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.

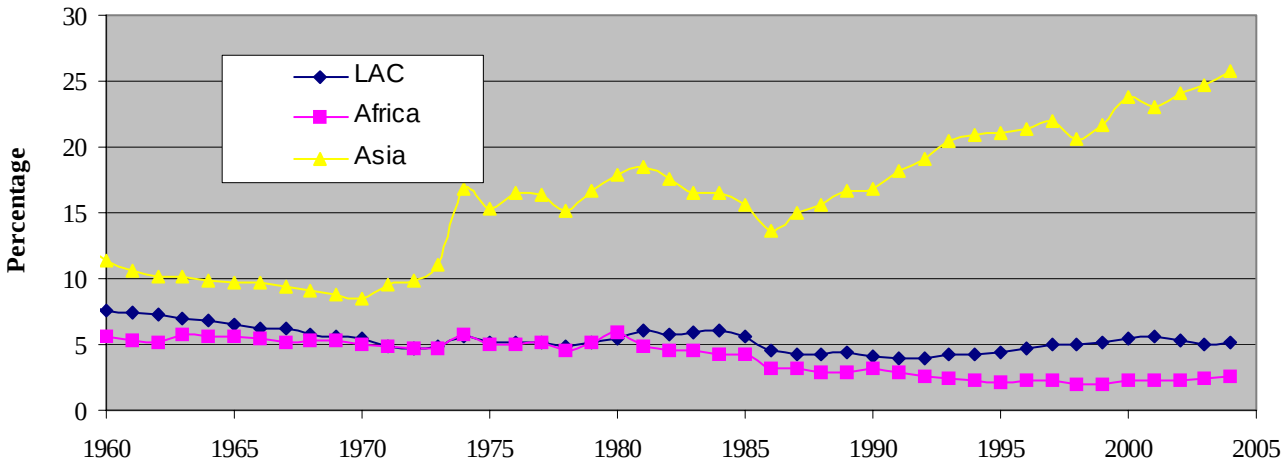
As shown in figure 1, Africa has lost more ground in trade than any other developing region since 1960. Africa's share of global trade remained above 5% between 1960 and 1980. Since then, Africa's share of global merchandise exports fell from 6% in the early 1980s to 2% in the late 1990s. Although international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

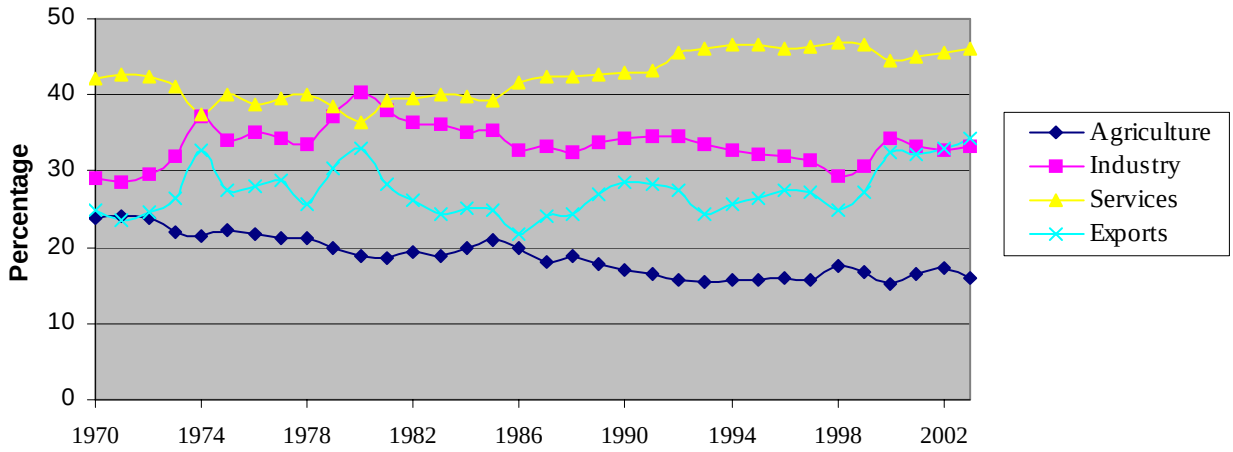
Entrepreneurship may fail to prosper in countries without efficient government institutions that process business-related services such as taxation, registration and land-leases, among others. Some African bureaucracies have become so "lean" (starved of human resources

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!

