

“BUSINESS OPPORTUNITIES & CHALLENGES IN AFRICAN AGRI-FOOD SECTOR”

(A Publication of the Indo-African Chamber of Commerce & Industries)



INDO-AFRICAN CHAMBER OF COMMERCE & INDUSTRIES

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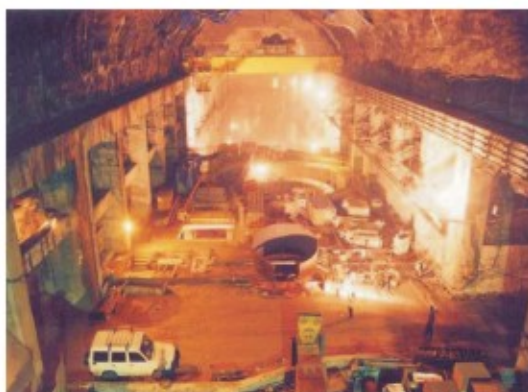
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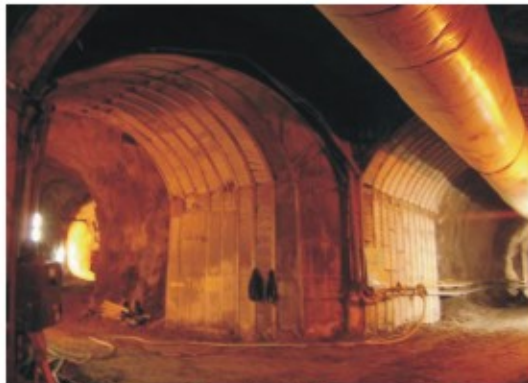
The General post Office building for Government of Qatar, at West Bay of Doha



Under Ground Power - House Srisaillam H.E. Project, India



Machine Hall Cavern, Ghatghar H.E. Project, Maharashtra, India



Under Ground Tunnel work Tapovan H.E. Project, Uttarakhand, India



India's first RCC Dam, Ghatghar H.E. Project, Maharashtra



Filling Hearth Floor of Dam in Spillway (USA)



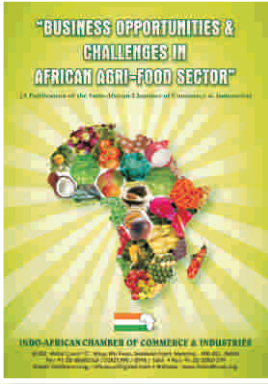
**60 Years of Dedication to
Development of the Nation**





**INDO-AFRICAN CHAMBER OF
COMMERCE & INDUSTRIES**

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This publication is published by **Mrs. Sunanda Rajendran**, Secretary General/Editor,
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(For the year 2012-2013)



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Contd...2



INDO-AFRICAN CHAMBER OF COMMERCE & INDUSTRIES



Sunanda Rajendran
Secretary General

Editorial

Dear Readers,

India's engagement with Africa is distinct & different from any other country.

Africa is described as, “the continent of opportunity”.

Agriculture is the dominant sector of Indian economy, which determines the growth & sustainability. About 65% of our population still relies on Agriculture for employment & livelihood.

The Green revolution transformed India from a food deficient stage to a surplus food market, in just a span of 3 decades, India became a net exporter of food grains. Remarkable results were achieved in these fields of dairying & oil seeds through white & yellow revolutions.

India is the world's 2nd largest producer of food next to China and has the potential of being the biggest with the food & agriculture sectors. The total food production in India is likely to double in the next ten years & there is an opportunity for large investment in food & food processing technologies, skills & equipment, especially in areas of Canning, Dairy & Food Processing, Speciality Processing, Packaging, Frozen Food / Refrigeration & Thermo Processing, Fruits & Vegetables, Fisheries, Milk & Milk Products, Meat & Poultry Packaged / Convenience Foods, Alcoholic Beverages, & Soft Drink & Grains are important sub – sector of the food processing industry.

Whereas in Sub Saharan Africa, the Processing Technologies which is used are at a small scale & use traditional or rudimentary level technology.

Several government in the African region, including those of the SADC region, view that foreign investment in agriculture cultivation would lead to possible benefits for rural poor, including creation of the potentially significant number of farm & off – farm jobs, development of rural infrastructure, & social improvements, leading to poverty reduction.

Contd...2

In post 1990 global challenges focus on “3fs” i.e. food, fuel & finance & to deals with these challenges India firmly believes that **Africa** is the only continent where infrastructure can be promoted in Agro Industry.

Africa is the hub of natural resources with leading world powers eyeing the continent for them. Only an average 3.0% of cultivatable land in Africa is being used now, which is not sufficient to feed the entire population of Africa. It is imperative to incorporate the development of the agriculture sector as a prerequisite to an African Country's Program & overall prosperity.

The trade & Investment in agri & agro infrastructure are interlinked & need mutual support which persuaded Africa to share Indian experience in this sector.

The combined net flows from India to Africa emerging from the government credits & pvt sector investment, therefore from another part of our sustainable model of co-operation with Africa which has in turn given huge impetus to many Indian companies to seek opportunities in Africa.

Finally I would like to convey my sincere thanks to all **African Embassies** and **Consulates** stationed in Delhi and Mumbai, **Government of Maharashtra, MEA – African Desk**, All our **Sponsors, Executive Committee & Staff of our Chamber** for their valued support co-operation and contribution without which this would not have been successful.

Once again thanks a million!!! Make Africa your Partner.....

Sunanda Rajendran
Secretary General



INDO-AFRICAN CHAMBER OF COMMERCE & INDUSTRIES

ATTN. : EXPORTERS / IMPORTERS

Africa Interest !!! Africa Business !!! AfricaContacts !!!

**Wants to promote your business with
the African Countries**

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Here is an opportunity.... Grab it !**





INDO-AFRICAN CHAMBER OF COMMERCE & INDUSTRIES



MESSAGE

Dear Readers,

Greetings!!

I am pleased to note that our Chamber is hosting an International Conference on “**Business Opportunities & Challenges in African – Agri Food Sector**” in Mumbai and planned to bring out a special publication on the occasion covering the various aspects of Agro projects, trade, finances, opportunities in the various African Countries.

Agriculture is the dominant sector of Indian economy, which determines the growth & Sustainability. About **65%** of our population still relies on agriculture for employment & livelihood.

India once upon a time was in a food deficient stage & just within **3** decades has transformed into net exporter of food grains. Hence the **rich experience** of India's Green Revolution needs to be shared with the African Countries which will convert the barren land of Africa into Green Horizon.

The rich experience of scientific farming technology in Indian will boost **Africa's world's** food basket.

I extend my best wishes to the Chamber for scaling greater “**Heights of Glory**” in years to come.

K. L. Daga
President



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Managing Director of M.B.B Ltd.
Engaged in Exports of Textiles / Fabrics.
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HON. CONSULATE GENERAL of Kenya in Mumbai.
Has played a pivotal role in promoting
Indo – Kenya Business relationship.
An Active COMMITTEE MEMBER of the CHAMBER.



MR. SURINDRA PARIKH – Industrialist,
HON. CONSULATE GENERAL – Zambia in Mumbai.
Has played a key role in boosting Indo-Zambia bilateral
trade, extensively travelled all over Africa.
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Has been instrumental in getting big projects
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K. Sankaranarayanan
GOVERNOR OF MAHARASHTRA



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MESSAGE

I am pleased to know that the Indo-African Chamber of Commerce & Industries is bringing out its Annual publication 'African Review' covering various aspects of Trade, Commercial, Economic, Cultural and Tourism sectors in the African countries.

India and Africa are like brothers of an extended family. Globalisation has presented us with a unique opportunity to rediscover each other and strengthen our friendship in diverse areas. Time has come for India and Africa to increase their engagement in the areas of commerce, trade and industry for mutually beneficial relationship. A beginning could be made by enhancing our cooperation in the field of higher education, cultural exchange, tourism, science, information technology, etc. It is heartening to note that the Indo-African Chamber has been promoting commercial and economic relations between India and African Countries. The Chamber deserves compliments for constantly striving to identify new areas of mutual co-operation to bring India and African countries closer.

I congratulate the Chamber for its commendable work and convey my best wishes for the success of the publication 'African Review'.

(K. Sankaranarayanan)



MR. PREMAL LOKHANDWALA

The young & dynamic **HON. CONSULATE GENERAL of Ghana**,
S/o Late Mrs. Vilas Lokhandwala
Has been a bridge builder of Indo – Ghana friendship.
Is one of our Active Committee Member of IACCI

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CEO & MD of Edulight Learning Services Pvt Ltd
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Heading the IT / Higher Education Committee
of the Chamber

DR. ANURAG SHAH

Another young & dynamic personality,
Doctor by profession, but businessman by mind.
Representing **Uni-Health**
Promoting not only Medical / Health Care Services in Africa,
But also being the Investor in various projects;
Is one of the Committee Member of IACCI



MR. MEHUL SHAH

Director – COSMOS, the trusted name in
Construction Equipment & Machinery.
Has been instrumental in establishing link for the Chamber in Pune
One of OUR YOUNGEST & ACTIVE COMMITTEE MEMBER

MR. SURESH CHAUMAL

Director of Roltech – Ahmedabad, a reputed name in
Rolling Mill Plants. Has been successful in Saudi, Sudan,
Yemen, Kuwait & many more. Has been instrumental in
strengthening Inter-Chamber of Commerce Relationship
in Gujarat. Is also one of OUR ACTIVE COMMITTEE MEMBER





सत्यमेव जयते

CHIEF MINISTER
MAHARASHTRA



Message

I am glad to know that Indo-African Chamber of Commerce & Industries is publishing its annual publication known as African Review.

Since the inception i.e. from 1985, Indo-African Chamber of Commerce & Industries is providing a dynamic institutional link for provision of commercial and economic relations between India and African Countries. I am aware that this publication covers various aspects of trade, commerce, economic, culture and tourism sectors between two countries.

I am happy that this Chamber is dedicated to the cause of expanding Indo-African business and goodwill relation. I am sure that, this publication will be very much useful.

My greetings and good wishes to this Annual Publication.


(Prithviraj Chavan)

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Doing Business in India....

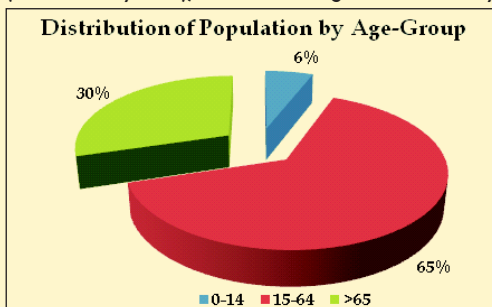
India, the world's largest democracy is second most populated country in the world. Since independence in 1947 the country has witnessed all-round developments and particularly after the onset of economic reforms in early 1990s the country has made rapid progress in converting itself from a predominant agrarian economy to a fast developing service oriented economy. India is seventh largest country in terms of area and 10th largest economy in terms of the size. On purchasing power parity (PPP) term India is the 3rd largest economy after the USA and China. According to IMF projection India is the second-fastest-growing major economy (7 per cent) after China (8.2 per cent). A BRIC Report has projected India to become the world's largest economy by 2050.

Democratic setup with common law, plural society with deep rooted culture of hospitality, vast natural and human resources and a burgeoning middle class of over 300 million has made India a country of strong business interest. Today the country has one of the largest reservoirs of English speaking skilled human resource.

A large number of countries are keen to capitalize on India growth story by. This write-up is prepared to provide basic information about the Indian economy and the business scenario.

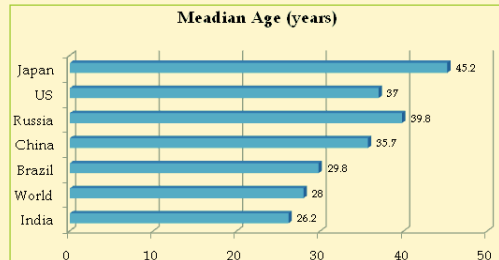
Demographic Profile: The India Advantage

With over 1.3 billion of population nearly 30% of Indians live in urban areas. The country is also distinguished to have over 500 million of strong labour force. A great majority of Indian population (65%) falls in working age group (i.e. 15-64 years), the median age in the country



is 26 years. Following diagram shows distribution of Indian population by age group.

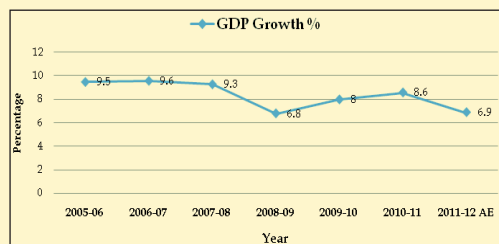
Among the major industrialized countries India has the youngest population which forecast the strong potential of Indian economy in the years to come. The low median age supports the fact that India will continue to enjoy the supply of huge workforce in the years to come. In 2010 E&Y interviewed more than 500 business leaders on the potential of the Indian market. It found that a large majority believes that, as early as 2020, India will become a global leader in education, research and development (R&D), innovation and as a producer of high value-added goods and services.

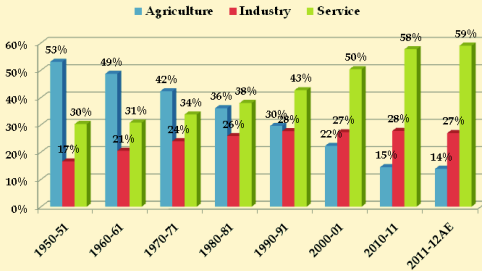


Changing Face of the Indian Economy

Post reform Indian economy has consistently achieved higher rate of growth and there has been positive change in the structure of the economy from primarily agriculture based to manufacturing and service oriented. India as a nation has been a traditional saver but in the last few years there has been visible change in the consumption pattern.

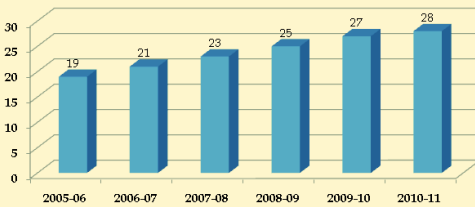
A large number of companies have established their presence in India not just to capitalize on the availability of cheap labor force but also for catering to the burgeoning number of consumers. Below graphs depict the growth in Indian economy, the structure of Indian economy and consumption patterns.





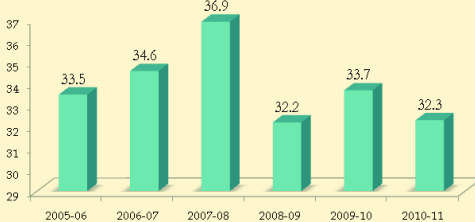
It is evident from the above graph that how the Indian economy has been gradually moving to service based activity. Increasing urbanization and modern technology have brought about a remarkable change in lifestyle and consumption pattern of Indians.

Private Consumption (INR trillion)



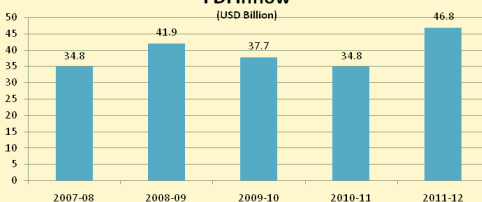
Improved economic condition has led to the increase in the Income of Indian population. This has positively impacted the saving rate. Improved savings has resulted in improvement in consumption as well as investments.

Saving Rate (Percentage of GDP)

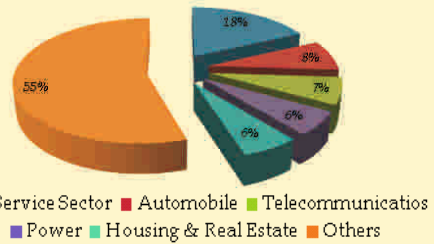


Indian markets potential to offer high profitability in an investor friendly regime is evident from the increase in FDI inflows in India. The Service sector has attracted most of the FDI inflows in India during the previous financial year followed by automobile sector 8%.

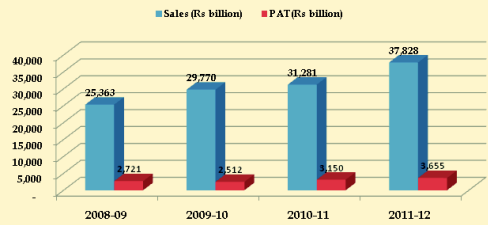
FDI Inflow (USD Billion)



FDI Inflow 2011

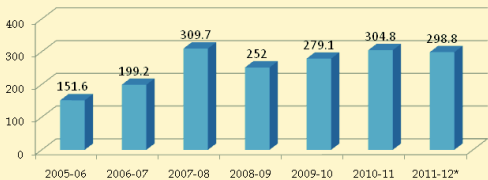


Indian Corporate Sector Performance



The financial results of the listed companies indicate sales growth of 20.9%. The country also stood well on its foreign exchange reserve which was USD 304.8 billion in the FY2010-11.

Foreign Exchange Reserve (USD billion)

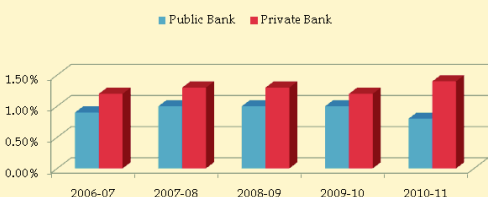


Financial Market of India: A safer avenue for Investment

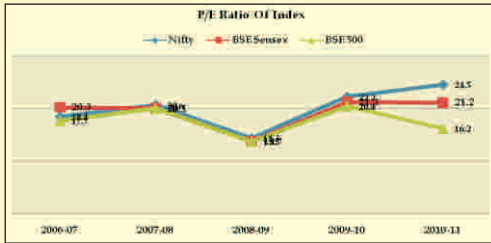
Post reform Indian financial system has seen a tremendous change. These reforms encouraged many private and foreign banks to enter into the market, which has led to overall increase in efficiency and productivity.

Indian Banking sector comprises of Public sector bank, Private sector bank, Foreign Banks. Currently the sector is dominated by Public sector banks. With stronger industrial recovery and growth Private Sector Banks have performed much better in terms of ROA.

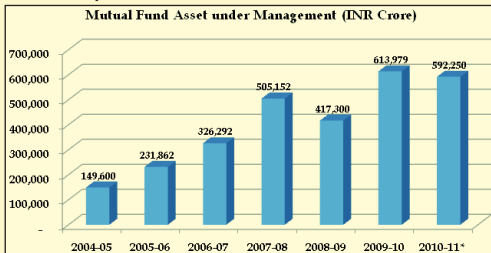
Return on Asset (%)



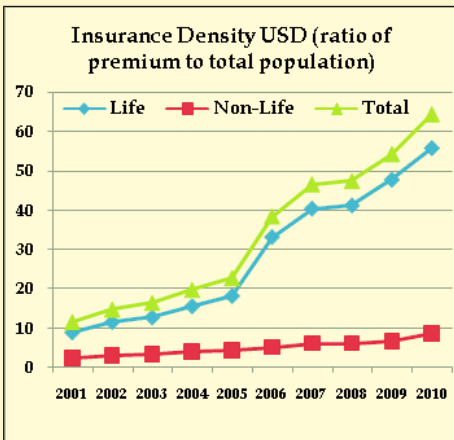
Indian Capital market has made a significant progress over the last decades. SEBI the regulatory authority of Indian Capital Market has brought in many positive changes leading to multidimensional developments of the capital market in terms of accessibility, regulatory framework, market infrastructure, transparency, liquidity and the types of instruments. The three main indicators of Indian Capital market BSE 500, Sensex and Nifty has shown the upward trend after the turmoil of 2008 recession.



Mutual fund industry plays important role in the resource mobilization. They offer schemes across various asset classes of equity debt and gold. The chart given below indicates the movement of Asset under management (AUM) over the years.



The Indian insurance sector has undergone a major transformation over the past decade and has evolved into considerably competitive



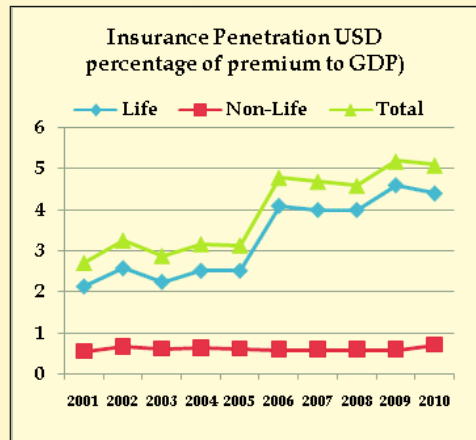
segment. A growing middle-class income, rising income level, increasing awareness about insurance, higher investment and infrastructure investing has laid the strong foundation to expand insurance market in India. The data of IRDA shows increase in Insurance penetration (percentage of premium to GDP) over the years. The chart given below gives the growth in Insurance penetration and density in India.

Investing in India: The Entry routes

Foreign Direct Investment (FDI):

The objective of India's foreign Direct Investment (FDI) policy is to invite and encourage foreign investments in India. Since 1991 the guidelines and the regulatory process has been substantially simplified to facilitate foreign investment in India. The FDI investment in the India is classified in two groups; one the sectors in which FDI is prohibited and second in which FDI is permitted. For the sectors in which FDI is permitted there are two routes of investment. The automatic route where no government approval is required, virtually all sectors or activities except very few come under the automatic route. The other route is through prior approval from Foreign investment Promotion Board (FIPB), which is required for the investments not qualify the automatic route.

Indian companies can issue equity shares, fully compulsorily & mandatorily convertible debenture (FCDs) and compulsorily mandatorily preference shares (CCPS) to the non-residents subject to pricing guideline/valuation norms prescribed by FEMA. Below is given the table of the sectors where FDI is permitted.



Sectors	Percentage of FDI Allowed
Automotive Industry	100%
Mining & Metal	100%
Oil & Gas	100%
Port	100%
Power	100%
Real Estate	100%
Retail & Consumer products	100%
Roads & Highways	100%
Telecommunication	100%
Defense Sector	26%
Commodity Market	26%
Insurance	26%
Private Banks	20%

Foreign Institutional Investors (FII)

FII registered with SEBI are allowed to invest in India. Foreign pension funds, mutual funds, investment trusts, AMC's, Insurance or Re-insurance companies, nominee companies & incorporated/ institutional portfolio managers are allowed to register as FIIs. Certain limits are prescribed, no restriction to investment by FII through offshore funds, GDRs or Euro convertible bonds.

Foreign Venture Capital Investments (FVCI)

SEBI registered FVCI with specific approval from RBI can invest in Indian venture Capital Undertaking (IVCU) or Indian venture Capital Fund (IVCF) or in a scheme floated by such IVFCs, subject to VCFs should also be registered with SEBI. FVCI can purchase equity/ equity linked instruments, debt/ debt instruments, the debentures of IVCU or of VCF, through an IPO or private placement in units of schemes/ Funds set up by a VCF.



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Food Security and India's Vision of Agriculture Development in Africa



Introduction

Agriculture is the dominant sector of Indian economy, which determines the growth and sustainability. About 65% of the population still relies on agriculture for employment and livelihood. The green revolution transformed India from a food deficient stage to a surplus food market. In a span of 3 decades, India becomes a net exporter of food grains. Remarkable results were achieved in these fields of dairying and oil seeds through white and yellow revolutions. The rich experience of India's Green Revolution needs to be shared with the African countries that will convert the barren land of Africa into Green Horizon. This Green Horizon engrosses enhanced cereal and other agro-products in the region that will boost agro-market & automatically the rural incomes leading towards food security. The rich experiences of scientific farming technologies in India will boost Africa's world's food basket, micro-financing institutions to grow better, by transferring Indian expertise in this field and encouraging Indian agro-processing firms to invest in Africa and promote joint initiatives in organic farming to meet the demand world markets. "Recent policy discussions have emphasized the importance of the staple food crop

sector in Sub-Saharan Africa in increasing farm productivity to achieve food security and to alleviate poverty. A critical issue in the debate is how the staple food sector can generate surpluses and how to ensure an equitable distribution of these surpluses. It is argued that the **governance of food markets** and commodity chains is a crucial element for efficiency and distributional effects, including for growth and food security- and that the chain governance itself is endogenous in an environment of weak contract enforcement and imperfect markets, and importantly depends on the value in the chain and on other commodity characteristics" (Alexander Sarris, 2010:77).

