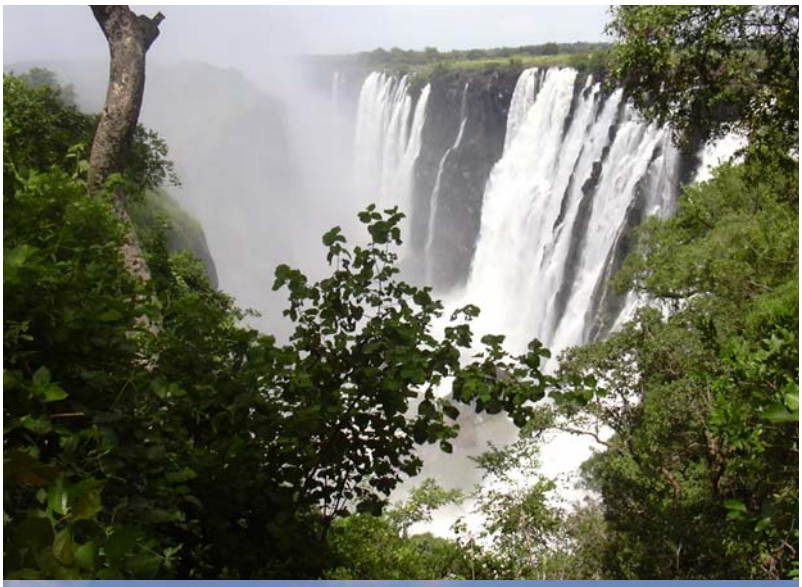
African Technology Development Forum

ATDF JOURNAL VOLUME 3, ISSUE 2

INNOVATION; TECHNOLOGY; TRADE; DEVELOPMENT



"The entrepreneur in us sees opportunities everywhere we look, but many people see only problems everywhere they look."

(Michael Gerber)

HIGHLIGHTS:

ISSN: 1817-2008

Abbreviation:

Afr. Technol. Dev. Forum j

Inside this Issue

Frontpage photo: Victoria falls (Zambia) and Matterhorn (Switzerland) ATDF), comparable in beauty but not in wealth. (Source: Konde, ATDF)

Financing Small and Medium Enterprises in Africa

Céline Kauffmann

Overview

The development of the private sector varies greatly throughout Africa. SMEs are flourishing in South Africa, Mauritius and North Africa, thanks to fairly modern financial systems and clear government policies in favour of private enterprise. Elsewhere the rise of a small-business class has been hindered by political instability or strong dependence on a few raw materials. In the Democratic Republic of Congo, for example, most SMEs went bankrupt in the 1990s – as a result of looting in 1993 and 1996 or during the civil war. In Congo, Equatorial Guinea, Gabon and Chad, the dominance of oil has slowed the emergence of non-oil businesses.

Between these two extremes, Senegal and Kenya have created conditions for private-sector growth but are still held back by an inadequate financial system. In Nigeria, SMEs (about 95 per cent of formal manufacturing activity) are key to the economy but insecurity, corruption and poor infrastructure prevent them being motors of growth.

Africa's private sector consists of mostly informal micro enterprises, operating alongside large firms. Most companies are small because the private sector is new and because of legal and financial obstacles to capital accumulation. Between these large and small firms, SMEs are very scarce and constitute a "missing middle." Even in South Africa, with its robust private sector, micro and very small enterprises provided more than 55 per cent of all jobs and 22 per cent of GDP in 2003, while big firms accounted for 64 per cent of GDP.

SMEs are weak in Africa because of small local markets, undeveloped regional integration and very difficult business conditions, which include cumbersome official procedures, poor infrastructure, dubious legal systems, inadequate financial systems and unattractive tax regimes. Many firms stay small and informal and use simple technology that does not require great use of national infrastructure. Their smallness also protects them from legal proceedings (since they have few assets to seize on bankruptcy) so they can be more flexible in uncertain business conditions.

Large firms have the means to overcome legal and financial obstacles, since they have more negotiating power and often-good contacts to help them get preferential treatment. They depend less on the local economy because they have access to foreign finance, technology and markets, especially if they are subsidiaries of bigger companies. They can also more easily make up for inadequate public services.

Restricted Access to Finance

Africa's SMEs have little access to finance, which thus hampers their emergence and eventual growth. Their main sources of capital are their retained earnings and informal savings and loan associations (tontines), which are unpredictable, not very secure and have little scope for risk sharing because of their regional or sectoral focus. Access to formal finance is poor because of the high risk of default among SMEs and due to inadequate financial facilities.

Small business in Africa can rarely meet the conditions set by financial institutions, which see SMEs as a risk because of poor guarantees and lack of information about their ability to repay loans. The financial system in most of Africa is under-developed however and so provides few financial instruments. Capital markets are in their infancy, shareholding is rare and no long-term financing is available for SMEs. Non-bank financial intermediaries, such as microcredit institutions, could be a big help in lending money to the smallest SMEs but they do not have the resources to follow up their customers when they expand. Improving business conditions, boosting the capacity of SMEs, expanding the financial sector and strengthening links between firms will permanently increase SMEs' access to finance.

Improving business conditions

Proper information, a key to deciding whether to make a loan, would be helped by adopting clear accounting standards, setting up independent, competent and reputable accounting firms and creating more credit bureaux supplying data on the solvency of firms.

An impartial legal system that can help settle contract disputes, commercial law reform and drafting and clarifying land titles, as well as effective bankruptcy procedures, are vital for growth of the business sector.

A country's tax laws can either coax small businesses into the formal sector of the economy or keep them out of it.

Governments should also make sure that they pay SMEs promptly, since public contracts are vital to the financial security of these firms.

First published in Policy Insights No. 7, a joint publication of the African Development Bank and the OECD Development Centre (www.oecd.org/dev/)

Helping SMEs meet the requirements of formal financing

Apart from the need to boost SME capacities, some financial instruments can help provide missing information or reduce the risk stemming from some SMEs' lack of transparency.

Franchising, which is very popular in Southern and East Africa with the encouragement of South Africa, allows use of a brand name or know-how that reduces the risk of failure. Warehouse-receipt financing (in South Africa, Kenya and Zambia) guarantees loans with agricultural stocks.

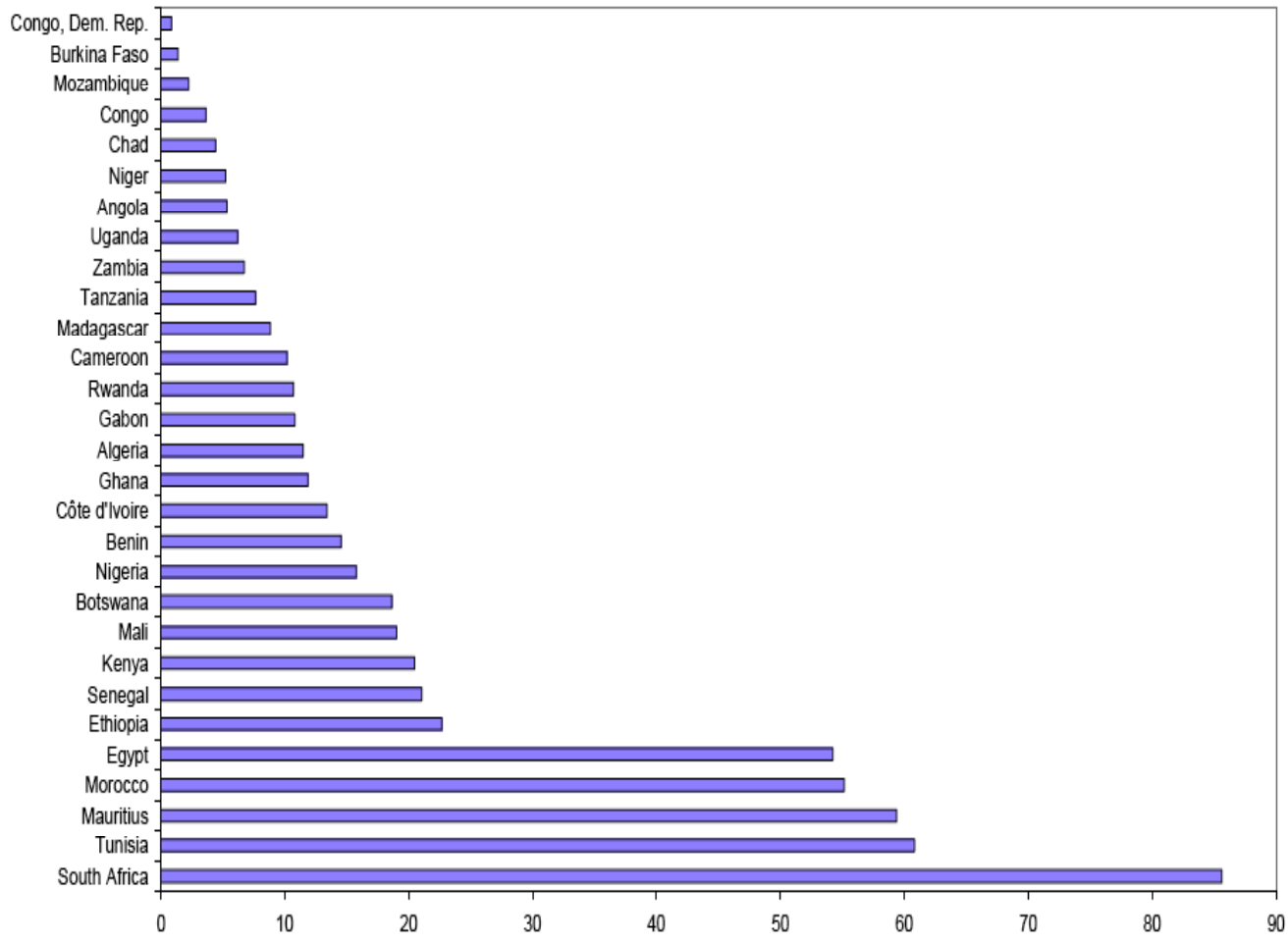
Other financial instruments, such as leasing and factoring, can reduce risk effectively for credit institutions but are still little used in Africa. Credit associations that reduce risk by sharing it are more common. They help financial institutions choose to whom to lend, by guaranteeing the technical viability of projects, and sometimes providing guarantees. But growth of these bodies is limited by the lack of organisation among SMEs in Africa and by their focus on certain sectors and geographical areas.

Governments and donor sources have thus preferred creation of guarantee funds to ensure repayment in case of default. In several countries, especially in Central Africa, this has not worked since provision of a guarantee has meant less rigorous choice of investment projects and a lower rate of debt recovery. Elsewhere, notably in Mozambique, borrowers and financial institutions have worked together to maintain a good rate of recovery and to reduce interest rates.

Making the financial system more accessible to SMEs

Most African financial systems are fragmented. The "missing middle" in the pattern of size of firm is matched by one in the range of financing available. Lack of funding for SMEs has partly been made up for by micro-credit institutions, whose growth is due to the flexible loans they offer small businesses. In Angola, Novobanco provides loans free of bank charges, without a minimum deposit and with informal guarantees (property assets and a guarantor), as well as permanent contact with loan managers. Though adapted to local needs, however, micro-credit institutions remain fragile and modest-sized.

Share of Credit to the Private Sector in 2003 (percentage of GDP)



Facts about SMEs in Africa

Very few countries have working definitions of SMEs, except some members of UEMOA/WAEMU and Mauritius and Morocco. So data on this is hard to compare, though patterns can be seen and countries can be ranked by extent of SME activity:

Nearly 80 per cent of firms in Congo have fewer than five workers. The country has 2 100 firms in the formal and 10 000 in the informal sector.

A 1997 survey in Benin showed that of the 666 SMEs counted, half were in commerce and the rest were mostly in construction, or were pharmacies and restaurants. Only 17 per cent were in manufacturing.

SMEs in Kenya employed some 3.2 million people in 2003 and accounted for 18 per cent of national GDP.

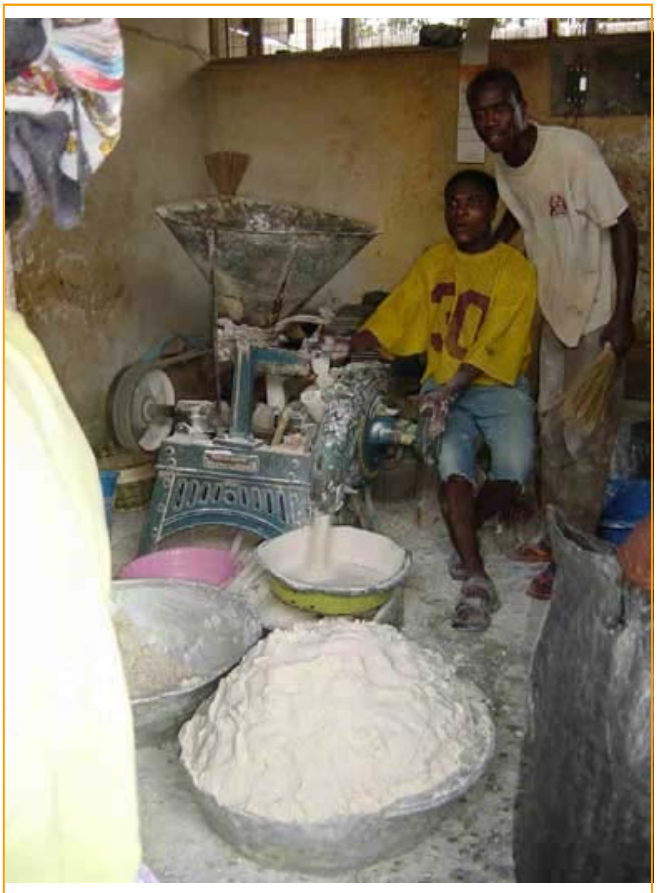
SMEs in Senegal contribute about 20 per cent of national value-added.

Nigerian SMEs account for some 95 per cent of formal manufacturing activity and 70 per cent of industrial jobs.

In Morocco, 93 per cent of all industrial firms are SMEs and account for 38 per cent of production, 33 per cent of investment, 30 per cent of exports and 46 per cent of all jobs.

Micro and very small businesses in South Africa provided more than 55 per cent of total employment and 22 per cent of GDP in 2003. Small firms accounted for 16 per cent of both jobs and production and medium and large firms 26 per cent of jobs and 62 per cent of production.

Source: African Development Bank and OECD Development Centre, African Economic Outlook (2004-2005).



Entrepreneurs are inventors of businesses. These SMEs are playing their role in feeding Ghana. But who would lend them money and technical support to improve their service, working environment and generate more incomes?

Source: AllAfrica.com

As well as lacking trained staff, micro-credit institutions face limited expansion because of their limited funds. Their mainly short-term finance means they cannot easily turn the savings they collect into medium or long-term loans.

They are also up against the cost of refinancing through the formal banking sector and have no access to refinancing either by the central bank or by venture capital. Microcredit institutions could be put on a firmer financial footing by developing and adapting long-term savings products that exist elsewhere, such as life insurance and home-saving plans, and encouraging the setting up of specialized refinance banks such as Mali's "solidarity bank" (Banque malienne de solidarité), or working more closely with the formal banking sector (Benin's SME support organization PAPME and the local Bank of Africa).

Some countries (such as Kenya) have dealt with the lack of funding by supporting growth of smaller commercial banks or (in Ghana) of rural banks, so as to bring traditional banks and SMEs closer geographically and business-wise. South Africa passed two laws in early 2005 to expand the banking system to include savings and loan institutions (second-tier banks) and co-operative banks (third-tier banks) while easing banking regulations so the newcomers could still be flexible in providing loans. In many countries, commercial banks are also setting up their own micro-credit services.

Removing the obstacles to access for SMEs' to finance requires that commercial banks, micro-credit institutions, community groups and business development services (BDS) work closely together. Pushing for agreements between financial bodies and BDS suppliers will help make up for lack of capacity and reduce costs by more efficient division of labour. The BDS supplier makes the

initial choice of projects on a purely technical basis and the credit institution looks at financial viability.

Making loans to intermediaries (NGOs and federations of SMEs) with the job of allotting funds to members can also help cut administration costs. Solidarity between banks, especially setting up inter-bank financing to (as in Nigeria) pool money to be invested in SMEs, reduces the extra risk of lending to SMEs, as well. Working with banks boosts the financial viability of micro-credit institutions and can also help informal financial bodies to move towards the formal sector.

Expanding the supply of finance through the non-financial private sector

Financial institutions are not the only source of money for SMEs. Apart from remittances by nationals working abroad, which are a key boost to private-sector growth, the interdependence between SMEs, large firms and sectoral "clusters" is a major potential source of finance, as shown in Asia and Latin America.

Big firms can do a lot to help SMEs get finance more easily by transferring resources (money and factors of production) and guaranteeing SME solvency with financial institutions. Links with major companies can also help SMEs get export credits, which are especially important in countries with weak institutions, since commercial partners are better informed than other creditors (especially financial institutions) about the ability of their customers to repay debts. Export credits have been proved useful in Zambia's agro-food industry. Subcontracting is still uncommon in Africa, but has grown rapidly in South Africa since 1998, though there is increasing scepticism about it because it may confine SMEs to low-skill informal activities.

Clusters of SMEs, which are very active in Asia, enable member firms to seek finance together, provide collective guarantees or even set up their own financial body. The threat of expulsion from the cluster ensures that promises are kept, which allows the network to overcome shortcomings in the legal system.

Frequent interaction with financial authorities, as well as the role that reputation plays in the cluster, can greatly increase confidence between firms and financial institutions and thus make it easier to get loans and lower rates of interest.

Working together also means firms can get supplier credits and can borrow from each other when necessary, which reduces general costs. Such clusters, however, are very little developed in Africa and are concentrated in South Africa, Kenya, Nigeria, Tanzania and Zimbabwe.

A CHANGING CONTINENT: THE AFRICA YOU NEVER SEE

Carol Pineau

Producer and director of the film "Africa: Open for Business,"

In the waiting area of a large office complex in Accra, Ghana, it's standing room only as citizens with bundles of cash line up to buy shares of a mutual fund that has yielded an average 60 percent annually for the past seven years. They're entrusting their hard-earned cash to a local company called Databank, which invests in stock markets in Ghana, Nigeria, Botswana and Kenya that consistently rank among the world's top growth markets.

Chances are you haven't read or heard anything about Databank in your daily newspaper or on the evening news, where the little coverage of Africa that's offered focuses almost exclusively on the negative -- the virulent spread of HIV/AIDS, genocide in Darfur and the chaos of Zimbabwe.

Yes, Africa is a land of wars, poverty and corruption. The situation in places like Darfur, Sudan, desperately cries out for more media attention and international action. But Africa is also a land of stock markets, high rises, Internet cafes and a growing middle class. This is the part of Africa that functions. And this Africa also needs media attention, if it's to have any chance of fully joining the global economy.

Africa's media image comes at a high cost, even, at the extreme, the cost of lives. Stories about hardship and tragedy aim to tug at our heartstrings, getting us to dig into our pockets or urge Congress to send more aid. But no country or region ever developed thanks to aid alone. Investment, and the job and wealth creation it generates, is the only road to lasting development. That's how China, India and the Asian Tigers did it.