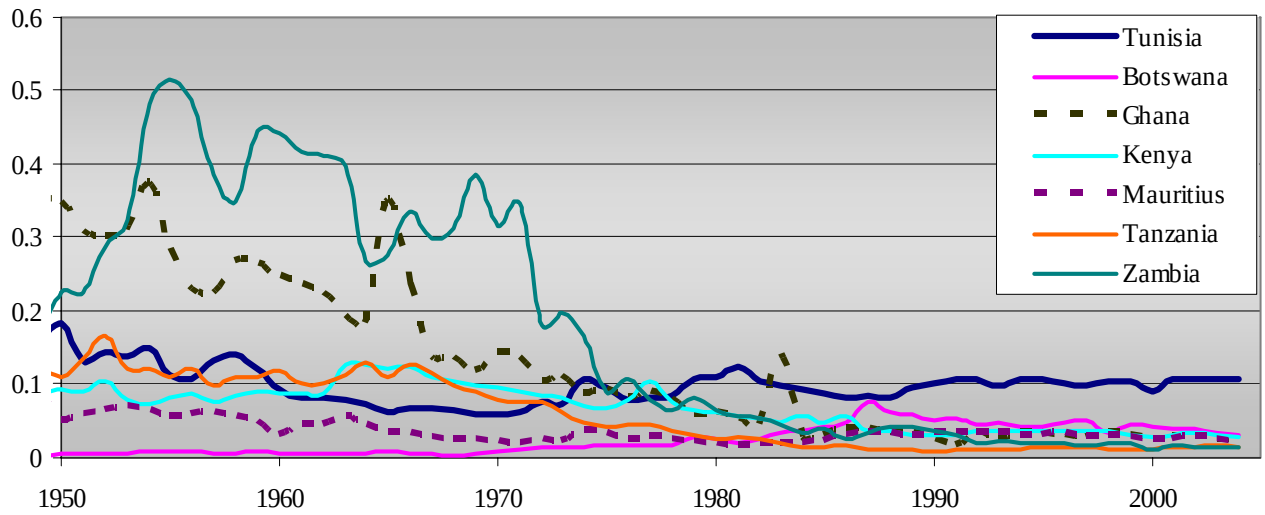
If one take into consideration literacy and wealth status of potential entrepreneurs in the in Africa then, then perhaps one appreciates that some of the requirements may be too complex and demanding for the majority of Africans. Given a choice whether to spend their limited resources paying lawyers 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.