The Structural Adjustment Programme (SAP) started in 1960's in Africa and focused upon the development of agriculture sector. One knows the experiences of production of Cocoa in Ghana and Ivory Coast that led to neck-throat competition among them. It ultimately benefited the European and American market as the demand of cocoa was tremendously high and the African farmers failed to cater their basic needs for survival, and nothing had come forwarded on the name of food security. As we know, the agriculture

accounts for more than 25% of the GDP in most African countries and employs more than 70% of the workforce and having approximately 783 million hectares of arable land (27% of the world total). But SAP did not cater to this workforce in Africa. The neo-colonial practice in Africa successfully worked from 1950 to 1990 and stopped functioning with the disintegration of erstwhile Soviet Russia and the independence of South Africa. The post 1990 globalization has marked the effective presence of developing countries of India, China, Brazil, East-Asian countries and Africa in the international market. A new development approach 'Cohesive Development' of developing countries has been adopted and many more countries have adopted the electoral democracy and multi-party system in their homes. India and Africa both are serious about the issue of food security and are ready to change their existing land laws, practices and adopting the new guidelines as per the needs. India is sharing its rich experiences in agriculture sector with African countries and receiving reciprocation.



The Western world looks for the bonding among developing countries as a new concept of colonialism. This connotation 'colonialism of market economy' cum globalization is different from the European Colonialism of political and economic sharing to Neo-colonialism of economic plunder. It is interesting to note here that both the European and American colonial master till 1990 had no role to play in this new colonialism rather they are interpreting new colonialism more vigorously with rich bandwagon. It

is a hard fact that the Euro and dollar market faced a tough face of market depression since 2007 onwards. The markets of Asia, Africa and Latin America did not get a U-turn impact like Europe and America and survived with

the strong base of educated middle class. All of them come under as a group of South-South unity and having broader understanding on political, economic and social milieu. Indian agriculture produces 100 million tons of milk and 200-300 millions tons of vegetable goods but able to process 10 percent of the total and 40 percent gets wasted. Indian political leaders and industries are not looking towards western solution to this problem and re-think its approach of development. It is common consensus that agriculture needs value addition in its production and India's federal polity need to work for economic federalism and persuade State leadership to act as execution driven leadership. This is the biggest challenge in India and the major development paradigm of North-South divide. The developed countries or North bloc have no issue of economic federalism and their provinces/ states are capable to drive their own maneuver. But the developing countries or South bloc has adopted and are practicing the federalism but with complications of allocations of financial powers, collection and dispersal of taxation, complex social matrix including all ethnic issues. The Center and most of the State's leadership has taken this issue seriously leading towards productive solution.

These initiatives are the timely step to deal with the Euro-dollar depression and

it boosts India's agriculture sector towards food for all. Do all these efforts lead towards India's food security or new colonialism? What's wrong with India's sharing this expertise with the other members of South bloc mainly to African counterparts? There is no doubt about it that China has successfully implemented the idea of food security and alleviating the poverty in practice at home front. The second largest population of India has adopted their own pattern of development to overcome the problem of agricultural production and its safety measures to reach to the maximum people. One fails to understand the idea of European and American philosophy of new colonialism and India act as colonial power in Africa. It looks that Euro-dollar crisis is looking towards the market of Asia, Africa and Latin America for their own survival and when it fails to sustain in these market with the development of indigenous technologies of developing countries, it looks revolting to the developed world. This is new colonialism or one may add the Euro-dollar cultural colonialism by imposing their philosophies on the developing world. Despite their past two hundred years of colonial and neo-colonial supremacy of Euro-dollar identity, it looks erstwhile superiority now in the developing world. India is working on another agricultural revolution to get its value addition and propagate it among the developing countries of Africa. This propagation will give a tough time to the wild-mongering SAP policies in Africa and other developing countries and introduce the idea of food productivity, processing and distribution. India is adopting e-based portal with single window these policies and the Euro-dollar domination of world looks it as a move towards new colonialism. The South bloc fought against the colonialism and got independence and it is not possible for the developing



countries like India to move as colonizer either in Africa or any parts of the world. India respects the sovereignty of all of its neighbors and no country has come forward to the idea of India acting as colonizer.

The Post Summit 2011 development in Agro-Infrastructure Sector

There is a new economic growth story emerging from Africa. Africa possesses all the prerequisites to become a major growth pole of the world. India will work with Africa to realize its vast potential. India believes that a new vision is required for Africa's development and participation in global affairs. Both will enhance the development partnership between the two regions, which is founded on the pillars of mutual equality and common benefit. India's exports to Africa have risen from US\$10.3 billion in 2006-07 to US\$21.1 billion in 2010-11, primarily due to increase in exports of transport equipments and petroleum products, wherein India's imports from Africa have more than doubled from US\$14.7 billion in 2006-07 to US\$32.3 billion in 2010-11, with the African continent now accounting for 9.1 percent share in India's total imports. Consequently, due to large imports from the region, India's trade deficit with Africa has also increased to US\$11.2 billion in 2010-11, implying that India has become a major market for African products. Table-1 highlights India's agriculture sector export and import items to Africa.

Table: India's agricultural Export and Import Items to Africa (US\$ mn)

India's Major Import Items from Africa (US\$ mn)						
	Value (US\$ mn)			Share in exports to Africa (%)		
	2008-09	2009-10	2010-11	2008-09	2009-10	2010-11
Cotton yarn fabrics made ups etc.	513.7	471.3	592.1	3.5	3.5	2.8
Sugar	188.1	0.5	363.7	1.3	0.0	1.7
Paper/wood products	204.5	205.9	327.0	1.4	1.5	1.6
Meat & preparations	277.0	243.4	440.0	1.9	1.8	2.1
India's Major Import Items from Africa (US\$ mn)						
Fertilizer manufactured	390.7	211.0	265.7	1.6	0.8	0.8
Pulses	67.3	204.0	253.3	0.3	0.8	0.8
Crude fertilizer	355.8	275.4	249.2	1.4	1.1	0.8
Wood & wood products	247.9	236.5	198.1	1.0	0.9	0.6

Source: Directorate General of Commercial intelligence & Statistics (DGCIIS), 2011-12.

Line of Credit (LoC) of India and Agriculture Sector Development

Export-Import Bank of India (EXIM Bank) has in place LoCs to enhance agriculture sector in Africa. Currently, 105 LoCs are earmarked for agriculture, infrastructure and related projects amounting to more than US\$ 4 billion covering over 47 countries in the African region. Some of the LoCs beneficiaries' African countries (Table-1) dealing with agriculture sector are:

- **Angola-** Railway rehabilitation project / Industrial park/Textile project/and acquisition of tractors from India;
- **Burkina Faso-** Rural electrification / Agricultural equipments and Cyber city project;
- **Burundi-** Hydro-electric project;
- **Cameroon-** Plantation project;
- **Chad-** Setting up of cotton yarn plant, plant for assembly of agricultural equipment;
- **Cote d'Ivoire-** Project for renewal of urban transport system in Abidjan and for agricultural projects/IT & Biotechnology park/Fisheries and coconut fibre processing plant/Electricity interconnection project;

- **Equatorial Guinea-** potable water plant project;
- **Eritrea-** Agricultural and educational projects;
- **Ethiopia-** Energy transmission and distribution project Development of sugar industry;
- **Ghana-** Rural electrification, agriculture, communication and transportation projects;
- **Lesotho-** Export of tractors, pump sets, consultancy services and irrigation equipment;
- **Madagascar-** Rice productivity and fertilizer production project;
- **Malawi-** Cotton processing/irrigation & threshing plant/one-village one-project;
- **Mali-** Rural electrification, and setting up of agro machinery and tractor assembly plant;



- **Mauritania**- Potable water project;
- **Niger**- Acquisition of transport equipments, transformers, motor pumps and flourmills;
- **Rwanda**- Power projects;
- **Senegal**- rural electrification project and fishing industry development project, irrigation project;
- **Sierra Leone**- Procurement of tractors, harvesters and pesticides/potable water project;
- **Tanzania**- Export of tractors, pumps and vehicles;
- **Zambia** - Hydroelectric project/export of buses, motor vehicles, motor cycles and supply of vocational tool kits."

Source: Background Note, 2012: 71-72: emphasis mine.

Sector	Sub Sector	No. of Projects	Total Value (US \$ Million)	Country
Agriculture	Agro technology, Food Processing, Tractors, Fisheries, Agro-Pastoral, Agro-equipment, Cattle/Animals, Water, Waste Management, etc	53	1818.04	Burundi, Cameroon, Central Africa, Republic of Congo, D R Congo, Gambia, Liberia, Malawi, Mozambique, Namibia, Niger, Rwanda, Sudan, Togo, Uganda, Zambia, Zimbabwe

Source: Project Opportunities, March 2012. CII, Export-Import Bank of India, Ministry of Commerce, Government of India.

The post Forum Summit and the basis of India-Africa Conclaves documented that the Africa has approximately 783 million hectares of arable land (27% of the world total), which is adequate to effectively feed its population. It is the only region in the world where agricultural productivity has not grown noticeably. Increased agricultural output and income needs a green revolution with value addition in Africa. It will influence directly the output of the manufacturing and services sector. Agriculture has been at the forefront of the recent transition in India-Africa relations.

The agro-industry in Africa needs farm mechanization that will facilitate increase in productivity. The production boost in agriculture is the only way to initiate the agro-industry in Africa. It should be remembered that once there will be surplus production of food in Africa, the agro-industry will get the input of raw materials to produce different

food products and cater to the needs of urban as well as rural areas. Approximately 80 Indian companies have collectively invested US\$2.3 billion in Ethiopia, Kenya, Madagascar, Senegal and Mozambique (**Indian farming companies buying in Africa, 2011**). Some African countries are offering land on lease for 99 years to overseas farmers, and several farmers from Punjab in India have already migrated to these countries and begun farming (African nations offering land for free to Indian farmers," The Economic Times website, <http://economictimes.indiatimes.com/news/economy/agriculture/African-nations-offering-land-for-free-to-Indian-farmers/articleshow/6293149.cms>, accessed 28 January 2011). Close to 70 Indian companies are working in the farming sector in this region (**Indian business groups are investing heavily in Africa, 2011: emphasis mine**). Such investments will generate local employment as well as create

opportunities for local skill development.

Case Study of Africa Invitation to India for Agriculture Investment

1. Botswana

India and Botswana agriculture, livestock and human resources development cooperation started in 1999. Indian seeds (Maize and Paddy rice) have been sent to this country for experimentation. A project for import of Indian Buffalos to this country has been set up. The farmer's project has been finalized and since 29th October 1999 six farmers from Punjab have landed to this country in view of realizing this project. "The tender for the purchase of Indian tractors at large scale is under process.

2. Burkina Faso

The cotton from Burkina Faso exports to India. Burkina Faso is second largest producer of cotton in West Africa and ranks third in entire Africa. Today, many trainees from Burkina Faso are coming to India for training in computer education, diplomacy, telecommunications, etc. Botswana is looking forward to setting up units of production of commercial farming such as fruits, vegetables, Arabic gum and cotton. Livestock occupies an important place in the economy of Burkina Faso in West Africa. The opportunity in this sector is the setting up of:

- Small industrial units for milk processing (dairy plants) breweries.
- Small industrial units for production of animal feeds.
- Small industrial units of veterinary pharmaceutical products.
- Meat processing.
- Small units for leather.
- Cattle rearing-ranching and poultry
- Industrial units of manufacturing tractors.



- Industrial units of manufacturing pump sets for irrigation.
- Industrial units of manufacturing agro-food products.
- Small Industrial units for agro-chemicals (fertilizers and pesticides).
- Industrial units of manufacturing textiles (Cotton fabrics, garment production and yarn).
- Setting up commercial farming units (fruit, vegetables, Arabic gum and cotton).

Burkina Faso exports cotton, animal skins, and leather and cashew nuts to India and imports Agro-machinery (tractors and farm implements), Rice, small and medium scale industries (e.g. oil processing) from India. Burkina Faso guarantees the foreign investors such as:

- Right of full business awareness for foreign investors.
- Right to acquire real estate, land, forested land, industrial areas in addition to concession from government.
- Right to transfer capital and profits of any investor.
- The advantages of investing in this country are:
- A possibility of Joint Venture with Burkina Faso business community.
- Low cost of labour.
- Good infrastructure (telecommunication, roads, railways and airport) and services.



- Strategic position in the heart of West Africa.

3. DR Congo

The country is the land of opportunities wide open to everybody and agricultural sector is one of the priority sectors. In order to access these opportunities, the Government recommends the strategies such as: Public – Private Partnership, Public – Public Partnership and Private – Private Partnership in agriculture, forest and hydrographic, re-launch of food crops: maize, rice, tomatoes, groundnuts, bananas, resumption of palm-tree exploitation (Bandundu and Equateur), re-launch of income-generating farming: cotton, coffee, hevea, tea, cocoa, sugar cane farming, production and transportation of rough lumber (Equateur, Eastern Province, both Kasai, Bandundu, Mayumbe), bio-fuel production from palm oil, jatropha, seaweed of the river and lakes, etc, industrial timber processing (Kinshasa, Kisangani, Kananga), wood pulp production (Kinshasa), cattle breeding (Katanga, Kivu, Eastern Province, Bas-Congo), pig breeding and poultry farming all over DRC, milk production (Katanga, Kivu, Eastern Province, Bas-Congo), rehabilitation of the agro-industrial Domain of N'sele (Kinshasa) and Fluvial, sea and lake fishing. DRC's food crops potential is tremendous and possible in manioc, maize, rice, groundnut, plantain, potato, yam,

wheat, sorghum, bean, soya beans, tarot and sweet potato and market gardening is open for onion and tomato. The income-generating farming prefers fibre, hevea, millet, palm-tree, coffee, cinchona, cocoa, tobacco, cotton, pyrethrum, tea, gourd, sugar-cane, papaine, sesame, urena and voandzou (**Invest in DR Congo, 2012: 12**).



land out of which 74.3 million (45% of the total area) is suitable for agriculture. However due to underdevelopment only 18 million hectare is under cultivation. The government offers about 3 million hectare (5% of the available land) to local and foreign investors. The prominent investor 'Sheikh Mohamad Al-Amoudi currently leases 10,000 hectares for a pilot project for rice production in Gambella Regional State. Under the agreement his company will be allowed to export no more than 60% of its production and 40% will be for local consumption. He is currently looking to increase the investment to US\$450 million and expand the area for cultivation' (**Ethiopia: Land of Tomorrow, 2012: 5**). The foreign investors may look for products such as:

- Food Crops- Cereals and pulses, Oil Crops
- Beverage Crops- Coffee, Tea
- Horticulture- Fruits and vegetables, herbs and cut flower
- Cotton, Sugarcane plantation and sugar processing
- Rubber and Palm tree plantation and Apiculture- honey and

beeswax

- Bio-fuel production- feed stocks for bio-diesel: Jatropha, palm oil, castor, feed stocks for ethanol: sugar cane, sugar beet, potatoes, corn, etc.
- Livestock- 43 million heads of cattle, 31 million heads of sheep, 27 million heads of goats, 53 million poultry, 2.3 million camels, 7 million equines. The investment opportunities here focuses on animal fattening, animal feed processing, meat processing and export abattoir for chilled and frozen meat.

The agro-processing deals with the processing and preserving of fruits and vegetables, meat products, , fish and fish products, dairy products, integrated production, processing of crude and refined edible oil from oil seeds, processing of crude and refined edible oil from oil seeds, processing of starch, cornflakes and edible oil from maize, processing of spices, production of spaghetti, macroni, etc, brewing and wine making **(Ethiopia: Land of Tomorrow, 2012: 8: emphasis mine).**

The government of Ethiopia provides 100% exemption for the payment of customs duty on imported capital goods, construction materials, and spare parts worth up to 15% of the total value of the capital goods to be imported. The income tax exemption gives right from 2 to 7 years for manufacturing or agro-industrial, agricultural and ICT investments.

5. Ghana

About 57% of total land (of 23.9 million hectares) is suitable for agriculture sector in Ghana and offers opportunities in different products as shown in the Table mentioned below.

Value of Export of Selected Commodities for 2009

No	Product	Value (000 US\$)
1.	Cashew	20,154.10
2.	Coffee	1,696.97
3.	Shea nut	26,853.37
4.	Maize	33.76
5.	Yam	12,032.06
6.	Exotic Vegetables	1,308.21
7.	Pineapple	10,628.23
8.	Mango	234.95
9.	Pawpaw	545.60
10.	Fish & Sea Food	48,121.32
11.	Banana	11,589.53

- Agro-processing (Cocoa, Fruits, Rubber, Vegetables, etc.)
- Food-grains (Rice, Millet, Sorghum, Yam, etc)
- General Infrastructure (Agricultural and Industrial Estates, Roads, Railways and Ports).
- Cattle, Sheep, Goat, Fisheries.

The government gives incentives by way of tax rebates for manufacturing in certain locations, tax holders, ranging from 5 to 10 years depending on sectors, custom import duty exemption for plant machinery, equipment and parts thereof and double taxation agreements. The tariff incentives refer to zero rated for agro inputs, plant and machinery and non-tariff incentives refer to observation of regulations on import/export of agro-products **(Doing Business with Ghana, 2012: 28).**

6. Kenya

Agriculture is the mainstay of the Kenyan economy with great potential for growth. It currently represents 24 percent of GDP. More than a third of Kenya's agricultural produce is exported and

accounts for about 60% of Kenya's total exports. The vision for agriculture sector is to be innovative commercially oriented and modern, offering the investment opportunities in Sugarcane development, Value Addition and Marketing Infrastructure. This will involve the wholesale projects: Two wholesale markets for fresh produce in Nairobi, a wholesale market in Nakuru and a wholesale market in Mombasa. The Livestock production is one of the major activities in the sector that includes Dairy industry and Hides, Skins and Leather industries.

The fisheries sector plays an important role in the national economy contributing 0.5% to GDP in 2006

Areas for Private Sector Investment are Value addition in fisheries products, Certified fish seed breeding facilities to avail quality seed to fish farmers, Investment in Tropical Aquaria parks for local and overseas tourism, Fish leather industry and Cooling-plants in major landing bays of Mbita, Sindo, Sori, Sio port, Usenge and Port Victoria.

The water sector offers good investment opportunities in Water Storage and Drilling; Capacity Building of National Water Conservation and Pipeline Corporation and Mzima II Pipeline Project **(Kenya- A Hub for Investment, 2012)**.

7. Mauritius

The agricultural sector in Mauritius is being re-engineered to cater for the rising needs of the global food security crisis with an increased diversification of agricultural production backed by modern techniques and technologies. Investment opportunities in the sector can be captured in advanced agricultural technology including precision farming, hydroponic cultivation, green and organic farming among others. Furthermore, the



transformation of the sugar industry in the sugarcane clusters present opportunities for the production of high value-added sugar, by products and energy.

Seafood and Aquaculture Based on a current world per capita consumption of 16 kg., the global seafood market is estimated at USD 100 billion per year. Mauritius has an exclusive economic zone of 1.9 million sq. km and is set to emerge as a leading seafood hub with seafood export accounting for 16.1% of total exports in 2009. Mauritius also offers the opportunity for sustainable fish farming activities in its lagoon. Furthermore local companies are also involved in fish transshipment, seafood processing activities and ancillary services **(Mauritius.2011:23)**.

8. Mozambique

The wide diversity of soil types and climatic conditions, access to over 60 rivers and 36 million hectares of arable land greatly enhance Mozambique's potential as an agricultural exporter. The main agricultural exports include cashew nuts, cotton, sugarcane, a variety of fruits and vegetables and tobacco, but virtually any crop can grown easily in Mozambique – and harvesting can occur months before other countries. The rich waters in the Indian Ocean offer a variety of seafood products from world famous tiger prawns to crayfish to langoustine – as well as a variety of fish such as tuna, grouper and cod. Mozambique also has 19 million

hectares of productive woodland, rich in tropical hardwood and to a lesser extent eucalyptus and pine. The natural potential of the sector offers a wide range of opportunities for timber, construction materials, furniture, wood products and pulp (**Institute of Export Promotion Mozambique. 2011:7**).

More than 95% of cashew marketed output is produced by about 1.4 million small family farmers in Mozambique and has cashew investment opportunities, distribution of production in North 57%, Center 24% and South 19%. The investment opportunities in Mozambique has favourable agro climatic conditions for cashew production having land available for new orchards, potential for new processing plants, all production provinces with access to the sea (Export infrastructures) and appropriate



institutional environment. The investment opportunities in cashew plantations as per the available area is mentioned under Table-1.

Table-1 Investment Opportunities in Cashew Plantations as per the Available Area

South Zone: (regular to irregular rainfall, irrigation potential)				
Province	Area (ha)	District	Production (Metric Tons)	Current Plants (Metric Tons)
Inhambane	75.000	Panda, Massinga, Funhalouro, Vilanculos e Mabote	9000	2500
Gaza	69.500	Chibuto, Chicualacuala	1000	3500
North Zone (regular rainfall, irrigation potential)				
Cabo delgado	50.400	Palam, Nangade, Macomia, Balama, Chiure	10,000	3500
Nampula	25.000	Mogincual, Mogovolas Meconta	50,000	30,000
Zambezia	25.000	Maganja da Costa	12,000	3500

Source: Rua da Resistencia, 2012:1-4. CINCAJU. Maputo.

The Mozambican production and its presentation on global markets require a new approach in the packaging sector, to create conditions for the country to compete in an international market, where rules are constantly changing and consumer demands are rising continuously. The MOZNEGOCIOS-International Packaging and Packaging Equipment

Trade Fair 2-10 June 2011 is a public event with international scope that involves producers, suppliers and consumers of the packaging industry from Mozambique and other countries. In this second edition, the MOZNEGOCIOS fair will bring together companies of the packaging sector and agro-processing enterprises (**IPEME.2011:1-4**).

Mozambique offers some of the best shipping ports in Southern Africa, serving as a link to the sea for its landlocked neighbours and the rest of the world. The three main ports in Mozambique are



fertilizers and production of natural fertilizers, revival of the business of coffee, cocoa, tobacco and others, creation of agro-food industry and revival of industries that

have stopped exploitation and been privatized, such as Sanghapalm for the exploitation of oil palm at Oesso, in the north of the country, and RNPC, national palm plantations authority of Congo in the Cuvette region, establishment of the pilot villages, realization of the complex agro-industrial of oil palm, rubber and others, establishment of vegetable villages, intensification of vegetable planting around big cities, development of food crops (paddy, bean, groundnut, potato, cassava, banana, rice and maize, etc.), production of seeds of good quality, irrigation of the fields establishment of quality-control center and establishment of biotechnological laboratories' (**Investment Opportunities in Congo, 2012: 4**).

in Maputo, Beira and Nacala. The port at Maputo is the hub the surrounding fishing and agricultural industries serving South Africa, Swaziland and Zimbabwe. The ports in Beira and Nacala serve Malawi, Zambia and Zimbabwe. Beira is linked to by road and rail to the African hinterland. The recently modernized ports in Mozambique enable them to handle millions of tons of cargo arriving from and departing to distant international destinations (**Institute of Export Promotion Mozambique. 2011:8**).

