BEYOND HUNGER

AN AFRICAN VISION
OF THE 21ST CENTURY

Beyond Hunger Project
ICIPE SCIENCE PRESS
The International Centre of Insect Physiology and Ecology
EXECUTIVE SUMMARY OF WORKSHOP ON
"BEYOND HUNGER: AFRICA'S FUTURE 1957-2057" held at the
Tea Hotel, Kericho, Kenya, June 1-5 1987 co-sponsored by the
African Academy of Sciences (Nairobi, Kenya);
Council for the Development of Economic and Social Research in
Africa, CODESRIA, (Dakar, Senegal); and the Alan Shawn
Feinstein World Hunger Program, Brown University,
(Providence, Rhode Island, U.S.A.)
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I
BACKGROUND AND PROBLEM

In the past twenty five years the image of Africa has shifted from great optimism of the immediate post-independence era (the 1960s) to one of immense gloom and pessimism. The independence of Ghana ushered in the dawn of a new age for the continent of Africa and its peoples. But with the onset of the great African drought 1968-75 and the oil crisis of 1973 and dramatic shift in the continent’s image ensued. In the minds of many Africa is now characterised as a continent in crisis, a highly vulnerable region of the world — a continent caught in an inevitable downward spiral. Famine, high population growth rates and declining agricultural production have rapidly become the most common symbols of African existence to the external world, replacing other historically entrenched stereotypes. Conventional assessment of Africa’s fragile natural resource base have conjured up an international image of a continent facing imminent collapse.

This persisting negative image of Africa as a continent in crisis, if unchallenged may not only be misleading but may also cause articulate Africans to doubt their own self-determination and critical role as levers of change for a better future. The database on which this image rests is weak and questionable; time horizons for evaluating development trends on the continent are short and often externally defined and the methodology is overly simplified neglecting the wide and rich diversity of local level cultural, social and economic basis in African society which offer an alternative interpretive framework for Africa’s future and analysis is mostly distant (done mainly by experts based in international organizations outside Africa).

In the absence of credible alternative visions, prevailing forecasts about Africa’s future extrapolated events could become self-fulfilling prophesies, frustrating the marshalling of innovative thinking, creativity and energy needed for new directions of thought and action.
A number of Africans representing a broad range of academic disciplines and institutions who see a need to break the hold of present limited perceptions of the continent are beginning to make their voices heard around the region and in international fora concerning a possible future direction in the 21st century Africa. While they do not underestimate the legacies of the past and the structural constraints to which they have given rise, they are concerned about the need to restore confidence in the capacity of Africa to survive and indeed thrive in the 21st century and future times. Africa cannot forever be haunted by its past: after all many cataclysmic events of the past years like the Jewish holocaust or Hiroshima have not led to an eternal pessimism among the Japanese or the Jewish peoples. It might even be a tremendous basis for overcoming disabilities inherent in technological ‘political’ and economic incapacity to become sources of positive change in themselves.

In today's difficult situation, Africa needs new, magnetic images and aspirations of the future. This is a time that calls for creativity in working together across academic disciplines, policy institutions and political programmes in order to mobilize natural, intellectual, managerial and financial resources toward a new Africa.

The Kericho conference represents a first step in an effort to mobilize continent-wide support for a new kind of imaging of Africa's future as a basis for formulating and implementing alternative development strategies.

What will Africa look like in the year 2057 — a century after Sudan and Ghana initiated the wave of political independence in sub-Saharan Africa?

Usually nobody adopts such a long-term perspective. For governments and donor agencies as well as many others, including the media reporting on Africa, the future ends at year 2000. Yet, in development terms, thirteen years is nothing and a child born today will be "only" 70 years by 2057.

Recognising the needs for a realistic time-frame for Africa's future development and a broadening of the policy and research agendas beyond their current stalemate, the Nairobi-based African Academy of Sciences, the Dakar-based Council for the Development of Economic and Social Research in Africa (CODESRIA), and the Alan Shawn Feinstein World Hunger Program, based at Brown University, U.S.A., are currently sponsoring a research and development policy project titled "Beyond
Hunger: Africa’s Future, 1957-2057”. Its initial activity was a Workshop on Africa’s future held at the Tea Hotel, Kericho, Kenya on June 1-5, 1987.