References

1. Thomas, V., Dailami, M., Dhareshwar, A., Kaufmann, D., Kishor, N., López, R and Wang Y. (2000) The Quality of Growth, The World Bank and Oxford University Press.
2. See Falsh 160 Entrepreneurship Reports.
3. GEM (2005) The Global Entrepreneurship Monitor 2005 Report, GEM.
4. Burton, R.C. (1998) Creating Entrepreneurial Universities Organization Pathways of Transformation. IAU Press
5. Etzkowitz, H. (2003) "Research groups as 'quasi-firms': The invention of the entrepreneurial university", Research Policy, 32.
6. Etzkowitz, H. (2004) 'The evolution of the entrepreneurial university', Int. J. Technology and Globalisation, Vol. 1, No. 1, pp.64–77.
7. Noble, D (1977) America by design: Science, technology and the rise of corporate capitalism, Oxford university press NY
8. Aronowitz, S. (2000) The Knowledge Factory: Dismantling the Corporate University and Creating true Higher Learning. Beacon press
9. Dasgupta P. and David P. (1994) Towards a New Economics of Science. Research Policy 23, 487-522.
10. Roger G. (1993) Research and the Relevant Knowledge. Oxford university press.
11. Veysey, L. (1965) The Emergence of the American Research University. University of Chicago press
12. Slaughter S. and Leslie L.L. (1999) Academic Capitalism; Politics, Policies and the Entrepreneurial University. John Hopkins.
13. Noll R.S. (1998) Challenges to the Research Universities. Brookings Institution Press.
14. Sutz J. (1997) The role of the university in the productive sector In: Etzkowitz H. and Leydesdorff L. (Eds) Universities and the global knowledge economy; A triple helix of university-industry-government relations. Pinter pg 11-14.
15. The Economist, March 27, 2007. The Valley of Money's Delight.
16. Gordon Moore, the co-founder of Intel and regarded as one of the Silicon Valley's founding fathers said in 2001 "Silicon Valley has been awfully hard to clone. I'm not sure if it can be planned; a lot of luck is involved. I don't think you could go back and repeat it here today."
17. Etzkowitz, H. 2002a "Incubation of Incubators: Innovation as a Triple Helix of University-Industry-Government Networks" Science and Public Policy
18. V. Konde (2004) Internet Development in Zambia; A Triple Helix of Government-University-Partners, Intl. J. Technology Management, 27, 440-451.
19. UNINET is a South African Universities Network

funded by the Foundation for Research and Development (FRD)

20. 11 July 1992, A Report View on Electronic Mail in Zambia.

21. Konde V (2006) Mobilizing university resources to develop and support enterprises, Paper presented at the Triple Helix Conference, Ethiopia.

22. http://sanjose.bizjournals.com/sanjose/stories/1999/07/12/story4.html

23. Fuyuno, I. and Cyranoski, D (2006) Cash for papers: putting a premium on publication, Nature 441, 792

24. Chinese professor accused of lying on CV gets fired and "http://www.scidev.net; and China Science Foundation Takes Action Against 60 Grantees; http://www.sciencemag.org/

25. See http://www.tt100.co.za/

26. UNCTAD (2006) A case study of the salmon industry in Chile, Transfer of technology for the successful integration of developing countries in the global economy UNCTAD/ITE/IPC/2005/6,

27. Alivial, A. (2003) "Evolución de la Industria, Cluster y Competitividad, Seminario Cluster Salmón X Región, INE-X Región.

28. UNCTAD (2004) Biotechnology Promise: Capacity-building for Participation of Developing Countries in the Bioeconomy, UNCTAD/ITE/IPC/2004/2

29. The United States fights for protection, markets and fair treatment of their private firms as though they were public enterprises. It is for this reason that bilateral free trade agreements between the United States and developing countries raise a lot of debate. See http://www.bilaterals.org/

30. http://www.doingbusiness.org/

31. UNCTAD (2005) A case study of the electronics industry in Thailand, Transfer of technology for the successful integration of developing countries in the global economy UNCTAD/ITE/IPC/2005

32. Gomes-Casseres, B., Hagedoorn, J. and Jaffe, A., B. (2005) Do alliances promote knowledge flows? J. Financial Economics, 80, 5-33.

33. ILO (1072) "Employment, incomes and equity: a strategy for increasing productive employment in Kenya". International Labour Organization: Geneva.

34. Oxford (2005) The impact of the second-hand clothing trade on developing countries, An Oxfam Research Report.

35. Zambia in the late 1990s introduced the Vendor's Desk at State House headed by a deputy Minister to take care of the needs of vendors. For the same reasons - political interests- Liberia and Zimbabwe used their armies to get rid of vendors from the streets.

36. Robinson P. B., Ahmed Z. U., Dana L.P., Latfullin G.R. and Smirnova V. (2001) Towards entrepreneurship and innovation in Russia. International J. Entrepreneurship and innovation, 2, 230-40.

37. See A world of Fleas and Elephants at http://media.wiley.com/product_data/excerpt/71/07879556/0787955671.pdf

38. Easterly, W (2006) The White Man's Burden : Why the West's efforts to aid the Rest have done so much ill and so little good. Penguin Press