Yet while Africa, according to the U.S. government's Overseas Private Investment Corp., offers the highest return in the world on direct foreign investment, it attracts the least. Unless investors see the Africa that's worthy of investment, they won't put their money into it. And that lack of investment translates into job stagnation, continued poverty and limited access to education and health care.

Consider a few facts: The Ghana Stock Exchange regularly tops the list of the world's highest-performing stock markets. Botswana, with its A+ credit rating, boasts one of the highest per capita government savings rates in the world, topped only by Singapore and a handful of other fiscally prudent nations. Cell phones are making phenomenal profits on the continent. Brand-name companies like Coca-Cola, GM, Caterpillar and Citibank have invested in Africa for years and are quite bullish on the future.

The failure to show this side of Africa creates a one-dimensional caricature of a complex continent. Imagine if 9/11, the Oklahoma City bombing and school shootings were all that the rest of the world knew about America.

I recently produced a documentary on entrepreneurship and private enterprise in Africa. Throughout the year-long process, I came to realize how all of us in the media -- even those with a true love of the continent -- portray it in a way that's truly to its detriment.

The first cameraman I called to film the documentary laughed and said, "Business and Africa, aren't those contradictory terms?" The second got excited imagining heart-warming images of women's co-ops and market stalls brimming with rustic crafts. Several friends simply assumed I was doing a documentary on AIDS. After all, what else does one film in Africa?

The little-known fact is that businesses are thriving throughout Africa. With good governance and sound fiscal policies, countries like Botswana, Ghana, Uganda, Senegal and many more are bustling, their economies growing at surprisingly robust rates.

Private enterprise is not just limited to the well-behaved nations. You can't find a more war-ravaged land than Somalia, which has been without a central government for more than a decade. The big surprise? Private enterprise is flourishing. Mogadishu has the cheapest cell phone rates on the continent, mostly due to no government intervention. In the northern city of Hargeysa, the markets sell the latest satellite phone technology. The electricity works. When the state collapsed in 1991, the national airline went out of business. Today, there are five private carriers and price wars keep the cost of tickets down. This is not the Somalia you see in the media.

Obviously life there would be dramatically improved by good governance -- or even just some governance -- but it's also true that, through resilience and resourcefulness, Somalis have been able to create a functioning society.

Most African businesses suffer from an extreme lack of infrastructure, but the people I met were too determined to let this stop them. It just costs them more. Without reliable electricity, most businesses have to use generators. They have to dig bore-holes for a dependable water source. Telephone lines are notoriously out of service, but cell phones are filling the gap.

Throughout Africa, what I found was a private sector working hard to find African solutions to African problems. One example that will always stick in my mind is the CEO of Vodacom Congo, the largest cell phone company in

that country. Alieu Conteh started his business while the civil war was still raging. With rebel troops closing in on the airport in Kinshasa, no foreign manufacturer would send in a cell phone tower, so Conteh got locals to collect scrap metal, which they welded together to build one. That tower still stands today.

As I interviewed successful entrepreneurs, I was continually astounded by their ingenuity, creativity and steadfastness. These people are the future of the continent. They are the ones we should be talking to about how to move Africa forward. Instead, the media concentrates on victims or government officials, and as anyone who has worked in Africa knows, government is more often a part of the problem than of the solution.

When the foreign media descend on the latest crisis, the person they look to interview is invariably the foreign savior, an aid worker from the United States or Europe. African saviors are everywhere, delivering aid on the ground. But they don't seem to be in our cultural belief system. It's not just the media, either. Look at the literature put out by almost any nongovernmental organization. The better ones show images of smiling African children -- smiling because they have been helped by the NGO. The worst promote the extended-belly, flies-on-the-face cliche of Africa, hoping that the pain of seeing those images will fill their coffers. "We hawk poverty," one NGO worker admitted to me.

Last November, ABC's "Primetime Live" aired a special on Britain's Prince Harry and his work with AIDS children in Lesotho. The segment, titled "The Forgotten Kingdom: Prince Harry in Lesotho," painted the tiny nation as a desperate, desolate place. The program's message was clear: This helpless nation at last had a knight -- or prince -- in shining armor.

By the time the charity addresses came up at the end, you were ready to give, and that's good. Lesotho needs help with its AIDS problem. But would it really have hurt the story to add that this land-locked nation with few natural resources has jump-started its economy by aggressively courting foreign investment? The reality is that it's anything but a "forgotten kingdom," as a dramatic increase in exports has made it the top beneficiary of the African Growth and Opportunity Act (AGOA), a duty-free, quota-free U.S.-Africa trade agreement. More than 50,000 people have gotten jobs through the country's initiatives. Couldn't the program have portrayed an African country that was in need of assistance, but was neither helpless nor a victim?

Still the simplistic portrayals come. A recent episode of the popular NBC drama "Medical Investigation" was about an anthrax scare in Philadelphia. The source of the deadly spores? Some illegal immigrants from Africa playing their drums in a local market, unknowingly infecting innocent passersby. Typical: If it's a deadly disease, the scriptwriters make it come from Africa.

Most of the time, Africa is simply not on the map. The continent's booming stock markets are almost never mentioned in newspaper financial pages. How often is an African country -- apart, perhaps, from South Africa or Egypt or Morocco -- featured in a newspaper travel section? Even the listing of worldwide weather includes only a few African cities.

The result of this portrait is an Africa we can't relate to. It seems so foreign to us, so different and incomprehensible. Since we can't relate to it, we ignore it.

There are lots of reasons for the media's neglect of Africa: bean counters in the newsroom and the high cost of international coverage, the belief that American viewers aren't interested in international stories, and the infotainment of news. There's also journalists' reluctance to pursue so-called "positive stories." We all know that such stories don't win awards or get front-page, above-the-fold placement. But what's happening in Africa doesn't need to be cast in any special light. The Ghana Stock Exchange was the fastest-growing exchange in the world in 2003. That's not a "positive" story, that's news, just like reports on the London Stock Exchange. I imagine a lot of consumers would have found it newsworthy to learn where they could have made a 144 percent return on their money.

My independent film was made possible by funding from the World Bank, for which I am extremely grateful. But the bank wouldn't have had to step in if the media had been doing their job -- showing all Africans in all facets of their lives. In a business that's supposed to cover man-bites-dog stories, the idea that Africa doesn't work is a dog-bites-man story. If the media are really looking for news, they'd look at the ways that Africa, despite all the odds, does work.

Author's mailto:africabiz@aol.com and website www.africaopenforbusiness.com.

News:

Announcements

Three-week training in RNA interference and reverse genetics in trypanosomes . International Livestock Research Institute - Nairobi, Kenya,

27 November to 15 December 2006

EMBO, TDR and the BioSciences centre will hold a three-week course in RNA interference and reverse genetics in trypanosomes to be held at ILRI-Nairobi from 27 November to 15 December 2006

The course is intended for experienced PhD students, post-docs or independent investigators with a basic molecular or cell biology background. Candidates may include those who wishes to use trypanosomes as a model in their research, or molecular parasitologists who need to increase their knowledge of trypanosome reverse genetics.

A good theoretical knowledge of molecular biology, and some laboratory experience, are required

African Science Communication Conference Nelson Mandela Metropolitan University, Port Elizabeth , South Africa.

5-7 December 2006

The South African Agency for Science and Technology Advancement (SAASTA) will be hosting an African Science Communication Conference focusing specifically on the need to develop this field and establish collaborative networks on the African continent engaging academies, universities, the public, science centres and private research centres, as well as industry, the media, the education field and professional practitioners

For details contact: http://www.saasta.ac.za/ascc/index.shtml

Employment opportunity: Network Director, NABNet

The North African Biosciences Network (NABNet) is looking for a suitable candidate to occupy the position of Network Director. The NABNet hub and Secretariat are hosted by the National Research Centre (NRC) in Cairo, Egypt. The nodes are located in the participating North African countries (i.e. Algeria, Chad, Egypt, Libya, Mauritania and Tunisia).

The preferred candidate should have a PhD or MD degree in biological/medical sciences or related areas of science and will be an experienced and credible scientist with strong leadership and excellent organizational skills.

Send applications and curriculum vitae to:

The Coordinator
NEPAD/African Biosciences Initiative
NEPAD Office of Science and Technology
Box 395
Pretoria
0001
South Africa

Email:aambali@nrf.ac.za or biosciences@nrf.ac.za

Applications should be submitted by post or email, no faxes will be accepted.

Deadline for receiving applications is 15th August, 2006.

Seeding enterprises: An African perspective to poverty reduction through private sector growth: .

Victor Konde, ATDF

Abstract

This paper discusses policy options on how to create entrepreneurs, and entrepreneurial capacity at Africa's research institutions by looking at successful country cases in the developing world. The author argues that national innovation policies are needed to promote the growth of a dynamic and competitive private sector that efficiently delivers private and public goods and services, unleashing the creativity of individuals and strengthening the performance of domestic R&D and support institutions to meet the development aspirations of their communities. The paper draws on different policies and approaches employed in Chile, Korea, Thailand, and Zambia.

Introduction

Development may be seen as "improvement in the quality of people's lives and expansion of their ability to shape their own futures." [1] One way of enabling people expand their ability to shape their future is to equip them with the skills and tools they require to becomes entrepreneurs. This could entail empowering entrepreneur-support institutions and infrastructure to facilitate seeding and nurturing entrepreneurs whose decisions play a role in the production and delivery of services to communities as well as creation of jobs and wealth.

From this perspective, the existence of a large proportion of entrepreneurs in the population of a country or region is a major factor in promoting economic growth and development. Their decisions on whether to start a new business line, modify or expand an existing product or service unit, acquire new and emerging technologies, among others, may determine the rate at which an economy grows and/or the development of the region.

Estimates suggest that only 10% of the total adult population in the developed countries are starting their own enterprises. This is a very small fraction of all individuals who, all things being equal, wish to become entrepreneurs. Surveys have shown that about 60% and 45% of the adult population in the United States and "EU-15", respectively, wish to be self-employed. [2] Even of those few that succeed to start a business, only 3-17% expect to employ more than 20 persons within their first five years of existence [3].

The first and greatest challenge to governments in Sub-Saharan Africa (SSA), possibly the world's poorest region, is finding ways to encourage entrepreneurship, in general, and entrepreneurs with high expectation (i.e. those that expect to employ more than 20 persons within their first 5 years of existence), in particular, to create enough jobs and wealth. The second challenge is to design mechanisms and policies to encourage potential entrepreneurs to invest their time, energy and resources in sectors that offer great development opportunities and provide decent returns. The third challenge is to empower the currently disadvantaged entrepreneurs trapped in the informal sector to expand, to create extra jobs and broaden the tax base. Other challenges include improving access to credit, entrepreneurial infrastructure and services (e.g. roads and customs clearance) and supply of skilled manpower, among others.

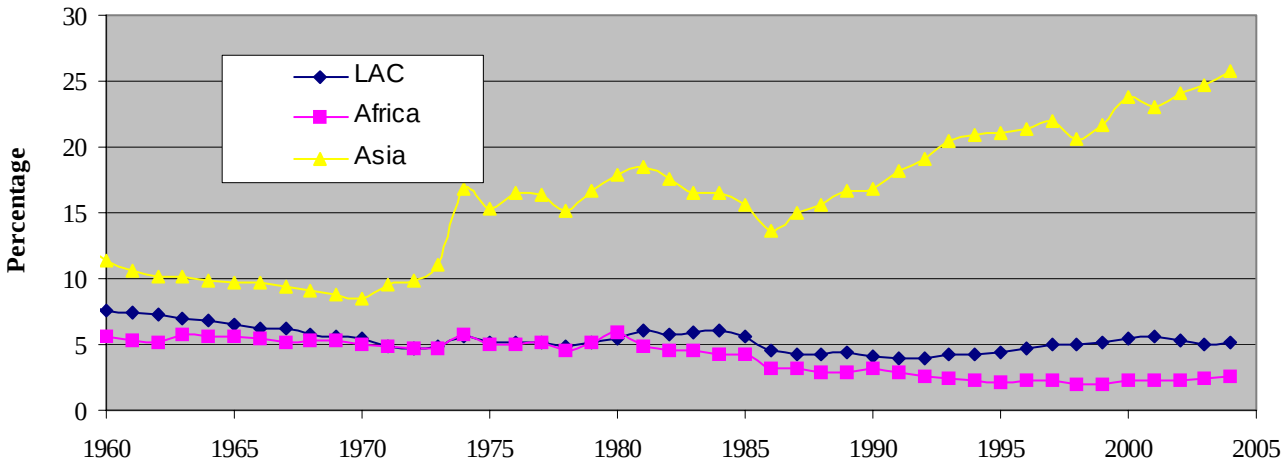
As shown in figure 1, Africa has lost more ground in trade than any other developing region since 1960. Africa's share of global trade remained above 5% between 1960 and 1980. Since then, Africa's share of global merchandise exports fell from 6% in the early 1980s to 2% in the late 1990s. Although international trade terms in most of Africa's exports products deteriorated, the continent has failed to diversify its production base.

Africa's economy could be divided into rural and urban or informal and formal - each supporting comparably large sections of the population. As a rural continent, agriculture plays an important role in the development of the continent.

However, industry plays an important role not just in the economies of the urban areas but also in provision of inputs and processing of agricultural products. The contribution of agriculture to the GDP of Africa has continued to fall since the 1970s (see figure 2). This will be as expected if the continent was industrializing and food production or consumption per capita was increasing (improvement in efficiency or incomes). One way of redressing this trend is to encourage agriculture to become a commercial activity where entrepreneurs - large and small - are encouraged to invest their resources in efficient farming and processing practices, marketing and distribution channels and financing mechanisms.

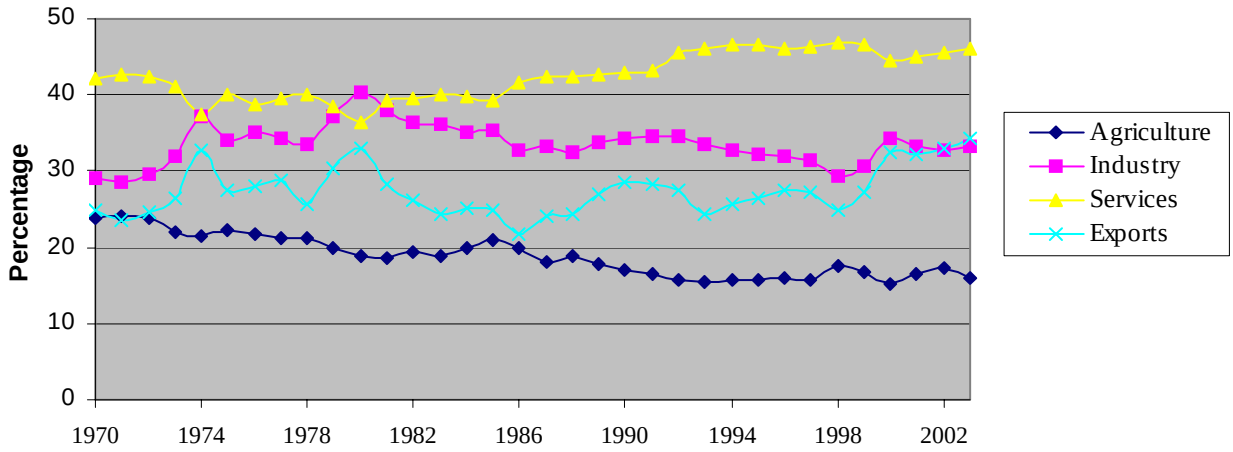
Entrepreneurship may fail to prosper in countries without efficient government institutions that process business-related services such as taxation, registration and land-leases, among others. Some African bureaucracies have become so "lean" (starved of human resources

Figure 1. Trend in regional share of global export of merchandise



Source: UNCTAD
LAC: Latin America and the Caribbean

Figure 2. Africa's GDP by economic activity and share of exports (percentage)



Source: UNCTAD

through public sector reforms) that their ability to implement any program successfully is highly compromised. The continent has the lowest number of civil servants per population. This has a greater bearing in developing and implementing programs, and creating an environment conducive to entrepreneurship.

This paper provides some options and lessons from countries in and outside Africa on how to create entrepreneurs, entrepreneurial institutions and conducive environments to sustain private sector growth. All of these three elements are needed to promote the growth of a dynamic and competitive private sector that efficiently delivers private and public goods and services, unleashing the creativity of individuals and strengthen the development aspirations of their communities.

1. Farming firms: R&D centres in private sector development

Despite the emergence of several centres offering support to potential and existing entrepreneurs, the characteristic of an entrepreneurial institution remains not-well defined. Research based on universities suggests that entrepreneurial institutions have at least five main characteristics [4]:

- ⇒ independent, strong and efficient managerial systems
- ⇒ interdepartmental cooperation and increased collaboration with the outside
- ⇒ a wide funding resource base
- ⇒ stimulated and strengthened research units
- ⇒ an integrated entrepreneurial culture throughout the organization.

These characteristics are important in enabling public institution departments and/or staff members to organize themselves into teams that exist almost as "quasi-firms". [5]. It is through such teams that traditional units in public institutions, especially universities, attract partners and broaden their funding resource base to undertake activities that may be of interest to its clientele. Such teams develop creative ways to raise and access external funding, use resources prudently and view the knowledge they create as potential economic and social assets.

There are also entrepreneurial institutions that, in addition to their traditional roles, have taken on board a mandate to mould individuals into entrepreneurs and/or generate enterprises. For example, the Linkoping University (Sweden) provides training and technical advice to carefully selected students willing to run businesses. Candidates whose business ideas show great potential are provided with funding and access to an incubator to develop their business concepts into enterprises. It is estimated that the programs generated about 100 ventures a year. [6]

These institutions play an important role in national development through the exploitation of the knowledge they generate for commercial purposes. Not all agree on the need of academic and research institutions pursuing commercial use of their knowledge. Some have argued that universities should freely generate knowledge without interference from the outside [7,8]. They argue that university programs should not be tailored to meet the needs of private institutions at the expense of academic excellence. [9].

However, others argue that the university should respond to changes in society and the market place in order to contribute to economic development and social welfare [10, 11]. Indeed, universities risk being perceived as irrelevant if they pursue purely intellectual excellence while industries need highly specialised knowledge workers. Despite this debate, universities have evolved to meet the new demands from industry, government and the public [12, 13] by embracing intellectual, research and entrepreneurial excellence.

What is not in dispute is the recognition that entrepreneurial institutions have become part of the national innovation system and major drivers of innovation and, as a result, economic development. Industry and government are looking to universities as sources of innovation stimulus (through ground-breaking basic research). This is partly influenced by the fact that industry does not have the diversity of personnel that universities offer [14]. This understanding makes university-industry partnerships natural in developed countries.

The success of a university is no longer measured only in terms of publications, extension service and program diversity, but in addition the numbers of patents and licenses received and companies founded. This has also made R&D centres play a greater role in enterprise development within their fields of specialization.

Stanford University and the emergence of the Silicon Valley

Before one concludes that all universities should play a similar role, it is important to understand the reasons that drive many of these initiatives. For example, Stanford University sought to sell some of its land to raise money (over 8,000 hectares). However, Leland Stanford, who donated the land to the University, had prohibited the sale of the land. The University decided instead to lease the land only to technology firms.

