# Africa can escape poverty

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## 1 Introduction

Welcome to this special issue of WRSTSD which has been devoted to Africa. We have received more than 20 quality papers for this issue covering a wide range of African focus and countries specific cases to the extent that we had difficulty deciding which papers should be published in this first special issue on Africa. We have finally selected nine papers with an interesting profile for this issue and will hopefully publish another special issue next year.

This special issue is dedicated to our friend, colleague and member of the editorial board, Sanjaya Lall, who died untimely and unexpected by a heart attack on 18th June 2005 at his home in Oxford. A Professor of Development Economics at the University of Oxford and staff member of the World Bank (1965–1968) and (1985–1987), Professor Lall made pioneering contributions to our knowledge of competitiveness, international investment, technology transfer and technology development, trade, industrial strategy and other aspects of industrialisation with particular focus on developing countries. Sanjaya was an inspiration to us and many people in the field of development economics. He had advised (consultant) many organisations and governments in Africa, including the African Development Bank, Egypt, Mauritius, South Africa, Zimbabwe…etc. And among his 40 books and monographs, Sanjaya wrote many books on Africa such as *Alternative Development Strategies in Sub-Saharan Africa* (with Frances Stewart and Samuel Wangwe, 1993), *Technology and Enterprise Development: Ghana Under Structural Adjustment* (1994), *The Technological Response to Import Liberalization in Sub-Saharan Africa* (1999), *Failing to Compete: Technology Systems and Technology Development in Africa* (with C. Pietrobelli, 2002)…etc. We will miss Sanjaya very greatly and send our condolences and sympathy not only to his family but also to all our members, colleagues, friends and the many people who admired and loved him.

## 2 Background

> "Given the political will and a serious hike in investment, African could see a breakthrough … this most extreme poverty is absolutely solvable because when you look at the pieces you see what is wrong."
>
> Jeffrey Sacks – Special Advisor to UN on the Millennium Development Goals[1]

Sub-Saharan Africa (SSA) seems to have come full circle to a position of real promise in the four decades since most countries in the region attained independence (Ahmed and Cleeve, 2004). Across the world, it is recognised that Africa is clearly one of the richest continents with incredible resources in terms of agriculture, water resources, minerals, forestry, as well as fauna and flora reserves, it is still considered the poorest part of the world's economy, hopeless continent and even described as a scar on the conscience of the world by the UK Prime Minister, Tony Blair in his commission for Africa. Therefore, how do we overcome such anomaly of having the richest continent with the poorest people?

It seems as if Africa has one major challenge, poverty. Other challenges Africa face, are just derivatives thereof. Pervasive poverty undermines the efforts of bringing about sustainable growth and development. The social exclusion of the vast majority of the people of Africa constitutes a serious threat to global stability. For as long as the vicious circle of poverty continues it becomes difficult to grasp Africa's vision. A recent study by Ahmed and Cleeve (2004) assessing the current performance trends of SSA countries towards achieving the MDGs clearly indicate that all SSA urgently needs a serious dramatic change in the pace of progress, as the majority of them are not on-track towards the universal agreed targets. Countries seriously off-track need to at least double their current rate of progress to achieve the development goals. No country in SSA is on-track for all the adopted targets, and every country is seriously off-track in at least one of the targets. Slightly fewer than half the countries in SSA are off-track for all targets where data are available. SSA countries are making the most progress on education targets; yet even here progress is limited: fewer than half of the countries are on track for achieving targets by 2015. Angola, Sierra Leone, and Somalia are seriously off track on all of the targets for which data are available.