Nineteen prominent African scholars drawn from 10 different sub-Saharan countries and various academic backgrounds (see list at the end of this summary) came together to consider the “conventional wisdom” about Africa’s future and through the use of a newly developed methodology create alternative and surprise-rich future scenarios for Africa. Participants were nominated by an Organizing Committee consisting of Professor Akin Mabogunje, Nigeria, Professor Thomas R. Odhiambo, Kenya; Dr. Marie-Angélique Savanne, Senegal; Dr. Kimpianga Mähaniah, Zaire; Dr. Thandika Mkandawire, Malawi; and Professor Göran Hyden, Sweden. Nominated were chosen for their documented commitment to and interest in Africa’s future, their scholarly contribution to the understanding and resolution of current problems, and their readiness to think and articulate issues in an independent fashion.

Funding for this initial activity of the project was received from the Ford Foundation (US$ 25,000), the Norwegian Ministry of Development Cooperation (US$ 25,000), and the Swedish International Development Authority (US$ 25,000).

II

THE “CONVENTIONAL WISDOM” ABOUT AFRICA

It is a sad comment on the status of policy analysis in Africa today that its agenda is really set by others. Thus the current perspective – here also referred to as the “conventional wisdom” – are contained primarily in documents prepared by the International Monetary Fund, the World Bank, the specialized U.N. agencies and various other international organizations. The only Africa-based institution in this group is the Economic Commission for Africa (ECA), itself a United Nations agency.

Participants at the Kericho Workshop were first asked to consider a current perspective scenario of development in sub-Saharan Africa until the middle of the 21st century. Derived from an analysis of a hundred international documents projecting future trends in Africa (and the world) with regard to conventional indicators such as population growth, gross domestic product (GDP), energy consumption, environmental change, technological capabilities and social development, this paper constitutes a
unique compilation of the “conventional wisdom” about the continent. The future scenario of Africa that emerges in that paper is “surprise-free” in that it does not attempt to encompass specific events, unexpected changes, or other surprises that could significantly alter long-term trends. However, it differs from the Malthusian “persistent-trend” scenarios put forward by, for example, the ECA and FAO in that it reflects conventional expectations of the reversal of recent discouraging trends in population growth, food production, economic performance, and other areas.

It is clear that surprise-free development over the next 70 years is not very likely. Few periods in history have not had their shares of surprises. Nevertheless, the potential for surprise should not deter careful examination of and planning for the future. Indeed, according to World Bank demographic projections, of the 180 million children in Africa under age 10 in 1985, roughly three-fifths of Africa’s present population may witness all of what occurs during the next 70 years. The year 2057 will be of concern not only to members of future generations, but also to many of those alive today.

The “current perspective” scenario, then, provides a starting point for developing alternative scenarios of the future and for asking questions about how long present trends might persist, how they might be modified by ongoing or future choices, and how well they portray the future of Africa.

A three-stage trajectory is generally employed by the international organizations in projecting the current perspective for Africa to 2057. The time of euphoria begins in 1957 and ends in 1980; the time of troubles continues to 2000; and the time of renewal extends to 2057. For many variables, each time period implies a different growth rate. For instance, economic growth per capita is assumed to be 2.4% per year for 1950-1980, 1% for 1980-2000, and 2.5% for 2000-2057. Although the year 2000 appears to be a relatively early turning point for some discouraging trends, it is certainly a key reference point in the current perspective of the future. Delaying the onset of the time of renewal to 2010 does not change the scenario for 2057 significantly.

What, then, is the “current perspective” scenario for Africa in 2057? At that time, Africa would be a continent of 2 billion people, one fifth of the world’s total population, with an average per capita income of $3,800 and an average life expectancy of 76, with almost all of its children in primary school and half in secondary school,
and with intensive use of its rich natural resources. As such, it would be about as densely populated, as wealthy, healthy and educated, and as environmentally transformed as Greece was in the early 1980s.

More than half of the African population would be concentrated in Eastern and Western Africa. In all regions, population growth would have slowed substantially. Less than one-fourth of the population would be under 15 years of age. Three quarters of the population would live in urban areas, with perhaps a third of these in cities of over 4 million people.

Average per capita incomes would have risen almost fivefold since 1957. Both agriculture and industry would have expanded rapidly. Agricultural production would have increased more than ninefold, raising per capita food supplies by almost half. Although not self-sufficient in meeting its industrial demands, Africa would produce capital goods equal in value to what the United Kingdom produced in 1980.