By 1951, some firms started moving in and early entrants included Varian Associates, Eastman Kodak, General Electric, Preformed Line Products, Lockheed and Hewlett-Packard, among others. This marked the birth of "Silicon Valley" in the area previously called the "Valley of Heart's Delight". It is thought that the Stanford Research Institute (SRI- now SRI International created by a team of business executives and Stanford University professors in 1946) played a role in attracting technology firms to the initiative.

Silicon Valley is also said to have perfected the financial art of venture capital. By 1990s "about a third of independently-raised venture capital, in the United States and around a sixth of the world's total" was controlled by firms around Silicon Valley". [15] It is estimated that Kleiner Perkins Caulfield & Byers invested about "$1 billion to help start 250 companies, which in 1995 had revenues of $44 billion".

By 1995, Silicon Valley was home to 6000 high-tech firms with sales of $200 billion, had a GDP of about $65 billion and employees there earned an average salary of $43,510 - almost twice the United States' average. Attempts to replicate Silicon Valley have not been successful anywhere - not even in the United States – and many that have succeeded, have created different variants of Science Parks. [16] However, Silicon Valley has played a catalytic role in the development of science and technology parks around the world, some of which have even adopted the name "Silicon".

Although many African universities are unlikely to develop centres that look like Silicon Valley, there is a need to revitalize African R&D institutions to generate entrepreneurs and support emerging and existing enterprises. It requires

the creation of new relationships – spaces rather than links (e.g. joint industry-government-university innovation development centres or fund) – that promote collaboration and establish outreach centres whose main role is to expand the reach of the R&D institute, bring industrialists and development partners closer to university and help students and researchers appreciate real life development and private sector challenges. These are crucial in enabling the R&D centres become engines for enterprise development. [17].

Use of non-teaching centres to promote entrepreneurship at University of Zambia.

The Computer Centre and the Technology Development and Advisory Unit (TDAU) are both non-teaching units at University of Zambia (UNZA). The Computer Centre has promoted several entrepreneurial activities. The Centre is credited with the development of Zambia's first and main internet service provider. The emergence of email and the Internet offered many academic institutions a cheaper communication alternative with partners and colleagues outside. The early email networks in Africa were developed to meet this need by academics, just like in developed countries.

The UNZA soon realized that the lack of an internet service provider in the country hindered the direct connection of the university to the Internet. Armed with a $200,000 loan from the World Bank, a willing management, political support and a few creative individuals with basic knowledge and contacts inside and outside the country, the University transformed its email network into Zambia's first Internet Service Provider, Zamnet Communications. [18]This made Zambia the first country in Sub-Saharan Africa, outside South Africa, and the fifth country on the continent, to enter the Internet age.

Several factors made this development possible. The Computer Centre was coordinating three projects for NGOs, University and the Government. Each of these projects brought in expertise, links, equipment and political influence. For instance, the University project, through Rhodes University, [19] generously offered to bear the cost of picking up and dropping of mail everyday, [20] HealthNet supported the satellite link and the Computer for the NGO project served as the first server. The pooling of resources from the different projects was key to the successful development of the network and Zamnet.

After the successful commercialization of Zamnet, the computer Centre turned the room which house Zamnet into The Consultancy and Training Unit (CTU). The CTU, initially created to support university staff and departments with IT services, has carried out training and provision to software to organizations such as the Common Market for Eastern and Southern Africa (COMESA), Chilanga Cement PLC, Zambia Telecommunication Co-operation and Micro Banker's Trust [21].

Similarly, TDAU is primarily a consultancy unit that provides testing, designing, fabrication, manufacturing, training and marketing services. The Unit, on request, modifies existing off-the-shelf technological products to meet the user's needs and thus serve as a link between the University community and the general society. The Unit enjoys more financial and administrative autonomy than schools or departments and some of its employees were hired from the private sector. The manager of TDAU has the freedom to allocate resources without explicit permission from the University administration and can issue bonuses to employees. Among its many products, TDAU has adapt a seed-treating machine for use by farmers in rural areas without electricity and a fruit pulping machine for wine production.

There are others initiatives that are undertaken to complement existing research and teaching activities. For instance, UNZA got a loan from the Ministry of Finance to buy a farm that its has developed into Zambia's second largest exporter of low volume, high value agricultural products with an annual turnover of about $14 million and employs about 3,300 workers.

One can argue that UNZA has created many jobs, contributed to diversification and expansion of exports of the country and, in the process, to poverty reduction (i.e. beyond educating thousands of Zambians). Perhaps, African R&D centres and Universities could play a catalytic and demonstrative role that facilitates private sector development. The existence of centres where industry, government, donors and NGOs feel comfortable to interact with experts in R&D centres could facilitate the identification of technological and market niches that may be exploited to generate enterprises and create jobs.

2. Seeding and nurturing entrepreneurs in the education system

Entrepreneurship is often seen as a rare 'genetic trait' for a few gifted individuals. However, there is a growing recognition that it is partly cultivated and probably seeded early in life. Primary and secondary education plays an important role in shaping the future decision of many people. However, for a continent without established firms, high unemployment and no promotion of private-sector led development, business development is not one of the topics often taught at primary, secondary and tertiary levels. It seems countries wait until students fail to become everything else before they are encouraged to become entrepreneurs through hashed-up workshops and conferences.

There is absolutely nothing wrong in including cash-flows, sales and marketing topics and activities, etc, in mathematics or general business management topics in social studies. If it is possible to teach management and organizational structures of governments and political parties in primary and secondary schools, it should be easier to develop curriculum for business development. Above all,

managing a home is similar to managing a business (e.g. when and how much to borrow, how to structure repayments, balancing a budget and distributing incomes to meet the varying needs etc). It is embarrassing that even those that graduate with degrees in economics and - in some cases- business management or accounting are not even taught how to prepare a professional business plan. That is not just a short-coming in the African education system but rather on a global scale.

Just like schools teach preparation of research proposals or questionnaires, it should be possible to teach design and preparation of business plans and financial reporting to equip future public and private workers and provide enterprise development as an option (just like becoming a teacher or doctor) early in life, in addition to the current ones (carpentry, farming, metalwork and cookery).

There are several additional practical steps that institutes and specialized centres could undertake, to stimulate entrepreneurship. Clubs for entrepreneurs at secondary schools, colleges and universities or specialized centres could be created. They could meet 1-2 times a week in structured sessions that could bring established successful and emerging industrialists, government department heads (tax, finance, intellectual property, S&T etc) to share their experiences with students and researchers, provide practical guidance and draw attention to new or emerging opportunities. Structured as working groups, such sessions could be just as effective and as useful as several months of formal classes.

Institutions could also encourage students as well as lecturers/researchers to set-up consulting or services in collaboration with the private sector. Such units would allow researchers and students to help identify niches, challenges faced by firms, establish critical links with industry and government, and learn how to deal with different key players in the economy and their varying needs. It may also help many individuals to learn how to work in multidisciplinary teams, instil trust and confidence and acquire skills to negotiate and seal deals. A number of universities, including some in Africa already run some consulting units that could be expanded to take on these roles.

These practical initiatives are particularly important as most entrepreneurial individuals are good listeners, highly practical and rely on trust but often dislike reading and theoretical details. This is not unusual as entrepreneurs may be motivated by passion to overcome an existing challenge, need to change the way things are done, simplify an existing complex process and the desire to empower themselves and/or others now as opposed to later.

For example, Jim Clark, the founder of Silicon Graphics, Netscape, Healtheon, myCFO.com and Shutterfly.com is quoted saying: “With Silicon Graphics I was doing what I had trained myself to do, and what I thought could be done better at a lower price point; but at Netscape there was a lot of ego involved, and I did it partly to expunge from my mind and others any doubt about my ability. At the time, the Internet was considered academic, impractical and profitable Netscape proved firms such as AT&T, IBM, Microsoft, which pursued proprietary networks, wrong.” [22]

It is important to realize that several entrepreneurs are just a few steps away from realizing their dreams and all they need is a little push or help. Such help could include provision of technical, managerial and professional services (coaching) to emerging firms and entrepreneurs and some shared cheap working space. Short of building incubators and technology parks, having a list of national advisors and institutions willing to provide some space could play a similar role in the short-term.

Incentives could also be used to entice entrepreneurial individuals take more 'measured' risks to invest in technology, cooperate and create jobs. This could be modelled along those used to promote research and innovation. The Chinese Academy of Sciences’ Institute for Biophysics pays up to $31,000 to scientists who publish their research in Nature, Science and Cell and other Journals depending on their impact factor, Pakistan’s ministry for science has been paying up to $20,000 based on the cumulative annual publications since 2002, and Korea will be paying its scientists $3000 per paper published in key journals. [23]

As a result the number of publications is up in all these countries but there are fears that it may be pushing scientists a little too hard (scientists could be tempted to manufacture or fabricate data). [24] Despite this potential conflict of interest, the main aim is to encourage scientists come up with original research ideas that could be published in premier journals and used to develop novel technologies for domestic industries. The Chinese Academy of Science has developed high-tech companies such as Lenovo, which recently acquire some assets of IBM.

It is possible to modify these award systems towards employment and wealth creation by rewarding individuals, clubs and institutions that develop or support existing entrepreneurs and products and services. South Africa already offers innovation awards to emerging and established firms and institutes annually in a number of categories: R&D, marketing, commercialization, empowerment, portfolio management, design and social innovation. [25] There is absolutely no reason why countries cannot use awards to stimulate development of pharmaceuticals, engineering, agro-processing and other social services especially in countries without a strong base of such industries.

3. Lending emerging enterprises a helping hand

Individuals and teams starting firms in new areas face many challenges: these may include demonstrating technical and economic feasibility of the concepts, establishing production, distribution and marketing channels and achieving sufficient production volumes to reduce costs. These, in addition to the traditional challenges such as difficulties in accessing financial resources, limited skilled and experienced human capital and lack of linkages or networks that are associated with new fields or emerging firms, increase the costs and risks of starting businesses in new fields.

The case of Chile

Chile understood that research and technology development plays an important but small part in converting natural resources into industries and export products. It established institutions that undertake research, demonstrate the technical and economic feasibility, and support entrepreneurs willing to create firms. In addition, it helps its firms upgrade their technologies to meet international standards as well as marketing the emerging products. Chile has several organizations whose main role is to support technology diffusion and firm formation (e.g. Fundación Chile), support emerging and existing firms (e.g. Chilean Economic Development Agency; CORFO) and, national and international promotion and marketing of Chilean products (e.g. ProChile). [26]

Fundación Chile, created in 1976 by the Chilean Government and the United States' ITT Corporation to develop ways of diversifying the Chilean economy, creates new firms based on or add value to Chilean natural resources. Once the firms have grown and the sector starts to attract sufficient private investments, the firms are sold to private investors to recover the initial investment. Since then it has created about 40 enterprises in different sectors and sold about 30 to the private sector. Furthermore, Fundación Chile works with other players to establish product standards and develop firms.

For instance, after developing the basic scientific and technological methods for salmon farming, Foundation Chile established three firms that demonstrated the technical and economic feasibility of the different aspects of salmon farming (breeding, production and nutrition). [27] Foundation Chile used the firms to search for other potential farming areas, transfer technology to emerging firms and undertake further research in salmon farming. The success of these firms attracted the interest of both domestic and, later, foreign investors.

Similarly, ProChile, the trade commission within the Ministry of Foreign Affairs, has about 56 global offices in major and emerging markets and 13 national offices in the various regions of Chile. It monitors the development of legislation and customs regulations to keep exporters informed and advises Chilean exporters on market trends, and promotes relations between Chilean enterprises and foreign partners.

The main roles of ProChile are to:

1. Support and advance Chilean business interests in the global marketplace;
2. Facilitate exports by providing data on and identifying export regulations;
3. Develop international business relationships;
4. Facilitate formation of strategic alliances;
5. Provide information on international trade; and
6. Stimulate diversification of Chile's exports.

One of the main challenges in learning from Chile's experience is the absence of grand plans. Chile has diversified its economy away from copper mining to a producer and exporter of fish, wines and fruits, among others, without major national master plans. It is perhaps the most successful developing country in creating industrial clusters based on its natural resources. What is often overlooked is the role of not-for-profit business support institutions created by or with support of government departments. It is these institutions that seem to cooperate closely with universities at home and abroad and with the private sector. They also nurture and continue to guide the emerging firms for several years (may be considered incubation). There is no reason why many African countries, with a vast natural resource base and human capital, should not emulate or adapt Chile's approach to private sector development.

The case of the Republic of Korea

The Republic of Korea (from here referred to as Korea) supports emerging and established firms in a very different way. Unlike Chile, it lays out very detailed and explicit master plans that are used to galvanize industry, research and government institutions. For instance, Korea developed the Korea Biotech 2000 plan of action with three main phases and at total investment of $15 billion by 2007: the first phase (1994-1997) was to acquire and adapt bioprocessing and improving performance of R&D investment; the second phase (1998-2002) was to consolidate the scientific foundation for development of novel products and the last phase (2003-2007) to expand the market for biotechnology products domestically and internationally. [28] The Government set aside about $380 million to help establish 600 biotechnology-related ventures by the end of 2003. Such detailed sequencing of industrial development is not common.

Korea, which in the 1960s and 1970s was no richer than Ghana, has emerged as a producer and exporter of knowledge-based products. Korea promotes the import of foreign technologies needed to help its industries

Table 1. Ranking of some African countries based on their business environment.:

Examples of some of the indicators used and rank of African countries out of 155 countries surveyed.

Economy	Global Rank	Starting Business	Licenses	Registering Property	Getting Credit
South Africa	28	51	37	77	40
Namibia	33	76	58	118	37
Botswana	40	74	113	80	4
Tunisia	58	40	88	67	102
Zambia	67	44	85	111	107
Kenya	68	93	15	113	13
Uganda	72	100	92	97	127
Ghana	82	131	71	120	116
Nigeria	94	105	117	152	38
Malawi	96	70	110	83	85
Lesotho	97	111	56	117	118
Ethiopia	101	94	57	140	114
Morocco	102	50	125	58	146
Mozambique	110	139	54	94	70
Zimbabwe	126	140	147	71	90
Mauritania	127	146	89	56	67
Algeria	128	109	100	138	138
Benin	129	107	135	72	108
Cameroon	130	133	121	122	91
Madagascar	131	124	128	146	94
Senegal	132	125	68	137	136
Angola	135	155	122	145	77
Sierra Leone	136	64	134	139	122
Eritrea	137	150	109	115	143
Rwanda	139	58	106	124	149
Tanzania	140	113	150	143	125
Egypt	141	115	146	129	142
Burundi	143	88	138	123	110
Guinea	144	145	144	133	144
Cote d'Ivoire	145	130	133	147	141
Mali	146	143	123	91	135
Congo, Rep.	148	128	81	136	130
Togo	149	148	108	128	151
Niger	150	142	129	90	119
Sudan	151	68	..	..	123
Chad	152	154	102	108	112
Central African Republic	153	112	116	87	111
Burkina Faso	154	138	149	148	109
Congo, D.R.	155	153	132	142	140

Source: (World Bank's) Doing Business in 2006 report

produce locally developed products. This is almost opposite to the approach of African countries that focus on product (e.g. a vaccine) rather than "production process" (i.e. how to produce the vaccine). Many of the plans in the Korea are co-developed and co-funded with existing and emerging industries.

Although different countries use different approaches, some have developed dedicated enterprise support institutions (such as Chile) while others, like Korea, participate in the development of the industry. A number of institutions- such as small industry development organizations, village industry organizations, farmer training institutes – were developed to promote industrial development in Africa. Many of them lacked freedom from political manipulations, focused on a few basic areas (e.g., leather and wood processing), targeted largely skills and technology diffusion, had no marketing arms and, where they succeeded to develop firms, they become managers rather than remaining as catalysts. By so doing even those that succeed actually failed as they seized being catalysts of enterprise development.

4. The need for entrepreneurial governments

Entrepreneurial governments may be said to be the ones that promote a common entrepreneurial culture throughout its arms or institutions, stimulates its institutions to develop innovative solutions to national challenges and provides sustained guidance and support to entrepreneurial individuals. Such governments are expected to spend more resources developing solutions for current and future challenges and to cooperate with the private sector and civil society to meet its goals.

For example, Zambia liquidated its state owned United Bus Company of Zambia (UBZ) – the sole national-wide passenger bus service provider – following years of mismanagement. The Government waived duty on imports of buses with a seating capacity of 14 or more passengers. Within a few months the void left by the liquidated state firm had been filled by private operators offering much improved services. What would have been the impact of this measure on domestic learning and technological upgrading if it was extended to producers of automobile spare parts and other related industries? It was also during this time that tyre and car battery producers (e.g., Dunlop Limited closed its plant in 1997) seem to have suffered most. An extension of this measure to related firms may have helped a few learn and become producers and exporters of automobile parts, save the limited foreign exchange earned and create employment.

Asia is perhaps an excellent example of a region with some of the most entrepreneurial governments and competition is very high among countries seeking to become global manufacturers, traders and technology centres. Asia has focussed on promoting private enterprise by promising high returns on investment through incentives and subsidies. These often include targeted incentives for selected industries and technologies, flexible labour regulations, infrastructure support and assistance with skills-upgrading, marketing and matchmaking services. Some countries, such as Thailand, have investment promotion offices in Europe and United States and other emerging markets.

Therefore, an entrepreneurial government may also be judged by its attitudes towards private enterprises. Entrepreneurial governments are more tolerant to successful domestic firms and use them to stimulate further domestic and foreign investment, they monitor unfair competition and practices likely to hurt their firms at home or abroad and they keep their firms abreast of emerging challenges and opportunities. They seek better ways to accelerate imports and exports, registration and licensing, enforcing contracts and payment of fees. In a way, they go beyond maintaining a level playing ground on the domestic front to proactively promote growth and expansion of their firms at home and abroad. The United States is perhaps a good example. [29]

Africa has taken several significant steps towards meeting some of these challenges but could do a lot better. According to the World Bank's 'Doing Business Report' [30], out of the 155 countries surveyed, only 3 African countries are in the top 50 (or 11 among the top 100) while all of the bottom 20 countries except 3 are from Africa. As summarized in table 1, it is much harder to start a business, get a licence, pay taxes, register property and get credit in many of the African countries. In addition to poor infrastructure, these factors make Africa an expensive place to do business.

Finally, entrepreneurial governments work very closely with industry to map out future development strategies. For example, Thailand established the National Information Technology Committee (NITC) in 1992 to exploit information technology (IT) for social and economic development. The NITC was chaired by the Prime Minister and is composed of ministers, permanent secretaries and senior public and private sector leaders. [31] It develops IT-related policies and proposes them to Cabinet; it conducts policy research, establishes information centres, coordinates relevant IT-related development activities and disseminates information. The NITC works together with the Ministry of Information and Communication Technologies.

Therefore, it is not surprising that firms such as Oracle, IBM, Intel, Microsoft, the Centre of Excellence for Computer Security and Internet Thailand are among strategic partners of the Software Park Thailand (SPT). Although these firms may have been attracted by cheap qualified labour, stable economic environment and government incentives, among other, government commitment may have played a major role as well. Such commitment at high level to enterprise development remains illusive in many African countries despite the high levels of poverty, disease, hunger and unemployment.