The poor performance of African countries can also be attributed to three principal factors, namely a lack of: openness to trade; market incentives; and national saving. In order to launch a global war against poverty and underdevelopment in Africa, tremendous resources, including capital, technology and human skills need to be mobilised and utilised into productive areas of activity to attract direct foreign investment (FDI). African countries have the highest rate of return on investment in the world-four times more than in the G-7 countries, twice more than in Asia, and two-thirds more than in Latin America (See UNECA, 2003a, World Bank, 2000, 2002). The full potential for FDI in Africa remains under-utilised. The FDI flows are far less than what is required to obtain high economic growth rates to reduce unemployment and poverty in Africa. More emphasis needs to be placed on human resource development as a strategy in itself, to attract FDI. This includes the reversing of the brain drain and improving the quality of education throughout. Capacity building in developing good quality and appropriate human resources, is a priority for transformation in both the private and public sectors (Naude and Krugell, 2003). The New Partnership for Africa's Development (NEPAD) plays a significant role by creating the necessary political, social and economic conditions that would serve as incentives to curb the brain drain and attract much-needed investment to Africa.

Poor infrastructure, transportation system and maintenance, market uncertainties and lack of incentives and openness to trade, lack of national saving, political instability, poor policies and corruption, small markets limit scale economies, reduce competition, power shortages, interruption to material supplies, and many other factors are all behind African countries failure to attract international firms. These factors represent real challenges for firms in managing operations in SSA and are the outcome of the interaction of business and the environment in SSA.

Africa faces major capital flow challenges. Higher levels of domestic savings as well as a more effective tax collections system are needed to increase public resources, as well as the rationalising of government expenditures. Domestic savings are lost to African countries as a result of capital flight. This situation can only be resolved if residents see the African economies as attractive locations to hold their wealth. Debt relief, increased ODA flows and the increase of the private capital flows from outside the continent are critical factors in this regard. A priority will be to change investors' perception of Africa

as a 'high-risk' continent. In this regard leadership and the role of media are important considerations.

Another problem in Africa is that most Africa countries have followed an anti-farming strategy during the 1970s and 1980s and at the same time take on so many tasks that performance is bound to be poor. According to many reports of the World Bank, both donors and African governments are guilty of this.

## 3 Technological transformation

One of the many challenges confronting many SSA countries today is to develop, use, and disseminate appropriate endogenous scientific and technological capacities relevant for improved productivity (particularly agricultural) and output (see Ahmed, 2004). The transfer of information and knowledge from developed to SSA countries is one important source of support for sustainable development under current conditions. The scarcity of literature in educational and research institutions is a serious problem in SSA, where there is a real need for better access to information.

Technological dependence in Africa is severe and pervasive, primarily because of colonialism and continued poverty. Weak communication and social infrastructure not only block information flows in most African countries but ultimately stifle social and economic development. Information and communication technologies (ICTs) are crucial for the knowledge-based society of the future and the nucleus of the globalised economy. Production suffers from the resultant lack of skills and lack of interest in manufacturing. With a shortage of technical and managerial skills, turnkey technology transfer promotes dependence on unmodified imported technologies, which are rarely mastered through learning by doing. Attention to human capital at the national level and to learning mechanisms at the firm level is the imperative for technological development in Africa. For more discussion of the impact of technology upon the productivity in SSA see Ahmed (2004).

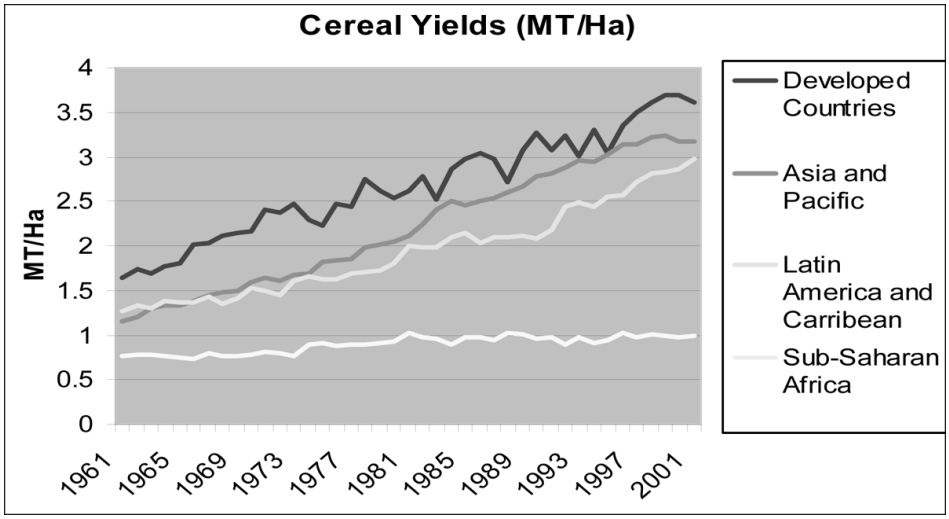
Most SSA countries recognise that much of their economic future will depend upon the understanding of the global technological forces at work and their long-term implications. However, the evidence also shows that the benefits accrued from the utilisation of ICTs over the recent years have been inequitably distributed with SSA facing the prospect of being marginalised. This marginalisation has afflicted a new form of poverty, *information poverty,* within these countries.