Children born in 2057 would have a life expectancy of 76 years. Mortality among infants would have dropped to the level in North America in the 1980s. Relatively few children would have more than one sibling. Most would receive primary education and probably secondary education and almost all would know how to read. As adults, they would have good opportunities for higher education, technical training, and subsequent employment within Africa.

Greatly expanded agricultural and industrial production, high-density population clusters and rapidly growing energy consumption would place tremendous pressures on natural resources and the environment. Although the worst problems of soil erosion, deforestation, and desertification would have been contained, many areas would still face serious losses, and must make substantial investments to keep them under control. Attempts to deal with localized pollution problems are expected to have been generally successful, but the threat of large-scale hazards such as radioactive or biological contamination might be growing.

III
CRITIQUE OF THE CONVENTIONAL WISDOM

There are at least three principal sets of limitations inherent in the "current perspective" on Africa's future. The first pertains to the accuracy and representativeness of presently available data on
Africa. Statistical summaries of key demographic and economic indicators are reproduced widely in both the technical and popular literatures. Unfortunately, the proliferation of such summaries tends to conceal the limited quantity and quality of the primary data on which these indicators are based and the often considerable uncertainty they incorporate. Possible pitfalls include the tendency to:

1. focus on conventional variables for which data exist rather than on more pivotal newly identified variables for which data are sparse;
2. to concentrate on aggregate behaviours, rather than on the potentially more sensitive behaviour of sub-regions or subgroups; and,
3. to ignore the effects of uncertainty have uses, extrapolations into the future. Thus, although these data certainly have uses, it is important to keep their shortcomings in mind in thinking about the future.

A second limitation is that the forecasts of the future used in the “conventional wisdom” scenario at best consider only a few key variables at a time. Few consider possible interactions between variables or important heterogeneities in any detail. For example, almost all economic and social forecasts treat demographic projections as an external input, thereby limiting the potential feedback of social and economic factors for demographic behaviours. The demographic projections themselves incorporate gross assumptions about future economic and social conditions and about the effects of these on demographic behaviour. Such assumptions are usually varied to a limited degree to produce “low”, “medium”, and “high” estimates, but this procedure may mask the effects of complex interactions and feedbacks characteristic of real systems. The possibility therefore exists that even the supposedly “extreme” scenarios developed using conventional methods overlook important self-regulatory mechanisms, thresholds, or other nonlinear phenomena and therefore may fail to characterize fully the range of possible futures.

The third limitation, which many workshop participants felt very strongly about, is the absence in the “current perspective” of any reference to the cultural dimension of human systems. Forecasting models only incorporate those variables that can be quantified. As a result, everything else tends to be treated as potential constraints. For example, in demographic and economic forecasts,
African cultures are treated as obstacles rather than opportunities. Still it can be argued, as indeed many participants did, that development is not so much about the production of certain tangible outputs as it is about the change of the human mind, notably the emergence of greater respect both for oneself and others. Given the historical legacy of Africa as the perennially oppressed and exploited region of the world, this factor takes on special significance in any thinking about the continent’s future. By according greater recognition to the nature and quality of social interaction, human creativity and self-esteem, African countries could make great strides forward.

What may seem implausible today, therefore, could well be common practice tomorrow.

IV

CONSTRUCTING AFRICA’S ALTERNATIVE FUTURES

In constructing alternative future scenarios, Workshop participants used a combination of subjective probability assessment and imaging. The first of these two techniques was used to elicit “surprising” or alternative endpoints for Africa in year 2057. Two separate scenarios emerged out of this exercise which was conducted in four groups working independently of each other. The first was labelled the “Big Lift”, based on the assumption that after another twenty years, Africa would “take off”. The second was called “Big Rift” after participants had suggested that a very probable scenario for the mid-21st century was an increasing differentiation among African states. As it turned out the Workshop had time to devote itself only to the first of these two endpoints.

The technique of imaging was subsequently used to identify credible, coherent and consistent pathways to a future Africa that in the “Big Lift” scenario would be much better off than in the perspective of the current conventional wisdom. As in the case of eliciting the alternative endpoints, participants were divided into four groups consisting of individuals with different disciplinary orientations.

By allowing a longer time horizon than usual this methodology enabled participants of very varying backgrounds to work together without getting bogged down in epistemological differences. To be sure, there were divergences on many issues but physicists, geographers, climatologists, economists, political scientists, anthropologists, etc. were able to interact with each other in a con-
structive and rewarding fashion in producing the four versions of the “Big Lift”.