Entrepreneurial governments focus on more than the immediate and obvious challenges. African countries and their policy makers and advisers spend more time counting the poor, hungry, sick and dying etc year in and year out rather than devising ways of making sure that in the future Africa should be counted among the rich, healthy and well-fed. If anything, the data collection exercise seem to be used to wave at donor to get more help rather than to design policies and support institutions needed to empower their people or leave a better nation than they found. A simple check on development strategies of some African countries reveals that they have no clue how they wish to look like 2 or 5 decades from today or have just dabbed international targets as though they were national in any respect!

There is no competition among African countries on economic performance or development achievements. Should they not be devising ways of transforming all our countries into the rising power stars creating the highest number of enterprises, jobs, wealth and social services? Entrepreneurial governments would be turning crisis into opportunity – as they say; "necessity is the mother of all invention" and Africa is not short of needs.

Take Tunisia, when it realized that its car assembly was dying it sought ways of encouraging its firms become producers and suppliers of auto-parts. By the time it totally shut down, the country had become a competitive supplier of automotive spare parts to its domestic and export market. Similarly, when sugar prices started falling on the international market, Mauritius embarked on alternative uses of sugar. It is perhaps one of the few proud owners of co-generation energy technologies and has learnt how to produce several by-products of sugar processing (e.g. yeast) industry. They are possibly the only two African countries whose development and fast economic growth has not been based on oil or mineral resources.

If Africa has to feed, dress and shelter itself without a lot of outside help, then it is time to get rid of many of the traditional ministries and introduce ones that address the needs of the people. Malaysia, for example, has established the Ministry of Science, Technology and Innovation, Ministry of Entrepreneurs Development and Cooperative and Ministry of International Trade and Industry that have promoted initiatives such as the Multimedia Super Corridor and the Malaysian Technology Development Corporation.

In a way, the country is placing greater emphasis on innovation and development of technology intensive industries. It is no wonder that Malaysia, which got palms from Ghana, today accounts for half of the palm oil exports while Ghana is still learning.

As BBC correspondent Mark Doyle described a conversation with Ghanaian friends:

Ghanaian friend: "Oh, this country! Nothing works in Ghana! Why are our politicians so useless? Why are we so poor?"

Mark: "Hey! don't do yourselves down! You've got peace and democracy. You're miles better off than most other Africans. What's more, this country is full of really friendly people!"

Ghanaian friend: "Come off it, Mark. You can't eat democracy or friendly people! Anyway, why should we compare ourselves with other African failures? We want to compare ourselves with the best!"

(BBCNews.com, 4 April, 2005)

Entrepreneurial governments are required to enable their people realise the dream of being among the best.

5. International industrial alliances to promote entrepreneurship

Strategic alliances are complex linkages between related or unrelated firms (i.e. affiliated or unaffiliated firms) and institutions designed to reduce the costs, risks and uncertainty associated with development of new products, production processes and marketing. They may also be used to facilitate access to and transfer of technology and information exchange. [32] Partnering arrangements, such as subcontracting, joint-ventures could be used to promote enterprise development and technological learning.

Although there is not enough information to assess the extent to which African firms collaborate internationally and domestically, there are indications that such collaborations are becoming more important in some sectors, such as horticulture, travel (airlines), hospitality and finance. Few firms are known to collaborate in either seeking technologies or opening up markets abroad. Such alliances are often driven by developed country firms seeking markets or partners in Africa.

Government and national industrial and trade associations could promote the formation of alliances that benefit their domestic firms. For instance the Republic of Korea and Russia in 1990 agreed to created the Korea-Russia Scientific and Technological Cooperation Centre to utilize Russian expertise in areas where Korea was weak, acquire technologies that are difficult to acquire from other countries, utilize Russian experts to facilitate development of small and medium enterprises, develop joint ventures and to manage the Venture Technology Incubation Centre. Such centres could be used to familiarize parties with the working practices and promote formation of alliances.

6. Prescriptions and overregulation kill entrepreneurship

Governments and donors, and to some extent, NGOs, by nature tend to develop initiatives that meet their political, economic and social responsibilities and rarely consider the need of entrepreneurs. For example, an assessment of the World Bank 's Country Assistance Strategy (1997) for Tanzania concluded that although the Bank set agricultural growth at 5 percent per year, it did not emphasize exports even though growth at this pace was likely to saturate the domestic market and constraints to agricultural investment were not considered despite adopting a private-sector led strategy. "Part of the problem arises because factors that determine agricultural investment and growth are often outside the sector and concerns of Bank agricultural staff." (World Bank, 1998).

Donors and governments are often in a hurry to demonstrate success for obvious reasons and withdraw support at the earliest signs of failure. Start-up firms can take up to a decade before they can demonstrate success - that is often beyond the political life-span of most donor and government initiatives. Tanzania, like other HIPC countries, has had structural adjustment programmes that lasted no more than 3 years and often changing the economic and development strategy e.g. 1983-86, 1986-89, 1996-1999. Measures such as currency devaluations, privatization, tariff reduction, taxation and reduction in government expenditure affect corporate planning and their radical and rapid alterations could kill firms.

Such reviews also ignore the importance of projects that seem or promise to fail but given time would succeed. Some have recommended that failed projects should be periodically reviewed to identify "false negatives" at least twice. For instance, entrepreneurs may be sceptic of government or donor initiatives in early stages. Scrapping the project may just fulfil the belief that the offer was not genuine and yet a few more years would have attracted more interest from individuals.

Agriculture is a good example of an area where some entrepreneurs, especially larger ones, invest their resources in commercial or export crops where governments seem to play a smaller role. Indirect price controls, ill-timed food donations, limiting sourcing of outputs and suspension of export food crop at will, among others, make corporate planning difficult. As a result, some countries in Southern Africa that have food shortages and are permanent food aid recipients have also an expanding production and export of non-food crops.

It is also known that each country has its own ethnic group(s) that produces entrepreneurs. Malaysia, one of the success stories, has an economy that is largely driven by Chinese Malaysian while the indigenous Malays run the political arms. The Serahule in Gambia, Kikuyu in Kenya and the Kasai in Democratic Republic of Congo are examples of ethnic groups in African countries famous for their entrepreneurship. More than genetics, ethnic grouping provide protection, trust, support and key information (e.g. emerging markets, price changes and others) which enable them to start and run businesses.

For instance, about 20,000 Dutch Somali's have left Netherlands for Britain in the last 5 years. Although there are many reasons, Dutch rules on assimilation of immigrants make it difficult for immigrants to be entrepreneurial. Most Somalis that have migrated to Britain are in Leicester and Birmingham. According to the Leicester City Council report on "Taking Forward Community Cohesion", a number of Somali led-businesses have already been established without external financial and other assistance within the short-time they arrived. While Netherlands is very generous and tolerant to immigrants, Somali seem to be more entrepreneurial in groups rather than in isolation. Similarly, Asians in Eastern Africa tend to live in the same area, use the same banks and run similar businesses - largely retail. By so doing, they provide vital social and market intelligence support needed to remain competitive, as well as help others start firms.

However, there is another twist to consider: opportunity and incentives. For instance, Silicon Valley provided the often "disadvantaged groups in a less results-oriented environment: women and immigrants" with opportunities...Sun, Oracle, Solectron, Cirrus Logic and hundreds of other firms all have at least one foreign founder. Chuck Robel, an accountant at Price Waterhouse, jokes that employee registers for stock options are so international that they make "the average company look like the UN" ". [15]. In a way, Silicon Valley provided opportunities to brilliant entrepreneurial individuals, incentive to venture capitalist to make more money, and, more importantly, created a community of individuals that invest time and resources in risky ventures. This may explain why often marginalized groups seem to have made it just as well in Silicon Valley.

Therefore, public initiatives should try to understand factors that enable their target groups be entrepreneurial. Switzerland is a good case for some African countries. Its 7 million people live in 26 States scattered its mountainous landscape that will make Kenya look like a flat land. Its smallest has about 15,000 people and the largest 1.3 million but each has its own constitution and, as a result, unique business environment. Each has developed its own entrepreneurs and businesses - but not necessarily in the same sector.

Governments may also promote learning and integration by funding projects through competition rather than dictating who or how to do it. One of the best examples is the land resettlement schemes. Recently, an Ethiopian official was quoted saying "It is our duty to move the peasants if they are too stupid to move by themselves" in an effort to resettle 1 million people. Ethiopia is not the first. Zambia's resettlement efforts

in the 1990s were meant to take its unemployed youth roaming streets to potentially fertile farming camps. Perhaps both should have advertised and invited those interested to relocate.

Governments should focus on building the social and physical networks, infrastructure and support institutions that promote trust, understanding and communication among entrepreneurs and those that support them. Marginalized groups or populations are likely to benefit more from programs that are result-oriented, provide opportunities and incentives for all involved. Targeting only the marginalized often leads to further marginalization of the target group by fuelling resentment in those who perceive themselves as losers. Similarly, leading entrepreneurs may avoid or limit access of start-ups that seem to be growing at their expense to their established distribution and marketing networks.

7. The informal sector: challenges and options

The phrase "informal sector" is thought to have been popularized by the 1972 International Labour Organization report on Kenya. [33] Defining the informal sector presents a major challenge as some activities considered informal in one country may be formal in another and it may be defined in terms of employment (e.g. informal employment or employment in the informal sector) or economic activity (informal enterprise or household. In general, the informal sector is that part of the economy that seems not to fall under any legal or regulatory frameworks governing enterprises.

The informal sector presents many challenges. How many of the individuals trapped in the informal sector are actually entrepreneurs or how many are simply trying to stay alive in the absence of a job or social security? Of the entrepreneurs, how many are seeking to improve or expand their businesses? It will also be important to know the challenges they face in procurement, production, marketing and distribution. Except where clusters of informal producers exist and can be identified, the heterogeneity of enterprises in the informal sector has often led to generalization of their needs.

One of the things that governments could still subsidize is technology development, transfer and diffusion. This could include adapting freely available technologies to meet needs of the informal entrepreneurs as well as helping individuals in the informal sector to meet royalties and licensing fees (e.g. for ICTs) or acquire technology through R&D centres, meeting the cost of outreach programmes by R&D centres, financing linkages initiatives with established firms and creating innovative funding mechanisms for those seeking to grow, among others could play a vital role.

The quest to formalize the activities of the informal sector has remained elusive. Some of the activities of the

The informal sector: Entrepreneurs or unemployed lot? Source: Allafrica.com

informal sector are difficult to regulate and may have killed growth of industries. For instance, the growth in second-hand clothes imports has helped many people in the informal sector earn a living but it has also been one of the factors that facilitated the fast demise of the textile industries in some parts of Africa. According to Oxford International, trade in second hand clothes represents about 0.5% of global volume of clothing but up to 50% of the volume in some African countries. [34]

Part of this challenge is due to large size of the informal sector in many African countries (in comparison to formal sector). By nature, some of the activities of the informal sector may be partly legal (e.g. trade in currencies or operating a bar/drinking place without a licence) while other activities are illegal irrespective of the sector (e.g. resale of stolen goods). Some governments still use the large size of informal sector for political gains. [35]

However, those parts of the informal sector with established businesses (e.g. fabricating, manufacturing and repair units) could be formalized and helped to expand through provision of financial, technical and professional support. Some of the individuals running such ventures are educated and some are trained. For the majority of the informal sector, several strategies may have to be employed. These could include the creation of formal jobs to reduce the size of the informal sector and provision of infrastructure - especially markets stalls - to improve the working conditions.

Other measures may include reducing the regulatory requirement for start-up firms to encourage individuals register their enterprises. Above all, lengthy registration procedures tend to encourage corruption, political manipulations and undue delays that raise costs for entrepreneurs. Entrepreneurs hoping to exploit an emerging window of opportunity before it closes may be forced to operate informally. The Internet is an example where high government fees (e.g. $40,000 in Zambia) or bans (e.g. Southern African countries agreed to ban voice over the internet protocol) led to the operation of unofficial services.

Box 1. Comparison of regulatory entry barriers for start-up firms for New Zeland and France

New Zealand requires entrepreneurs to first obtain approval for the company name from the website of the Registrar of Companies, and then apply online for registration with both the Registrar of Companies and the tax authorities. This takes about three days.

By contrast, France requires the entrepreneur to check the uniqueness of the chosen company name with *Institut National de la Proprie´te´ Industrielle* (INPI), obtain the mayor's permit to use a home as an office or secure a notarized lease agreement if office is rented space. In addition the entrepreneur must consult three separate authorities to obtain the following documents:

⇒ proof of a clean criminal record,
⇒ original extract of the entrepreneur's certificate of marital status and
⇒ a power of attorney.

"The start-up capital is then deposited with a notary bank or *Caisse des De´poˆts*, and is blocked until proof of registration is provided followed by notarization of the Articles of Association. A notice stating the location of the headquarters office is published in a journal approved for legal announcements, and evidence of the publication is obtained. The founder registers four copies of the articles of association at the local tax authority. The entrepreneur then files a request for registration with the *Centre de Formalite´s des Entreprises* (CFE).

The CFE must process the documents or return them in case the request is incomplete. The CFE automatically enters the company information in the *Registre Nationale des Entreprises* (RNE) and obtains from the RNE identification numbers: *numero SIRENE, numero SIRET, and numero NAF*. The SIRET is used by, among others, the tax authorities and the RNE also publishes a notice of the company formation in the official bulletin of civil and commercial announcements. The firm then obtains a proof of registration *K-bis* form.

To start legal operations, the entrepreneur completes five additional procedures:

⇒ inform the post office of the new enterprise,
⇒ designate a bondsman or guarantee payment of taxes with a cash deposit,
⇒ unblock the company's capital by filing with the bank the *K-bis* form,
⇒ have the firm's ledgers and registers initialled, and
⇒ file for social security.

The procedure takes 52 days".

Globally, about 58% of the red tape involves screening the entrepreneur, 19% are related to labour issues, 19% taxation and 4% health and environment matters.

(Extract from Djankov, S. *et al*., (2002) Regulation of entry, *Quarterly Journal of Economics*).

More importantly, as illustrated in box 1, most of the procedures do not deal with technical and commercial viability, labour, taxation, health and environmental issues of the business but rather profiling of the entrepreneur and many business days are lost. For instance, 153 days are needed to complete Mozambique's procedures, 14 days in Tunisia, 35 days in Zambia and 38 days in South Africa will be needed to start a firm. By a wide contrast, one needs on 2 days in Australia, 3 days in Canada and 6 days in Singapore to complete registration procedures!

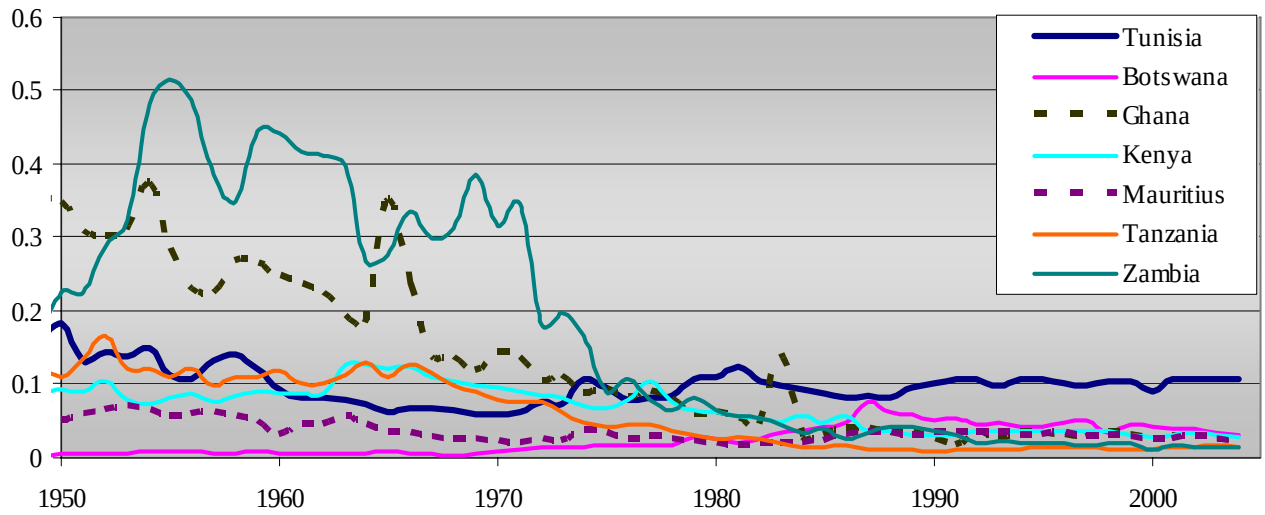
If one take into consideration literacy and wealth status of potential entrepreneurs in the in Africa then, then perhaps one appreciates that some of the requirements may be too complex and demanding for the majority of Africans. Given a choice whether to spend their limited resources paying lawyers and/or corrupt officials to register (formal) or to operate unregistered (informally) they will possibly choose being informal.

Concluding remarks

There is a general consensus that the private sector will have to play a greater role in the development of countries. For this to happen, seeding entrepreneurship early in life and providing the necessary tools needed to convert potential entrepreneurs into developers and managers of enterprise is important.

Robinson and co-workers [36] described four attitudes, that are applicable to Africa, that do not encourage or facilitate entrepreneurship:

Figure 3. Changes in global export share of select African countries



Source : UNCTAD

- ⇒ "The zero sum attitude" or the tendency to overcharge even when a lower price would increase turnover and be profitable,
- ⇒ The perception that prosperous individuals must be doing something illegal,
- ⇒ The attitudes that government should provide everything,
- ⇒ The lack of respect for rules or contracts.

In Africa, there is also the lack of respect for public and private property. Such attitudes do not inspire entrepreneurs to innovate as government seems to accept failed or struggling firms as the norm and successful ones as greedy. This is especially evident as some governments seem to take trips abroad and advertise in international media to woo investors while at home they are condemning or threatening to expel investors already inside the country. The legacy of public enterprises has left many governments feeling partly hopeless as they can no longer alter private sector decisions as easily as they did with public enterprises.

There is a recognition by many African countries that poverty reduction and wealth creation are not necessarily enemies even though they are not necessarily friends. The main goal is to encourage both small and large private enterprises to grow. Any development strategy that focuses only on small and medium enterprises is likely to hurt the larger firms that tend to serve as anchors in industrial clusters. As shown from figure 3, some countries in Africa will need both large and small companies if they have to recover their lost grounds (e.g. Ghana and Zambia) or keep up (e.g. Botswana and Tunisia).

Most new ideas, jobs and innovations are developed by small and medium enterprises that have to be creative to compete. The large firms take up the new ideas that have been proved or promise to work, refine and produce them in mass, and deliver them to the final consumer at a lower price. [37] It is now accepted that most mergers of large firms result in job losses and their investment is highly mobile. The large firms invest huge amounts of money in R&D and acquiring new products and processes from emerging and small firms.

Large and small firms play complementary roles and should receive the attention of their governments. Unlike in developed countries, many of the one to three employee-sized firms are likely to be in the informal sector and are unlikely to receive any assistance from government and no one notices when they die. However, there is an emerging class of small firms providing business and professional services to large firms in Africa that are in the formal sector partly because their clients may demand official receipts, guarantees and pay good salaries. One such area is the provision of IT-support services by one or a team of individuals.