9. Nigeria

In 2009, the Federal Government introduced the National Food Security Programme in Nigeria to focus on both upstream and downstream activities such as production, storage, processing and the marketing of crops, livestock and fisheries (**Programme on Food Processing, Storage, Marketing Out. 2009**).

10. Republic of Congo

The Ministry of Trade and Supplies attracts investment opportunities in Congo in the different areas of agriculture sector such as: 'establishment of companies for rental and maintenance of agricultural equipment, fabrication of chemical

The livestock production opportunities especially breeding sector attracts the restoration of ranches and farms development, production of animal feed, establishment of poultry farms and ranches, creation of processing industry of derivative livestock product, construction of abattoirs in big cities and the slaughter areas in the secondary centers, creation of purchasing centers of veterinary inputs, equipment and products, development of non-conventional



livestock, such as crocodiles, turtles, pigeons, agouti, development of livestock with short-cycle reproduction (poultry, pigs, sheep's, goats), amelioration of the forage plant and development of dairy cattle breeding. Along with it, the continental maritime fishing sector attracts the investors in establishment of structures of supply of materials and equipment of fishery at reasonable prices, establishment of structures for the factory and supply of food for fish, creation modern storage structures, establishment of transport companies for fishery products (land, river and sea freight), establishment of appropriate structures to finance fishery, construction of fishing jetty, valorisation of the lakes, development of fish breeding, breeding of freshwater crayfish and establishment of enterprises for fabrication and maintenance of fishing boats.

The forest sector of Congo attracts the 'investors in obtaining exploitation permits and creation of exploitation companies, restoration logging companies, including industrial companies that have stopped exploitation due to diversified reasons by the management, establishment and development of tourist zones in the various wildlife reserves full of rare species and production of logs. The Congolese forests can support a

production of two million m³ on the basis of a rotating exploitation with damage to their regeneration in sawing and development of wood, production of support poles of power lines, industrial processing of wood, production of pulp, exploitation of the hevea, fabrication of plant-based medicament and agro-forestry' **(Investment Opportunities in Congo, 2012: 3).**

11. Togo

Le Parc des Expositions "TOGO 2000" of Lome will host the 9th International Trade Fair of Lome from 25th November to 12 December 2011 focuses on promotion of trade and services of all sectors of economic activities of countries in the sub-region as well as those of the other continents and contacts between professionals for the development of sub-regional and intercontinental commercial activities. This fair of Lome is opened to economic operators (manufacturers, industrialists, traders, businessmen /women and service providers) from Togo, Africa, Europe, Asia and America.

12. Tunisia

The agribusiness sector in Tunisia comprises 791 firms, employing 10 workers and more. Among these firms, 92 produce entirely for export (Table-1). The investments in the agribusiness sector have steadily increased during the period 1992-2001. They went from Million Tunisian Dollars (MTND) 100 in 1992 to MTND 204 in 2001. Their share in the manufacturing investments has been 21% in average for the same period. In 2001, the agribusiness sector occupied the 2nd rank in terms of investments in the manufacturing

sector, preceded by the textile and clothing sector. The exports of the agribusiness sector went from MTND 224 in 1992 to MTND 670 in 2001. The share of olive oil is 30%. The imports of the agribusiness sector totaled MTND 888 in 2001, against MTND 350 in 1992. The cereals and cereal by-products, seed oils, and sugars and sugar by-products represent 70% of the country's imports of food products in 2001. Tunisia is the 4th international exporter of olive oil, after Spain, Italy and Greece. Given the highly-prized quality of its dates, Tunisia is the 1st world exporter of this product. 90% of the exports of frozen sea products go to Italy and Spain. 97% of the fresh tuna is exported to Japan. The agribusiness sector comprises 68 joint-venture firms, and 13, 100% foreign-owned firms. 25% of Tunisian engineers serve in the agricultural and agribusiness sector.



The universities and technical institutes provided the local labour market with some 300 specialised engineers per year in the agribusiness sector. There are also vocational training centres in the agribusiness branch. Their training capacity is of 400 trainees per cycle (training session). A major programme is currently underway to enhance and adapt the training capacities to the needs of the firm' (**Agri-business: Achievements and Opportunities, 2012: 2**).

NB: The total of the activities are given for the sake of information only; in fact, the same firm may be undertaking several activities.

13. Uganda

Uganda is east Africa's food basket. 'A KES1-billion food processing plant was commissioned at Makerere University's

Activities	Entirely for Export	Other than Entirely for Export	Total
Oil and fatty substances	10	174	184
Fruits and vegetables	04	48	52
Refrigeration	35	27	62
Fishery	35	27	62
Cereals and cereal by-products	05	283	288
Beverages	03	41	44
Milk and dairy product	----	38	38
Sugar and sugar by-product	02	30	32
Meat	---	15	15
Other	10	48	58

Source: Agency for the Promotion of Industry (API), 2012.

Faculty of Food Science and Technology in Uganda in 2009. The fruit and vegetable processing plant, scheduled to operate on a pilot basis, will help the department produce fruit juice and other foodstuffs for sale as well as train students to become entrepreneurs and agro-processors' **(Food Processing Plant Launched. 2011)**. Similarly, Britania Allied Industries, a consortium of food processing firms, plans to invest KES11 billion for the construction of a fruit juice-processing plant in Namanve, Uganda. The investment incentives in agriculture sector focuses on:

Agribusiness

Uganda is among leading producers of coffee and bananas. It is also a major producer of tea, cotton (including organic cotton), tobacco, cereals, oilseeds (simsim, soya, sunflower, etc.), fresh and preserved fruit, vegetables and nuts, essential oils, orchids, flowers and sericulture (silk). Opportunities include commercial farming and value addition, as well as the manufacture of inputs and supply of agricultural machinery.



Uganda's fish processing sector has expanded greatly in recent years and current export earnings for the year 2006 were close to US\$146 million. Large fresh water expanses are home to a wide variety of fish products. Opportunities are available for fish



farming and establishment of more fish processing factories on other lakes other than Lake Victoria, Uganda's fish is a delicacy in Europe and has recently penetrated the US market.

Forestry

Uganda is having over 4.9 million hectares of rich forest vegetation. Uganda possesses abundant potential in areas like timber processing for export, manufacture of high quality furniture/wood products and various packaging materials. There are also opportunities in afforestation and reforestation especially of medicinal trees and plants, soft wood plantations for timber, pulp & poles.

14. Senegal

Fishing is a significant sector of the economy, but agriculture is Senegal's principal resource accounting for almost 50% of the country's total exports. Peanuts are the main commodity produced in the country, but attempts have been made to diversify into others, particularly cotton, the second largest export commodity, millet, sugar cane, fruit and vegetables. Phosphate is the most important mineral resource, although there are also significant iron ore deposits as well as oil. India facilitated Senegal agriculture sector on lines of credit such as:

- 15 million USD for acquisition of agricultural material and the creation of rural enterprises.
- 27 million USD for irrigation projects with a view to achieve rice self sufficiency.

Agriculture sector comprises of 70% of Senegalese population is central to the country's development. India put at the disposal of 510 tractors, equipment for tilling, carts, drilling machines, pumps, trucks and maize processing and enriching equipment under Indo-Senegalese cooperation. Senegal government and Indian Farmers Fertilizer Co-operative Limited (IFFCO) signed an agreement of about \$240 million. There are export opportunities in the agri-business sector, with the AGOA visa in:

- Floriculture
- Fruit Cultivation
- Market Gardening
- Thousands of hectares of Cashew nut plantation
- Diversification of the industrial



processing of groundnut.

- Fish Cultivation
- Support to the development of horticultural exports.
- Improvement of the condition of market operation.
- Support to agri-business producers and operators for a better adaptation of products to the market.
- Development of private irrigation and land-related activities' **(Dr. Suresh Kumar.2008).**

Senegal is dependent on import rice that reached 400,000 tones of CFA Francs 118 billion for 2003. As an

a) Investment Capital Allowances	
Initial Allowance on plant and machinery	50.75%
Startup cost spread over 4 years	25% p.a.
Scientific research expenditure	100%
Training expenditure	100%
Mineral exploration expenditure	100%
Initial Allowance on hotel, hospitals and Industrial buildings	20%
Deductible annual Allowances (depreciable assets) Depreciation rates of assets range.	20-40%
Depreciation rate for Hotels, Industrial Buildings and Hospitals	5%
b) Investors who register as investment traders are entitled to VAT refund on building materials for industrial/commercial buildings.	
c) Duty and Tax free import of Plant & Machinery.	

- d) First Arrival Privileges in the form of duty exemptions for personal effects and motor vehicle (previously owned for at least 12 months) to all investors and expatriates coming to Uganda.
- e) Export Promotion Incentives and Facilities
- f) Investors who register as investment traders are entitled to VAT refund on building materials for industrial/commercial buildings.
- g) Duty and Tax free import of Plant & Machinery.
- h) First Arrival Privileges in the form of duty exemptions for personal effects and motor vehicle (previously owned for at least 12 months) to all investors and expatriates coming to Uganda.
- i) Export Promotion Incentives and Facilities
 - ? Manufacturing Under Bond
 - ? Duty exemption on plant and machinery and other inputs
 - ? Stamp duty exemption
 - ? Duty draw back – a refund of all or part of any duty paid on materials, inputs imported to produce for export
 - ? Withholding tax exemptions on plant & machinery, scholastic materials, human & animal drugs and raw materials.
 - ? Ten year tax holiday – duty remission scheme for exporters involved in value addition.

alternative, the Senegal government offers investment opportunities in this sector particularly in Senegal River Valley region. Senegal has become a leading exporter of cherry tomatoes, fine green beans, basil, green asparagus, onions, potatoes and aborigines (**Dr. Suresh Kumar.2008**).

15. Zambia

Government regards the growth of the agricultural sector as a crucial element in enhancing Zambia's foreign exchange earnings and economic development. Although the agricultural sector employs more than half of the total labour force, only 15% of the arable land is under cultivation. It is because of this potential that the government encourages investment in commercial farming. As the country is looking to diversify the economy away from copper, sectors has in agriculture production, which has not been fully exploited over the years. The sector has been performing poorly in recent years due to high input costs,

inadequate infrastructure and low private investment in the sector. However to turn this around, the Government has increased its allocation of funding to the sector to address some of these constraints.

The government facilitates input tax claim for three months prior to VAT registration for businesses that have already commenced trading and reduction of VAT rate for investors in tax free zones (**Zam-Indo Business Profiles, 2012:11-12**).

Anyone investing not less than





\$500,000 in any of the priority sectors listed is entitled to fiscal incentives. The sectors are: Floriculture (Fresh flowers and dried flowers), Horticulture (Fresh and dried vegetables) and Processed foods (Wheat flour). The other processed foods include investment in Beverages and stimulants (Tea and tea products and Coffee and coffee products) and production and the processing of the following products in the textiles sector such as Cotton, Cotton yarn, Fabric and Garment and processing of Agricultural products and Forest products.

16. Zimbabwe

The agriculture sector remains under-capitalized with insufficient inputs and infrastructure. The Capitalization of commercial farming enterprises includes meat processing, poultry and fish farming, juice extraction, horticulture, floriculture and cotton-processing Infrastructure development and refurbishment, as well as investment in value-adding processing of agricultural equipment **(Zimbabwe Investment. 2010-15).**

17. Zanzibar

Zanzibar, part of United Republic of Tanzania offers investment opportunities in:

Agriculture

- Horticulture and Floriculture.
- Agro-processing.
- Fruit processing and Canning.

Fisheries

There is a potential for development of various types of fish, shrimps, lobsters, seaweed and other marine resources. Investors are free to choose suitable areas for:

- Deep sea fishing.
- Fish Farming
- Processing and Canning

Zanzibar is known as the Spice Islands. The investment opportunities in spices include:

- Cloves,
- Cinnamon, Cardamom, nutmeg, black pepper, chillies, etc.

Conclusion

India declared during the Forum Summit about the India-Africa Food Processing Cluster that will contribute to value-addition and creation of regional and export markets, an India-Africa Integrated Textiles Cluster to support the cotton industry and its processing and conversion into high value products, an India-Africa Centre for Medium Range Weather Forecasting to harness satellite technology for the agriculture and fisheries sectors as well as to contribute towards disaster preparedness and management of natural resources and an India-Africa Institute of Agriculture and Rural Development. India will work with Regional Economic Communities to establish at the regional level, Soil, Water & Tissue



Ababa.

Food Processing Plant Launched. All Africa. August 2011. Dow Jones Factiva.

I P E M E . 2 0 1 1 . 2 n d Mozambique International Packaging and Packaging Equipment Trade Fair. Setembro.

Indian farming companies buying in Africa. 2011. The Economic Times.

<http://economictimes.indiatimes.com/Corporate->

[Trends/Indian-farming-companies- buying-land-in-Africa/articleshow/4713183.cms](http://economictimes.indiatimes.com/Corporate-Trends/Indian-farming-companies-buying-land-in-Africa/articleshow/4713183.cms), accessed 28 January 2011.

Indian business groups are investing heavily in Africa. Cote d'Ivoire – Diaspora website, www.ivoirediaspo.net/?s=Indian+business+groups+are+investing+heavily+in+Africa&x=5&y=11, accessed 27 January 2011.

Invest in D R Congo, 2012. National Agency for Investment Promotion, ANAPI. Kinshasa. Investment Opportunities in Congo, 2012. Ministry of Trade and Supplies. Brazaville. Institute of Export Promotion Mozambique. 2011. Maputo.

Kenya- A Hub for Investment, 2012. Ministry of State for Planning National Development and Vision 2030. Nairobi.

Mauritius. 2011. Your Investment and Business Hub. Board of Investment.

Programme on Food Processing, Storage, Marketing Out, 2009. Nigeria

Zam-Indo Business Profiles, 2011. Zambia High Commission. New Delhi.

Zimbabwe Investment Authority, Ministry of Power & Energy Development, Ministry of Finance - The Medium Term Plan 2010-2015 Document, Banks & Banking Survey 2009 - Zimbabwe Independent Newspaper, CZI July 2008 Manufacturing Sector Survey, Financial Gazette (7th January)



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Testing Laboratories, Regional Farm Science Centres, Seed Production-cum-Demonstration Centres, and Material Testing Laboratories for Highways. The Forum Summit 2011 has focused on the Africa's self-reliant development in agriculture sector and initiates an alternative to African countries either to go for the SAP or build indigenous techniques in the partnership with India and achieve the real reliant development and get rid of any sort of colonial past.

References

Agri-business: Achievements and Opportunities, 2012. Agency for the Promotion of Industry (API). Tunisia.

Alexander Sarris and Jamie Morrison .ed, 2010. Food Security in Africa. FAO. UK.

Background Note, 2012. Creating Possibilities, Delivering Values. 8th CII-EXIM Bank Conclave on India-Africa Project Partnership, 18-20 March 2012. New Delhi.

Doing Business with Ghana, 2012. IACCI, Mumbai.

Dr. Suresh Kumar. Aug-Oct. 2008. Nurturing the Tilling Fields of Africa. Africa Quarterly. Vol. 48. No.3.

Ethiopia, Land of Tomorrow, 2012. Ethiopian Investment Agency. Addis

Trade Between India and Africa in Agro Sector



AGRICULTURE TECHNOLOGY

- Africa and India will boost cooperation in agricultural technologies for smallholder farmers in Sub-Saharan Africa, with a view to achieving food security by 2015. Twelve African countries, including Burkina Faso, Kenya, Mali, Niger and Sudan, took part in this initiative which includes agricultural equipment, research, soil and water conservation, bio-fuels, post-harvest management and knowledge parks.
- Another initiative is to discuss cooperation in 'evergreen agriculture' - a form of conservation farming that integrates nitrogen-fixing trees with annual crops. This method is popular in several African countries, including Cameroon, Ethiopia, Ghana, Malawi, Niger and Zambia.

FOOD PROCESSING

- One of India's leading business groups, Bharti Enterprises, has expressed interest in taking over land in Africa and South America to engage in agro- and food-processing. Taking note of the production shortfall of pulses and edible oil in India, the Government would lend support to the plans of such Indian companies that acquire land in Africa for cultivating and processing items such as pulses and edible oil, and then exporting to India.

- There are linkages which are being established now beyond just manufacturing and services. The company's next focus area will be in agro- and food processing in Africa.
- Indian is already helping Africa in irrigation, water management, seed development and crop diversification. India also has institutional linkages with agricultural institutions in Africa
- Another initiative is that an Indian company has signed a pact with the Rwanda Development Board (RDB) to invest \$250 million for a knowledge hub and an integrated food park in this East African country

• Food Processing Industry in India

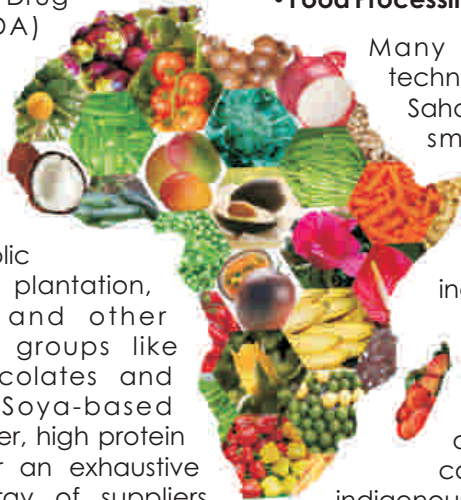
India is the world's second largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. The total food production in India is likely to double in the next ten years and there is an opportunity for large investments in food and food processing technologies, skills and equipment, especially in areas of Canning, Dairy and Food Processing, Specialty Processing, Packaging, Frozen Food / Refrigeration and Thermo Processing. Fruits & Vegetables, Fisheries, Milk & Milk Products, Meat & Poultry, Packaged / Convenience Foods, Alcoholic Beverages & Soft Drinks and



Grains are important sub-sectors of the food processing industry. Health food and health food supplements is another rapidly rising segment of this industry which is gaining vast popularity amongst the health conscious.

India is one of the world's major food producers but accounts for less than 1.5 per cent of international food trade. This indicates vast scope for both investors and exporters. Food exports in 1998 stood at US \$5.8 billion whereas the world total was US \$438 billion. The Indian food industries sales turnover is Rs 140,000 crore (1 crore = 10 million) annually as at the start of year 2000. The industry has the highest number of plants approved by the US Food and Drug Administration (FDA) outside the USA.

India's food processing sector covers fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods etc. We cover an exhaustive database of an array of suppliers, manufacturers, exporters and importers widely dealing in sectors like the -Food Industry, Dairy processing, Indian beverage industry etc. We also cover sectors like dairy plants, canning, bottling plants, packaging industries, process machinery etc.



• Food Processing Industry in Africa

Many of the processing technologies used in sub-Saharan Africa are at a small scale and use traditional or rudimentary level technology. There are a wide variety of indigenous foods, some of which are rich in specific micronutrients. With increasing popularity of Western dishes, consumption of African indigenous foods may decrease, especially in urban cities. It was recommended by the forum that the traditional processing methods should be documented, along with the habits and traditions of the foods, and nutritional value. Many of the processing methods are however labour-intensive,

The most promising sub-sectors includes - Soft-drink bottling, Confectionery manufacture, Fishing, aquaculture, Grain-milling and grain-based products, Meat and poultry processing, Alcoholic beverages, Milk processing, Tomato paste, Fast-food, Ready-to-eat breakfast cereals, Food additives, flavors etc.

The FDI (foreign direct investment) in food processing industry is quite encouraging. The FDI inflow for food processing sector in India during the financial year 2010-11 up to November 2010 was Rs 576.50 crore as compared to the total FDI of Rs 5,344.22 crore (April 2000-December 2010).

Besides attracting the FDI through schemes like mega food park, the government had also extended several fiscal incentives during this financial year to enhance the FDI in food processing sector. These included full exemption from excise duty given to specified equipment for preservation, storage or transport of apiary, horticulture, dairy, poultry, aquatic & marine produce and meat and processing thereof.

and there is potential to adapt the methods by using modern techniques to minimizing loss in quality, increase shelf-life and encourage continued consumption.

Research and development efforts on improved food processing technologies should be based on the needs of the local environment. This should include the resource base of enterprises, the support facilities available to them and the impact of the enterprise on the environment. It is necessary to both upgrading of traditional processing technologies as well as adapting (down-grading) modern technologies. However, the key overriding factor is that interventions to improve food processing operations must be market-orientated.

It is important not to forget existing research on new processing technologies. Although it is known that a market-orientated approach is needed for technology/enterprise development, technologies have in the past been developed without the consideration of final users or beneficiaries. Most research on processing technologies is never taken up to pilot level for viability testing. Government policies need to be more supportive in the development of processing technologies in Africa.

In order to meet global export markets for African food products appropriate processing technologies are needed and introduction of appropriate safety standards are needed. Technical



cooperation between professionals in African countries would strengthen the position of producers to meet the market needs. SMEs in the food processing sector need training and skill development. There is a need for a consortium of experts that could set up food processing factories.

It was considered that it was important to promote establishment of medium scale processing close to rural areas to create employment and to reduce the need for transport of fresh perishable commodities. The development of mobile processing units for farm gate processing was suggested. This could contribute to rural employment, reducing losses, reducing rural-urban migration and increase stability of the products.

The Food Processing sector in Africa can be discussed in the below given manner.

1. Food, Health and Nutrition

Nutrition is considered important for vulnerable groups in African societies. Both under-nutrition and over-nutrition are considered important. Access to sufficient food of an appropriate quality and quantity needs to be achieved so that a diet can be considered to be balanced. Food production, purchasing, processing and preservation, preparation and promotion of appropriate indigenous knowledge throughout the food processing and marketing chain need developing to ensure that issues of sufficiency and quality are addressed.





Different interventions to improve micronutrient status are possible, but food-based approaches are considered especially important. .

More research on the effects of processing to enhance bioavailability is needed. The effect of storage, packaging and food preparation methods on nutritive value need to be into account. In addition, it is important to recognise where food-food interaction can play a role in a balanced diet, particularly for vulnerable groups. More research is needed on the potential for vulnerable groups to gain nutritional benefits from traditional and indigenous foods.

The ability to accurately and precisely determine the nutrient content of foods is a basic requirement for nutrition research in sub-Saharan Africa. This is currently restricted by insufficient laboratory analysis capacity and capability. The analytical capability in sub-Saharan Africa must be reviewed and ways of improving both the capability and sharing of resources and information sought.

Local and indigenous foodstuffs in sub-Saharan Africa offer a potential resource that is currently under utilised. This is compounded by the lack of information. Research on indigenous and traditional processing methods needs to be documented and to make information available, a database needs to be developed. The importance of the database could be enhanced if it were to include indigenous foodstuffs with high nutritional and medicinal value

relevant to people with HIV/AIDS.

2. Food Safety and urbanisation

There is a need to define appropriate food safety legislation, which responds to both global and domestic challenges. Access to information on international food standards is considered difficult for many individuals and organisations in sub-Saharan Africa. Enforcement of food standards was an issue their may be limited resources for inspection, enforcement, and access to accredited laboratories that provide reliable food safety information. Sensitisation of consumers and food handlers about food safety is important. There is large number of informal food processing sector (for example, street food vendors) in Africa as it provides a significant proportion of food consumed in many of sub-Saharan Africa's cities. Coordination between local authorities and food standards and regulatory bodies are considered necessary. There is a need to improve consumers and processors understanding of food safety issues. There is a lack of information concerning the availability and suitability of lower cost, safer local alternatives for use by poor people and whether consumers are willing to pay more for safe food and if this can be used as an incentive for producers and processors to produce safer foods. Education programmes should also include cost-benefit comparisons and take into account cultural preferences and patterns of behaviour. It was considered important that education in food safety should be addressed throughout society, for example in schools, households, workplace and in



food processing and catering businesses.

