute substantially to the battle against AIDS, which is spreading rapidly in rural areas. Better nutrition from home gardens can prolong survival rates; extension offices can counsel on health and nutrition, and agricultural distribution systems can distribute condoms.

(271) Not for the first time Africa stands at a crossroads. But this may be the last, great chance Africa faces. There are huge opportunities and huge obstacles. Success could not only mean a cutting of hunger by half in fifteen years, but also the beginning of a virtuous circle that could mean the reduction of poverty, disease and war on a broad and continuing basis. This is a chance that must be seized.