Perhaps governments should develop institutions that will support emerging entrepreneurs. To avoid conflicts with emerging trade rules on subsidies, they could focus on provision of professional support, technology development and acquisition, and space and other infrastructure support- directly or through R&D centres. They could also encourage their institutions to offer appropriate training early in life on enterprise development. Current courses, such as carpentry and cookery, seem to suggest that those who fail to become doctors or engineers, among others, would become woodworkers and housewives. Instead, training should prepare

individuals to do well in whatever career they may choose to pursue – including running their own firms.

Ultimately, it is the decisions of individual entrepreneurs that determines how fast or slow an economy may grow, in the case of Africa – whether we overcome hunger or disease. If their preparation - e.g. training - is bad they may fail or require more time to learn how to run businesses that employ more than just themselves. As shown in figure 3, many African countries are unlikely to reclaim their share of global trade they had in the 1950s to 1970s without a major investment in developing entrepreneurs.

Similarly, if the business environment is poor, they may decide to invest their time and resources else where – making talks of "brain-drain" sound very academic. If the goal is to reduce poverty and promote development, then expanding the ability of individuals to do best what they wish to accomplish – especially where it meets the objectives of the people and country - should receive more attention than is currently given- whether they want to run private schools and clinics or make biscuits from cassava.

Finally, governments have to provide some learning and experimentation space for creative ideas. William Easterly [38] argues that there are two types of approaches to development: "planners" and "searchers." Planners, mainly from the developed countries, have ambitious schemes, experienced development economists, serve as experts and financiers, and greatly influence government policies of recipient countries – where possible backed by conditions. Searchers, on the other hand, are often talented locals or returnees with good unproven ideas, often outside official government channels with limited support.

The planners get most of the attention as they champion one "new big idea" after another. No one knows what searchers exist or champion until the projects, if they managed to get support, become successful. Promoting entrepreneurship may require provision of support for individuals willing to test innovative concepts. Setting up institutions, such as those in Chile, offering some shielding from political meddling but focusing on entrepreneurs may be one way of reducing poverty and creating jobs and wealth.

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Will Qatar take a lead in the emergence of an Arab and Islamic Scientific Renaissance in the twenty first century?

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Once upon a time, the Arab world was the leader in science and Arab scientists have established and help shaped the foundation for science and medicine. Just to cite a few names: Avicenna, 980 to 1037; Averroes, 1126 to 1198 and many others. However, the current situation can simply be qualified as disastrous. There is a deep technology divide between the Arab world and the industrialized world because of the lack of support for science and technology in Arab countries, which has led to: marginalization of developing Arab countries, making it hard for them to meet their basic needs and to participate in the global economy and manage the environment.

Then comes Qatar with a bold and very ambitious initiative directed mainly towards the Arab expatriate scientists. The idea is to create a partnership between the Arab scientists and the Qatar Foundation for Education, Science and Community Development through which Qatar's scientific research and development can be developed.

During the first meeting of the scientific founding committee in December 2005 in Doha. From left to right: Abdallah Al Kubaissi, Alaa Al Hosseini, Ali Fares, H.H. Sheikha Mouza Bint Naser Al Misned, Farouk Al Baz, AbdelAthem El Sebti, Abduljalil Lahmanate, Nagwa Abounaga, Rabi Mohtar, Fathy Saoud and Abdelali Haoudi.

Under the auspices of Her Highness Sheikha Mozah Bint Nasser Al-Misned, Chairperson of Qatar Foundation for Education, Sciences and Community Development, the first Conference of the Arab Expatriate Scientists was held on April 24-26, 2006 in Doha, Qatar. As a result, 200 Arab scientists have been invited to this first gathering (http://www.iqatar.qa).

The goals of this conference were twofold: the current infrastructure and the possibilities for future scientific research in Qatar through the establishment of scientific research projects, the Research Support Fund, Science & Technology Park and the Research Centers in Education City, and the Collaboration Channels and Partnerships by devising communication network building methodology and standard setting for creating research working groups.

Qatar foundation has a plan to position Qatar as a centre of scientific research. A science and technology park is in the making with a view to attract R&D facilities of multinational corporations including Microsoft, which has set up a research unit there, as have European aircraft maker Airbus, oil giants Total and Shell, and General Motors. Qatar will strongly target and get engaged into emerging and strategically-important fields such as biomedicine and biotechnology (genomics, proteomics, bioinformatics, stem cells), Environmental and Sustainable Development Technologies, Information technology and Nanotechnology. Research in each of these areas is critical to the health, well-being and economic prosperity of Qatar and will help ensure a recognized position on the map of world-leaders in innovation.

As a result of the first conference of the Arab expatriate scientists, a Doha declaration and action plan have been adopted

(http://www.mozahbintnasser.qa/output/page277.asp).

For the Arab world to recapture its lost glory in the fields of science, the most important step would be to invest in their human capital, through providing high quality education and well supported scientific re-

search. In order to ensure high quality education there must be a vibrant research component developed as well. In addition, the focus of attention of policy makers and development agencies should be on the development of local capabilities to develop, adapt and use technologies. There is little or no technology development in the region.

This conference has generated lot of excitement and high hopes. Now, a follow up committee has been set up to come up with innovative strategies on how to move forward with this historical initiative and most of all how to make it a big success. Failure is not an option at this time. In September 2006, the follow up committee will meet in Doha to officially present the strategy for organization and implementation of the Doha declaration.

Will the strategy meet the high expectations of Arab scientists? Will Qatar leave up to the expectations of Arab scientists? Will this initiative be the first step toward a revival of the lost glory of Arab and Islamic science? Will this be at least a successful initiative to jumpstart science and technology in Qatar and set an example for others to follow? One thing is sure, it is a historical, very ambitious and noble initiative and deserves the support of the scientific community.

During a plenary session on science and technology in the Arab and developing world, role of technology transfer, April 2006, Doha, Qatar.

While Boeing is creating the next generation of the 747 jumbo jet to fly in 2009, Qatar is investing in generation of knowledge workers for the future. Who knows, it may become one of the future technology powerhouses.

Source of photo: BBC

The Principal-Agent Problem in Development Assistance and its negative Impact on Local Entrepreneurship in Africa: Time for New Approaches in Africa

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Abstract

The following article describes the principal-agent problem in international development assistance. It shows how this problem leads to a top-down approach in development projects which may discourage local entrepreneurship and ultimately undermine sustainable poverty alleviation strategies. The author argues that African countries suffer most from this problem because of their high level of aid dependence. A change in the rules of the game of project-oriented development assistance could help tackling the issue by setting the incentives right. Entrepreneurship and technology may then become tools of social, economic and political empowerment and facilitate more endogenous development that is driven by successful local initiatives rather than foreign aid programs.

Introduction

The essential paradigm for the analysis of market behaviour is that economic agents pursue, at least to some extent, their private interest. It would therefore be foolish to ignore the role of private incentives even in a field such as international development assistance.

Development assistance is largely based on a two-stage delegation process of tasks, which is related to the Principal-Agent Problem (PAP) in institutional economics. This two-stage delegation process causes high transaction costs and unintended outcomes in development projects: the first delegation of tasks happens in the developed country where the donor/public contractor pays an Organisation Involved in Development Assistance (OIDA) to carry out projects in developing countries that contribute to sustainable poverty alleviation. The second delegation of task occurs within the developing country where the respective OIDA hires a local partner to realize a development project.

Delegation always implies conflicting objectives between the agent (e.g. the OIDA) who has been selected for his or her specialized knowledge and the principal (e.g. the donor) who pays the agent but can never hope to completely check his or her performance (Arrow 1963). The agent may use the information advantage to take an action unobserved by the principal (moral hazard) or conceal the true cost or valuation of his work (adverse selection) (Laffont and Martimort 2002).

The first part of this article explains how the market for international development assistance currently works.

The second part then highlights the principal-agent or 'delegation' problems in this market and how they result in wrong incentives and ineffective outcomes in development assistance.

The third part outlines in detail why the principal-agent problem in development assistance undermined the role of higher education, technology and entrepreneurship as engines of endogenous development, especially in developing countries that are highly dependent on foreign aid.

The fourth part comes up with a possible new approach in development assistance that would be able to circumvent the principal-agent problems by changing the institutional setting of development assistance. Most of the long-term successes in development assistance are actually based on the fact that they have emerged outside the realm of traditional development assistance and therefore in an institutional setting that is more conducive to local entrepreneurship and less vulnerable to the principal-agent problem. Successful examples are microfinance (The Economist 2005), low-cost mini-tissue culture laboratories (Aerni 2006), developmental financial institutions that offer venture capital for local technological innovators (George and Prabhu 2003), the promotion of small and sustainable businesses that generate revenues in the poorest regions because they know the local demand and/or discovered an innovative and sustainable solution for a local problem (Gupta 2005), etc. What they all have in common is that they were developed by 'searchers' in developing countries rather than the 'planners' in developed countries (Easterly 2006). Only at a later stage, when the success of the new approach became undeniable it was adopted and marketed by the planners of OIDAs. Unfortunately, OIDAs then often tend to mix the simple business idea with idealistic principles that often prove to be more costly and less effective (The Economist 2005).

The fifth part puts forward the argument that higher education, technology and local entrepreneurship can be mobilized for sustainable development by changing the institutional settings. It would not just lead to more local empowerment and endogenous economic change but also facilitate good governance in the long run. This because good governance cannot be imposed from outside but is eventually induced through internal pressure from a tax-paying and politically empowered middle class within the country. This middle class, again, is a result of social mobility and the continuous build-up of human capital through smart domestic policies. Countries in continental Europe, for example, must only look at their own history to realize that the foundation of their welfare state and their stable democracies is based on human

ingenuity and the emergence of an entrepreneurial middle class in the 19th century (Mowery and Nelson 1999). The emerging graduation of many East Asian countries from a developing to developed country status is once again a confirmation that this insight also applies to the 20th and 21st century. It is therefore time for international development assistance to experiment more with new approaches that take these insights into account.

The paper concludes that the ongoing initiatives to eliminate hunger and poverty must address the Principal-Agent Problem (PAP) and design institutional rules of development assistance that are more conducive to bottom-up approaches. Otherwise it is be highly unlikely that the ambitious UN Millennium Development Goals will ever be achieved in 2015.

1. The market of international development assistance

International development assistance does not just represent a genuine effort to improve the situation of the World's poor but also represents a market in which participants have strategic interests and respond to economic and political incentives. The private actors in development assistance (e.g. religious charities, international NGOs, development consulting firms) may be active in developing countries but they tend to be based in developed countries where they compete for funding from private donors and public contractors.

The national agencies for development assistance in developed countries are the main public actors. They are not just running their own projects in developing countries but also provide funding to private actors and international organisations that are active in developing countries.

If these private and public actors in development assistance want to maximize their budget they need to win the public's favour by permanently appealing to people's feelings of compassion and solidarity with the World's poor. At the same time, they need to take into account the general public concerns about globalization and set their priorities accordingly in developing countries (Aerni 2006).

The demand in the market for international development assistance thus comes from private donors and tax payers in affluent countries who want to spend money to help the poor. The supply, in turn, comes from Organisations involved in International Development Assistance (OIDAs) such as NGOs and national agencies for development assistance. The donors/taxpayers are therefore the principals (contractees) whereas OIDAs are the agents (contractors)[1].

At first sight this market logic makes perfect sense: there is a demand among affluent people to contribute to the improvement of the world (more justice and sustainability, less poverty and hunger) and OIDAs offer the respective supply in form of development projects that fulfil first of all the expectations of these affluent people.

Yet, the purpose of such a market is not primarily to eliminate hunger and poverty in developing countries but to address the concerns of the donors in affluent countries who want to be reassured that they did something against world hunger and poverty. This does not mean that the people who work for OIDAs are not genuinely driven by the desire to alleviate hunger and poverty but if they want to stay in the market for donations they need to focus on donor perceptions. If the fight against poverty would be the primary goal then the poor should be, in theory, the principals or clients (because their needs are supposed to be addressed) rather than the donors. OIDAs (as agents) would then be accountable to the poor rather than the donors.

Representatives of OIDAs would object to such an argument and point out that the poorest of the poor do not have the means, the education and the knowledge to be the principals in the game. At the same time they would emphasize that the priorities of the poor are already taken into account through participatory projects. Moreover, their capacity-building activities would increase the knowledge base and empower local people to help themselves and become active in politics. This approach is called 'help for self-help'. The term may sound plausible but it cannot conceal that the principal-agent problem, probably the most important principle in institutional economics, is largely ignored in such projects – and this explains why many of these participatory approaches and capacity-building activities continue to mirror the concerns and ideologies of affluent people in developed countries rather than the poor in developing countries.

2. The Principal-Agent Problem (PAP)

The Principal-Agent Problem (PAP) relates to the problem of asymmetric information in a contract relationship. It gained wide prominence with the work of Nobel Prize Winner George A. Akerlof and his article ‚A Market for Lemons' published in the Quarterly Journal of Economics in 1970. The general argument of this article was that the agent (employee, salesman, contractor, manager, etc) is better informed about a specific task or project to be executed or the product to be sold than the principal (employer, client, customer, shareholder, etc). The agent uses this information advantage to further his own interest at the expense of the interests of the principal.

In project-oriented development assistance the PAP appears not just once but twice:

1. between the donor (principal) and the OIDA (agent) in the affluent country

2. between the OIDA (principal) and the local partner (agent) in the developing country

1. The PAP between donor/taxpayer and the OIDA in the affluent country

In an affluent country, the organisation involved in development assistance (OIDA) is better informed about its ongoing projects in developing countries than the private donors or taxpayers (the clients/principals that pay for it) in the respective affluent home country. The major goal of the OIDA is to give its clients the feeling that they did something good for the poor (by contributing to 'help for self-help'). This ultimately secures the continuous flow of income for the OIDA. It is therefore not surprising that the brochures and annual reports designed for the clients and the mass media never really cover failures but only the presumed successes in the ongoing fight against poverty. In this context, OIDAs highlight for example successful evaluations of projects that helped improve local health care, primary education or sustainable farming practices. However, these project evaluations are mostly carried out during the funding period. How the situation looks like five or ten years after the funding period (when 'help-for self-help' is supposed to 'kick in') is hardly ever known. Another result of the principal-agent problem is that OIDAs prefer to start new projects rather than continue or improve old projects; this because donors respond more positively to visible changes (e.g. a new medical station or school) than to mere descriptions of operation and maintenance activities of existing projects (Easterly 2001). This is a reason why so many medical stations in Africa lack trained doctors and medicine, and schools lack trained teachers and books. This is not to deny that the funding was meant to promote the principle of help-for-self-help, but it is not surprising that the supply of input to run the newly established facilities comes to a halt once the funding stops. There is hardly ever a clear strategy how locals might eventually raise sufficient revenues on their own to run the facilities themselves.

If the national agency for development assistance (which itself acts as the agent of the taxpayer) subcontracts development work to an independent NGO, an additional principal-agent problem might emerge within the group of OIDAs through the process of delegation: the independent NGO (as agent) is only indirectly accountable to the original principal (which is in this case the taxpayer and not the private donor). The fact that principals are hardly ever in a position to find out about the failures and the actions that are not conducive to the ultimate goal of sustainable poverty reduction are clear indications of the potential of moral hazard and adverse selection in development assistance.

2. The PAP between the OIDA and the local partner in the developing country

The second PAP occurs in the developing country, where the OIDA is the principal and the local partner is the agent. In this case, local partners are better informed about the particular local circumstances and they will engage in 'adverse selection' by only passing on the information that serves their personal or family interests (e.g. securing their well-paid position within the foreign OIDA). In this context, it also makes sense for the local partners to embrace the world view and interests of the OIDA rather than the interest of the local community as a whole.

2.1 Resistant to reform?

Over the past three decades, many public and private institutions worldwide identified the PAP at the root of institutional inefficiency caused by moral hazard and adverse selection, and they all reformed their rules of governance correspondingly. These reforms did however not happen in international development assistance even though there is wide evidence that the failure to respect the PAP in development assistance leads to wrong market signals, the misallocation of scarce resources and, ultimately, an unsustainable form of long-term poverty alleviation. William Easterly pointed out (2001, 2006) that OIDAs managed to avoid addressing the problem over the past decade by trying to solve all problems at the same time and adopting a competent and positive development language (e.g. 'mistakes happen but they are addressed by now'). This again helps to avoid accountability and the superficial reforms never reached the root of the problem.

Yet, it must be admitted that it is far more tricky to address the PAP in development assistance than in other organisational forms of society. This is because the poor cannot act as principals as long as they are not able to pay OIDAs for their services. The donor may be willing to put a local entrepreneur in charge of a project who would focus on real local demand in order to generate local revenues. But how can they know that this local person has the ability to succeed and act responsibly?

Moreover, donors want to feel good about their support for development. OIDAs are very professional in quickly delivering tangible positive results that show that the money helped the poorest of the poor; they also learned how to shield donors from being exposed to negative long-term results (e.g. when a project crumbled after the end of funding). This is much more rewarding for a donor than the sponsoring of highly unpredictable local entrepreneurs. In addition to that, educated and innovation-driven entrepreneurs are often hard to find in rural areas of developing countries due to the absence of institutions of higher education that are able to generate the useful human capital and financial institutions that help convert new knowledge and business ideas into goods and services (Juma and Yee-Cheong 2005).

3. The neglect of higher education, technology and entrepreneurship as collateral damage

Remembering the importance of endogenous development

The economist Joseph Schumpeter (1942) already pro-

vided empirical evidence that economic and technological change may result in more complexity (new challenges and opportunities, new knowledge, etc.) and uncertainty (new potential risks, less job certainty, etc) in the short-run, but, on the long-run, creates improved conditions for everyone. It is hard to contradict the argument that endogenous development powered by domestic technological and economic change ultimately creates the wealth necessary to fund the modern welfare state in affluent societies. After all, that is what happened in Europe.

At the same time Schumpeter recognized that the resulting welfare state will lead to a changing attitude toward change: the benefits of change are taken for granted while its risks are increasingly becoming unacceptable to society. The resulting scepticism towards technological and economic change as engines of globalization then leads to the general attitude that developing countries 'should not commit the same errors'.

Yet, this well-intended goal to protect traditional communities in developing countries from the 'destructive' forces of the market economy and modern technology leads to the unintended consequence of marginalizing these local communities even more. By focusing their support on the preservation of indigenous products and knowledge and by encouraging them to radically defend local identity and the sovereign use of local resources, OIDAs often discourage exchange with and fuel distrust toward the outside world. This, again, strengthens the power of traditional and conservative forces in local communities at the expense of those who would prefer exchange and development. As a result, the entrepreneurial and curious types in the local community - 'the searchers' as Easterly suggests (2006) - who long for change and new opportunities, will be forced to try their fortune elsewhere and this mainly because of outside 'planners' with good intentions. The exodus of these people in return weakens local sovereignty because the dependence on outside help increases (due to the lack of home-grown entrepreneurs). Moreover, it cripples genuine endogenous development that is based on change that comes from the bottom up.

Remembering the role of universities as engines of change

Over the past three decades, OIDAs tended to neglect the role of universities as engines of social, cultural and economic change in developing countries. This may also be attributed to the PAP since donors and taxpayers back home are expected to see their money being invested in projects that help the poor rather than students at universities and their personal careers. However, there is a mistake in this kind of reasoning: the poor cannot be helped on the long-run unless their offspring is allowed to contribute to economic development (and to support their kin) by pursuing an individual career through higher education and the subsequent search for business opportunities.