3. Agro processing

Many of the processing technologies used in sub-Saharan Africa are at a small scale and use traditional or rudimentary level technology. There are a wide variety of indigenous foods, some of which are rich in specific micronutrients. With increasing popularity of Western dishes, consumption of African indigenous foods may decrease, especially in urban cities. The traditional processing methods should be documented, along with the habits and traditions of the foods, and nutritional value. Many of the processing methods are however labour-intensive, and there is potential to adapt the methods by using modern techniques to minimizing loss in quality, increase shelf-life and encourage continued consumption.

Research and development efforts on improved food processing technologies should be based on the needs of the local environment. This should include the resource base of enterprises, the support facilities available to them and the impact of the enterprise on the environment. It is necessary to both upgrading of traditional processing technologies as well as adapting (down-grading) modern technologies.

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In order to meet global export markets for African food products appropriate processing technologies are needed and introduction of appropriate safety standards are needed. Technical cooperation between professionals in African countries would strengthen the position of producers to meet the market needs. Current SMEs need training and skill development. There is a need for a consortium of experts that could set up food processing factories.

It is important to promote establishment of medium scale processing close to rural areas to create employment and to reduce the need for transport of fresh perishable commodities. The development of mobile processing units for farm gate processing was suggested. This could contribute to rural employment, reducing losses, reducing rural-urban migration and increase stability of the products.

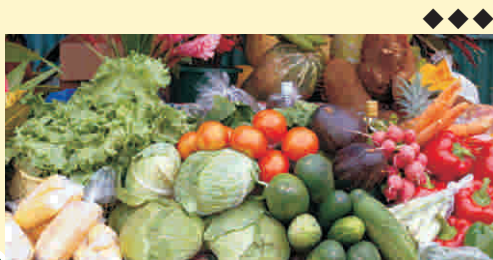
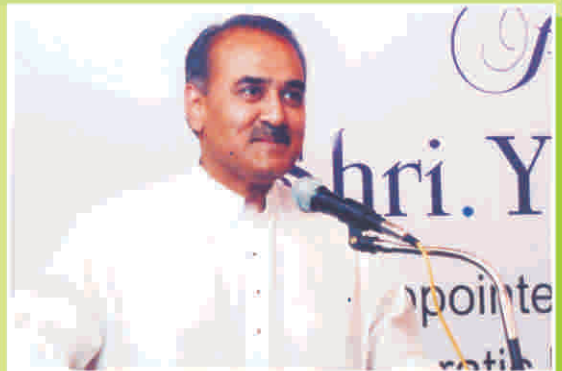


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Agriculture as an Emerging Sector: Mutual Interests of India and Africa



Introduction

Agriculture accounts for more than 25% of the GDP in most African countries and employs more than 70% of the workforce (**Challenges to Agricultural Development in Africa. 2011**). Africa has approximately 783 million hectares of arable land (27% of the world total), which is adequate to effectively feed its population. However, the output is highly concentrated with Egypt and Nigeria accounting for approximately one-third of total agricultural output and the top 10 countries in the continent producing nearly 75%. Africa is the only region in the world where agricultural productivity has not grown noticeably. In fact, the Green Revolution, which enhanced agricultural growth in many Asian countries, is yet to take place in Africa (**Raising Agricultural Productivity in Africa. 2011**). The African agricultural sector has substantial potential to improve local economies and leave a lasting impact on the livelihood of its large populace. Increased agricultural output and income also has a multiplier effect on the economy because of its links with markets for the output of the manufacturing and services sector. Agriculture has been at the forefront of the recent transition in India-Africa relations. Various African nations perceive the success of the Green Revolution in India a role model. Moreover, India remains focused on capacity building, human resource development and the transfer of technology and skills as a key ingredient of its policy.

The agro-industry in Africa needs farm mechanization that will facilitate increase

in productivity. The production boost in agriculture is the only way to initiate the agro-industry in Africa. It should be clear to all that once there will be surplus production of food in Africa, the agro-industry will get the input of raw materials to produce different food products and cater to the needs of urban as well as rural areas. Approximately 80 Indian companies have collectively invested US\$2.3 billion in Ethiopia, Kenya, Madagascar, Senegal and Mozambique (**Indian farming companies buying in Africa. 2011**). Some African countries are offering land on lease for 99 years to overseas farmers, and several farmers from Punjab in India have already migrated to these countries and begun farming (African nations offering land for free to Indian farmers," The Economic Times website, <http://economictimes.indiatimes.com/news/economy/agriculture/African-nations-offering-land-for-free-to-Indian-farmers/articleshow/6293149.cms>, accessed 28 January 2011). Close to 70 Indian companies are also in the process of entering the farming sector in the region (Indian companies get into commercial farming in Africa. 2011). A leading integrated tea company based in India acquired Uganda-based Rwenzori Tea Investments for US\$25 million in December 2009. In recent times, Indian companies have also started investing in agri value-added products. An India-based business house leased a 50-acre model dairy farm in Uganda in 2006 (RJ Corp charts mega plans to venture into virgin Africa. 2011). An Indian company specializing in textiles recently opened a spinning mill in Burkina

Faso (Indian business groups are investing heavily in Africa. 2011). Such investments are expected to generate local employment as well as create opportunities for local skill development. Agro-industry sector of India-Africa traction in agriculture is welcome and discussed in detail further.

Today, national development issues incorporate agriculture sector as prerequisite to country's progress and prosperity in Africa. Indo-Africa is pursuing mutual cooperation under the theme of 'Today's Investment-Tomorrow's Prosperity'. The development and mutual partnership covers self-reliance schemes avoiding huge debt as a result of this brotherhood. Indo-Africa partnership policy persuades African willingness and mutual benefit to implement the common development partnership programmes in different parts of continent. African government's national development Programme cannot function in isolation. Africa needs a mutual cooperation and development programme from outside world and Indian mutual economic brotherhood and political understanding kick out all western propaganda about India's policy of New Colonialism in Africa. The idea of today's investment will nourish a debt free Africa and strengthen economic development as tomorrow's prosperity. African politics cannot ignore international relations to build up national development and this partnership is a way towards Today's investment, Tomorrow's Prosperity' (Suresh Kumar.2008).

1. Agro-industry of Fish and Fish Farming Industry

India and Africa needs an effective approach to ensure food security, eradicating poverty, improve people's livelihood, subsistence agriculture, fisheries and other animal resources and work for self-reliant. Both may work for sustainable development of fisheries and animal resources with necessary support of scientific research for conservation of land and environment. Fish cultivation on ground as an alternate source of food may increase many folds depending upon its natural feeding (such as Carp Larvae). One



reinvigorates that pond and river fish cultivation using these larvae will add nutrient in food production barring use of chemical and other chemical food nutrients on the one hand and safeguards environment biodiversity on the other hand.

India plays vital role in international as well as regional cooperation developing fisheries and other sea resources as an alternate source of food and maintains sea-diversity as part of environment conservatism. India as a regional partner is assisting Myanmar in the exercise of their delineation of their continental shelf. The Ministry of Earth Sciences (MoES) shares program on 'Oceanology & Geo-hydrates' under Integrated Programs (ILTP) with Russia (Annual Report: 139-40). Similarly, Indian National Centre for Ocean Information Services (INCOIS) is developing capability of processing the availability of fish stocks, ocean state, etc. for societal and economic benefits. It identifies the potential fishing zone that beneficial to fisherman increasing their profit. The government protects this sector from natural calamities and developed Early Warning System for Tsunami has been set up in Hyderabad, India. It may further coordinate with African coastal countries. India-Africa may share this technology averting natural killer Tsunami under mutual understanding and cooperation.

Africa and India may share their experiences and produce policy analysis, cooperation in water management, agro-infrastructure, capacity building and enhancing market opportunities for each other's value added agriculture and

fisheries products under global partnership, which will reinforce socio-economic transformation.

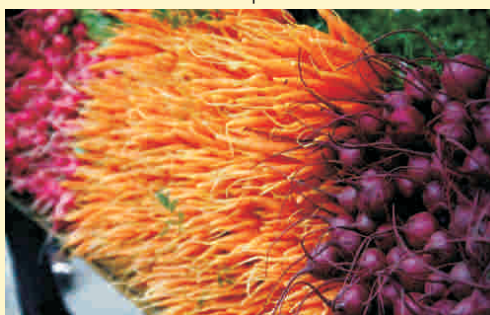
The water resources of Indian Ocean in Southern Africa, Red Sea in North-east Africa, Mediterranean Sea in North Africa and Atlantic Ocean in West Africa and lakes & rivers of different African countries provide vast potential in fish and fish farming investment and business linkages opportunities such as:

- Southern Africa produces about tons of marine fish annually. Kenya, Tanzania, Mozambique and South Africa have the potential to produce fisheries for the local population as well as for the global world.
- Kenya has only one tuna fish factory producing cooked frozen tuna loins for further processing in EU countries. Investment in premium fishes such as Nile Perch (Uganda), Tuna fish (Kenya, Djibouti and Eritrea) and value added fish products such as canned fish, fish sausages, fish soups, and fish fingers could be processed for regional as well as premium export markets.
- Similarly, the investment in low cost species such as tilapia and Haplochromis (Uganda), King and Queen fish (Eritrea), etc. for the local and regional market and Aquaculture development of stock fish, farming of premium species such as eel and cage fish farming and other marine resources are potentially profitable ventures.
- The technology of deep sea fishing, prawn and trout farming are not available in African countries and there is vast unexploited potential investment in deep sea fishing logistics, including technical support. Fish processing opportunities exist in (filleting and fishmeal production) as well as fisheries-support infrastructure (refrigerated transport, cold storage, etc.).
- Local and regional cold distribution chain to minimize the loss of fish products and deterioration.

2. Livestock Agro-Industry

The livestock development (Cow, Goat, Sheep, Chicken, Ducks, Pig, etc) strategy focuses on establishing an efficient livestock disease control system based on cost recovery; achieving self-reliant in meat, milk, poultry and other livestock products. It promotes and develops industrial linkages for livestock products including dairy, leather and meat processing, encouraging the export of livestock and love stock products, and strengthening research in livestock breeding in order to upgrade the quality and productivity of the present livestock breeds. The business opportunities include:

- Local commercial dairy breeding and production of semen to reduce on the importation of heifers.
- Vaccine development and forge production.
- Animal feeds production and processing.
- Integrated beef production and feedlot finishing.
- Most hides and skins are processed up to the wet blue stage for export. There is big investment opportunities available in processing & production of finished leather, leather manufacture industries (shoe, bag, purse, valet, belt, jackets and other) and distribution chains (through retail shops) in different parts of countries in Africa.
- Game ranching.
- Animal breeding and establishment of modern abattoirs.
- Local and regional cold distribution chain to minimize the degradation of meat and meat products.



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3. Dairy and dairy Product Sector

This sector develops, promotes and controls production, processing and marketing of milk and dairy products as well as the general facilitation and development of the Dairy industry. It has the potential of export-oriented processing of quality milk. There is a potential in investing in processing milk into powder for local markets and exports. There is untapped potential in goat milk processing and camel milk processing for Europe and Middle East countries. The opening of milk plants through Indian investments will provide the low cost/affordable technologies and equipment for small scale processing and opportunities for improvement in technology infrastructure such as packing, storage and refrigerator transportation. The investment opportunities in this sector are:

- Establishment of reliable collection centers in the major producing areas and transportation of milk to the processing plants.
- Establishment of more processing plants to cater for the excess production.
- Production of powdered milk for use in ice-cream manufacturing confectioneries and homes.
- Production of long life (UHT) milk supplying to the UN Peace Keeping Forces, people suffering from natural calamities and in other emergent situations.
- Processing of butter, cheese, butter oil, ice-cream and yogurt.
- Local commercial dairy breeding and production of Semen reduce in the importation of heifers.
- Local and regional cold distribution chain to minimize production loss and deterioration.

4. Agro-Industry of Organic Farming

Africa has ample land that needs to be developed for the agriculture purposes. Indian investors provide agriculture mechanization such as seed cum fertilizer drill facilitates seed saving, saving in



fertilizer, enhancement in cropping intensity and increase in gross income and return to farmer in Africa. The private sector of India (Karturi and other Companies) has started the investment in agriculture sector and developing organic farming and other as part of agro-industry. The organic farming deals with the different sub-sectors such as:

A. Agro-Industry of Fruit and Vegetable

The investment opportunities (as per the physical condition of the region) in this sector are:

- There is huge investment opportunity on cracking, grinding, roasting and packaging cashew and other nuts.
- There is also considerable potential for the processing of cocoa and manufacturing the chocolate and confectionery products for regional market and export.
- Use of Indian technology and start production of Edible and other oils by using sunflower, rapeseed, cottonseed, sesame, coconut and corn seeds. West Africa is known for the production of palm oil and it is the right time to introduce the scientific technology that will facilitate the low cost production of oil.
- There is a high production of oil seeds in Eastern Africa and there is a potential for more production. Investors have the opportunity to set up the edible oil industries catering local as well as regional needs.
- There is high potential and production of varieties of fruits as mangoes, pineapples, oranges, passion fruits, bananas, and avocados to cater the

supply at regional as well as export market. It opens the processing of fruits at local level and there is an open investment opportunity for processing of fruits for the production of juices, fruit jelly, fruit jams and other.

- Production and export of dehydrated fruits.
- Investment in cold storage facilities at collecting points.
- Organic farming of fruits and vegetables.
- Packaging of vegetables and fruits for exports.
- Opportunity for local manufacturing of attractive packaging for fruits and vegetable.
- Irrigation schemes for commercial farm to ensure harvests throughout the year.

B. Agro-Industry of Floriculture

This agro-industry is a big source of export income in Africa. Indian investors are investing in this sector and are getting good responses from the local people in Africa. It persuades the Indian investors to produce the cereals using scientific technology for local consumption along with floriculture. The opportunities exist in this sector such as:

- North-Eastern Africa (Kenya, Ethiopia, Uganda and Tanzania) has seen phenomenal growth in the production and export of cut flowers. The export markets focuses on European Union countries such as Germany, Netherlands, United Kingdom, Sweden, Italy, Switzerland and France.
- The investment in pre-cooling and cold storage will facilitate exporters in maintaining the high standards of their produce for export as required by the market.
- Packaging of flowers for exports.

C. Agro-Industry of Sericulture

There is a huge export market too for silk cloth and garments. Sericulture and silk production have an enormous potential in Africa provided it is made available to rural



people, especially women, and its marketing is organized independently. It can serve as an excellent mode for employment generation and augmentation of income. Indian investors will provide latest technological inputs to primary producers by evolving and establishing new systems of organizing production and marketing. Silkworms feed on mulberry leaves. Hence the rearing of silkworms involves cultivation of mulberry trees, which provide a regular supply of leaves. Worms are introduced through DFLs (Disease Free Laying, i.e. eggs) procured from a quality centre (called grainage).

The African farmers should promote bulk of mulberry cultivation along side their agriculture field. Even the small farmers of less than 4 acres land usually in clusters of 300-400 will initiate the production of sericulture. Investment in mechanization in silkworm rearing operations is needed to cut down on production costs. Small machines for such operations such as leaf chopping, harvesting and def-loosing of cocoons are necessary. Africa has very little knowledge on wild silkworm rearing technology. Indian investors will promote the training to the local people in this field. Investment opportunities that would also trigger increased production are mainly in:

- Cocoon post harvesting and processing equipments.
- Multi-end silk reeling machine.
- Spindle spinning machine.
- Cocoon boiling machine.
- Warping machine.
- Power and hand looms.
- Cocoon dryers.



- Cocoon and raw silk testing equipment.
- The Product development will initiate the development of beauty products, processing & packaging of mulberry green tea and powder and natural dyes technology.

5. Agro-Industry of Food and Beverages Sector

The agriculture system in Africa is based on the traditional method of farming that feeds the rural community only one square meal to the entire family. As a result, the rural population is migrating in search of employment to the urban centres and surviving. This initiative of production improvement needs agricultural tractors and combines machinery for the use of more arable land and improvement in production. The growth in agro-industry products will be an additional source of income for the agriculturalist in Africa. The food and beverage sector provides opportunities in:

- Value addition to a variety of agricultural produce locally available.
- Planting and processing of coffee, production in instant coffee particularly in Uganda, Kenya and Ethiopia.
- Breweries and distilleries of alcoholic beverages.
- Soft drink and packed fruit drinks manufacture.
- Commercial farming and processing of sugar, corn flakes, gram flakes, etc.
- Establishment of fast food restaurants of international chains/brands.

- Different Pickles manufacture for European, American & Middle East Market.
- Local and regional cold distribution chain to minimize the deterioration of products.

6. Agriculture Engineering

India produce agricultural tractors, mould board plough, disc plough, sub-soiler as primary tillage, spring loaded tillers, harrow, leveller, bund former, scraper, rotary tiller as secondary tillage, back hoe with tractor, laser grader, graders, scrapers with tractors as earth moving equipments. Escorts, Sonalika, Eischer, HMT, International Tractors, Mahendra & Mahendra, etc. are the largest producers of Agricultural equipments in India. Along with it, India produce sowing machinery such as post hole digger, paddy planter, seed drill for cotton seed, seed cum fertilizer drill, potato planter and multi row vegetables planters, irrigation systems such as sprinkler systems, drip system, irrigation pumps like centrifugal pumps, stationary diesel engine driven centrifugal pumps, engine set, electric pumps and submersible pumps, sowing & harvesting machinery such as maize combine, sugar cane combine, mowers, paddy combine, reaper, wheat combine, fruits harvester, onion harvester, potato digger, cotton picker and post harvest machinery like bailer, tipping trailer, sugar cane grabber, trailer, thresher and maize Sheller (Improving Farm: emphasis mine). This agricultural mechanization will enhance the production as the land in Africa is naturally highly fertile. There are different agro-industries that may be promoted in Africa, which will give value addition for their products such as:

- Mechanization of rice production by use of rotivators, trans-planters and cultivation equipment.
- Farmer associations and private entrepreneurs will be encouraged to install Pass and Mobile rice mills.
- Investment opportunities exist in seed production, manufacture of sprayers and pesticides, veterinary services, construction of cold storage facilities and refrigerated transport for

horticultural and other perishable products.

- Industrial units for manufacturing tractors.
- Industrial units for manufacturing pump-sets for irrigation.
- Industrial units for the manufacturing of agro-food products.
- Small Industrial units for Agro-chemicals (fertilizers and pesticides).
- Industrial units for manufacture of textile (Cotton fabrics, garment manufacturing, yarn).

Case Studies of Individual African countries (Agriculture Investment)

1. Botswana

India and Botswana agriculture, livestock and human resources development cooperation started in 1999. Indian seeds (Maize and Paddy rice) have been sent to this country for experimentation. A project for import of Indian Buffalos to this country has been set up. The farmer's project has been finalized and since 29th October 1999 six farmers from Punjab have landed to this country in view of realizing this project. "The tender for the purchase of Indian tractors at large scale is under process." The cotton from Burkina Faso exports to India. Today, many trainees from Burkina Faso are coming to India for training in computer education, diplomacy, telecommunications, etc. Botswana is looking forward to setting up units of production of commercial farming such as fruits, vegetables, Arabic gum and cotton.

Livestock occupies an important place in the economy of Burkina Faso in West Africa. The opportunity in this sector is the setting



up of:

- Small industrial units for milk processing (dairy plants) breweries.
- Small industrial units for production of animal feeds.
- Small industrial units of veterinary pharmaceutical products.
- Meat processing.
- Small units for leather.
- Cattle rearing-ranching and poultry.

2. Burkina Faso

It is a member of the West African Economic and Monetary Union (WAEMU) and share a common currency i.e. CFA franc and have set up a full custom union since 2000. WAEMU comprises Burkina Faso, Benin, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo having same custom duty tariff. The volume of Indo-Burkina Faso trade has increased by 30% in 2002-03. India imports 66% of cotton yarn produced by FILSAH, one of the major producers in the country. Burkina Faso exports cotton, animal skins, and leather and cashew nuts to India and imports Agromachinery (tractors and farm implements), Rice, small and medium scale industries (e.g. oil processing) from India.

Burkina Faso guarantees the foreign investors such as:

- Right of full business awareness for foreign investors.
- Right to acquire real estate, land, forested land, industrial areas in addition to concession from government.
- Right to transfer capital and profits of any investor.
- The advantages of investing in this country are:
- A possibility of Joint Venture with Burkina Faso business community.
- Low cost of labour.
- Good infrastructure (telecommunication, roads, railways and airport) and services.
- Strategic position in the heart of West Africa.

Burkina Faso is second largest producer of cotton in West Africa and ranks third in entire Africa. Agriculture plays a key role in this country's economy, it accounts for over 40% of the country's GDP, 80% of export revenue and 85% of employment." 11 The government gives priority in twelve fields for investment in cotton, cereals, fruits & vegetables, oil seeds, skin and leather, meat, milk, chemical products, fertilizers and pesticides. The agriculture investment exists in the following sectors:

- Industrial units of manufacturing tractors.
- Industrial units of manufacturing pump sets for irrigation.
- Industrial units of manufacturing agro-food products.
- Small Industrial units for agro-chemicals (fertilizers and pesticides).
- Industrial units of manufacturing textiles (Cotton fabrics, garment production and yarn).
- Setting up commercial farming units (fruit, vegetables, Arabic gum and cotton).

Live Stock Production in Burkina Faso

It is having more than 20 million livestock comprising bovines, aprons, ovin, pigs, mules and poultry. The production of fish is around 10,000 tones per year mainly for the local market.

- Small Industrial units for milk processing (dairy plants).
- Small Industrial units for production of animal fats.
- Small Industrial units for veterinary pharmaceutical production.
- Meat processing.
- Small units for leather
- Cattle rearing-ranching and poultry.

3. Ethiopia

The country has 111 million hectare of land out of which 74 million is suitable for agriculture. However due to underdevelopment only 15 million hectare is under cultivation. The government offers about 3 million hectare (5% of the available



land) to local and foreign investors. The prominent investor 'Sheikh Mohamad Al-Amoudi currently leases 10,000 hectares for a pilot project for rice production in Gambella Regional State. Under the agreement his company will be allowed to export no more than 60% of its production and 40% will be for local consumption. He is currently looking to increase the investment to US\$450 million and expand the area for cultivation' (Development or Exploitation.2011:1-2). The government of Ethiopia has welcomed the recommendation of the author. "It is estimated that the use of 15 percent of the total land in Africa is sufficient for the domestic consumption including having food stock for the emergency. Indian investors are buying land in Africa for agricultural purposes. The sharing of the total produce should be in the ratio of 70:30, where 70 percent should be reserved for the export & industry and only 30 percent should be used for domestic consumption. This ratio may vary from 70:30, 75:25, 85:15 and so on depending on particular country's land fertility and the requirements of the total population of the country concerned. The recommendation to put this ratio is that most of the African states do not have the advance cold storage facility to keep the food grains presently on the one hand and the lower ratio is sufficient to cater population of a country on the other hand" (Dr. Suresh Kumar. 2010). Similarly, Karturi, a Bengaluru-based company of India set up greenhouses on 25 acres of land in Ethiopia in 2004 for rose cultivation. The company was able to utilize its African operations strategically to improve the export of roses to Europe and has now emerged as one of the largest producers of cut roses in the

world. The company is now exploring the option of growing crops such as maize and vegetable crops in the continent. The INR 5.5-billion company has 672 acres of land under floriculture in Africa, along with a land bank of 311,000 hectares in Ethiopia.