Technology development and industrialisation in most SSA countries play key roles in terms of employment, food security, export earning, provision of raw material and its potential as a source for capital for development. Industrialisation is the key to increasing Africa's participation in world commerce and finance, is crucial to the structural transformation of Africa's economy, and provides the platform for enhancing Africa's competitiveness in an increasingly globalised economy. The level of Africa's industrialisation remains low, as illustrated by three key facts:

- there are only a handful of countries where manufacturing as a share of GDP exceeds 25% the benchmark for considering a country as having achieved the threshold of industrial take-off
- the export composition of African countries continues to be dominated by primary rather than by processed or semi finished products
- the ratio of public expenditure and private investment in scientific research and development remains minuscule as a percentage of GDP in all African countries (see UNECA, 1999, 2003a, 2003b).

Productivity and efficiency of the agricultural sector in particular are central to any programme of economic recovery in most SSA countries. Despite the dominant role of agriculture in the national economies of most SSA countries (contributing up to 70% of GDP) the agricultural productivity is extremely low (Figure 1) and does not exceed 30% of the level attained in research farms (also see Ahmed, 2004).

**Figure 1** SSA low crop productivity




*Source*: Bruinsma (2003) and World Bank (2004)

Reasons for the low productivity include weaknesses in the structure, planning, management and evaluation of research programmes, exacerbated in most instances by gaps in the linkages between research, extension and the farmer. To achieve this prime objective, however, it was considered necessary to evolve a technology assessment and transfer mechanism, through case studies of broad agro-ecological zones in the region, with a view to its eventual application in virtually all the countries of the region.

Table 1 below shows the potential for SSA to increase productivity. Moreover, the gap in science-based agricultural technologies applied in food production widened between industrialised and developing countries including SSA, leading to surpluses in many of the former and deficits resulting in mass under-nutrition and starvation in many of the latter (see Herz, 1993).

**Table 1** Potential for increasing productivity in SSA

| | *SSA* | | | | | |
|---|---|---|---|---|---|---|
| *Commodity* | *Farmer* | *Potential* | *China* | *India* | *USA* | *World* |
| Maize | 1.2 | 5.0 | 4.8 | 1.6 | 7.7 | 3.9 |
| Rice | 1.6 | 4.0 | 5.9 | 9.8 | 6.4 | 3.7 |
| Sorghum | 0.8 | 2.5 | 4.0 | 0.8 | 4.1 | 1.4 |
| Wheat | 1.6 | 3.5 | 3.5 | 2.4 | 2.6 | 2.5 |

*Source*: Mukiibi (2003)

SSA countries must increase their agricultural productivity to attain food security, reduce poverty, provide employment, increase exports, produce raw material for industrial transformation and conserve its natural resource base.

## 4 Sustainability performance

Africa has learned that sustainable development is impossible in the absence of peace, security, democracy, good governance, human rights and sound economic management (NEPAD, 2001). The political and social vulnerabilities, on which conflict is based, need to be addressed to ensure peace and security in the future. Existing regional and sub regional institutions need to be strengthened to build Africa's capacity to manage all areas of conflict. Africa recognised the importance of an environment where people can decide how they are governed, by whom and for how long. Priority needs to be given to the global standards of democracy, allowing the existence of several political parties and workers' unions as well as fair and open elections organised on a periodically basis.