At the moment the average quality of education and research at African universities is low due to the lack of access to new knowledge and the long neglect not necessarily by their own governments, but the donors that advise them. The lack of access to new and relevant knowledge again explains why the local private sector does hardly ever see any benefit in collaborating with local universities. The lack of quality and local relevance in research and education again lowers the value of a university degree and makes it difficult for graduates to get a job in the private sector. Moreover, entrepreneurial graduates have no access to venture capital that would allow them to set up their own business (unless they descend from rich parents with a big business network).

As a consequence, universities are unable to generate the human capital necessary to promote sustainable economic growth. Moreover they cease to be ladders of social mobility. Low social mobility again strengthens established interests and prevents a society from renewing itself.

If donors and taxpayers in rich countries would look at their own history of economic development they would realize that their stable democracies and their prosperous economies (that rely on human rather than natural capital) ultimately have their roots in the dynamic and healthy universities that were set up mostly in the 19th century (Mowery and Nelson 1999). If this fact would be more emphasized in education and media coverage in developed countries it would also change public attitude in these affluent societies and ultimately allow self-interested OIDAs to pursue more integrated poverty reduction strategies that include the mobilization of domestic human capital through a more responsive system of higher education.

3.1 Strengthening the role of the entrepreneur as agent of change

The principal-agent problem (PAP) in development assistance and its negative impact on local entrepreneurship and the quality of higher education could be addressed in Africa with new approaches that are based on a different set of institutional rules. The following section will outline a possible approach that is based on institutional rules that take into account the PAP.

Setting up Funding Pools for Endogenous Development (FDEPs)

A possible approach could be the creation of international funding pools for endogenous development (FDEP) designed to strengthen the role of entrepreneurs as agents of change in local communities. FDEPs would be funded by private donors, stand in direct competition to each other and preferably be run by professional venture capitalists. The major goal of such a FDEP is to identify local entrepreneurs in Africa with a

potential to set up a successful business in their home region. The overall goal of such a pool would be to generate entrepreneurs that are able to make profits by offering goods and services that meet a local demand. It might then encourage other locals to start a business. The successful graduates then become alumni. They are expected to return a tiny share of their annual profit to the pool and thus contribute themselves to the generation of new local entrepreneurs. The more entrepreneurs a FDEP is able to generate the more revenues it receives from these former graduates and the more attractive it becomes for private donors who are interested in alleviating poverty by promoting endogenous development. At the same time unsuccessful FDEPs that failed to generate a high rate of local entrepreneurs will become less interesting for donors and may eventually go out of business. This would create a genuine competition among these pools that is based on performance. State development banks in India may have come closest to the idea of an FDEP (even though those that failed hardly went out of business). These banks often supported innovative entrepreneurs with backgrounds in science and engineering and thus helped generate many homegrown companies that contributed to technological innovation (George and Prabhu 2003)

A successful FDEP must have effective and experienced scouts in African countries that identify promising entrepreneurs and assist them in the creation of a business plan[2].

The business plan must contain a clear strategy on how to become a profitable and sustainable local business. The scout would also provide the applicant with a list of locally active companies and development organisations and their core competencies (or the products and services they offer). Once the business plan has fulfilled the formal requirements, the local entrepreneur will be paid out by the FDEP mostly in the form of vouchers. These vouchers would enable the local entrepreneur to make initial investments by purchasing products, services, and know-how from the companies or development organisations (s)he considers to be useful in the implementation the business project. The pool itself would then pay these companies and organisations in cash upon producing the vouchers received from the local entrepreneur.

There will also be checks and balances. The scout will get a pay rise with every new entrepreneur he or she has assisted successfully in building up a locally profitable and sustainable business[3]. The entrepreneur, in turn, has the right to dismiss a local company or development organisation that is not able to deliver what was promised and hire another one. This would force development organisations to become more professional and specialize on the delivery of particular services, products or know-how. The competition with local companies will also make them more focused in meeting demands rather than providing supplies

This sketchy outline may not be able to solve the more complex and bigger challenges in the fight against poverty (communicable diseases, malnutrition, war, natural catastrophes etc). Yet, it would at least it address the double principal-agent problem in project-oriented development assistance and therefore contribute to a more sustainable poverty alleviation strategy in the long-run. The new rules of the game would force OIDAs to look at the poor as their clients rather than recipients (since they are paying them). The donor instead would become a shareholder (principal) of a FDEP (agent) which must deliver in order to survive in the competition with other FDEPs . Unlike with a stock company, the shareholder of a FDEP (who has the intention to donate in order to contribute to the fight against poverty) cannot expect to get annual dividends based on the amount of shares (s)he owns in the pool. Instead, (s)he is expected to make an annual payment to the pool. If the pool starts generating successful local entrepreneurs it will also generate additional revenues for itself. This would then lead to a lowering of the annual payment and signal to the donor that his or her money has started to bear fruit. The value of the shares would increase in turn because it reflects an increase in the price-earnings-ratio for donations; as a consequence, more people may buy shares of this particular FDEP because they promise maximal poverty reduction with minimal amount of investment. The pool idea also has the advantage of putting the local person in charge again as an entrepreneur who must make sure that her or his activities serve the local people because they will have to generate revenues eventually. OIDAs have an active interest in helping the local entrepreneur to achieve this goal if they want to continue to earn money from vouchers and increase their reputation for delivering effective support. So they will invest more in the quality of their goods and services and less in campaigning and advertising for donor money in their home country. As such, development assistance would eventually become a professional service industry for the poor. This service industry for the poor may look less heroic but may be all the more effective. It will also generate new opportunities for graduates of local universities to set up their own businesses and create pressure on the administrators of these local universities to improve access to new and relevant knowledge in order to attract talented students that later might become successful local entrepreneurs who provide new funding.

4. Contribution to Good Governance

Today, most Western donors agree that good governance and an effective poverty reduction strategy should be important requirements for an African country to be considered for debt relief and additional foreign aid. This idea is not new but, as pointed out by William Easterly (2001), exists since the 1960s and strict selection criteria for access to foreign aid have been applied on a regular basis under different techni-

cal terms over the past four decades. The concept however proved to be ineffective and is likely to remain so in future because, inadvertently, donors turn out to be part of the problem: once again there is a principal-agent problem (PAP) that frustrates the best intentions. This time, the international donors are the principals and the governments in developing countries are the agents. Most governments are willing to accept the terms set by the different donors, in return for access to foreign aid money and debt relief. Yet, when it comes to implement all the sensible poverty reduction strategies produced in collaboration with foreign donors there is hardly any evidence that it works better than 30 years ago. Moreover, international donors often proved to prescribe the wrong medicine with structural adjustment programs that encouraged governments to trim their budgets by cutting back on their expenses for essential public goods such as higher education and infrastructure.

The PAP could be eliminated again through a change in the institutional setting: Instead of just allowing developing countries to write off their debt entirely (which actually creates further incentives to become indebted again) foreign creditors and donors could insist that they pay the annual interest of their debt, but not to the creditor's account but to an independent funding pool specifically designed to improve the infrastructure for entrepreneurs in the respective developing country. It would then essentially complement the activities of the aforementioned FDEPs. In the long run, this might help generating more successful entrepreneurs and stimulate endogenous development. This, again, would lead to a prosperous and politically active tax-paying middle class who would want to have a say as to how their tax money is being spent. If they think the government is doing a bad job by simply wasting resources and not addressing the urgent problems in the country, they will mobilize politically and make sure the incumbent government is voted out of power.

There is abundant evidence from Asian countries that it has always been the middle classes rather than radical political movements that were able to get rid of corrupt governments and improve transparency and accountability of elected governments (Curtis 1997, Aerni 1999). This makes perfect sense from an institutional economics point of view because the principal is no more the foreign donor but the local taxpayer while the agent is still the national government. The local taxpayers know better whether government spending really makes a difference to them and, unlike international donors, they can vote a government out of power if they are not happy with the performance. However, many African countries still lack such a large and politically empowered middle class, and the tax base is correspondingly low (the poor cannot pay and the rich tend to find ways to avoid taxes). Especially in the least developed countries in Africa, where up to 70% of the government budget comes from foreign assistance, it is simply natural that governments have a higher incentive to please foreign donors rather than their own people.

5. Conclusion: Improving the rules for future initiatives

In 2000, the UN general assembly adopted the Millennium Development Goals (MDGs). The overall goal of the MDGs is to cut hunger and poverty by half in 2015. The Five-Year-Implementation Review of the MDGs published by Jeffrey Sachs in January 2005 (Sachs 2005a) is asking for an increase in foreign aid yet without addressing the PAP in development cooperation. This is unfortunate because even the Sachs report admits that little has been achieved in the past five years (the human development indicators only improved in countries with strong economic growth). As a consequence, other development economists such as William Easterly have become impatient with the way development cooperation works (2006). He attacks Jeffrey Sachs' big plan to end poverty (2006) in particular. This triggered a highly polarized debate whether foreign aid is doing more harm than good. But this debate is futile because neither is Easterly asking to stop foreign aid nor would Jeffrey Sachs deny the principal-agent problem in development assistance. Both may agree that creative local solutions are even more important than a global big plan to end poverty. For that purpose, a bottom-up approach is needed to ultimately help achieve the MDGs through the empowerment of local people and endogenous development. A bottom-up approach must be based on institutional rules that deal with PAP and set the right incentives for local initiatives and local governments. Once such rules are in place, entrepreneurship and technology may become the quintessential tools of local empowerment rather than tools of Western domination. The self-replication of local entrepreneurship may also have positive side-effects such as strengthening the local system of higher education and the improvement of accountability and transparency in the public sector. It would bring international development assistance closer to its ultimate goal – namely to eventually become redundant.

Acknowledgements:

I would like to thank my collegues Patrick Kuhn and Sara Küpfer from the Center for Comparative and International Studies (ETH Zurich) for their useful comments on the paper.

Notes:

1. In the developing countries, however, OIDAs play the role of the principal by hiring
2. These scouts may be necessary because unlike job-seekers, entrepreneurs are less likely to focus on advertisements in newspaper because they are busy building up their own business networks outside the conventional market of job supply and demand.

3. A locally sustainable and profitable business must be clearly defined as a long-term venture so that the scout has little incentive to just generate quick profits with the local entrepreneur and then collect his pay rise. Ultimately, a new business that proved unable to generate enough local revenues to make profits to become self-sustaining and a contributor to the generation of new entrepreneurs (through the return of a small percentage of the profit to the FPED) is not a sustainable business.

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Connecting Rural Hinterlands in Africa to Domestic and Export Markets: Elements for a Strategic Trade Facilitation Assistance Package

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Abstract

The basic purpose of this article is to show how a strategically designed 'trade-facilitation' assistance package aimed at rural welfare in Africa could complement investments in ports and customs reform. By focusing initially on creating and connecting primary and secondary economic corridors through targeted infrastructure investments, the package can help create a virtuous cycle of information flows and economic activity. These could in turn lead to further trade-facilitation investments in rural areas, for example in transport and distribution services. While the article focuses on Africa, the proposals could be applied to rural areas in other developing countries as well. Finally the article calls for a greater focus on rural infrastructure within existing and future trade-facilitation assistance schemes.

Introduction

Trade facilitation can be construed in both a narrow and broad sense. The ongoing WTO negotiations on trade facilitation focuses on a very narrow mandate and involves clarifying and improving multilateral disciplines under GATT Articles V (Freedom of transit), VIII (Fees and Formalities relating to import and export other charges), and X (publication and administration of trade regulations), all bound together under the framework of the WTO 'Single Undertaking' and its dispute settlement mechanism. Most organisations have adopted a broader definition of Trade Facilitation, as the box below illustrates. Technical assistance designed to ensure a smoother flow of goods and services often encompasses a number of activities indistinguishable from the broader infrastructure requirements of the economy as a whole.

Hill (2005) summarises the WTO definition of trade facilitation as follows: "the simplification and harmonisation of international trade procedures, including activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade". The scope of this definition is restricted to transactions involved in the movement of goods, and more specifically to customs-related procedures as adopted by the United Nations Conference for Trade and Development (UNCTAD).

Hill also adds that "..the definition favoured by the business community, notably International Chamber of Commerce (ICC), includes trade facilitation measures as part of a broader framework for the competitiveness of the economy, so as to address all business interests and concerns across the board. Private professional associations like IATA as well as UN-related institutions as UNECE or UNCTAD undertook this approach, with a watchful view on the entire supply-chain and greater sensitivity to IT elements in trade facilitation." Further a "..trader's basic interests lie on trade facilitation measures dealt with as a coherent set of rules and practices in accordance with the need for predictability, transparency and simplification of trade procedures."

Linking Trade-Facilitation Technical and Financial Assistance to African Rural Development Strategies

The critical question is how trade-facilitation investments can be made to benefit rural areas in Africa, particularly those that are based on subsistence activities and unconnected to wider local, regional and global markets. There is the danger that trade facilitation assistance in Africa that is confined only to developing existing hubs of economic activity could end up by-passing rural communities and widening regional disparities.

Technical and Financial Assistance for Trade Facilitation is currently being provided by a number of organizations and these include assistance for infrastructure such as road-development and ports. The critical importance of infrastructure has been underlined in a number of studies such as the World Bank study by Wilson, Man and Otsuki. This study shows that 'port efficiency' has the largest elasticity amongst the trade facilitation indicators in intra-APEC trade; and that the greatest benefits for trade would come from improvements in port efficiency. The study further concluded that the removal of restrictions in US ports would confer more benefits to developing countries than simply granting market access concessions.

The World Bank Study used four indicators of trade efficiency in measuring the impact on economic development (1. Port efficiency; 2. Customs environment; 3. Own regulatory environment; and 4. E-business usage).

Box 1. Definitions of Trade Facilitation – "Narrow" and "Broad" Definitions

"Narrow" Definition of Trade Facilitation

WTO and UNCTAD: "Trade Facilitation is the simplification and harmonization of international trade procedures, including activities, practices, and formalities involved in collecting, presenting, communicating, and processing data required for the movement of goods in international trade". (WTO website, and UNCTAD E-Commerce and Development Report 2001, p.180).

"Broad" Definition of Trade Facilitation

UNECE: "*Comprehensive and integrated approach* to reducing the complexity and costs of the trade transactions process, and ensuring that all these activities can take place in an efficient, *transparent, and predictable manner,* based on internationally accepted norms, standards and best practices." (Draft document 3/13/2002).

APEC: "Trade Facilitation generally refers to the simplification, harmonization, *use of new technologies* and other measures to address procedural and administrative impediments to trade." (APEC Principles on Trade Facilitation 2002).

APEC: "The use of technologies and techniques which will help members *to build up expertise*, reduce costs and lead to better movement of goods and services." (APEC Economic Committee 1999).

OECD: "Simplification and standardization of procedures and associated information flows required to move goods internationally from seller to buyer and to *pass payments* in the other direction." (OECD, TD/TC/WP (2001) 21 attributed to John Raven).

Source: Reproduced and adapted from Wilson *et al*, (2002); and Lucenti (2003) (Italics in original document.)

A study on trade facilitation commissioned by the European Union includes extensive sections on technical assistance and capacity building. It concluded that they were both core elements to enhance trade facilitation measures. The seven (7) main categories of technical assistance considered in the EU study build on the four indicators developed by the World Bank and arrived at the following:

⇒ Technical assistance to customs authorities.

⇒ Technical assistance to improve regulatory environment.

⇒ Technical assistance related to transport and transit.

⇒ Technical assistance related to improvement of transparency and private-public partnership.

⇒ Technical assistance related capacity building in international trade.

⇒ Technical assistance related infrastructural improvements.

This is a broad list of focus areas but leads in the right direction. To make trade-facilitation have a real impact on rural economies, the first four categories of assistance relevant to customs and transit will need to be strongly reinforced by assistance to the last three categories.

In this article, I shall propose a 'strategic' trade-facilitation assistance package that will help improve conditions for productive entrepreneurial investment in goods, and eventually trade-facilitation related services for rural areas in Africa. The strategy involves:

Using a 'package-approach' for trade-facilitation related infrastructure assistance involving a combined investments in roads, electricity and Information and Communication Technology (ICT) infrastructure to create 'primary economic corridors' i.e. connecting the main hubs of economic activity with regional ports.

Creating 'secondary-corridors' to rural areas interconnecting with primary corridors and economic hubs. The creation of these corridors will involve the same 'package' approach targeting select rural regions that are 'poverty-intensive' but have sound development potential. The focus here will be to prioritise roads and telephone networks, if funds are short, at least in the initial stages for reasons I will explain below.

Attracting 'catalysts' (I will explain this in further detail below) and enabling them to leverage the 'economic opportunity space' or greater potential for development created through these infrastructure investments and kick-start 'value-addition' activities.

Policies to attract distribution service providers to further boost rapid delivery of 'rural goods' to domestic hubs and export markets

Thus the 'package-approach' targeted at rural infrastructure could enable rural areas to benefit in the long-term from the more 'traditional' trade-facilitation related assistance aimed at customs and ports. The emphasis is on infrastructure in the initial stages that will connect rural areas to markets and attract 'catalysts' such as entrepreneurs. This should subsequently be combined with a conducive environment for what I would call 'trade-facilitation' service providers who could profitably operate in rural areas and further boost delivery of rural goods to domestic and international markets.

Below I explain in a bit more of detail of how this 'strategic' trade-facilitation package might work and how it could help rural areas in Africa evolve in three phases to generate economic activity and exports. I stress that these proposals are largely speculative and does not pre-judge the actual state of infrastructure in rural Africa or the nature of existing or future assistance directed at trade-facilitation. Speculation also means that these policies are largely untested and may or may not succeed depending on other challenging hurdles that may require resolution such as political stability, corruption, reliable and effective judiciary or access to credit for local entrepreneurs.

Phase I: Laying the Foundations-Primary and Secondary Corridors and Communication Hubs

The fundamental pre-requisite of making trade-facilitation measures have an impact in rural areas starts with investment in infrastructure focusing on transportation, energy and information and communication technologies (ICT). The key elements of this stage could comprise:

Creation of 'primary' economic corridors: As a first-step and a matter of course, trade-facilitation infrastructure assistance should include the creation of 'trade-corridors' or roads connecting major ports in the country or region with the hinterland and perhaps extending further into land-locked countries. If these arteries can be conceived of as 'primary economic corridors', then a 'strategic' trade-facilitation package would aim to supplement these roads with electricity and telephone lines (which may, in fact, already exist along towns and cities on the route) and a broad-band fibre-optic network which could lay the foundation for an 'internet backbone' enabling internet hubs to easily spring-up along the corridor. Electricity is fundamental for obvious reasons as would be telephone lines. Where telephone-

Such infrastructure my encourage sorting, packaging and standardization of products to meet market needs

Source: Bartel, ATDF

lines are non-existent, the potential to use existing or create new mobile networks should also be explored.

Creating 'secondary' economic corridors: In this stage, an assessment may be done (possibly as part of country diagnostic trade integration studies) to select rural regions which could be connected, using the same infrastructure 'package', to the primary economic corridors. The selection of the rural areas could be based, for example, on 'intensity of poverty' or potential for rural economic activities. The creation of these corridors will involve targeted investments in good quality rural roads and telecommunications, and where feasible with electricity and internet. The reason for this prioritization is that if funds do not suffice, rural areas could still connect by phone to suitable agents manning internet hubs along the primary corridor and thereby reap the benefits even though the areas themselves may not immediately get internet infrastructure.