4. Ghana

Ghana is searching for an investment location and offer opportunities in:

- Agriculture (Cassava, Cotton, Sugarcane, Soya Beans, Oil Palm, Pineapples, etc.)
- Agro-processing (Cocoa, Fruits, Vegetables, etc.)
- General Infrastructure (Agricultural and Industrial Estates, Roads, Railways and Ports).
- Fisheries.

The government gives incentives in tax rebates for manufacturing in certain locations, tax holders, ranging from 5 to 10 years depending on sectors, custom import duty exemption for plant machinery, equipment and parts thereof and double taxation agreements (Dr. Suresh Kumar.2008).

5. Kenya

Agriculture is the mainstay of the economy, providing livelihood to approximately 75 per cent of the population. There is considerable scope for diversification and expansion of the agricultural sector through accelerated food crop production and increase of non-traditional exports. There are also opportunities for improvement in technological infrastructure such as packaging, storage, and transportation. Intensified irrigation and additional value added processing are marketable areas for investments. Opportunities exist in production and export of products such as cut-flowers, French beans, pineapples, mangoes and other fruits, cereals, leather and leather products, canned beef, and honey farm machinery and other products.

The vision for agriculture sector is to be innovative, commercially oriented and modern, offering the following investment

opportunities in Sugarcane development, Value Addition and Marketing infrastructure. This will involve the following wholesale projects; two wholesale markets for fresh produce in Nairobi, a wholesale market in Nakuru and a wholesale market in Mombasa. Along with it, the Livestock production is one of the major activities in the sector like Dairy industry and Hides, Skins and Leather industries. The fisheries sector plays an important role in the national economy contributing 0.5% to GDP in 2006. The areas for Private Sector Investment are value addition in fisheries products, Certified fish seed breeding facilities to avail quality seed to fish farmers, Investment in Tropical Aquaria parks for local and overseas tourism, Fish leather industry and Cooling plants in major landing bays of Mbita, Sindo, Sori, Sio port, Usage and Port Victoria. The water sector offers good investment opportunities in Water Storage and Drilling: Capacity Building of National Water Conservation and Pipeline Corporation and Mzima II Pipeline Project (Kenya.2011. A Hub for Investment:1-4).

Kenya has recently seen phenomenal growth in the production and export of cut flowers. Its ideal tropical and temperate climatic conditions make it favorable for flower production. The major flower varieties grown and exported from Kenya are roses, carnations, statice, cut foliage, carthamus, solidaster/solidago, chrysanthemum, arabicum, trelizia, rudbeckia, gypsophila, lilies, molucella, eryngium and tuberose.

Some cut flowers are also sold locally, mainly in the urban centres of Nairobi and Mombasa by street vendors and floriculture shops in shopping centres. Main export markets for cut flowers from Kenya is



the European Union, in particular Germany, Netherlands, United Kingdom, Sweden, Italy, Switzerland and France. Along with it, the investment opportunities in the Cashew nut production and processing for exports in Kilifi, Fruit production & processing in Malindi, Sugarcane production in Ramisi area, Bixa production and processing for food pigment and colouring, Gum Arabic and gum resins development programmes, Fish processing Plants and other Sea food for export and Fertilizer production (Kenya in the Front Line. 2010:26).

6. Togo

Le Parc des Expositions "TOGO 2000" of Lome will host the 9th International Trade Fair of Lome from 25th November to 12 December 2011 focuses on promotion of trade and services of all sectors of economic activities of countries in the sub-region as well as those of the other continents and contacts between professionals for the development of sub-regional and intercontinental commercial activities. This fair of Lome is opened to economic operators (manufacturers, industrialists, traders, businessmen /women and service providers) from Togo, Africa, Europe, Asia and America.

7. Mauritius

The agricultural sector in Mauritius is being re-engineered to cater for the arising needs of the global food security crisis with an increased diversification of agricultural production backed by modern techniques and technologies. Investment opportunities in the sector can be captured in advanced agricultural technology including precision farming, hydroponic cultivation, green and organic farming among others. Furthermore, the transformation of the sugar industry in the sugarcane clusters present opportunities for the production of high value-added sugar, by products and energy.

Seafood and Aquaculture Based on a current world per capita consumption of 16 kg., the global seafood market is estimated at USD 100 billion per year. Mauritius has an exclusive economic zone of 1.9 million sq. km and is set to emerge as a leading



seafood hub with seafood export accounting for 16.1% of total exports in 2009. Mauritius also offers the opportunity for sustainable fish farming activities in its lagoon. Furthermore local companies are also involved in fish transshipment, seafood processing activities and ancillary services (Mauritius.2011:23).

8. Mozambique

The Mozambican production and its presentation on global markets require a new approach in the packaging sector, to create conditions for the country to compete in an international market, where rules are constantly changing and consumer demands rise continuously. So far, Mozambique has a poorly developed packaging industry which is largely oriented towards the satisfaction of basic needs for the fabrication of domestic consumer goods and a few export products. The MOZNEGOCIOS-International Packaging and Packaging Equipment Trade Fair 2-10 June 2011 is a public event with international scope that involves producers, suppliers and consumers of the packaging industry from Mozambique and other countries. In this second edition, the MOZNEGOCIOS fair will bring together companies of the packaging sector and agro-processing enterprises (IPEME.2011:1-4).

The general purpose of investment refers to the 'promotion and enhancement of packaging sector in Mozambique and improves the quality and quantity of products offered by Micro, Small and Medium Enterprises (MSMEs). The specific objectives of investment highlights are:

- Identify national as well as foreign producers and distributors of

packaging equipment;

- Identify national suppliers of packaging, design services, printing and package recycling;
- Identify consumers and potential consumers of national packaging;
- Attract domestic and foreign investment in the sectors of agro-processing and packaging
- Improve the provision of services related to agro-processing and packaging
- Establish a connection between the producing entrepreneurs, suppliers, distributors and consumers (Micro, Small and Medium Enterprises) of packaging (IPEME.2011:1-4).

The specific objectives of investment in Mozambique requires:

- Companies that produce equipment / machinery for packaging
- Companies that produce and distribute packaging
- Companies that design labels and the related packaging
- Companies that use recycled products resulting from packaging
- MSME's that wish to improve and/or expand their businesses
- Scholars that wish to assess market trends of agro-processing equipment and packaging
- Agricultural associations
- Printing companies that produce labels
- Companies linked to the agricultural or agro-processing sector.

The wide diversity of soil types and climatic conditions, access to over 60 rivers and 36 million hectares of arable land greatly enhance Mozambique's potential as an

agricultural exporter. The main agricultural exports include cashew nuts, cotton, sugarcane, a variety of fruits and vegetables and tobacco, but virtually any crop can grow easily in Mozambique – and harvesting can occur months before other countries. The rich waters in the Indian Ocean offer a variety of seafood products from world famous tiger prawns to crayfish to langoustine – as well as a variety of fish such as tuna, grouper and cod. Mozambique also has 19 million hectares of productive woodland, rich in tropical hardwood and to a lesser extent eucalyptus and pine. The natural potential of the sector offers a wide range of opportunities for timber, construction materials, furniture, wood products and pulp (Institute of Export Promotion Mozambique.2011:7).

Mozambique offers some of the best shipping ports in Southern Africa, serving as a link to the sea for its landlocked neighbours and the rest of the world. The three main ports in Mozambique are in Maputo, Beira and Nacala. The port at Maputo is the hub the surrounding fishing and agricultural industries serving South Africa, Swaziland and Zimbabwe. The ports in Beira and Nacala serve Malawi, Zambia and Zimbabwe. Beira is linked to by road and rail to the African hinterland. The recently modernized ports in Mozambique enable them to handle millions of tons of cargo arriving from and departing to distant international destinations (Institute of Export Promotion Mozambique.2011:8).

9. Nigeria

In 2009, the Federal Government introduced the National Food Security Programme in Nigeria to focus on both upstream and downstream activities such as production, storage, processing and the marketing of crops, livestock and fisheries (Programme on Food Processing, Storage, Marketing Out. 2009).

10. Uganda

Uganda is east Africa's food basket. 'A KES1-billion food processing plant was commissioned at Makerere University's



Faculty of Food Science and Technology in Uganda in 2009. The fruit and vegetable processing plant, scheduled to operate on a pilot basis, will help the department produce fruit juice and other foodstuffs for sale as well as train students to become entrepreneurs and agro-processors' (Food Processing Plant Launched. 2009). Similarly, Britania Allied Industries, a consortium of food processing firms, plans to invest KES11 billion for the construction of a fruit juice-processing plant in Namanve, Uganda.

Possible investment opportunities are in production of instant coffee, extraction of vegetable and essential oils, packaging of beans, alcoholic beverages, soft drink manufacture, processing of sugar and fast food restaurants. Uganda needs US \$ 15-30 million investment requirement to expand rose industry depending on wooden or metallic infrastructure. All the roses' projects send soil samples to Holland for analysis. The cost of the services (US \$ 200-600/ha) justifies the establishment of a soil analysis laboratory and services in Uganda. Greenhouse plastics constitute 6% of the investment requirement and need to be replaced every 2-3 years, providing commercial opportunities for local manufacturers. Fertilizers, herbicides, pesticides currently imported.

Ugandan flowers have managed to mark their presence in the world for a, claiming a fifth position in Africa's largest exporter of cut flowers. Indian investor may look forward for mutual trade.

Uganda is mainly an agricultural country with over 80% of the population relying on agriculture for its livelihood. The linkage potential in the plantation and agro-industry includes:

- Outsourcing the field operations including seed-bed preparation.
- Supply of produce to processors.
- Maintenance of machinery.

The most important market for Uganda's fruits and vegetables is European Union. In 2005, EU imports of fresh vegetables amounted to Euro 9.8 billion and 10.5 million tones. Uganda is capable of producing most of the tropical and sub-tropical, or



even temperate fruits and possible investment and business linkage opportunities. Uganda livestock production contributes 17% and 9% to agriculture sector.

Several firms in Uganda are involved in production of fish fillets for export, the annual quota of 60,000 metric tons o processed fish, has never been met. In addition, the local market is expanding. Entry into this sub-sector is viable and there are possibilities of joint ventures with existing fish processing firms. Dry/smoked fish is mainly for the domestic market but also for exports into the regional market.

11. Senegal

Fishing is a significant sector of the economy, but agriculture is Senegal's principal resource accounting for almost 50% of the country's total exports. Peanuts are the main commodity produced in the country, but attempts have been made to diversify into others, particularly cotton, the second largest export commodity, millet, sugar cane, fruit and vegetables. Phosphate is the most important mineral resource, although there are also significant iron ore deposits as well as oil. India facilitated Senegal agriculture sector on lines of credit such as:

- '15 million USD for acquisition of agricultural material and the creation of rural enterprises.
- 27 million USD for irrigation projects with a view to achieve rice self sufficiency.

Agriculture sector comprises of 70% of Senegalese population is central to the country's development. India put at the disposal of 510 tractors, equipment for tilling, carts, drilling machines, pumps,

trucks and maize processing and enriching equipment under Indo-Senegalese cooperation. Senegal government and Indian Farmers Fertilizer Co-operative Limited (IFFCO) signed an agreement of about \$240 million. There are export opportunities in the agri-business sector, with the AGOA visa in:

- Floriculture
- Fruit Cultivation
- Market Gardening
- Thousands of hectares of Cashew nut plantation
- Diversification of the industrial processing of groundnut.
- Fish Cultivation
- Support to the development of horticultural exports.
- Improvement of the condition of market operation.
- Support to agri-business producers and operators for a better adaptation of products to the market.
- Development of private irrigation and land-related activities' (Dr. Suresh Kumar.2008).

Senegal is dependent on import rice that reached 400,000 tones of CFA Francs 118 billion for 2003. As an alternative, the Senegal government offers investment opportunities in this sector particularly in Senegal River Valley region. Senegal has become a leading exporter of cherry tomatoes, fine green beans, basil, green asparagus, onions, potatoes and aborigines (Dr. Suresh Kumar.2008).

12. Zimbabwe

The agriculture sector remains under-capitalized with insufficient inputs and infrastructure. The Capitalization of commercial farming enterprises includes meat processing, poultry and fish farming, juice extraction, horticulture, floriculture and cotton-processing Infrastructure development and refurbishment, as well as investment in value-adding processing of agricultural equipment (Zimbabwe Investment. 2010-15).

13. Zanzibar

Zanzibar, part of United Republic of Tanzania offers investment opportunities in:

Agriculture

- Horticulture and Floriculture.
- Agro-processing.
- Fruit processing and Canning.

Fisheries

There is a potential for development of various types of fish, shrimps, lobsters, seaweed and other marine resources. Investors are free to choose suitable areas for:

- Deep sea fishing.
- Fish Farming
- Processing and Canning

Zanzibar is known as the Spice Islands. The investment opportunities in spices include:

- Cloves,
- Cinnamon, Cardamom, nutmeg, black pepper, chillies, etc.

Conclusion

India has launched special scholarships for African students in the field of agriculture to provide support to the Nyerere Programme of the AU. Under the program, '25 seats are offered to students for pursuing a doctoral degree with the Gol. The program, which provides each student with a stipend of INR 15,000 per month, offers 50 students the opportunity to pursue Masters' degree programs in India, with a stipend of INR 12,000 per month from the Government of India' (EXIM BANK.2011: 19).

India has had a long history of ties with Africa and played its role as Non-aligned leader in the liberation of African countries. The Delhi Declaration 2008 has provided an



alternative to African countries either to choose the existing partners (European and China) or work as partner with India. India-Africa needs to build their capacity to use them as functional leaders, enjoy more responsibility and produce scientific educated younger and future generations. This partnership will help to strengthen African countries development and their collaboration with the Indian partner works for Self-reliant development.

References

- Africa Oil.
http://www.iimcal.ac.in/research/download/OFDI_Partha-pal.pdf: accessed on 9 March 2011.
- African nations offering land for free to Indian farmers. The Economic Times.
<http://economictimes.indiatimes.com/news/economy/agriculture/African-nations-offering-land-for-free-to-Indian-farmers/articleshow/6293149.cms>, accessed 28 January 2011.
- Annual Report (2007-08). Ministry of Earth Sciences, Government of India.
- CII: www.cionline.org; accessed 20 June, 2008.
- CII India-Africa Project Partnership. 2005. Background paper. Delhi.
- Challenges to Agricultural Development in Africa. 2011. UN Economic Commission for Africa. www.uneca.org/era2009/chap4.pdf: accessed 28 January 2011.
- Development or Exploitation? Foreign Investment in Ethiopia's Agriculture. 14th March 2011. Ethiopian Embassy Publication. Delhi.
- Dr. Suresh Kumar. Aug-Oct. 2008. Nurturing the Tilling Fields of Africa. Africa Quarterly. Vol. 48. No.3.
- Dr. Suresh Kumar. February-April 2010. African Agriculture: An Abiding investment Avenue for India. Indo-Africa Business. EXIM Bank.
- EXIM BANK. 2011. India-Africa Partnership Potential. Ernst & Young. Delhi.
- Food Processing Plant Launched. All Africa. 26 August 2009. via Dow Jones Factiva. © 2009 All Africa.
- Indian business groups are investing heavily in Africa. Cote d'Ivoire – Diaspora website, www.ivoirediaspo.net/?s=Indian+business+groups+are+investing+heavily+in+Africa&x=5&y=11, accessed 27 January 2011.
- Indian farming companies buying in Africa. The Economic Times.
<http://economictimes.indiatimes.com/Corporate-Trends/Indian-farming-companies-buying-land-in-Africa/articleshow/4713183.cms>,
- accessed 28 January 2011.
- Improving Farm Productivity through Agro Machinery (2008). Escorts Limited, Faridabad.
- IPEME. 2011. 2nd Mozambique International Packaging and Packaging Equipment Trade Fair. Setembro.
- Institute Of Export Promotion Mozambique. 2011. Maputo.
- Kenya in the Front Line. 2010. Kenya Tourist Board.
- Kenya. 2011. A Hub for Investment. Ministry of State for Planning National Development and Vision 2030. Nairobi.
- Mauritius. 2011. Your Investment and Business Hub. Board of Investment.
- Mohan Breaking Boundaries. 2005. Joining Hands. MEIPL.
- Oil and Gas. 2005. IBEF. (CII).
- Resolution. 2006. Resolution of the Abuja Food Security Summit (FS/Res (1)). Summit on Food Security in Africa. December 4-7, 2006, Abuja, Nigeria.
[http://www.africanunion.org/root/au/conferences/past/2006December/REA/summit/doc/Abuja Res Final tracked.doc](http://www.africanunion.org/root/au/conferences/past/2006December/REA/summit/doc/Abuja%20Final%20tracked.doc)
- Raising Agricultural Productivity in Africa. 2011. Africa Progress Panel.
www.africanprogresspanel.org/files/3812/8352/7667/Raising%20agricultural%20productivity%20in%20Africa-FORWEB.pdf: accessed 28 January 2011.
- Programme on Food Processing, Storage, Marketing Out. All Africa. 16 March 2009. via Dow Jones Factiva, © 2009 All Africa.
- RJ Corp charts mega plans to venture into virgin Africa. The Economic Times.
<http://economictimes.indiatimes.com/news/news-by-industry/cons-products/food/rj-corp-charts-mega-plans-to-venture-into-virgin-africa/articleshow/5414639.cms>, accessed 28 January 2011.
- Sudan Tribune. 6 November 2007. Khartoum.
- The Hindu. 15 October 2005. Delhi.
- The Times of India. 7 July 2006. Delhi.
- Your Partner in Progress, Overseas Infrastructure Alliance, March 2008.
- Zimbabwe Investment Authority, Ministry of Power & Energy Development, Ministry of Finance - The Medium Term Plan 2010-2015 Document, Banks & Banking Survey 2009 - Zimbabwe Independent Newspaper, CZI July 2008 Manufacturing Sector Survey, Financial Gazette (7th January)

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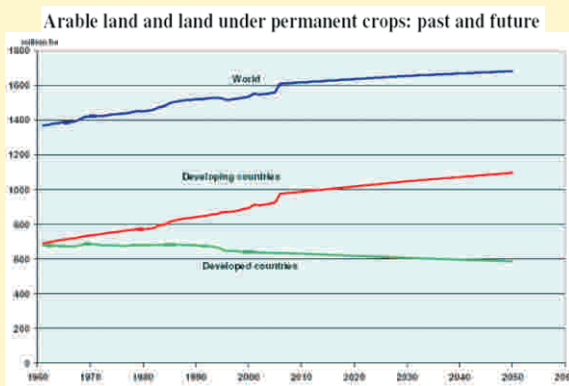
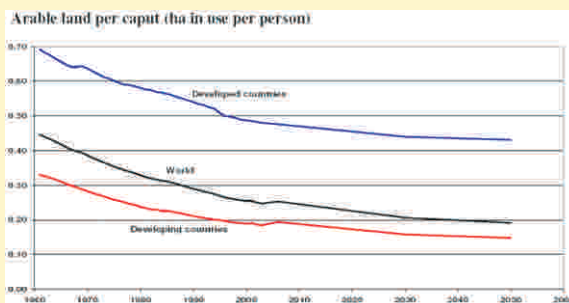
E-Mail: skafrica2003@yahoo.com
<http://www.africaindia.org>



Business Opportunities and Challenges of African Agriculture – Food sectors



The imbalances between demand, supply and various changes that occur in the international trade have given rise to the recent crises in the global food markets. According to the UN medium variant projections (UN, 2004), global population is set to increase from approximately 6 billion in 1995 to 8 billion in 2025, with over 98 per cent of this increase in developing countries. To meet the rising demands for food requirements, various overseas large scale agricultural investments are required. Densely populated developing countries, including countries in the Eastern Europe where little land is available for area expansion, therefore have yield gap. Countries in Asia, Western Europe and the Middle East with high population density and limited suitable land available for cultivation, whereas in African countries, large tracts of cultivable land are available for agricultural expansion.

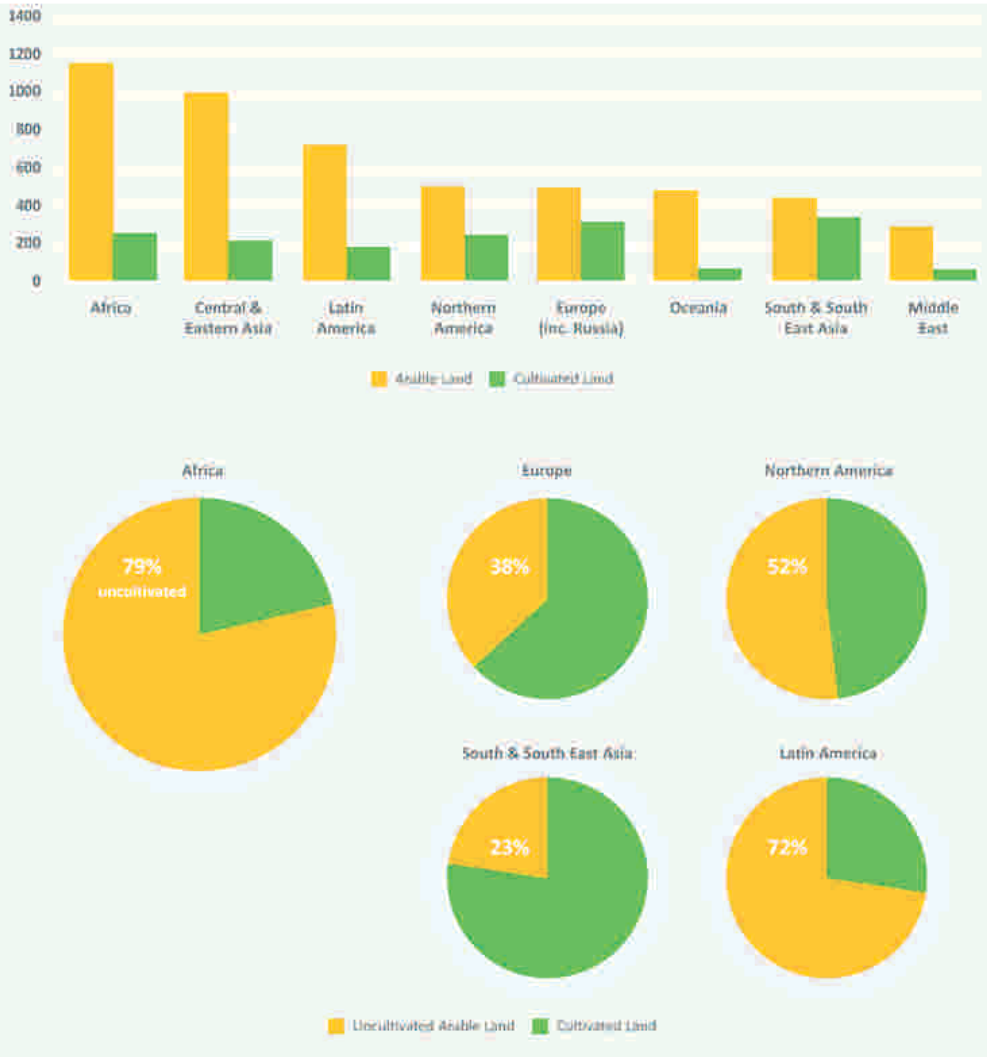


Source: FAO Expert Meeting on How to Feed the World in 2050

Africa has the largest share of arable land in the world (16%)...