A devastating threat to the realisation of Africa's vision of sustainable growth is the HIV-AIDS pandemic. The acknowledgement of the gravity thereof as well as the urgency of taking drastic action is a major challenge facing Africa. Weak environmental policies and poor living conditions are the main factors limiting the population in addressing their health problems. The New Partnership for Africa's Development (NEPAD, 2001) leads the campaign to attract international financial support in the struggle against HIV/AIDS. All efforts being made to create and sustain growth and development will be meaningless if this disease and other related diseases are decimating the very people whom these efforts are intended to benefit.

Sustainable development in Africa also presents the following managerial and entrepreneurial challenges:

- strengthening mechanisms for conflict prevention
- reversing the brain drain
- ensuring peace and security
- promoting political, economic and corporate governance
- restoring and maintaining macroeconomic stability
- revitalising the provision of education, technical training and health services
- cross cultural and diversity management
- promoting the role of women in social and economic development
- promoting the development of infrastructure, agriculture and the diversification into agro-industries and manufacturing to serve both domestic and export markets
- promoting public private partnerships
- encouraging an entrepreneurial, innovative economic mindset
- bridging the digital divide in information and communication technologies
- promoting tourism and sustainable utilisation of natural resources.

According to the latest Environmental Sustainability Index (ESI)[2] (2002 and 2005) ranking (Table 2), Gabon, Namibia and Botswana leads the African countries in environmental sustainability.

In general terms, high ESI scores are attributed to substantial natural resource endowments, low population density, and successful management of environment and development issues. Libya's rank moved from 124th in 2002 to 126th in 2005 showing that a nation's economic status does not always correspond to its ESI performance.[3] This result would be even more dramatic if conflict, which was treated exogenously, were factored into the equation. The broad challenge to policy makers in Africa is to mainstream and integrate population, environment, science and technology, and agricultural productivity concerns into their national development planning and poverty alleviation frameworks and policies. Another key challenge for Africa is to join the information revolution, which will require that Africa develop capacity to tap into the global system of information and knowledge, and adapt it to solve its development and poverty problems. The overriding development challenge and ultimate goal for every development intervention in Africa is therefore poverty reduction (see UNECA, 2003a).

However as evidenced by the ESI and recent studies by UNECA (1999, 2003a, 2003b), the long-term sustainability of economic and social progress of many African countries is at best fraught with uncertainty. Nearly two thirds of African countries have low sustainability capacity with only five countries, which account for a mere 5.7% of Africa's population and 27% of GDP, possess the minimum conditions to sustain growth and development (for more details see UNECA, 1999, 2003a, 2003b).

**Table 2** African Environmental Sustainability Index (ESI) 2005 and 2002

| *Rank* | *Country* | *ESI* | *Rank* | *Country* | *ESI* |
|---|---|---|---|---|---|
| | *Highest ten 2005* | | | *Lowest ten 2005* | |
| 12 | Gabon | 61.7 | 115 | Egypt | 44.0 |
| 25 | Central A. Republic | 58.7 | 120 | Sierra Leone | 43.4 |
| 32 | Namibia | 56.7 | 121 | Liberia | 43.4 |
| 34 | Botswana | 55.9 | 123 | Angola | 42.9 |
| 41 | Mali | 53.7 | 124 | Mauritania | 42.6 |
| 49 | Ghana | 52.8 | 126 | Libya | 42.3 |
| 50 | Cameron | 52.5 | 128 | Zimbabwe | 41.2 |
| 55 | Tunisia | 51.8 | 130 | Burundi | 40.0 |
| 57 | Uganda | 51.3 | 135 | Ethiopia | 37.9 |
| 59 | Senegal | 51.1 | 140 | Sudan | 35.9 |
| | *Highest ten 2002* | | | *Lowest ten 2002* | |
| 13 | Botswana | 61.8 | 119 | Rwanda | 40.6 |
| 26 | Namibia | 57.4 | 123 | Niger | 39.4 |
| 36 | Gabon | 54.9 | 124 | Libya | 39.3 |
| 40 | Congo | 54.3 | 126 | Mauritania | 38.9 |
| 43 | Central African Republic | 54.1 | 127 | Guinea-Bissau | 38.8 |
| 46 | Zimbabwe | 53.2 | 128 | Madagascar | 38.8 |
| 59 | Mozambique | 51.1 | 130 | Liberia | 37.7 |
| 61 | Tunisia | 50.8 | 132 | Somalia | 37.1 |
| 65 | Ghana | 50.2 | 133 | Nigeria | 36.7 |
| 69 | Zambia | 49.5 | 134 | Sierra Leone | 36.5 |