While the 70-year time horizon adopted in this project at first appeared quite long – and indeed is much longer than what is employed in current perspectives – participants soon realized that seventy years constitutes a relatively short period in human history. The subjective probability assessment technique encouraged participants to recognize the importance of the human force in history. Man can make a difference but he must also accept that not all events are equally probable. There is a need to carefully assess which events man sets in motion that is likely to be particularly significant in the longer run. Workshop participants identified a broad range of factors that tend to be ignored in current perspectives, for example, spontaneous innovative and productive activities taking place at the grassroots level, technological inventions, political developments and climatic changes. All of these can help bring about surprising developments in Africa in the next seventy years. Below follows a summary statement about the four histories developed under the “Big Lift” rubric.

The four alternative histories envision a changed Africa by the year 2057. Africa has been transformed economically, politically, socially and culturally for the better in such a way that there is a higher level of living characterized by higher growth rates, greater democratization of the political process, a heightened social and political awareness of peoples at the local level coupled with a greater contribution of grassroots social, religious, cultural and feminist movements to national development. In particular the histories envisage a greatly improved situation of women and a higher level of cultural activity affirming African identity in languages, music, dance and symbolic culture.

There is a greater unity and social and economic interaction and exchange among African states alleviating the problem of small land-locked states and common currencies have emerged to facilitate intra-African trade, cooperation and exchange.

By the year 2057 apartheid has been eliminated and Azania takes its rightful place among African nations. Industrializing efforts are now centred in Southern Africa and West Africa with Nigeria as the focal point in the west and Azania in the south. Science and technology has greatly advanced as exemplified by the “African Institute of Advanced Aeronautic and Space Science and Technology” established at the Makerere University of the Feder-
ation of Africa based in Kampala, Uganda. One history provides a 20-year phased interval of waves of change from 1987-2057 with emphasis on economic improvement and greater democratization of society. Another case history envisions dramatic climatic changes with a deteriorating situation in the northern hemisphere causing the once ‘developed’ countries to depend more on Africa for grain and food. Another history envisions a delinking of African economies from the North as a result of the application of biotechnology and genetic engineering to the production of high-value agricultural commodities and a greater competence in biotechnology in solving food problems. Yet another history envisions a greater development of the capacity of symbolic culture as an alternative path for predicting the future.

V

EVALUATION

At first glance, the alternative future scenarios produced by the Workshop may appear overly optimistic, but they are not really. In comparison with the “conventional wisdom” scenario, these alternatives assume a longer period of crisis, reckoning and awakening. At the same time, it adopts a more optimistic assumption about Africa’s performance after year 2015. The conventional wisdom conceives of a unilinear trend, the alternative future histories incorporate a dialectic movement.

Participants generally agreed that the “conventional wisdom” scenario – implying that sub-Saharan Africa in 2057 would be where Greece is today – is conservative. It is definitely within the realm of possibilities for Africa to move further ahead. Participants quoted various factors in support of this proposition:

1. the already existing creativity and vitality of local actors outside the formal sector (most of which never gets recorded and acknowledged by governments and donors);
2. the rapid technological developments in fields of key importance to Africa, e.g. biotechnology;
3. the climatic changes that man may induce in the next hundred years as a result of emitting higher doses of carbon dioxide into the atmosphere;
4. the growing impatience in many parts of Africa with poor government performance and abuse of power; and
5. the emerging rediscovery of Africa’s cultural heritage and its significance as a force in the development of society. Perhaps the most important outcome of the Workshop was the growing awareness among participants that they represent a new movement that could have a bearing on where Africa is going in the next seventy years. There was a deliberate effort to contrast the thoughts, approaches and methodologies adopted in the workshop with those associated with the “conventional wisdom”. These differences, which appear at different levels, may be summarized with regard to policy and research, as follows:

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>CONVENTIONAL WISDOM</th>
<th>AFRICAN VISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCEPTUAL</td>
<td>abstract</td>
<td>realistic</td>
</tr>
<tr>
<td></td>
<td>static &amp; short-term</td>
<td>evolutionary &amp; long-run</td>
</tr>
<tr>
<td></td>
<td>unilinear</td>
<td>dialectic/systemic</td>
</tr>
<tr>
<td></td>
<td>crisis-oriented</td>
<td>beyond crisis</td>
</tr>
<tr>
<td></td>
<td>equilibrium</td>
<td>non-equilibrium</td>
</tr>
<tr>
<td>METHODOLOGICAL</td>
<td>surprise-free</td>
<td>surprise-rich</td>
</tr>
<tr>
<td></td>
<td>deductive</td>
<td>inductive</td>
</tr>
<tr>
<td></td>
<td>predictive</td>
<td>retrodictive/explanatory</td>
</tr>
<tr>
<td>INSTITUTIONAL</td>
<td>state-centred</td>
<td>grassroots-oriented</td>
</tr>
<tr>
<td></td>
<td>concentrated</td>
<td>multiple &amp; dispersed</td>
</tr>
<tr>
<td></td>
<td>monopolistic</td>
<td>pluralizing</td>
</tr>
<tr>
<td></td>
<td>heavily planned</td>
<td>experimentalist</td>
</tr>
<tr>
<td>OPERATIONAL</td>
<td>donor-fed &amp; controlled</td>
<td>locally owned &amp; initiate</td>
</tr>
<tr>
<td></td>
<td>directive; pre-emptive</td>
<td>supportive nurturing</td>
</tr>
<tr>
<td></td>
<td>capital intensive</td>
<td>people intensive</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>massive transfer</td>
<td>seed money</td>
</tr>
<tr>
<td></td>
<td>project-specific</td>
<td>matching funds</td>
</tr>
</tbody>
</table>

Participants were agreed that the various elements associated with the African vision should be further explored and propagated both among researchers, analysts and decision-makers.

VI
FOLLOW-UP

Workshop participants agreed to continue the project and develop various activities, including a special lecture series on the “Future of Africa”, research, and dissemination. Some argued for the development of the project into an African “think-tank” on the continent’s future.

A number of specific research topics, reflecting the issues raised in the alternative future scenarios, were identified:
The new Panafrikanism: regional cooperation through parallel markets
- The new African: the Panafrikanization of urban culture
- African languages in the context of expanding intra-African interaction
- Informatics in relation to language and non-formal education
- Relationships between African universities, research institutes and grassroots organizations in development
- South Africa beyond apartheid
- Role of African religious movements in social change
- The Lagos Plan of Action and the new social movements
- Population growth and agricultural change in densely populated areas of Africa
- Resource conservation in land abundant areas in Africa
- Informal spread of high technology in Africa
- Biotechnology and Africa's genetic heritage
- Impact of climatic changes on African development in the next century
- Ecological implications of anthropogenic influences of African development in the next century
- Social and scientific responses to epidemics in Africa
- Prospects for improved communications and transportation within Africa.

Participants suggested that as much as possible research activities should be informed by a common concern with the issues of gender, culture and democracy.

Finally, the Workshop agreed that the project should continue as a network and that other concerned scholars in Africa should be invited to join this timely effort to broaden and realign the research and policy agendas from within the continent.

VII
THE SPONSORS

1. The African Academy of Sciences
   Founded in 1985 under the auspices of the Third World Academy of Sciences, the Academy’s principal role is to develop Africa’s own manpower and know-how and sensitize governments to the realization that no country can ever develop with borrowed skills and resources. More specifically, the Academy
stimulates, designs and coordinates regional inter-disciplinary scientific research, promotes science education programmes, nurtures the growth of young scientists, and undertakes the publication of scientific progress in various media. It is headquartered in Nairobi, Kenya.

2. The Council for the Development of Economic and Social Research in Africa
Originating in 1973 as a forum for directors of development research institutes in Africa, CODESRIA has in the past ten years emerged as the principal inter-African agency for the promotion of social science research on the continent. It initiates and coordinates regional multi-disciplinary research projects on pertinent topics, awards research grants to young promising scholars, and promotes interaction among African social scientists through publications, including its journal, African Development, and seminars. Its headquarters is in Dakar, Senegal.

3. The Alan Shawn Feinstein World Hunger Programme
Started in 1986, this new research programme at Brown University, Providence, Rhode Island, in the United States, addresses two principal questions:
(a) Why does hunger persist in a world of plenty?
(b) How can hunger be eliminated in the foreseeable future?
Using hunger rather than food production, nutrition or any other such narrow variable as the cutting edge of its work, the World Hunger Programme initiates and coordinates multi-disciplinary research on such topics as the prospect for sustainable agriculture in the world and the possible outcome of the “green gene revolution”. Special importance is attached to a long-term perspective, both backwards and forwards, studying hunger issues.
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