...and the largest share of uncultivated arable land (79%).

Availability of Arable and Cultivated Land (millions of ha)



Source: FAO, *World Agricultural Outlook 2010-2030*

About 80 per cent of the projected growth in crop production in developing countries would come from increased crop yield (71 per cent) and increased cropping intensities (8 per cent). The share due to intensification goes up to 95 per cent in the land-scarce region of South Asia and to over 100 per cent in

Near East/North Africa where increases in yield would have to also compensate for the foreseen decline in the arable land area. Arable land expansion will remain an important factor in crop production growth in many countries especially in the sub-Saharan Africa.

Sources of growth in crop production (percent)

	Arable land expansion		Increases in cropping intensity		Yield increases	
	1961 - 2005	2005/07 - 2050	1961 - 2005	2005/07 - 2050	1961 - 2005	2005/07 - 2050
All developing countries	23	21	8	8	70	71
sub-Saharan Africa	31	25	31	6	38	69
Near East/North Africa	17	-7	22	17	62	90
Latin America and Caribbean	40	30	7	18	53	52
South Asia	6	5	12	8	82	87
East Asia	28	2	-6	12	77	86
World	14	9	9	14	77	77
developing countries with less than 40 percent of their potentially arable land in use in 2005*		30		15		55
developing countries with over 80 percent of their potentially arable land in use in 2005**		2		9		89

* 42 countries accounting for 15 percent of the population in developing countries.

** 19 countries accounting for 35 percent of the population in developing countries.

Source: FAO

Land with rainfed crop production potential (million hectare)

	Total land surface	Share of land suitable (%)	Total land suitable	Very suitable (VS)*	Suitable (S)	Moderately suitable (MS)	Marginally suitable (mS)	Not suitable (NS)
Developing countries	7302	38	2782	1109	1001	400	273	4520
Sub-Saharan Africa	2287	45	1031	421	352	156	103	1256
Near East/North Africa	1158	9	99	4	22	41	32	1059
Latin America	2035	52	1066	421	431	133	80	969
South Asia	421	52	220	116	77	17	10	202
East Asia	1401	26	366	146	119	53	48	1035
Industrial countries	3248	27	874	155	313	232	174	2374
Transition countries	2305	22	497	67	182	159	88	1808
World**	13400	31	4188	1348	1509	794	537	9211

* VS = yield attainable is 80 to 100 percent of the maximum constraint-free yield; S = 60-80%; MS = 40-60%; mS = 20-40%; NS = <20%.

** Including some countries not covered in this study.

Source: FAO

Therefore, Africa is a major destination of various investment flows, especially for large-scale agricultural production, the continent has the largest reserves of available arable land.



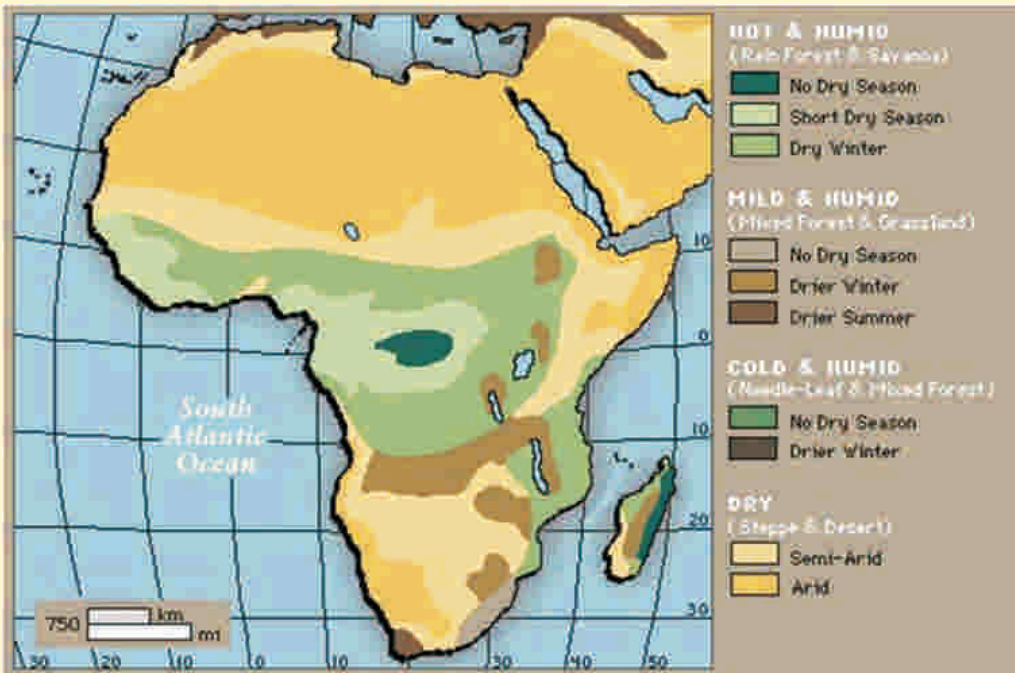
PHOTO GALLERY



PHOTO GALLERY



Detailed climatic zones of Africa



Africa is endowed with diverse agro-climatic zones. These diverse zones range from the heavy rain-forest vegetations with heavy bi-annual rainfall to relatively sparse, dry and semi arid and arid vegetations with low rainfall.

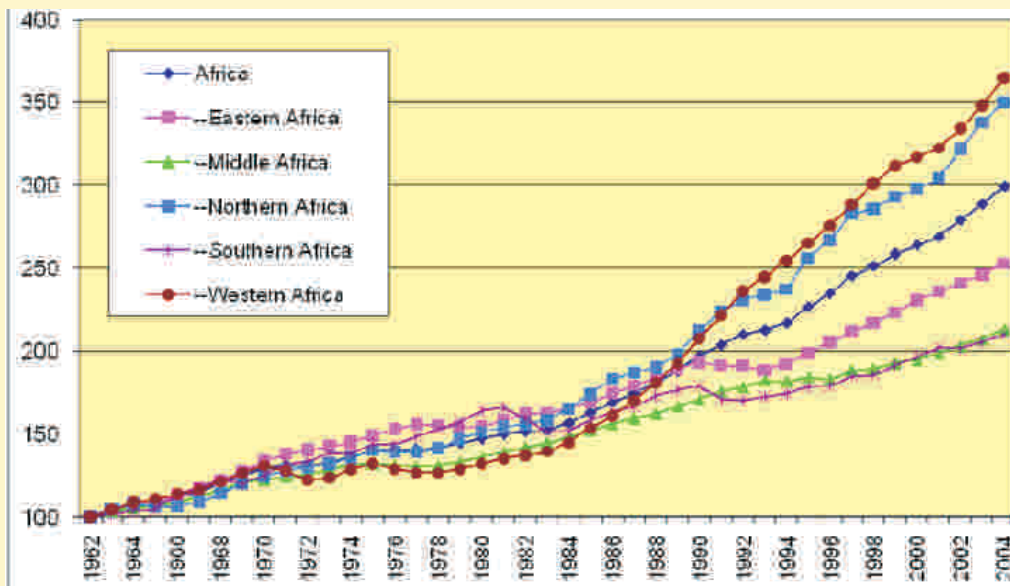
The primary source of livelihood for about 70 per cent of Africans is Agriculture. About 30–40 per cent of Africa's GDP is dependent on agriculture and accounts for almost 60 per cent of Africa's export income. The vast majority population of the Africa continent, living in the rural areas also lives in extreme poverty due to lack of sufficient food production. Over the last few decades, increase in the agricultural output in Africa have come largely through extending rain-fed cultivation, especially food crops on marginal soils.

Greater agricultural and rural development is required for reducing high levels of poverty and hunger in the continent. Small-scale farms account for more than 80 per cent of Africa's agricultural production and are

dominated by the poor, unskilled workers mainly females. Smallholder farming systems contain about 75 per cent of Africa's underweight children - in spite of recognized need the progress in improving the condition of Africa's smallholder farmers has been extremely slow over the last decades. Due to rapid population growth, rural households have been forced to adopt various agricultural practices that assured their survival. But increasing crop yields per hectare - have not been exercised as an important household food security strategy.

Growth of Agricultural production in Africa





Source: FAOSTAT, gross PIN, taking three-year moving averages and basing the index to 1961/63.



Commercial agriculture which occupies a relatively small share of crop production, the use of agricultural inputs like improved high yielding seeds, organic, inorganic fertilizers, insecticides and pesticides etc have been much lower in Africa compared to the other parts of the developing world. Use of agro-chemicals and/or integrated pest management techniques to deal with plant diseases and pests management is mainly confined to export crops only.

Food insecurity still remains a major problem and required to import large

amount of food grains. A number of well known constraints have hindered the acceleration of agriculture revolution which helped to still continue the state of hunger. The major among them are low land productivity, inadequate rural infrastructure, poor technology transfer, vulnerability to natural disasters, and high levels of insecurity.

Agriculture and related allied activities are crucial economic activities which provide employment and livelihoods for majority of Africans. In most African countries, agriculture supports the survival and well-being of majority of the population. Agricultural growth is more important for Africa than for any other continent.

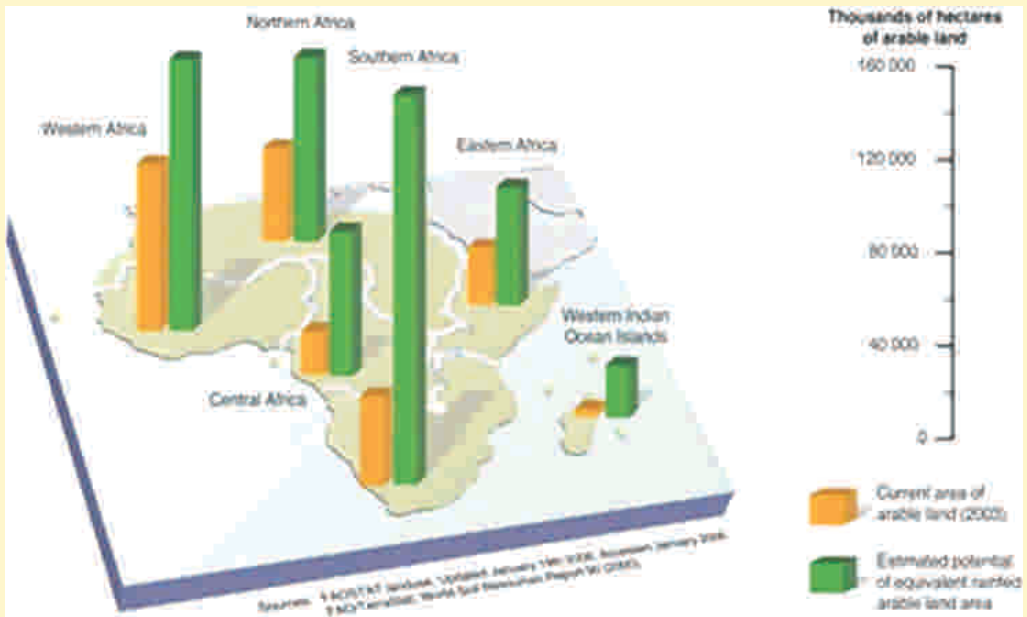
Agricultural performance has improved since last two decades, but growth is not yet fast enough to meet the challenges.



Sub-Saharan Africa: Projected growth in food security variables ¹					
Grain production	Grain yields	Population	Grain imports		Export earnings
<i>--Percent growth per year --</i>					
Cameroon	2.5	1.4	2.0	2.4	4.5
Central African Republic	2.0	1.0	1.9	5.6	5.6
Congo	3.8	2.0	2.1	1.2	4.5
DR Congo	3.0	1.8	2.5	4.1	6.2
Burundi	4.3	2.2	1.7	2.4	5.0
Eritrea	3.4	2.4	2.5	1.9	2.0
Ethiopia	2.7	2.0	1.9	4.6	6.5
Kenya	3.3	2.2	2.6	3.2	6.6
Rwanda	3.5	2.5	2.7	4.2	6.6
Somalia	3.5	2.3	2.9	0.7	0.0
Sudan	2.5	1.5	2.3	4.1	5.2
Tanzania	3.5	2.5	3.1	2.6	7.0
Uganda	4.3	2.8	3.1	6.5	7.0
Angola	3.2	1.8	2.6	4.8	6.2
Lesotho	2.5	1.2	0.9	1.7	4.9
Madagascar	2.7	1.6	2.8	4.1	5.1
Malawi	3.1	1.9	3.4	2.4	3.7
Mozambique	2.8	1.6	2.2	4.2	7.8
Namibia	2.0	1.3	1.5	3.1	4.3
Swaziland	0.5	0.5	1.1	2.2	2.4
Zambia	3.8	1.9	3.3	4.3	7.5
Zimbabwe	2.6	1.8	2.1	2.1	3.0
Benin	2.4	1.5	2.6	2.2	5.0
Burkina Faso	2.4	1.8	3.0	2.5	6.4
Cape Verde	0.8	0.3	0.9	2.6	4.8
Chad	2.0	1.2	2.5	7.1	3.4
Cote d'Ivoire	2.2	1.1	2.2	3.4	5.3
Gambia	2.8	1.4	2.6	3.8	5.5
Ghana	2.1	1.3	2.1	1.3	4.9
Guinea	2.7	1.5	2.5	2.3	6.5
Guinea-Bissau	2.1	1.0	2.1	3.4	4.7
Liberia	4.1	1.8	2.5	3.1	5.5
Mali	2.9	1.9	2.9	2.2	5.1
Mauritania	1.7	0.9	2.1	2.8	5.6
Niger	3.3	2.2	3.6	2.8	6.6
Nigeria	1.7	0.9	2.5	4.1	6.0
Senegal	3.1	2.0	2.5	2.5	5.4
Sierra Leone	2.6	1.7	2.0	2.1	4.1
Togo	1.9	1.4	1.9	4.4	4.4
SSA	2.7	1.6	2.4	3.2	5.1

¹Annual projected growth between 2012 and 2022.

Source: ERS/USDA calculations based on Food Security Assessment model results, IMF online data, April 2012, and UN Population projection data.



Source: FAO



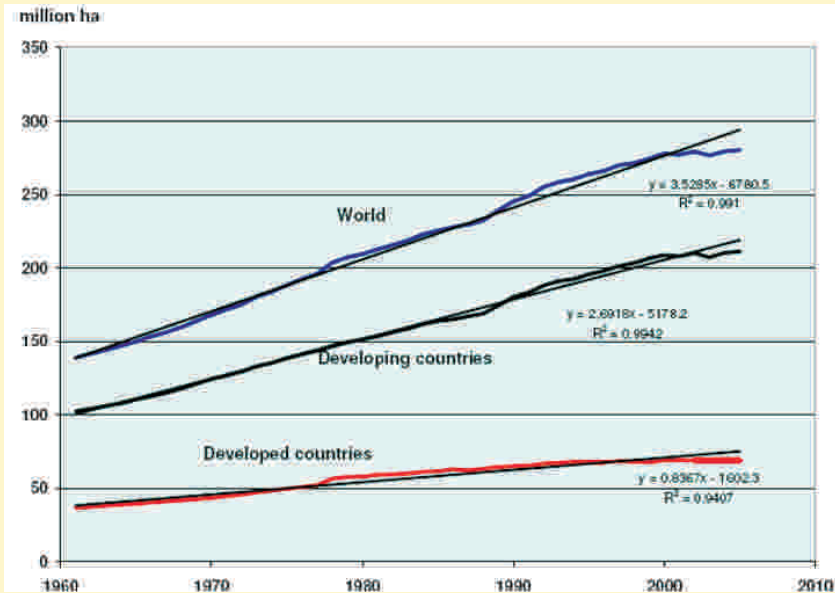
Though Africa has vast tract of arable land of about 874 million hectares, majority of the available land have serious soil fertility and/or various other limitations such as nutrient depletion, for a good agricultural production. Suitable soil management strategies should be adopted for soil texture improvement and amendments to achieve steady and sustained higher agricultural productivity. Adoption of sustainable integrated soil fertility, suitable land and water management practices should be judiciously adopted for long term food security, high productivity. The fertilizer use is very low in Africa which is an important yield-enhancing input.

Fertilizer consumption in sub-Saharan Africa is as low as 10 kg/ hectare.

Water is another essential factor for ensuring higher agricultural productivity. Suitable water management plays a key role in higher agricultural productivity. Two thirds of sub-Saharan Africa lies outside the equatorial humid zone where water is the key constraint for agricultural production. On an average, annual rainfall varies from 400mm in Sahelian zones to 1200mm in Guinea savanna restricted to 4-5 months in a year. Moisture constraints for agriculture are caused due to long dry season, variability of total rainfall etc. The percentage of irrigated land in sub-Saharan Africa is only 3.7 per cent.



Area equipped for irrigation

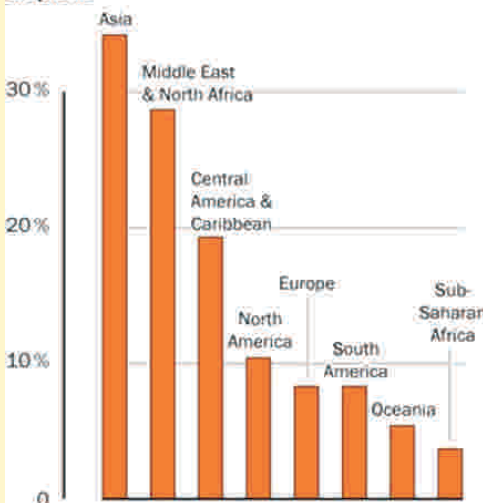


Share of irrigated land and production in total

shares (in percent)	All crops			Cereals	
	arable land	harvested land	production	harvested land	production
World					
share in 2005/07	15	23	42	29	42
share in 2050	16	24	43	30	43
Developing countries					
share in 2005/07	19	29	47	39	59
share in 2050	20	30	47	41	60

Source: FAO

Ratio of irrigated cropland

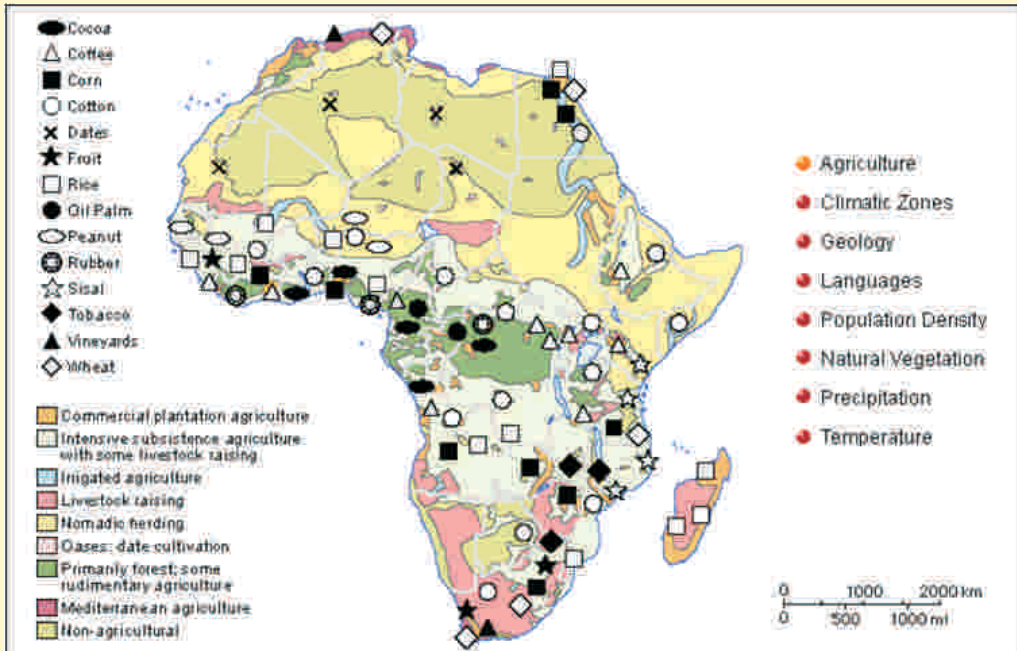


Source: GRID-Arendal, 21 Feb 2012

In Africa as a whole, there is a tremendous opportunity for foreign direct investments (FDI) in large scale high yielding crop production to meet the food insecurity challenges. There is potential market for small scale farmers, amongst whom hunger and poverty are concentrated.

There is strong need for technology transfer, and to update these small scale farmers with recent agricultural advancements to improve their output and in turn enabling countries to reduce their import dependence. Improvements in the performance of the agriculture sector will depend on the use of irrigation technologies, suitable soil amendments, suitable organic and inorganic fertilizers, high yielding seeds etc.

Detailed Agriculture and Climatic zones of Africa



In Africa, in spite of low productivity, the problem of high post-harvest losses is prevalent due to the lack of suitable storage capacity, various processing plants, weak linkages with markets.

Cumulated agriculture investment needs over 2005/07 to 2050 in sub-Saharan Africa, North Africa and the Near East (billion US\$ 2009)

	Sub-Saharan Africa	Near East/North Africa
Total investment in primary production	496	771
of which in crop production	319	619
- Land development, soil conservation and flood control	48	7
- Expansion and improvement of irrigation	45	267
- Permanent crops establishment	45	17
- Mechanization	59	300
- Other power sources and equipment	115	14
- Working capital	6	15
of which in livestock production	178	152
- Herd increases	67	37
- Meat and milk production	110	115
total investment in downstream support services	444	422
- Cold and dry storage	78	66
- Rural and wholesale market facilities	159	136
- First stage processing	207	220
Total	940	1193

Source: Schmidhuber et al. 2009

In general, the land under agricultural expansion was concentrated in Sub-Saharan Africa, East Asia, Latin America, and Southeast Asia but two-thirds of land demand for agricultural expansion is concentrated in Africa. The sub-Saharan agricultural sector — 80 per cent of which consists of smallholder farmers had declined for decades— increased more than 3.5 per cent in 2008, above the 2 per cent rate of population growth. High cultivable land demand in 2009

alone was more than 20 years of previous land expansion for agricultural production (Deininger 2011).

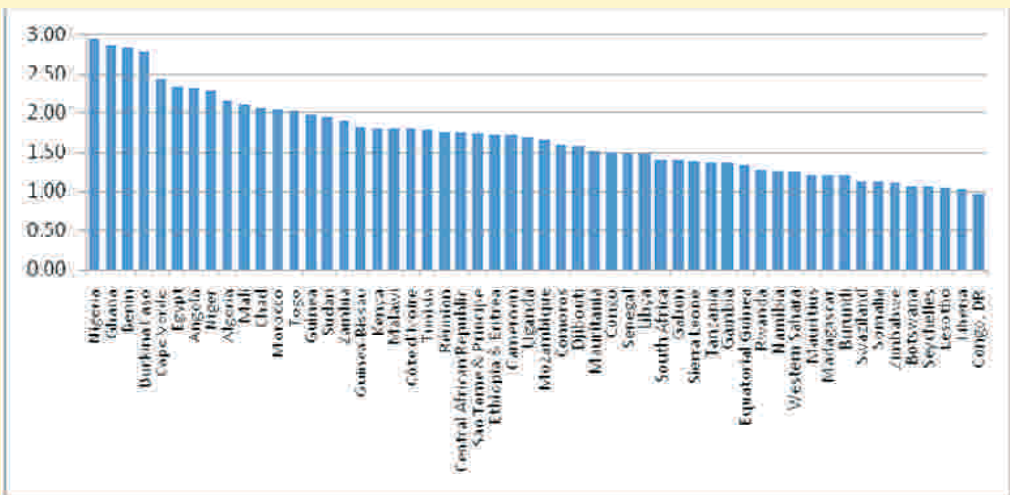
The favourable policy environment for agriculture in many countries and higher world prices for food commodities such as wheat and rice gains were the growth drivers. Various technological advances like the New Rice for Africa drought-resistant rice variety (NERICA) also have helped to boost the agricultural production in the region.