*Source*: Adopted from Yale Centre for Environmental Law and Policy (2005 and 2002) and World Economic Forum (2005 and 2002)

## 5 Special issue

The papers included in this issue cover wide range of topics and coverage. The first paper by Jacques L. Hamel (*Knowledge for Sustainable Development in Africa: Towards New Policy Initiatives*) reflects on the concept of knowledge and the current state of knowledge in Africa, as it relates to the radical transformations that are necessary for achieving a meaningful transition to sustainable development on the continent. The role of scientific and technological knowledge is particularly emphasised as the main driver of sustainable development. In conclusion, the paper calls for the initiation of a long struggle of self-exorcism and for a profound reform of knowledge based on the premise that freedom is the infinite fountain of knowledge.

Following on the same issues of knowledge, William Nwagwu's paper (*Deficits in the Visibility of African Scientists: Implications for Developing Information and Communication Technology (ICT) Capacity*) shows that a true assessment of African science cannot be reliably undertaken on the basis of international indexing services.

Local indexing of African science is an imperative that must be pursued, in order to create a basis for science in Africa. The significance of this paper lies in the expectation that it will stimulate action towards harnessing the benefits of ICT for the purpose of indexing of local resources in Africa.

Continuing on the role of ICT in African development, Muhammed Ademola Badamas (*Information Technology for Sustainable Development and Global Competitiveness: Comparing Curriculum in Africa and America*) examines the IT curriculum in Nigeria, and compares it with that of the USA. This comparison allows Badamas to determine the competitiveness of the Nigerian graduates in the global market and hence the implications for human resource development and education in Nigeria.

In the fourth paper in this issue, Kunirum Osia (*Africans and the Incidence of HIV/AIDS: The Role of Educational Institutions*) critically examines available data to gauge the enormity of the HIV/AIDS epidemic in Africa, with particular reference to Botswana, Ethiopia, Nigeria, South Africa, Tanzania and Zimbabwe. Osia argues that appropriate education about HIV/AIDS will make a major contribution to the control of the epidemic; also that the role of schools as an important and indispensable forum for conveying norms and societal values is often underestimated in the global fight against HIV/AIDS.

Moving on to other key emerging issues for African development, Ernest Kadembo (*Regional Economic Integration: Challenges for Africa*) investigates the idea of a United States of Africa in order to integrate economies. Political instability, lack of trust and too many institutions working on integrating African states handicap the process of economic integration. The paper suggests that an African Union with the necessary powers could lead to the realisation of the aspirations for integration.

The next paper by Raymond Talinbe Abdulai and Adarkwah Antwi (*Traditional Landholding Institutions and Individual Ownership of Land Rights in Sub-Saharan Africa*) examines landownership in SSA. As first level suppliers, land is vested in indigenous corporate bodies like families, tribes and chiefs in SSA. The paper concludes that customary land tenure systems are composite with communal as well as individual landownership akin to that of England. Traditional landownership systems in SSA do not appear to constrain individual ownership of land rights.

The last part of this special issue consists of three case studies focusing on Nigeria, South Africa and Sudan. Nnamdi O. Madichie (*Corruption in Nigeria: How Effective is the Corruption Perception Index in Highlighting the Economic Malaise?*) examines the numerous problems facing Nigeria in the 21st century, portrayed by the Corruption Perception Indices (CPI) orchestrated under the framework of Transparency International (TI). Nigeria's score fits the bill of a country that needs a miracle in order to return its economy to a more governable status. This paper, however, argues that the CPI is not a sufficient indicator of the level of corruption in developing countries such as Nigeria because bribery is not taken into account when designing the CPI. By incorporating the Bribe Payers Index into the CPI calculus, a more holistic and, therefore, more credible measure of corruption levels in countries – especially Nigeria – will be established.