The creation of internet hubs: along the primary economic corridors should be a priority but these should, when and where possible, also be replicated in the rural areas connected by secondary corridors. Internet hubs could managed either by the government, the private-sector (where possible) or by development agencies. The primary function of these hubs should be to serve as portals of information for business-activity and connect in turn to local, regional and global depositories and networks of information. The aim should be speedy provision of information to those who require it but cannot directly access the internet. Poor or illiterate populations, will therefore, not be deprived of 'development or business-related' knowledge wherever it may lie. Investments in ICT infrastructure should thus be an essential element of any assistance package involving infrastructure. An OECD presentation at their Global Forum on Trade Facilitation in 2005 reveals that the bulk of Overseas Develop-

ment Assistance in 2003 on Infrastructure went to Energy and Transport and Storage with a relatively small proportion going to communication. This discrepancy needs to bridged. The figures below provide some information on the state of connectivity between African countries for key Information and Communication Technologies.

Phase II: Plugging rural regions to domestic and export markets

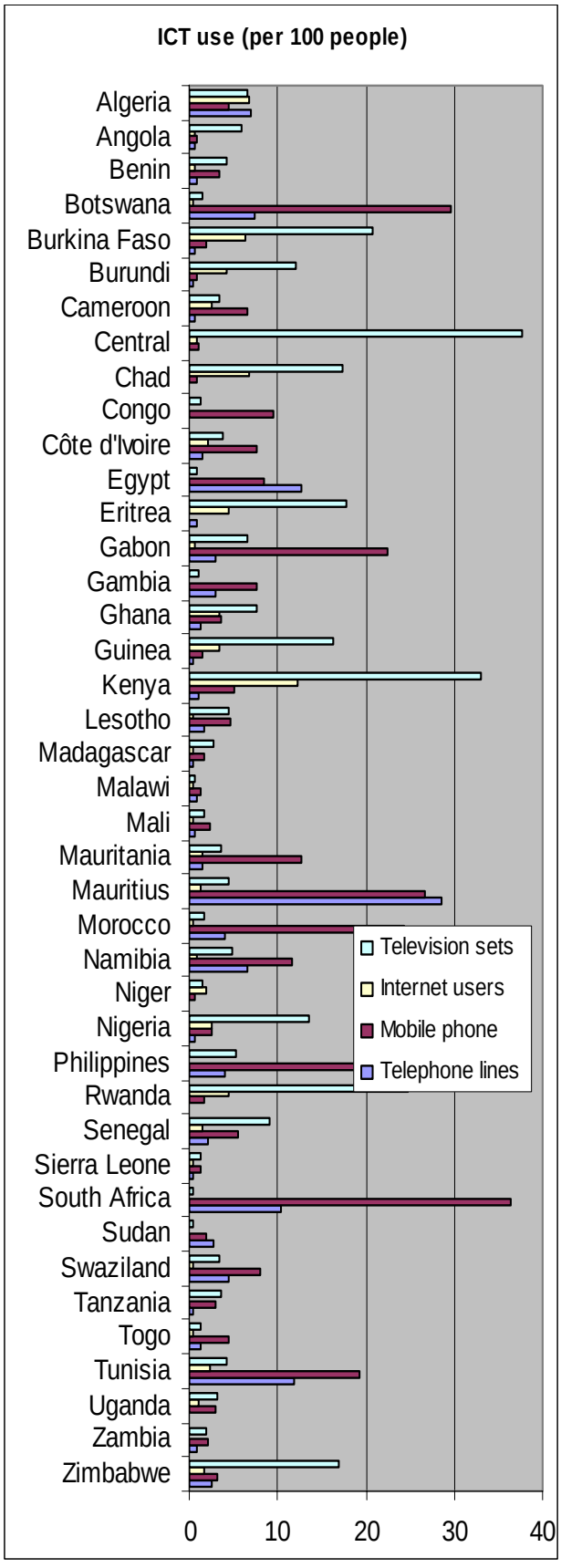
Integrating rural areas in Africa many of which are largely characterised by subsistence economic activity to major markets will be no easy task. A start could however be made targeted at the 'secondary economic corridors'. Here, the initial investments made will provide the initial leverage to make these areas more attractive for investment by domestic or foreign entrepreneurs. These or other literate individuals or organizations-private, governmental or non-governmental whom I term 'catalysts' could play the role for change. Catalysts are thus important agents of economic change. While catalysts could be inhabitants from a rural area (perhaps those who have migrated to cities or even abroad), often illiteracy, lack of access to credit and information may make it more difficult for local inhabitants to become catalysts. Hence the conditions should be set in place for catalysts to operate and set in motion the process of economic change and involve the rural population in productive activities. Here, the pre-existing road and communication networks could help in a number of ways:

Firstly, ICT infrastructure could help add 'value' to rural sectors especially agriculture. For example rural farmers through mobile networks will get a better idea of prices in urban markets which can help eliminate middlemen as has already happened in many parts of Africa. The role of catalysts here is that they could use mobile or telephone networks to tap into a wider source of information from internet hubs located for example in the nearest town along the primary corridors, and transmit these to farmers and others even by word of mouth. So lack of internet access or knowledge of computers on the part of the rural poor should not impose limitations as long as they are clear about the information that they want and can access these through the 'catalyst'. Information could range from facilities available for credit, to product quality standards to best practices in irrigation-in fact anything that can help rural development take that one step forward.

Secondly, the initial 'secondary corridor' investments could in turn spur investments in supportive infrastructure such as cold-storage facilities or agro-processing plants. But this may not always happen automatically as one would wish and the government may need to provide incentives such as tax-breaks or holidays. The point I would like to stress is that the initial investments in roads and ICT would make other inducements such as tax-breaks or holidays by the government that much more attractive as at least investors will know that they

The basic ICT tools for facilitating trade and enterprise development remains illusive for most of Africa.

Source: ATDF Knowledge Centre (2004).



will be able to get the produce urban or foreign markets and bring in physical machinery and tools for example much more easier than before. Access to information from internet and telephone networks would help investors quickly contact points along the supply-chains including in export markets instantly and communicate requirements, as in contract-farming, to rural farmers. In this regard the potential of communication software such as Skype that has dramatically cut down costs can hardly be overemphasized. E-commerce initiatives for marketing rural produce could also be developed.

Thirdly, both the creation of physical infrastructure such as roads as well as the investments that are attracted will have the potential to provide alternative employment to rural populations and generate opportunities for backward and forward linkages and non-farm activities.

The third phase-Attracting and taking advantage of distribution services

In the succeeding phase, once rural regions connected by secondary corridors to external markets and have started producing goods for supply, the 'strategic' trade-facilitation package could be expanded to include policies to attract distribution service providers and freight-forwarders in case they are not already attracted to rural areas. The operation of distribution and logistics service providers could provide a further boost to trade-facilitation to products from rural areas to domestic and export markets. Policies to attract such providers could include tax-concessions as well as liberalization commitments for these types of providers made as part of WTO negotiations under the General Agreement on Trade in Services. Commitments on market access could for example, be made with the conditionality that 100 per cent equity would be permitted for operators specifically catering to rural area supply-chains. Growth in distribution and logistics services could in themselves also be a major source of employment opportunities.

Conclusion

The proposals laid down by this article does not purport to be based on empirical research on ground realities, more on logical perceptions about what 'ought' to happen. The fundamental argument is that the more conventional trade-facilitation investments such as those relating customs reform and border-procedures will not have noticeable effects on rural economic activity in Africa as these regions are often isolated from local, let alone regional or international markets. Investments in strategically targeted rural infrastructure will thus be required to 'connect' or 'plug in' these areas to the mainstream of traffic in commerce and information flows along 'primary economic corridors' so they can access the benefits of this flow and attract new investment in productive activities.

How will these initial infrastructure investments for these corridors be financed? Trade-facilitation assistance has been growing and if ongoing negotiations at the WTO succeed, will certainly get a further boost. But technical assistance linked to WTO obligations, due to the nature of the negotiating mandate, may again only solve a limited range of issues of concern to existing exporters and importers in Africa. The massive investments required to encourage further investment, particularly in rural parts of least-developed and land-locked countries in Africa, will be enormous and will have to be provided by other means of bilateral or multilateral assistance, such as through development banks, that will target areas outside the WTO's 'trade-rules' related mandate. Policies geared at rural infrastructure no doubt figures, and should figure in existing and future Poverty Reduction Strategy Papers (PRSPs) drawn up for African countries. Specific assistance for rural infrastructure should be enhanced within existing schemes such as the Integrated Framework and also be an integral and growing component of future schemes such as the promised 'Aid for Trade' packages. As the saying goes, 'Knowledge is Power' and this should be reflected in due importance for Information and Communication technologies within these packages as well. Trade after all should also be facilitated by flows of ideas and information, not just flows of goods and services

Notes

1. Hill, A.K.G. (2005) Business and the WTO Negotiations on Trade Facilitation," International Trade Centre-UNCTAD/WTO Technical Discussion Paper.24.
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3. "Trade Facilitation and Economic Development: Measuring the Impact" (2000), World Bank Policy Research Working Paper N° 2988, Washington DC.
4. Hill, A.K.G. (2005) Business and the WTO Negotiations on Trade Facilitation," International Trade Centre-UNCTAD/WTO Technical Discussion Paper.39
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In the News:

Ethiopia Triple Helix Conference, Addis Ababa, 29th – 31st May 2006

The conference, hosted by the Ethiopian Triple Helix Association (ETHA) and its President, Dr, Mohammed Duri, in the United Nations Conference Centre in Addis Ababa, was opened by H.E. Mr. Girma Welde Giogis, President of the Federal Democratic Republic of Ethiopia in the presence of the Ambassador of Sweden to Ethiopia, H.E. Staffan Tillander, the Ethiopian Minister of Education, H.E. Dr Sintayehu Woldemichael, numerous dignitaries, international and local presenters and participants representing the country's government, academic and industry sectors.

ETHA co-organised the event with substantial input from IKED (the International Organization for Knowledge Economy and Enterprise Development, based in Malmö, Sweden) and significant support from organizations such as Sida (the Swedish International Development Agency), GTZ (the German Technical Cooperation organisation), ECA (the United Nations Economic Commission for Africa), World Bank and Midroc Ethiopia, to name a few.

The two-and-a-half day event was a platform for many presentations and ensuing discussion-sessions on the theme of effective development of cooperation between government, universities and industry to further economic development in the country.

IKED's President, Thomas Andersson, presented IKED's background paper on the Ethiopian economy and provided food for thought about the country's future development needs.

Henry Etzkowitz, Business School, Newcastle University, who is largely responsible for having inspired and launched the Triple Helix concept, was on hand throughout to intermediate in the discussions with international colleagues presenting cases from such diverse origins as Brazil, Cameroon, Israel, Mexico, South Africa, Sweden, Tanzania, United Kingdom, Zambia, to provide examples of how cooperation had worked in these environments.

Representatives from Ethiopian universities and private sector were active in displaying their work, presenting a wide range of examples of cooperation between Academia and industry (including agriculture) to improve effectiveness of knowledge transfer to the economy.

The enthusiastic closing session, recognizing that the country stands to benefit greatly from accrued effective Triple Helix interaction supported the motion of holding a workshop within the coming six months in order to further explore and define how the concept should be implemented in Ethiopia.

Source: IKED

Linking global firms to Local Small and Medium Enterprises

ATDF

Abstract

There are many types of business linkages and many different programmes to promote linkages between large and small companies. This paper focuses on two types of linkages, namely forward and backward linkages. Backward linkages refer to an arrangement where transnational corporations (TNCs) source parts, components, materials and services from small and medium sized enterprise (SME) suppliers in the host economy while forward linkages occur when a TNC provides inputs to another firm or industry.

This paper discusses the conditions necessary to enhance the competitiveness of SMEs and how business linkages between TNCs and SMEs can contribute to the competitiveness of both enterprises as well as to the growth and development of the host countries. Three case studies of successful linkage programmes in Africa and Asia are discussed. It also describes important elements in public-private sector partnerships.

Introduction

While it is generally accepted that SMEs are the backbone of the domestic economy, contributing to jobs and income and hence to poverty reduction, few governments in developing countries have framed policies to enhance their growth or survival. It is not difficult to find statements of commitment to private sector development, such as the recognition in the UK Commission for Africa report *Our Common Interest* that *"the public and private sectors need to work together to create a climate which unleashes the entrepreneurship of the peoples of Africa, generates employment and encourages individuals and firms, domestic and foreign, to invest."* However, coherent and well defined policies that have been developed in consultation with the private sector are generally absent.

For instance, some developing countries have been successful in attracting foreign direct investment (FDI) but not all have been able to ensure that FDI strengthens local enterprises. There is a lack of adequately skilled local human capital, absorptive capacity in local firms and/or incentives to stimulate the diffusion of technology to local firms. In such cases, FDI can add little value to local development and may result in a crowding out of access to finance, abusive transfer pricing that minimizes tax payments, foreign exchange instability, and labour and environmental problems.

These problems in part reflect the failure to combine policies to support SMEs with policies designed to attract FDI. Well-designed SME and FDI policies can ensure that FDI works for local enterprise development. This could be achieved by grounding FDI in local business linkages to facilitate access to finance, distribution and marketing channels and technology to local enterprises. The Government can use transnational corporations (TNCs) in their boarders to improve the capacity of local enterprises through business linkage programmes or supplier development programmes similar to those of Ireland, Malaysia and Singapore to name a few.

2. Global dynamics effect on linkages

The current dynamics of global production favour the creation of business linkages between TNCs and their suppliers. TNCs for the most part concentrate on their core operations and outsource others. The decision to source locally depends on the cost, quality, reliability and flexibility of local suppliers relative to suppliers abroad. It also may depend on national policies or WTO agreements such as the Trade-Related Investment Measures (TRIMs). TRIMs prohibits local content requirements, which specify that some amount of the value of the investor's production must be purchased from local sources or produced locally.

Normally, local sourcing should lower costs, allow for closer monitoring, and give greater flexibility in changing specifications and in developing new inputs.

In the case of the Asian tigers they did not have large natural resources or large internal markets but they had a competitive advantage in terms of the ability to provide special skills, infrastructure, and suppliers which could use technology efficiently and flexibly. Large companies not only look for efficient and flexible SME partners but they also use these partners to gain insights into fast moving technologies, close the gaps in their understanding or develop devices that may boost the long-term use of their products.

Many TNCs assert that there is a lack of suitable local SME partners which could meet their corporate standards or international product standards. For most local SMEs, "partnership readiness", a pre-requisite for mutually beneficial linkages with TNCs, often remains an elusive objective because SMEs lack information, experience, contacts and above all, the human and financial resources to implement the management and tech-

Box 1: Key Features of TNC strategies that deepen linkages

- Investment driven by the search for strategic capabilities and assets rather than for cheap natural resources, low wages or protected local markets,
- Business models based on networking and inter-firm cooperation, and
- Decentralized corporate decision-making and empowered local management to authorize independent sourcing and new product development.

nology changes needed to do business with the TNCs. The vast majority of SMEs therefore remain de-linked from TNCs, missing these potential opportunities.

2.1 Facilitating partnerships

The challenge for developing countries is to ensure that such linkages occur and contribute to the growth and the competitiveness of SMEs and the development of the economy as a whole. Toward this end, a set of specific policies and programmes are required as well as the cooperation of various development actors in implementing them.

The strength of TNC-SME linkages and the ability of countries and individual enterprises to exploit them for technology upgrading vary greatly, depending on three factors:

⇒ The existence and efficiency of supporting public policies and measures that increase investment in domestic SMEs and facilitate both technical and managerial skill development;

⇒ TNC strategies which are conducive to local enterprise development; and

⇒ The existence of SMEs that have the potential to meet TNC standards within a short learning period.

Beyond the motives of a company to investing in a given developing country, many other aspects shape the corporate strategy and the TNC's willingness to develop linkages with local SMEs. These include the degree of technological sophistication of the TNC and the economies of scale attained, the length of time the TNC plans to operate in a host country, the geographic proximity and transaction costs between the TNC and its affiliates, the TNC's market position (such as whether it operates in price-sensitive markets or enjoys high innovation rents), and the trade policies of the host country, i.e. whether inputs can be easily imported.

2.2 Linkage and the corporate culture of TNCs

The TNC's willingness to develop linkages is also influenced by its corporate culture which, in turn, reflects cultural features of the TNC's home country. For example, several studies have shown that United States and European electronics and computer companies have used the Southeast Asian affiliates for specialized production in a global division of labour, therefore beginning a process of systematically upgrading the technology, improving quality control and diversifying managerial responsibilities for their subsidiaries. Japanese TNCs, on the other hand, have maintained higher value-added operations in Japan, while transferring only lower-end processes to their foreign affiliates (UNCTAD, 2000).

3 Corporate social responsibility

Governments can enlist the support of certain TNCs in building linkages because many profit-seeking TNCs are concerned with the issue of corporate social responsibility (CSR) largely because they are aware of the importance of their public and media profile. They understand that they need an implicit license to operate in the societies of their host and original countries. The social contract stipulates that with power and rights come certain responsibilities. Some TNCs interpret the concept of CSR in a broad sense, that is, they understand and accept obligations not only to shareholders but also to other stakeholders such as employees, suppliers, customers and even competitors, local communities and governments.

4. Case studies on promoting linkages between TNCs and SMEs

This section concentrates on backward linkages between large and small enterprises where the TNCs source parts, components, materials and services from SMEs and thus are more likely to have a profound development impact. The case studies were chosen with several criteria in mind:

⇒ They demonstrate [backward] linkages;

⇒ They are based on a profit-driven business strategy rather than philanthropic motives;

- ⇒ They are long-term and have already demonstrated positive development impacts;
- ⇒ They are sustainable in the future; and
- ⇒ They are replicable.

4.1 Linkages through enterprise development: The case of Zimele, South Africa

Zimele evolved out of Anglo American a global leader in mining and natural resources and De Beers Small Enterprise Initiative established in 1989. In 2000 a separate corporation was created called Zimele, which in Zulu/Xhosa means "to stand on one's own feet". Anglo American, recognized the potential for increasing efficiency through greater SME outsourcing. It created an investment fund of US$ 2.3 million, managed by its own Board and three permanent staff. Through Zimele, small specialist companies provide inputs into the operations of the MNC thus reducing Anglo's costs through competition.

Zimele's programme has three main goals:

1. To proactively seek out opportunities for black owned/managed SMEs to supply non-core services to Anglo Group companies;
2. To support SMEs more broadly, including those with links to Anglo American Group of companies, through the provision of finance, technical assistance, business planning services and the transfer of skills; and
3. To look for investment opportunities.

Zimele has two main areas of activity: procurement and business development services. The entire Zimele programme developed out of Anglo-American procurement opportunities. In procurement, Zimele identifies purchasing needs within the Anglo Group, and sources the needed goods and services from local SMEs. These SMEs have to be commercially and technically viable and meet quality standards, offer competitive prices and deliver on time. Zimele sets targets for local managers and lead contractors. It gives SMEs "bite size" tenders and provides prompt payment. For those SMEs wanting to take advantage of Anglo-American procurement opportunities, Zimele provides business development support services in terms of business skills, strategies and systems.