Changes in arable area used for farming

Region	Cultivated land area (millions of ha)			Annual change	
	1961	1989–91	2007	1961–2007	1990–2007
East Asia	176	223	256	1.7	1.9
Latin America & the Caribbean	104	148	164	1.3	1.0
Middle East and North Africa	86	97	97	0.2	0.0
South Asia	191	204	205	0.3	0.0
Southeast Asia	71	92	103	0.7	0.7
Sub-Saharan Africa	148	179	221	1.5	2.4
Developing countries	704	850	940	5.0	5.3
Industrialized countries	385	395	360	-0.5	-2.1
Transition countries	286	275	254	-0.7	-1.3
World	1,376	1,521	1,554	3.8	1.9

Source: Deininger et al. 2011a.

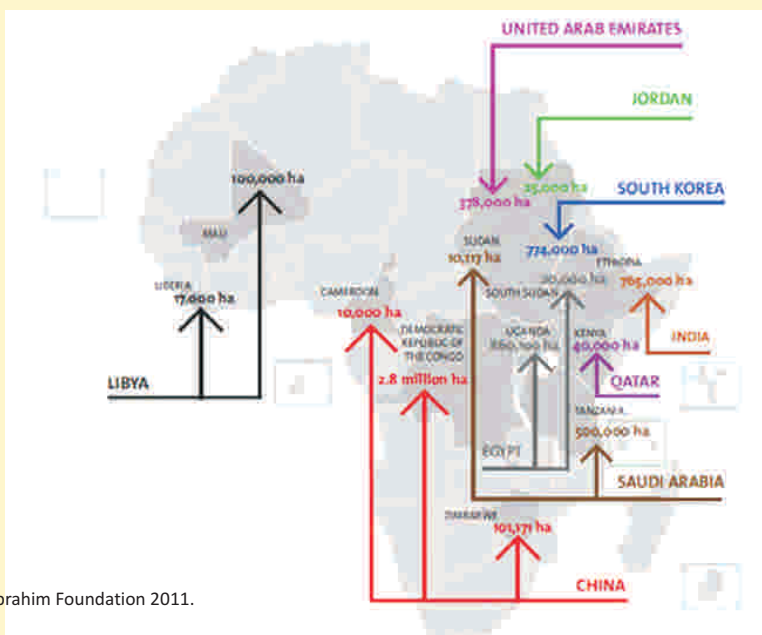
Growth of agricultural output in Africa, 1983/85 to 2003/05



Source: FAOSTAT data, Gross agricultural PIN, three-year moving averages. Ethiopia and Eritrea combined to allow record to extend before 1991.

Foreign Direct Investment (FDI) inflows from developing countries in various sectors of Sub-Saharan Africa hit a record high of USD 45.5 billion in 2012 (Reuters Africa, July 2012).

International acquisitions of agricultural land in Africa



Source: Mo Ibrahim Foundation 2011.

Foreign direct investments (FDI) in African agriculture are increasing rapidly, posing a number of challenges as well as opportunities. Large-scale farmland investments in Africa can promote sustainable agricultural development by financing like investments in road and irrigation infrastructure, warehousing, cold storage, inputs, advanced technology and efficient management for

sustainable agricultural intensification. According to a World Bank report (2011), farming activities have only started on 21 per cent of the announced farmland investment deals and that local rights were often not respected. Opportunities of large-scale agricultural foreign investments supports access to capital and technology for increased production, infrastructure development in rural areas, increased employment opportunities, improvement of food security and thereby stabilizes the global food inflation.

Referred Websites:

1. <http://www.ers.usda.gov>
2. <http://www.fao.org>
3. <http://www.ifpri.org>
4. <ftp://ftp.fao.org>
5. <http://www.grida.no/>
6. <http://af.reuters.com>



By **Dr Debashree Chakraborty**
Advisor - IACCI



Agro Projects in Africa

BURUNDI

Sector : AGRICULTURE

1 Setting up tomato production plants. (Expected Result-Production of more than 12000 tons of concentrated tomatoes per year - expected).

- No existant plant for tomato transformation
- Two varieties of tomatoes are produced in large quantities in the lambo Plain
- The present demand for the proposed product is estimated to be around 100 thousand tons per year.
- The Population Growth rate is 3% and the GDP Growth rate is 4% per year.
- Many incentives offered by the Investment Code
- Final feasibility study
- Purchasing/Leasing of a land of 2,5 ha (Cibitoke urban area seems to be the best place for the plant)

2. Setting up a cassava flour transformation plant in the KUMOSO plain. (Expected result Production of more than 15000 tons of cassava flour and 500 tons of amidon per year)

- No existent plant in the Cassava transformation sector
- Burundi Cassava production is evaluated to be 600000 tons per year.
- The present demand for the Cassava flour is estimated to be 100 thousand tones per year.
- The Population Growth rate is 3% and the GDP Growth rate is 4% per year.
- Many incentives offered by the Investment Code
- Final feasibility study
- Purchasing/Leasing of a land of 2,5 ha (KAYOGORO Center in Makamba Province holds best soil for the plant)
- Purchasing of a land of 500 ha, for a minimum of auto supply in the area.

3. Investment in modern pineapple transformation plants (Expected result - Transformation of the pineapple national overproduction)

- National production of pineapple fruits estimated at 7500 tons per year
- Three semi-industrial plants with moderate quality products
- The Population Growth rate is 3% and and the GDP Growth rate is 4% per year.
- Many incentives offered by the Investment Code
- Possibility of joint-venture with local plants
- Feasibility study
- Improvement of the product quality
- Negotiation with local suppliers
- Purchasing/Leasing of a land for auto supply.

4. Investment in modern passion fruits transformation plants (Expected result - Transformation of the passion fruits national overproduction)

- National production of passion fruits estimated at 250 tons per year
80% of the national passion fruits production is exported.
- Three semi-industrial plants with moderate quality products
- The Population Growth rate is 3% and the GDP Growth rate is 4% per year.
- Many incentives offered by the Investment Code
- Possibility of joint-venture with local plants
- Feasibility study
- Improvement of the product quality
- Negotiation with local suppliers
- Purchasing/Leasing of a land for auto supply.

Contact Details :

Alexis Girukwishaka - Investment Promotion Manager

Burundi Investment Authority, B. P. 7057, Bujumbura, Burundi.

Tel.: +25722275995 / 96/97, Email: giru90@hotmail.com, agirukwishaka@burundi-investment.com

Web: www.burundi-investment.com

CAMEROON

Sector : INFRASTRUCTURE, AGRICULTURE.

1. Project to build 300 systems of water supply in small rural towns.
2. Proposed construction of 200 hillside dams, multi-purpose on the national territory.
3. Rehabilitation project of 5000 water points on the national territory.

Contact Details :

Mr. AWE Pierre - Technical Background

Ministry Of Water Resources and Energy , P.O Box 70 Yaounde, Cameroon

Tel.: 75570571/94314972, Email : pierreawe@yahoo.fr

Sector : AGRICULTURE FINANCE.

2. **Our Association checks partnership in rural projects and how to mobilize financial and technical assistance in India.**
We need to promote and integrate project in agriculture and industrialization.

Contact Details :

Mr. THOM épouse OYONO - Chairman

AFEVID (Rural Women Association), Cameroon

Tel.: +237-99656532, Email : afe_bid@yahoo.fr

Sector : AGRICULTURE. Total Value (US \$ Million) : 5.64

3. **The project names, programme de neteo-climatologie agricole (PROMECLAG) have a goal to collect data in meteorology and climatology according to agricultural needs. Then it aims to put place ten (to) collect data units through the country, according to the different agro-ecological zone. It will be implemented by the ministry of agriculture through its studies direction.**

Contact Details :

Mr. TOUNANGONO Louis Marie - Cadre DEPC/MINADER

Ministeri de l'agriculture et du developement rural (MINADER), Cameroon

Tel.: 22-22-16-13, Email : tounson2005@yahoo.fr

CENTRAL AFRICAN REPUBLIC

Sector : AGRICULTURE, POWER & ENERGY. Total Value(US \$ Million) : 40

1. **-Development of culture of 10000 Ha of moreinga olifera**
-Development of culture of Jathropha 10000 Ha for production of bio fuel.

Contact Details :

Ms. Bengaye Nina Riccy - Director

IDP (Investment Program), BP 1034. BANGUI, Central African Republic

Email: nina.benganga@gmail.com

CONGO (REPUBLIC OF)

Sector : INFRASTRUCTURE, AGRICULTURE. Total Value(US \$ Million) : 35

1. **Project 1 : Waste water recycling plant and sewage mud system in Brazzaville.**

Objective: Building of two water processing stations; one in the northern part and the other in the southern part of the Brazzaville.

System: Repnoless household waste water and sewage mud with 16 lorries, build public toilets (100units) and acquire 12 garbage lorries. (US \$ 25 Million)

Project2: Building register office management capacities of the municipality of Brazzaville.

-The municipality of Brazzaville decided to computerize its register office.

-Currently only the city hall and the morgue are equipped with computers and software to process with registering.

The project seeks to interconnect existing computerized sites with the 9 other districts. It consists a mentiorating or installing a more performing software. (US \$ 10 Million)

Contact Details :

Mr. Ngouelondele Hugues- Mayor of the Municipality

The Municipality of Brazzaville, BP 73, Hotel de ville, Place Fulbert Youlou- Brazzaville, Republic of Congo

Tel.: +242-055517171, Email : huguesgolden@yahoo.fr

Sector : AGRICULTURE. Total Value(US \$ Million) : .03

2. Looking for a partner for the import of food products

Contact Details :

Mr. Pulcherie Sophie MALONGA -Manager

MALO Sarlu , Immeuble Nkounkou, Avenue de Loango, Pointe_ Noire, Brazzaville, Republic of Congo

Tel.: +242-066592426, Email : msophiepulcherie@yahoo..fr

Sector : TRANSPORT & AGRICULTURE. Total Value(US \$ 0.05)

3. - Looking for a partner within the framework of transport and logistic (tractor-trailer and public works machine)

-Looking for a partner for the import of food products (vegetable oil, beechnut and new products)

Contact Details :

Mr. Blanchard KOUDIMBA-KOUMBA- Manager

Societe Gide Distribution, B.P. 90, Bd de Loango Pointe- Noire, Brazzaville, Republic of Congo

Tel.: +242-05-5089096, Email : gideblanchard@gmail.com

Sector : AGRICULTURE. Total Value(US \$ Million) : 0.07

4. Search to diversify her activities by specializing in the food-processing industry (every kind of spices etc)

Contact Details :

Mr. Mariam VENDEMI - Manager

Horizon, logeelement Soprogi N 107, OCH Pointe- Noire, Brazaville, Republic of Congo

Tel.: +242-066223397

Sector : AGRICULTURE. Total Value(US \$ Million) : 0.07

5. Diversification of the activities by specializing in import of farm produces. Search for suppliers

Contact Details :

Mr. Alphonse NGOLO - Managing Director

CHANDREL, Route de la Base Pointe - Noire, Brazzaville, Republic of Congo

Tel.: +242-055603820, Email : etschandrel@yahoo.fr

Sector : AGRICULTURE. Total Value(US \$ Million) : 0.006

6. Finished Products (Rice food paste, wine, juice, frandises.etc, freezer & others.)

Contact Details :

Mr. MATSOUMA Maurice -Commerce en agroalimentaire &electromenager

Grossiste, Bureau and magasin sise route de la frontiere, Quartier Tchimbambouka Pointe - Noire,

Republic of Congo
Tel.: +2425910828, Email: mp_stocks@yahoo.fr

DEMOCRATIC REPUBLIC OF CONGO

Sector : AGRICULTURE . Total Value(US \$ Million) : 182

1. **SOFT DRINKS : We are currentling bottling in glass bottle. We need a PET and CAN bottling lines. We need also bottles crown, can thin supplier.**

TEA : Processing machineries for bulk and retailed packaging- double chamber; round tea bag. Processing for green. orthodox and CTC teas. Supplier of jute and paper bags.

COFFEE : Roasting machineries. Bulk and Retailed packaging. Need Decaifeine machinery.

POWER : Up grading a 325kva dam to 01 MW with its related transmission lines. Building civil engineering of a micro dam 06MW and its transmission lines. The blue Prints are available.

Contact Details :

Mr. Rajesh Mahna- CEO -Indian and Asian countries

Ms. Kitambala Kahyndo Solange- Managing Director

Project P.A.I.E, P.O Box 209 North kiva Rd, DR Congo

el.: sokkyt@yahoo.com; rajesh_mahhna@hotmail.com

DJIBOUTI

Sector : AGRICULTURE, POWER & ENERGY. Total Value(US \$ Million) : 45

1. **Project consists of in building with paved road No. 6 connecting the town of DIKHIL to take ABBE over a 75 km length. Project opportunities exist in :**

- **Technical, economical and environment surveys.**
- **Road construction with drainage infrastructures**
- **Monitoring and control work performing**
- **Project interest in exploitation of lake ABBE geothermal power.**

Contact Details :

Mr. Mohamed Ali Hassan - Director

Direction de l'equipement, BP 485 Djibouti, Republique of Djibouti

Tel.: +253353150, F: +253355782, Email : corridor@intnet.dj

GAMBIA

Sector : INFRASTRUCTURE, AGRICULTURE.

1. **PROJECT 1 :** GIEPA has 164 hectares of land adjacent to the Yundam International Airport, named the J22 Business park. About 8.8 hectares of this land is already developed. GIEPA investments in the Park infrastructure includes an energy centre, maintenance facility, boreholes etc.

The agency is looking for potential investors to develop the 156 hectares at the park on a BOT or BOO basis. The park is 250 minutes drive from the city center and is ideal for an export processing zone, and is also suited for other business activities as well such as a multipurpose business park.

PROJECT 2 : Kombo farms has initiated a project that aims to develop a sustainable Ultra Heat-Treatment (UHT) milk processing plant in the Gambia. Presently all UTH milk products in the Gambia, approximately 4.5 million liters, are imported.

The company plans to invest in the production of 1.5 million liters in the first year, to be doubled by the fourth year. The company will also introduce local fruit flavored UTH milk, a cow feeding and breeding farm and broaden its network of milk collection centers for local cow farmers in the rural areas in the Gambia.

The project is to be implemented in three (3) phases. The cow feed growing and processing facilities, the cow housing and milking facilities and the UTH milk production plant. The total cost of the project is estimated at Euro 1.375 million and the projected Internal Rate of Return (IRR) is 27.3 percent.

Kombo Farms is seeking total or part financing of the project from potential partners. The company is flexible in the terms of the type and nature of financing, equity contribution or debt financing.

PROJECT 3 : The project is for the update of the network of wireless Internet and Data Service provision in The Gambia and the acquisition of shares in the consortium for the ACE Cable project in The Gambia.

The project will be implemented in two phases. The deployment of 20 4G WIMAX base stations on the 2.5GHZ licenced frequency and an ACE fibre optic cable of up to 1 Gigabyte of bandwidth, and the acquisition of between US \$ 2.5 million to US 2.5 million worth of shares allocated to unique solution .

A 2.5GHZ licence with 40MHZ Channel of Spectrum has already been secured. The Company is looking for US \$ 5 million to take up the shares and also upgrade its infrastructure. Investors are invited as long term financiers or equity participation.

PROJECT 4 : The KERR ABU project, located in Tanji, has an area of 16.03 hectares of land to be demarcated in 250 residential plots of various sizes. The project site is located close to the TDA and therefore a potential to attract tourists suitors. It is to be implemented in two phases, the demarcation of the site and service plots and construction of residential houses.

The demarcation and services provision phase will provide roads and storm water drainage system, portable water supply, electricity supply distribution network and internal road network. This is projected to cost approximately D21 million.

The construction of residential houses phases will provide 2, 3 and 4 bedroom models at a cost of D1.8 million per model respectively.

Of the total projected cost of D63.3 million , D27.5 million will be funded internally by Abden Company Ltd. The external funding requirement for the project is therefore D36.8 million.

Investors are invited as either joint ventures, creditors, Builder-contractors or finished product off-takers.

PROJECT 5 : The project is to construct a juice processing plant with three product lines. These products will be sold in the domestic market in various sizes. The total start up capital is estimated at D19.9 million.

The promoters of the company are looking for the investors who have experience in the food processing business.

Contact Details :

Ms. Fatou Mbenga Jallow- CEO

Gambia Investment and Export Promotion Agency (GIEPE), GIEPA House, 48 Kairaba Avenue, Serrekunda, P.O. Box 757, Banjui, The Gambia.

Tel.: +220-4377377, F : +2204377379, Email : fmjallow@giepa.gm, Web : www.giepa.gm

Ms. Fatou Sinyan Mergan- Chairperson of Board of Directors

Gambia Investment and Export Promotion Agency (GIEPE), GIEPA House, 48 Kairaba Avenue, Serrekunda, P.O Box 757, Banjui, The Gambia.

Tel.: +220-3332220, F : +220-4377379, Email : fsinyanmergan@qanet.gm ; fsinyanmergan@giepe.gm , Web : www.giepe.gm

Mr. Musa Bah - Director: Investment Promotion and Facilitation

Gambia Investment and Export Promotion Agency (GIEPE), GIEPA House, 48 Kairaba Avenue, Serrekunda, P.O Box 757, Banjui, The Gambia.

Tel.: +220-4377377, F : +220-4377379, Email : msbah@giepe.gm, Web : www.giepe.gm

LIBERIA

Sector : AGRICULTURE.

- 1. Liberia is highly vulnerable to high food price shocks as happened in 2008 and 2011. The country remains heavily reliant on food imports to meet domestic requirements. In order to leverage the current attention to agricultural productivity, it is important to accelerate the**

development of agriculture and agro- industries sectors that ensure value addition to agricultural products such as sugarcane and palm. To combat the high level of food insecurity and unemployment, it is the desire of government to encourage investments that will significantly increase the proportion of agriculture produce that is transformed into high-value products. We therefore wish to submit for your kind consideration sugarcane and kenel oil production, which are common cultivation in the country . According to FAO report, sugarcane production in 265000 tons, with an area of 26000 hectares. The equipment available for production is poor and does not meet all of the demand. The importation of sugar reaches two- third of the total consumption of sugar in Liberia. Moreover, sugarcane is under consumed as far as the various usages. As a result of the Liberian civil war, the only Liberian sugar company (LIBSUCO) was closed.

Contact Details :

Ms. Miata Beysolow - Minister

Ministry of Commerce & Industry, P O Box 9041, Ashmun & Gurley Streets Monrovi, Liberia

Email : mbeysolow@yahoo.com, Web : www.moci.gov.lr

Sector : AGRICULTURE. Total Value (US \$ Million) : 0.5

2. In Liberia, the countries of Rivercess and Grand Bassa are blessed with numerous resources, one of which is palm, which grows naturally. Nearly all of the districts in these countries have abundance of natural palm. 75 % of the citizens live on palm products as a means of livelihood apart from farming. One of the components of palm products which is very important but is overlooked and wasted is the kernel. The palm kernel when processed produces oil that is very useful for the following :

Bath and washing soap production

Body Lotion

Consumption

Also, after the oil is extracted, the chaff is used for processing chicken feed as well as feed for fishery development.

The Kernel shell is good energy sources for drying fish to replace charcoal, which studies now show to be unsafe for consumption.

MALAWI

Sector : AGRICULTURE.

1. We would like to expand our operations to manufacturer of maize starch and other by-products for the Malawi and international markets. We have been offered 50% grant funding (maximum Euro 1.5 million) of the total project cost. One of the conditions of these grant is that we need to get a strategic partner who is already in Maize Starch manufacturing who is already in manufacturing who are willing to part invest in this project.

We know that there are a number of companies that they are a number of companies that are in Maize Starch production in India. I was wondering whether you can facilitate the identification of some of these and conducting preliminary meetings with them to see if they are interested. I can then come to meet those who are very keen. We have also engaged consultants in Netherlands to develop business plans for this project.

Contact Details :

Mr. Anthony John mukumbwa (BSC (Eco), CIA, CFE, CFSA)- General Manager

Eco Products Limited, Luwanga Industrial Area, PO Box 1426, Mzuzu, Malawi

Tel.: +2651320213/4, F: +24651320215, Email : ecomalai@gmail.com

Sector : AGRICULTURE. Total Value (US \$ Million) : 8

2. Malawi recently acquired dhual processing equipment for the ovop programme to process pigeon peas for export. Currently, there are potential processors within the country. However, will need to partner with someone with expertise in the pigeon peas value chain right up to the market. The Partner will also need to inject some resources to set up processing infrastructure as well as purchase of raw material.

Contact Details :

Mr. kamia Kaluma- National Coordinator

One Village One Product Programme, Tama House, P.O Box 31762, Lilongwe 3, Malawi

Tel.: +265-1770617/ 1772506, F : +2651770601/ 1770698, Email : kkalumasulumba@yahoo.co.uk , Web :

www.ovop.org.mw

MOZAMBIQUE

Sector : INFRASTRUCTURE, AGRICULTURE. Total Value (US \$ Million) : 20

1. Civil construction, agro-processing, studies and projects.

Contact Details :

Mr. Joao Carlos Raul Monteiro -Director General

MB Construcoes, S.A., Ruo Coronel Bente Manave, Numero 409 sommerchield- Maputo, Mozambique

Tel.: +258-21496427, F: +258-214966423, Email: jcrmonte@gmail.com ; mbconstrucoes.sa@gmail.com

Sector : AGRICULTURE. Total Value (US \$ Million) : 0.04

2. Project Name : Activated Carbon from Coconut shell

Production of activated carbon from coconut shell. Feasibility study done in 2002, need to be updated.

Contact Details :

Mr. Vicente Chihale (PhD. D.) - Counselor Commerce

Mozambique High Commission, F8 / 22, Vasant Vihar, New Delhi- 110057

Tel.: +91-11-43399777 / F: +91-11-26156665, Email: vipachihale@yahoo.com

Sector : AGRICULTURE. Total Value (US \$ Million) : 0.15

3. Project Name : Horticulture Peri-urban Facilities Infrastructures - Processing and packaging Houses.

Develop a pilot project in one peri urban area of Maputo that should enclose a facilities for delivery of produce (load and unload docks), a packing house, and a cold room. The main idea is to establish this type of infrastructure and find a private partner interested in its operation. Seeking a Partner Public or Private Partnership for horticulture facilities establishment and management.

Contact Details :

Mr. Vicente Chihale (PhD. D.) - Counselor Commerce

Mozambique High Commission, F8 / 22, Vasant Vihar, New Delhi- 110057

Tel.: +91-11-43399777 / F: +91-11-26156665, Email: vipachihale@yahoo.com

Sector : AGRICULTURE. Total Value (US \$ Million) : 0.10

4. Project Name : New Mannica Seed Processing Industry Plant.

Its an old company owned by SEMOC, SA, with 100% Mozambian State share in Manica (Chimoio) with obsolete equipment. Main crops : Maize, Rice, Wheat, beans, pulses.