The second case study in this part from Louise van Scheers and Simon Radipere (*Perceptions of Small Business Owners on Managerial Skills: Problems in Business Development in South Africa*) is the result of a survey undertaken in South Africa to examine the perceptions of small business owners of the importance and existence of appropriate management skills within the sector. Van Scheers and Radipere identify the lack of managerial skills by entrepreneurs as the main reason behind the failure of small

businesses in South Africa. They suggest that an improvement of the managerial skills of small business owners is vital to the continued development of the sector and as a major contribution to resolving South Africa's unemployment problems.

In the last paper in this issue, Alamedin A. Bannaga (*The Impact of Adjustment Policies on Sudan's Economic Growth: Empirical Investigation*) examines the impact of structural adjustment policies on the Sudanese economy. By using econometric techniques, the stability of the long-run growth in Sudan (1960–2000) was investigated, followed by cointegration and an error correction model analysis. The study found that investment is the most significant variable affecting growth in Sudan in the long-term, and non-policy factors such as weather have only a significant short-run impact on the economic growth.

## 6 Conclusion

Africa's development or absence thereof, has lessons for all concerned. Lack of progress is bad enough, but slipping back is worse. Several countries in the region have achieved significant progress towards particular MDGs, demonstrating the feasibility of progress in even the most resource constrained environments. Therefore, the positive lessons that can be drawn from these countries' experiences should be disseminated and, where relevant, applied by other countries in the region as a first step towards ensuring that the collective status of Africa's performance improves. At the same time, it is equally important that the international community delivers its promises and commitments to Africa on debt relief, generous aid, opening markets for wider trade opportunities, and increasing investment.

Africans tend to rely on government for everything and governments have their uses, but may aspects of economic management should be left to the private sector. Proper resource allocation needs freely moving prices. Government spending should match revenues, with more going to education and health and less to over-staffed public bodies and more to incentives and less to interference.

SSA must increase its agricultural productivity to attain food security, reduce poverty, provide employment, increase exports, produce raw material for industrial transformation and conserve its natural resources base.

SSA countries need to invest in people, improve the climate for enterprise, open economies to international trade and investment and get macroeconomic polity right.

The priorities in Africa as outlined by the UNESCO include human resources development, increased investments, establishment of suitable institutions, formulation and adoption of appropriate policies, and inter-country cooperation within and outside Africa. UNESCO argues that Africa will be unable to rise above its current level of poverty without pursuing manufacturing more purposefully. Doing so will necessarily require a greater focus on industrial research and development.

Finally, it is hoped that the ensemble of papers presented in this special issue will help to stimulate debate amongst scholars, researchers and policymakers that will ultimately lead to a more integrated and multidisciplinary approach to policy design. We hope you find this special issue to be interesting and thought-provoking look forward to receiving your valuable submission and comments so we can continue to serve your needs to the very best of our ability.

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## Notes

[1]The MDGs are a framework of 8 goals, 18 targets, and 48 indicators covering every field of human endeavour, including the relief of poverty and hunger, improved access to education, greater gender equality, improved child mortality and maternal health, tackling HIV/AIDS, malaria, and other diseases, environmental sustainability and enhanced global partnerships for development.

[2]Environmental Sustainability Index (ESI) is a measure of overall progress towards environmental sustainability, developed for 142 and 146 countries respectively in 2002 and 2005. The ESI scores are based upon a set of 21 core 'indicators', each of which combines two to eight variables for a total of 68 underlying variables. The ESI permits cross-national comparisons of environmental progress in a systematic and quantitative fashion. It represents a first step towards a more analytically driven approach to environmental decision-making. ESI produced by Yale University (Yale Center for Environmental Law and Policy) and Columbia University (Center for International Earth Science Information Network) in collaboration with World Economic Forum and Joint Research Centre of the European Commission.

[3]The US ranks 45th and the UK ranks 46th in 2005 ESI scores.