Zimele's objective is to promote the existence of stable, sustainable SMEs that make money. Zimele works with entrepreneurs with a passion for business that have been identified for a process of mentoring and nurturing using the "incubator" approach to transfer business skills and good business practice. Participating SMEs interface with all of Anglo's functional areas including top executives, line management, business development managers and networks and business intelligence. Most important are the business development officers (BDOs) within the Anglo Group who provide support. Through the BDOs Zimele can provide a range of support services including:

- ⇒ Access to Anglo procurement programmes;
- ⇒ Secretarial, accounting, legal and tax help;
- ⇒ Business skills and proposals;
- ⇒ Financial and administrative systems for proper control; and
- ⇒ Strategic planning and alliances.

In addition to seeking out specific opportunities for SMEs to supply Anglo American, the BDOs and Zimele core staff look for investment opportunities. Zimele provides finance through loans and taking a minority stake (20 percent) up to US $350,000 per company. The latter is quite important since Zimele acts as a partner/shareholder that shares the SME's risk. However, SME shareholders also must make their own capital commitment. Over time the capital dependency is reduced as Zimele looks for an exit strategy. As a shareholder, Zimele sits on the boards of the various SMEs and so can act as a force for good corporate governance as well as protect its investment.

Impacts

Through Zimele, Anglo American has "institutionalized" its approach to supplier development. Over the years this has enabled Anglo American to spawn or strengthen a number of successful SMEs. During 2004 Anglo American's divisions collectively spent $800 million on goods and services from SMEs ($440 million in 2003). Since its creation Zimele has invested in over 100 companies since 1989 and has exited from 70 of them. The survival rate for SME partners is 90 percent. This is significant since the average life of an SME in South Africa is six years.

Critical success factors

The success of Anglo American's Zimele model depends on the following critical elements:

- ⇒ Encouragement of long-term economic empowerment and wealth creation;
- ⇒ Development of sustainable, commercially viable businesses;
- ⇒ Investment in small businesses through equity and loans;
- ⇒ Minority stakes of up to 20 percent with clear exit strategy;
- ⇒ Focus on the creation of successful enterprises not on jobs; and
- ⇒ Sustainability and commercial viability as evaluation criteria.

What we see in this case study of Zimele is that Anglo-American developed this programme in the absence of specific policies requiring local inputs. At the same time, it was inspired by the black empowerment programme of the South African government, which re-

quires corporations to set aside 1% of after-tax profit to help empower previously marginalized populations. As a result, Anglo-American had to take on many of the roles played by public and private partners, such as skills development and financing. It is a heavy burden for any company to "go it alone" but Anglo American has done it in a way that benefits both shareholders and stakeholders in the long run.

4.2 A win-win strategy: The case of Unilever Vietnam

Following successful negotiations with the Government and launch of operations in 1995, Unilever invested over US $100 million in refurbishing two existing plants and building two new ones. It also upgraded the facilities of nine main contract manufacturers and numerous suppliers, and created an extensive distribution network for its products. The contract manufacturers and suppliers needed special assistance to enable them meet the needs of Unilever. It should be remembered that Unilever was motivated to work with them in order to keep its operations slim, cost-effective and flexible. By increasing the capabilities of the local enterprises, Unilever knew that it would be increasing its own competitiveness.

To strengthen its local partners, Unilever used a step-by-step approach. Firstly, it carefully selected its partners; secondly, it treated the local enterprises as preferred business partners; and thirdly, it upgraded their technology through its Manufacturing Sustainability Improvement Programme.

Manufacturing Sustainability Improvement Programme

Unilever's Manufacturing Sustainability Improvement Programme focused on improving a number of key aspects such as plant hygiene and good housekeeping, management systems, equipment maintenance, processing, quality assurance and product safety, cost control, continuous improvement and security and confidentiality. Unilever provided the contract manufacturers with both training and access to technology in order to improve the above aspects.

Transfer of technology was achieved through the supply of world-class equipment, full-time hands-on technical support and supervision, access to Unilever's Innovation Centres and training in quality and hygiene, safety and productivity. Its experts taught the local enterprises what they needed in terms of modern plant and equipment, how much they needed to invest, and to invest only in what was needed to grow. Unilever provided in-house training since it did not have the benefit of a co-operatively managed training centre.

Unilever used a similar approach in training with its suppliers in audits to improve customer service, quality and safety. With both the contract manufacturers and suppliers, Unilever provided loan guarantees on the basis of the fact that a certain volume of sales was purchased by Unilever.

Besides its usual line of personal care products, Unilever also introduced new products based on local culture and tastes. One of its contract manufacturers had a unique product: Quoc Duong "Pha Quoc" fish sauce. The company had a prestigious source of raw materials — an abundance of good anchovies — and was experienced in processing them. It also possessed 90 percent brand recognition. Unilever Best Foods NV Ltd. invested $650,000 to build a bottling plant, expand Quoc Duong's fishing and fermentation capacity, and develop operational and management skills and protect its intellectual property against counterfeits.

Forward linkages

What Unilever accomplished in terms of *forward linkages* was also exceptional. A forward linkage is the outsourcing of the distribution of brand name products through local marketing outlets or distributors (Altenburg, 2000). Of course, Unilever was acting out of self-interest since the distribution network maintained and increased the demand needed to increase Unilever's turnover. Its distributors were its third leg after the contract manufacturers and suppliers, and key to its success as an enterprise. Unilever sold direct to its distributors — more than 350 of them. It trained them in the Unilever sales and distribution methodology as well as in cost and inventory management. It guaranteed them a volume of products to sell and it assisted them in reaching customers by giving vehicle loans and bank guarantees.

Impacts

During the linkage process, Unilever built up a healthy supply chain of growth-oriented contract manufacturers, suppliers and distributors. As a result, by 2001 contract manufacturers accounted for 48 percent of Unilever Vietnam's total production volume. Unilever was able to source 40 percent of its raw materials and 80 percent of its packaging from local enterprises. The enterprises in turn benefited in terms of increased turnover and employment. Unilever's employment policy to recruit, develop and retain local talent clearly benefited 7500 Vietnamese workers (of which 5500 were new jobs) in four plants and nine contract manufacturers.

Duy-Tan, a supplier of bottles, increased its total turnover from US $900,000 to US $6.67 million and employment from 160 to 664 between 1996 and 2002 through its association with Unilever. The transfer of technology to local enterprises enabled them to comply with international product quality standards and obtain ISO certifications. Since they were competitive in terms of costs and quality, they were also able to enter export markets and diversify their business partners and avoid

total dependence on Unilever.

Unilever gained additional capacity with low capital investments, cost competitiveness and a nationwide distribution reach. It was able to pull ahead of its competitors because of local sourcing that gave it a price advantage.

Unilever's community programme initiative did not stray from its business model, but at the same time addressed the need for corporate social responsibility. It knew that it was a business, not a charity. However, the company was willing to share wealth with the local community for mutual benefit. It has invested more than 50 billion Vietnamese Dong (VND) in various social and community programmes over the last 10 years with a strong focus on health, hygiene and education programmes. For example, it has supported a programme to improve the health of 10 million children.

Critical success factors

There are at least 4 success factors identified:

1. Vision and commitment;
2. Commercial sense;
3. Utilizing local cultural traditions;
4. Investing for the long-term.

Unilever officials know that linkages are a part of normal business operations. They have a choice of sourcing internally or externally, in the host or home country. Their global sourcing strategy *committed* them to striking mutually beneficial partnerships with local enterprises if they made *commercial sense*. Unilever invested in a network of local contract manufacturers and suppliers and distributors over the *long term*. Their competitors had a more global and less local approach to the Vietnamese market and were less successful.

4.3 Public-private partnerships; the Case of Penang and Intel, Malaysia

In order to promote investment, exports and enterprise development, the government of the Penang region in Malaysia adopted a policy that put into place various institutions, infrastructure support and incentives. These included the Penang Development Corporation (PDC), one of the first examples of the concept of Free Trade Zones (FTZs), as a one-stop environment that facilitates interactions between potential investors and the local authorities and local business community. In addition, the Penang Skills Development Centre (PSDC) was developed to pools resources from the private sector, the government and academia to upgrade the skills of workers.

The Penang Government also placed great emphasis on ensuring good transportation facilities and links, utilities and other physical infrastructure for the business sector. Penang International Airport, the second largest in Malaysia, has been upgraded with improved facilities and a new air cargo complex. The Penang marine port is similarly a major regional hub with modern facilities for both international and coastal vessels. The national railway line to Kuala Lumpur, Singapore and Thailand also supports the Penang region. Adequate electric power is supplied via the National Grid System and the Penang Water Authority supplies water which meets WHO standards. Investments in information technology (IT) have made the telecommunications infrastructure and services in Penang one of the best and most modern in the region.

Furthermore, various attractive tax incentives were provided for approved projects, in order to ensure that start-up and operating costs are competitive. Both local and foreign enterprises benefit from tax holidays, investment tax allowances, and reinvestment allowances. It is important to note that the incentives are for TNCs and SMEs alike. There are special incentives for increasing local content, for hi-tech industries, for industrial buildings, and for research and development activities. There are a number of incentives for training and training facilities which are considered an investment.

Intel's approach

Intel arrived in Penang in 1972 looking for the following four qualities in potential suppliers: competitiveness, capability, stability and resourcefulness. TNCs such as Intel are in a strong position to choose their partners. They look for SMEs that can meet their corporate requirements as well as international standards on crucial production issues such as price, quality, delivery, health, labour and environmental standards.

SMEs, on the other hand, are less than "partnership" ready. It is unrealistic to think that in a world of giants, SMEs can become partnership ready without assistance. For this reason, Intel uses five criteria to select and nurture suppliers:

1. SME should be willing and capable of meeting Intel's requirements;
2. Intel provides training to SMEs that match its business needs;
3. Gradually allocate tasks or contracts based on the SME's abilities;
4. Continuous improvement of the capability of the SME through coaching;
5. Mature SMEs may become suppliers to Intel global production chain.

Many of these initiatives are undertaken in collaboration with external skill centres such as Penang Skills Development Centre (PSDC), Intel's Global Supplier Development Programme and the National Institute of Occupational Safety and Health for contractor safety certification training. It also shares its internal training courses and provides suppliers access to its innovation centres, engineers

and assigns Intel staff to SMEs to share know-how.

Critical success factors

In distilling the "Penang experience" the following critical success factors emerge:

- ⇒ Long term commitment by both government and TNCs;
- ⇒ Targeted FDI strategy to attract TNCs with a positive corporate philosophy and willingness to delegate to local managers to develop linkages;
- ⇒ Establishment of public-private sector dialogue;
- ⇒ Formation of meso institutions, i.e. skill centers, such as PSDC;
- ⇒ Selective rather than indiscriminate support for SMEs;
- ⇒ Systematic supplier development programmes vs. less structured ones; and
- ⇒ Appropriate use of economic incentives.

Conclusion and recommendations

Business linkages are not the exclusive domain of the semiconductor industry. Backward linkages have been developed in many other sectors including mining, food and personal care products, textiles and automotive accessories. It is also possible to develop company programmes in the absence of the comprehensive public-private sector partnerships.

Advocates of business linkages should be clear in terms of what they are promoting — viable commercial ventures or acts of philanthropy. The number of discussions and initiatives promoting "partnerships" has covered a wide variety of relationships, and the distinction between commercial ventures and philanthropy has become blurred. Many philanthropic acts that have nothing to do with the TNC's business strategy are being promoted as partnerships and/or business linkages.

Providing health care, education or safe drinking water to local communities is not usually undertaken as a "commercial venture" although it might make sense in terms of corporate social responsibility. There are exceptions such as HIV/AIDS and malaria where the diseases are a threat to a large company's productivity. However, the company programmes are usually restricted to employees and their families and are not open to suppliers or the general community. Above all, most firms do provide health cover to their workers, in one form or another.

Giving general as opposed to selective support to SMEs in terms of setting up business centers or skill centers can make business sense if they are created and run cooperatively with other partners, using the principle of subsidiarity, and can enable both the TNCs' own suppliers as well as other SMEs to benefit. Promoters of such linkages should continually press for better enabling business environments. Administrative and regulatory burdens weigh more heavily on the SMEs than larger companies. This ensures that most SMEs remain in the informal sector, where they will find it difficult if not impossible to access partners, finance and global markets. In the case studies some of the participants in the linkage process function under very difficult circumstances.

The commitment and vision on the part of all stakeholders is best developed by public-private sector dialogue. Another reason why the Penang experience is unique is because few governments engage in regular and extensive public-private sector dialogue as in Penang. Here policies and programmes were developed in consultation to respond to public sector and private sector needs. When the Chief Minister called a meeting in the Penang Development Corporation, the local CEOs attended en masse.

All too often, there is a disconnect between the government's programmes for attracting FDI and for strengthening SMEs. These two policy areas need to be brought closer together through dialogue between investment promotion agencies and business service providers. The government must identify the economic sectors it wants to strengthen depending on where it might have a competitive advantage. It must then identify those TNCs with the right corporate strategy and track record in terms of supply chain management and direct its investment promotion programmes to them while at the same time strengthening its domestic enterprises. Of the examples described above, only in the case of Intel's activities in Penang did the government followed a targeted approach. In the other instances it was a case of working with whatever TNC was currently operating in the host country.

It is necessary to engage with local partners and/or institutions that work at a sectoral or regional level, known also as meso institutions, so that SMEs in the targeted economic sectors can be strengthened to participate in the linkage process. Otherwise, a very heavy burden rests on the TNCs as demonstrated in the case of Unilever to train and facilitate scale-up and quality enhancement. Meso-institutions can set up skills development, mentoring and coaching programmes in partnership with the business community and ensure that SMEs live up to commitments for continuous improvement. They can also ensure that the TNCs transfer skills, technologies, market information and other business contacts. The latter is important since the SME should not be dependent on just one TNC partner.

The meso-institutions should be run by a coalition of stakeholders and not solely by the government. If the private sector participates in management, the institutions will be successful in providing SMEs with what they need to do business with TNCs. Such partnerships relieve governments in developing countries of shouldering the entire financial and management burden of the meso institutions.

Economic incentives are sometimes necessary to scale up these best practices but they must be used sparingly by government in order to maintain fiscal stability. In the case of Penang, what the government gave up in corporate taxes, it made up in individual income taxes. In the absence of access to credit and equity, economic incentives can help SMEs maintain their cash flow so that they can invest in themselves. The effectiveness of the incentives should be evaluated to ensure that their benefits outweigh their costs. They must also comply with trade and investment rules. Since the Penang incentives were "horizontal" in nature, they complied with trade rules.

Developing countries that continue to ignore the necessity to support local enterprises through policies and programmes so that they are "partnership ready" will surely reap neither significant benefits from FDI nor will they increase their competitiveness in the global economy.

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Special Feature:

The Ethiopian Airlines Multinational Aviation Training Center.

Makonnen Kidane

Last April, the city of Addis Ababa was full of jubilant events as Ethiopian Airlines celebrated its 60th year anniversary. During the various speeches and discussions reflecting on the inception and development of this magical Airline, a consensus has emerged that the secret of this Airlines excellent service for such a long time was the result of its exceptionally good training infrastructure.

Ethiopian Airlines has played the roll of a pioneer in the development of Aviation Knowledge and skill in Africa and the Middle East. Talking about pilots and technicians alone, the training center has trained and deployed around 2500 aviation maintenance technicians and over 700 commercial Airline Pilots. Out of these graduates, about 40% were third party trainees sponsored and sent by various nations and companies in Africa, Middle East and Asia. The geographical origin of these trainees was so diverse, that every nation in Africa and the Middle East had an employee or two trained by Ethiopian Airlines.

For many years, the Airline was forced to be self sufficient, because of its distance from the service centers of the developed world. As a result, the Airline dose a wide array of aviation service starting from the basic material processing like plating ,welding plasma spray etc to the overhaul of aircraft, engines and various components. In the area of marketing and finance, it does everything that an airline requires to function as a commercial airline. As a result, therefore, we have developed training capability for all of the requirements of a typical airline and also a typical maintenance base.

The first established training school was for cabin crew; and was immediately followed by a pilot training school. In the years 1957 to 1964, Ethiopian airlines training center immerged as a one stop shop for all core airline training services and had been further developing its capability for close to 50 years now.

To day aviation training has become a competitive business; and in many cases there is a concern that safety and regulatory preoccupation is being challenged and compromised by commercial objectives.

Ethiopian Airlines is an old company. Because of its traditional foundation, the classical concerns of reliability and safety are still very well knit in the very fabrics of its system. This is also true of its training philosophy and instructional program. This is the reason why our graduates are truly seasoned commercial aviation professionals.

Because of this foundation, our training clients are always very pleased with the quality of the graduates produced by Ethiopian Airlines. This is actually proved by the high quality of overall services offered by Ethiopian Airlines and the testimony of many of our clients. Today, in the African continent, and in most parts of the globe for that matter, it is customary to see that most of the graduate technicians of Ethiopian Airline Training Center are at the top of technical profession.

In addition to the classical airline concerns it had carried through its long years of existence, there is yet an additional reason why the training center of the airline is among the few best of the world. And that is its association with an airline that does operations and maintenance by itself. Theory is everywhere in this era of information explosion; but practice can only be learned from a company that has accumulated a 6 decades century experience. Therefore Ethiopian Airlines Training center is one of the best training institutions in the industry because of its affiliation to a company of excellence in a wide range of aviation services, from maintenance to and marketing and operations.

Globally, the training business is taking new approaches. There are breakthroughs in training technology and in the technology of training. The business is becoming highly competitive. In realization of this, Ethiopian Airlines had appointed a French consulting firm to develop a business feasibility survey and prepare and identify up grade requirements.

In the year 2000, the consultant has confirmed that the Ethiopian Airlines Aviation Training Center has in deed business feasibility if upgraded and modernized.

Today, the airline is perusing the upgrade project intensively and welcoming partners in this regard.

AFRICA OPEN FOR BUSINESS NOW ON DVD

Documentary showing a different view of the new Africa by award-winning journalist Carol Pineau, is being released for purchase on DVD at www.africaopenforbusiness.com.

The one-hour documentary is a radical departure from most films on Africa. It features ten portraits of entrepreneurship throughout the continent and offers African solutions to African problems. United Nations Secretary General Kofi Annan called the producer's work, "Very perceptive, and much more balanced than one usually finds."

The film has proven to be an extremely powerful tool in changing people's perceptions on Africa and encouraging investment into the continent. It is ideal for organizations, NGOs and businesses wanting to promote awareness of Africa's economic potential, as well as for classroom use, including international and African studies, international business and MBA programs, and journalism and communications programs.

The DVD version for institutional and educational markets features extras, including a six-minute short that opened several conferences, conversations with producer/director Carol Pineau and director of photography Mark Thalman, and a teacher's study guide. The price, which includes public performance rights, is $179, plus tax and shipping, and is available for purchase online at www.africaopenforbusiness.com.

The film aired worldwide on BBC in May and will be broadcast in the fall on US public televisions. It screened at the World Economic Forum, Cannes Film Festival, and AGOA Forum, and played at several other high level venues including the United Nations, US Department of State, and US Congress.

For more information and to view a trailer, visit www.africaopenforbusiness.com.