Contact Details :

Mr. Robert Albino- National Director

Center For Promotion Of Agriculture, Email : roberto.albino@cepagri.gov.mz or

albino.roberto@gmail.com,

Web : www.cepagri.gov.mz

Sector : AGRICULTURE. Total Value (US \$ Million) : 6

5. Project Name : Zambezia Seed Processing Industry Plant.

Its an old company owned by SEMOC, SA, with 100% Mozambian State share in Zambezia (Nicoadala) with obsolete equipment. Main crops : Maize, Rice, Wheat, beans, pulses.

Contact Details :

Mr. Robert Albino- National Director

Center For Promotion Of Agriculture, Email : roberto.albino@cepagri.gov.mz or albino.roberto@gmail.com,

Web : www.cepagri.gov.mz

Sector : AGRICULTURE. Total Value (US \$ Million) : 6

6. Project Name : Nampula Seed Processing Industry Plant.

Its an old company owned by SEMOC, SA, with 100% Mozambican State share in Nampula (Namialo) with obsolete equipment. Main crops : Maize, Rice, Wheat, beans, pulses. Partnership for Investment in new seed processing plants.

Sector : AGRICULTURE. Total Value (US \$ Million) : 40

7. Rehabilitation for the Munda-Munda irrigation system to irrigate 3000 ha to produce rice and vegetables and installation of processing units. Seeking Partner for Technology, management or others.

Sector : AGRICULTURE. Total Value (US \$ Million) : 46.5

8. Development of hydro- agricultural infrastructures to produce rice and vegetables in area of 4500 ha. Seeking a partner for technology, management or others.

Sector : AGRICULTURE. Total Value (US \$ Million) : 46

9. Niassa agrarian development to produce maize, wheat and potato. Seeking a partner for technology, management or others.

Contact Details :

Ministry of Agriculture

Mr. Victorino Xavier, Email : victorinoxavier@yahoo.com

Mrs. Hercilia Estrela, Email : hercilia.estrela@cepagri.gov.mz

Sector : AGRICULTURE.

10. Project Name : INCAJU - Cashew Promotion Institute(Mozambique).

Cashew Production (cashew plantation)

Investment opportunity for cashew production in c.a. 145000 hectare of suitable land identified in different Mozambican provinces, namely :

1. North
 - a. Cabo Delgado : 50,400, hectare;
 - b. Nampula : 25000 hectare;
 - c. Zambezia : 25000 hectare.
2. South
 - a. Inhambane : 75000 hectare;
 - b. Gaza : 69500 hectare;

Sector : AGRICULTURE.

11. Project Name : INCAJU - Cashew Promotion Institute(Mozambique).

Cashew Processing & export

Investment opportunity for cashew processing up to potentially 46000 metric ton/year, identified in different Mozambican provinces, namely :

1. North
 - a. Cabo Delgado : 6500MT/year;
 - b. Nampula : 20000 MT/year;
 - c. Zambezia : 8500 MT/year;

2. Central
 - a. Manica & Safola : 8000MT/year
3. South
 - a. Inhambane : 6500-8500 MT/year.
 - b. Gaza : 4500-8500MT/year.

Contact Details :

INCAJU - Cashew Promotion Institute, Mozambique

Rua da residencia n 1746 c.p 2272, 4th floor - Maputo, Mozambique

Tel.: +258416898, +258417723, F: +25821418552,

Email : maiopue@incaju.co.mz, matule@incaju.co.mz, rafeala@incaju.co.mz, angela@incaju.gov.mz, Web : www.incaju.gov.mz

NAMIBIA

Sector : TRANSPORT, MANUFACTURING, AGRICULTURE, TRADE. Total Value (US \$ Million): 100.1

1. Project 1: Aviation

- Meat processor/ Abattoris
- Mining, copper, rare metals, diamond
- Manufacturing, dairy products

(US \$ 100 Million)

Project 2: Lyelafala General Trading cc short term vision is to have its own shop that caters to the needs of the most individuals in a sense that they will have all their shopping needs met under one roof. The plot in question will be acquired from the municipality city of Windhoek. Once granted, it will be able to provide employment to the unemployed youth of Namibia. In the long run Lyelafala General Trading cc seeks to establish itself throughout Namibia and abroad. **(US \$ 100000).**

Contact Details :

Mr. Christoph Siririka - CEO

IPBF Investment Holding Pty., P.O Box 22402, Windhoek, Namibia

Tel.: +264-61-400862, F: +264-61-400694, Email : chrisch@ipbf.com.na , Web : www.ipbf.com.na

NIGER

Sector : AGRICULTURE. Total Value (US \$ Million) : 0.0085

1. **The objective of the project is to constitute a permanent fund for buying paddy from the farmers during the 2 seasons that help them to produce more rice.**

The company have a total capacity of processing 35000 tonnes of paddy a year for a national production estimated at 100000 tonnes basing on his new mills, the company proposes to buy and process 20000 tonnes of paddy a year that will cost US \$ 8000 and needs a complementary technology partnership for US \$ 500.

Contact Details :

Mr. Omar Mamai Alimi - Administrateur Delegue

Le Riz du Niger SAEM (Ministere du Commerce te de la Promotion du Secteur Prive),

Siege Social- kirkissoye, B. P 476 Niamey, Republic du Niger

Tel.: +227-203153 04, F : + 227- 20315304, Email : maoalimi@yahoo.fr

RWANDA

Sector : AGRICULTURE. Total Value (US \$ Million) : 120

1. **Project Name : Land Husbandry Water Harvesting Hillside Irrigation (LWH)**

-More than 68%of Rwanda is in Hillside with a slope > 16%

- Mission is to support model land-husbandry, innovative water harvesting in valley dams and gravity irrigation in hillsides.
- This project will demonstrate improved land husbandry and productivity on 35800 ha lands in 34 pilot watersheds and irrigated agriculture on 1000ha distributed in 34 locations
- The hillside irrigation program is focused on highly economical horticultural crops such as mangoes, avocado, cooking banana, plum, peaches and pineapple but also on coffee and tea
- Detailed survey and design works are completed for 8 of the project sites and 16 more are under detailed design.

Sector : AGRICULTURE. Total Value (US \$ Million) : 48

2. Project Name : Fresh Wholesale Food Market

- An initial feasibility study for the development of a fresh food market has taken place
- The necessary land has been secured in the Kigali Special Zone; a comprehensive feasibility study together with architectural design are expected to be completed by the end 2011
- It is estimated that Rwanda consumes annually about 3 million MT of FFV's (Fresh Fruits and Vegetable)
- Consumption figures per annum of Kigali City are estimated as follows:
 - Current: 363144 MT of FFV's and 36621 MT of livestock related products
 - Projected by 2020 : 581000 MT of FFV's (60% Increase) and 60000 MT of livestock related (39% increase)
- The main sources of revenue and their expected contribution in total contribution include :
 - Produce entry market fees (38%)
 - Rental fees from trading stalls (21%)
 - Supermarket, cold-room, loading user charges (19%)
 - Banking and administration halls and other (22%)
 - Business transactions are planned to be based on a card system while the revenue model will be based on a rental mode

Sector : AGRICULTURE. Total Value (US \$ Million) : 21

3. Project Name : Flower Park

- A 200 ha land has been identified in the eastern Province for the development of the flower park
- The Zone is close to lake, on intermediate altitude
- GoR intends to follow the example of Ethiopia which is generating +\$250 M annually through its flower industries
- A local company called Rwanda Roses LTD has already completed a feasibility study and a business plan to start a 50 ha rose farm in the Park
- The project is expected to produce over 95 million stems every starting with 60 million stems per year in phase I
- Production will be under green, computerized irrigation, with fertilizer and pesticides application. These high production techniques will ensure that 95% of the products are of export quality

SUDAN

Sector: Manufacturing, Agriculture. Total Value(US \$ Million) 100

- Project 1:** Drinking Water purification system to produce clean water for 300 towns in Sudan
Project 2: Manufacturing of Pipe regulator and Roller Skive Gates(RGS).
Project 3: Manufacturing of water pumps

Contact Details:

Mr.Husham ELSayed Abdalla ELSayed -General Manager
 S.A.S Engineering Company
 1450 Khartoum, Plot 13, Block 9 Riyadh Area, Khartoum Sudan
 T:+249-155300463 F:+249-155304464. E:sayed.sd@gmail.com

Ms.Azhar Osman Murad Osman -Deputy Director Manager

S.A.S.E Engineering Company
P.O Box 1450 Khartoum, Plot 13, Block 9 Riyadh Area, Khartoum Sudan
T: +249-155300463 F: +249-155304464, E: sayed.sd@gmail.com

Sector : Agriculture Manufacturing : Total Value : (US \$ Million) 5.25

2. The Project is intending to produce tomato paste product, which are widely used consumers segments and other purposes.

The Plant the techno-economic and financial viability of tomato processing plant which, when operating at its full designed capacity, will be capable to use approximately 36,200 tons of tomato fruits to produce 6000 tones of a production mix of 5100 tons of tomato paste (28% conc) and 900 tons of tomato ketchup (12% conc) with a normal process loss of 5% of the inputs.

Location and Site: Nahr Alnil State

Plant Capacity Utilization: The annual planned capacity utilization during the entire project life is estimated to be as follows:

- a) First Year 70%
- b) Second Year 80%
- c) Third Year onwards 90%
- d) Fourth year onwards 95%

Contact Details:

Mr. Mohamed Ahmed Khairy Abd Elkarim : Ass. G. M. Finance & Investment

Giad Industrial Group – P.O. Box 10783 Khartoum, Sudan.

Tel. +249-185338081, Fax. +249-185338005, Email. Kheiri@giad.com / kheiri@hotmail.com, Web. www.giad.com

Sector: Agriculture . Total Value : (US \$ Million) 20

3. The Project on the study is intending to enhance what is termed convenience food or tertiary processed food which is commercially prepared food designed for ease of consumption and to save time and labor, this project calls for establishment of a factory for processed meat like:

Fully designed capacity, will be capable to use approximately 20 tons of processed meat per day.

Location & Site: Kosti City (White Nile State)

The annual planned capacity utilization during the entire project's life is estimated to be as follows:

- a) First year 70%
- b) Second year 80%
- c) Third year 90%
- d) Fourth year 95%

Contact Details:

Mr. Alamin Mohamed Ahmed : General Manager of the Group

Giad Industrial Group – P.O. Box No. 10783 Khartoum Sudan.

Tel: +249-185339987, Fax: +249-185340955, Email: aminsmt@yahoo.com, Web: www.giad.com

Sector: Agriculture Transport

4. We seek to invest in the areas of agriculture and transportation so as to extend our business in those sectors.

Contact Details:

Mr. Mohamed Mohamed Salih Elnifaidi

Elnifaidi Group. P.O. Box 10292 Khartoum Sudan.

Tel: +249-83496569, Fax: +249-83496565/6, Email: sma_aba@yahoo.com

Sector: Agriculture. Total Value : (US \$ Million) 4

5. **New Lines for food Production**

- 1. Line for production
- 2. Line for Ketchup

- 3. Line for Natural Juices & Powder
- 4. Line for baby food
- 5. Line for mineral water

Contact Details:

Ms. Zainab Hassan Mohammed Osman – CEO

Samhar International Co.Ltd

Khartoum North, AC Amlak Morris Building Sudan.

Fax: +249-185336508, Email: info@samhargroup, www.zainabsamhar@yahoo.com, Web :

www.samhargroup.com

Sector : Agriculture Total Value : (US \$ Million) 3

6. Purchase of machinery and technologies for crushing and refining edible oil seeds

Contact Details:

Gamal Musa Nsereldein Almansour – Owner

Gramalmusa Edeible Oil Co.,Sudanese Businessmen & Employer Federation Sudan.

Tel: +249-183471720, Email: gamalmusa123@hotmail.com, Web: www.sudanindustry.org

Sector: Agriculture Total Value : (US \$ Million) 0.1

7. I want to meet manufacturers for COMAR machines of crushing oil seeds and other technologies for the same area.

Contact Details:

Mr. Elamin Ali Elamin Elton – Owner

Alamin Oil Mills Co., Khartoum Sudan.

Email: aboseeds2002@amail.com; Web: www.sudanindustry.org

TOGO

Sector: Agriculture Total Value : (US \$ Million) 145

- 1. - Agriculture and food processing: (Growing cassava: build a structure which will help women to produce gari and tapioca)
- Growing Soya bean cesam, maize, Potato.
- Industrial activities (extraction of soya oil, cesam oil, maize oil, neem oil.
- Looking for machines to help separate oil from cake.
- Processing of soya bean flour, apple – based ships and banana ships.

Contact Details:

Mr.ALLADO Kokouvi Xavier – Managing Director

EPSILON, P.O.Box: 8345 Lome Togo.

Tel: +228-22-514265 , 22513614, Fax: +228-22-514271, Email: xallado@yahoo.fr, Web:

www.epsilonvie.com

Sector: Agriculture, Manufacturing Total Value : (US \$ Million) 0.1

- 2. - Licence Plates of quality
- Machine of quality
- Markets for spare parts of vehicles
- Agriculture and agro food processing
- Markets for agro foods

Contact Details:

Mr. Badanaro Katango – Economic Counselor

SOTOPLA – CEVA, P.O.Box: 8009 Lome Togo, T

Tel: +228-22-514265, Fax: +228-22-514271, Email: raph.badnaro@yahoo.fr, Web : www.sotopla.com

ZAMBIA

Sector: Agriculture Total Value: (US \$ Million) 10

2. Overland distributors is seeking to add value to the agricultural sector by developing a fertilizer and grain bag manufacturing plant to be located in Chipata the provincial headquarters of eastern province. The main economic activity in the province is agriculture. The province produces different cash crops namely, maize, groundnuts, cotton, tobacco among other crops. The production of maize is over 1,000,000 metric tones per annum. The Province to near Malawi and Mozambique to the south which is about 100km away

This is Comparative advantage because the market base is broadened. There is a scarcity of empty grain bags and fertilizer as the only fertilizers to meet the current demand levels. Consequently, the government imports the government imports deficit at great cost thereby exerting pressure on the meager forex reserves. The potential of this undertaking cannot be over emphasized. Furthermore, the energy sector is under developed creating opportunities in the development of mini hydro power station to mitigate the current power deficit and act as an engine for development. Acces to the markets in the sub region is further enhanced by the good road network and the Chipata Mchinji railway which connects Zambia, Malawi to the port of Beira in Mozambique. The Current government policies further growth in these sectors thereby empowering the masses.

Contact Details:

Mr. Kopa Muyabala – Director

Overland Distributors, P.O.Box 510724 Chipata Zambia

Tel: +260-955153203, Fax: +260216223413, Email: kopa1972@yahoo.co.uk

ZIMBABWE

Sector: Agriculture. Total Value : (US \$ Million) 30

1. Seed production, processing and marketing in Zimbabwe is being hampered by the country's liquidity challenger and under capitalization of the local seed companies. There are very good seed varieties in the country but they have not reached every corner of the country let alone the region. Two unique maize varieties that are very popular in the country but not well produced, distributed and taken up by the market are AC 71 and AC 31. These were bred and released by the African center for fertilizer and Development. There is however a need to increase production of these dwarf maize varieties. This will also lead to expansions of the processing equipment and machinery and improvement of seed distribution by the Agro-dealers. The two varieties, too are popular in the whole southern Africa region.

Contact Details :

Mr. Mwashireni Amon- Managing Director

Arda Seeds (Pvt) Limited, Box BW 531, Borrowdale, Harare, Zimbabwe

Tel : +263-4-772133020, Email : amwashaireni@yahoo.com, Web : www.ardaseeds.com

Sector: Agriculture. Total Value (US \$ Million) : 600

2. Project 1: 40 000 Hactare Middle Sabi West Bank Sugarcane Project

The Government of the Republic of Zimbabwe through its Ministry of Agriculture Mechanization and Irrigation Development (MAMID) is desirous of the promotion of Zimbabwe's sugarcane and wish to have it grown, milled in to raw sugar and processed in ethanol for blending with petrol. The by-product bagasse will be used for thermal power generation to augment electricity requirements for sugar cane mill, ethanol plant and the surrounding community.

The objective of the sugarcane project is to expand cane production on the Middle Sabi West bank and increase the productive capacity and growth potential for the nation through agro-industrial development. The project outputs and components will include land and irrigation development, construction of kendo Dam, establishment of a sugar mill and power plant and mechanization of field operations.

40 000 hectares on the Middle Sabi West Bank in Chipinge District, Manicaland Province of

Zimbabwe, will be put under sugar cane production. On an average yield of 80 tonnes per hectare a total of 3 200 000 metric tonnes of sugar cane will be produced per year. After harvesting, the sugar cane will be milled into raw sugar at the sugar plant and then later refined. The bulk of the sugar is then exported and the remainder sold on the local market.

Expected benefits will include improvement in the capital and productive base of the estate, alleviation of fuel shortage, employment creation, generation of exports revenue, national food security and poverty alleviation

A total of US\$350 million is required to finance the project. The project is financially viable and profitable with a Net Present Value(NPV) of Rate of Return (IRR) of 26% at 5% rate of interest over a 10-year period.

Project2: The Government of the Republic of Zimbabwe through its Ministry of Agriculture Mechanization and Irrigation Development(MAMID) are desirous of the promotion of Zimbabwe's cotton and wish to have it grown, purchased from farmers, ginned and sold regionally and internationally for the expansion of direct trade volumes between itself and various countries.

The overall objective of the cotton project is to expand cotton production on the Lower West Bank of Sabi opposite current ARDA Chisumbanje Estate, in Chiredzi District of Masvingo Province and increase the production capacity and growth potential for the nation through agro-industrial development. The project outputs and components will include land and irrigation development, construction of Chitowe Barrage and cotton depots and mechanization of field operations.

37 000 hectares on the West Bank of the Lower Sabi opposite Chisumbanje District of Masvingo Province, will be put under cotton production. Attaining an average yield of 3 tonnes per hectare, a total of 111 000 metric tonnes of cotton seeds will be produced every year from the project. The seed cotton will be toll-ginned at the already established but under-utilized COTCO ginneries at Triangle, Chiredzi and Chisumbanje and 70% of the lint subsequently exported to The People's Republic of IRAN.

Expected benefits will include stimulation of the growth of the agriculture sector and other sectors of the economy, employment creation, improvement in the capital and productive base of Lower Sabi West Bank Scheme, generation of exports revenue, national food security and poverty alleviation

A total of US\$250 million is required to finance the project. The project is financially viable and profitable with a Net Present Value(NPV) of US\$32 433 498 and Internal Rate of Return(IRR) of 9% at 5% rate of interest over a 10-year period.

Contact Details :

Mr. Willard Tendai Mbona - Acting General Manager

Agricultural and Rural Development Authority(ARDA), No. 3 Mcchlerly Avenue South, Eastlea, Harare, P O Box : CY 1420, Causeway, Harare, Zimbabwe, Tel : +263-4703919, Email : wtmbona@arda.co.zw

Sector : Agriculture. Total Value (US \$ Million) : 10.53

3. Agro-Innovations has identified three projects it intends to pursue these are;

Zero Tillage Equipment and Farming : Distributions of Zero tillage equipment from Argentina. Provision of Tillage and crop management services for selected farmers.

Sugarcane Tillage and Crop Management Services : Targeted Farmers control 15880 ha representing 35% of developed sugarcane land in Zimbabwe. Project will initiate a plough out and re-planting of 3200 ha annually.

Targeting a yield per hectare of 120 tonnes total yield expected from 3200 hectares will be 384000tonnes cane.

Agro- Innovations will control the Value chain from planting of the cane to delivery to the mill ensuring return on Investment.

Agricultural And Hydrated lime Production : Targeted production will be 1560 tonnes per month of agricultural lime and 670 tonnes per month of hydrated lime. The estimated mineable ore reserves are 2 to 3 million tonnes would last over 80 years. The objectives of this project are to be establish to capacity to produce and manufacture enough agricultural and hydrated lime to service all the Farmers, Municipality

and town Councils in Manicaland Provinces with surplus to service the rest of the country. Whilst also enhancing employment opportunities and infrastructure in rural communities.

Contact Details:

Mr. Tongai Saurombe- Director

Agro- Innovations (Pvt) Ltd, 7 Flushing Close, Cotswold Hills, Mabelreign, Harare, Zimbabwe

Tel.: +263 4 770296, F: +27 865176729, Email: tongai.saurombe@agroinnovations.co.zw

Sector : Agriculture.

4.
 1. Stock Feed Processing
 2. Maize and Flour Milling.
 3.
 - a) 40000 ha Middle Sabi West bank Sugar Cane Project.
 - b) 37000ha Lower Sabi West Bank Cotton Project
 - c) Dwarf Seed Maize Research, Production and Multiplication Project
 4. Irrigation Development Project

Contact Details:

Mr. Kabudura Collen- Deputy Director, Trade & Marketing

Ministry of Agriculture, Mechanization and Irrigation Development, No 1 Borrowdale Rd, CY 7701, Causeway, Harare, Zimbabwe

Tel. :+263-4-708794/ +263-4-790358, Email: kckabudura@yahoo.com

Note : We have tried to capture project to the closest translation. Delegates are requested to clarify the extract content of the project with direct parties , as per the details provided in the contact details column.

Source: Export-Import Bank of India



Space Station 2 - Clubhouse



Elite - 330 Apartments



Space Station 2



Space Station - 80% Green Area

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Aliens Space Station
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2012-2013



Space Station - Largest Project with 2200 Apartments in Hyderabad



HUB - 1500 acres



Space Station - Unique 'S' Shape

Creating an urban revolution is our vision

With a vision to create an urban revolution and a mission to promote intelligent living where the entire living space is designed around the needs of the residents. Green Building, Technology and Design are three of our keystones in ensuring that we deliver on this promise.

As we build the most desirable real estate in the country, we aspire to be among the top five master planners of urban environment by 2020. Over the years we have strived to capitalize on our growth for providing excellence in residential projects. Our partners and our extensive network of talented resources help us to shape real estate from a mere product to an experience- from space selling to Intelligent Living.

'INTELLIGENT LIVING'
Green Homes + Adv. Technology



OUR PROJECTS



'INTELLIGENT LIVING'

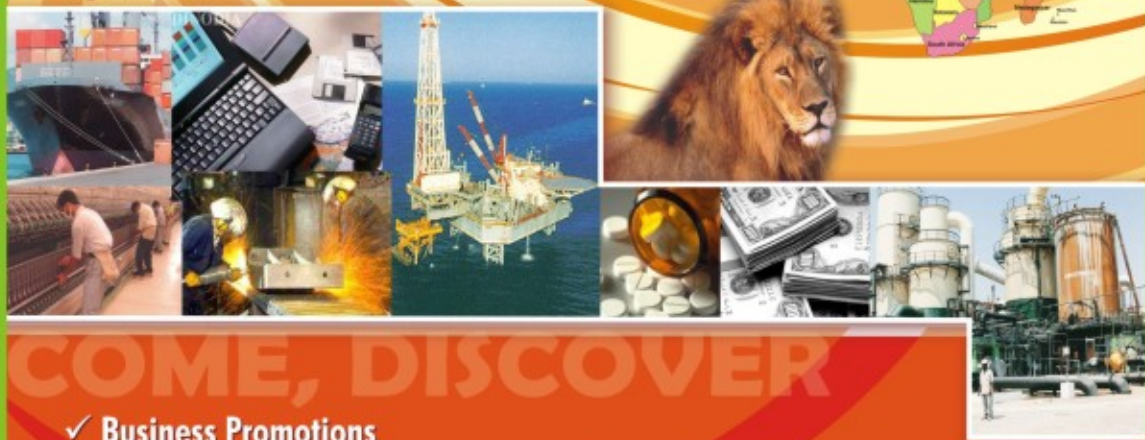




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