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**Enhancing the Private Sector Role and Participation in Key Strategic Sectors in Africa** 

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# Acronyms

AfDB African Development Bank AFC Africa Finance Corporation

AMPRIP African Market Promotion and Regional Integration Project

ASEAN Association of East African Nations

ECA (United Nations) Economic Commission for Africa

FDI Foreign Direct Investment
ERA Economic Report for Africa
GCI Global Competitiveness Index
GDP Gross Domestic Product

GPAD Governance and Popular Participation Division/ECA

ICT Information and communication technology

IMF International Monetary Fund

ITU International Telecommunication Union
NEPAD New Partnership for Africa's Development

ODA Official Direct Investment

OECD Organization for Economic Cooperation for Development

OPEC Organization for Petroleum Producing Countries

PPP Public Private Partnership

RATES Regional Agricultural Trade Expansion Support

R&D Research and Development

SSA Sub-Saharan Africa
TNC Transnational Corporation

USAID United States Agency for International Development

USO Universal Service Obligation

VCA Value Chain Analysis
WEF World Economic Forum
WEO World Economic Outlook

## I. Introduction

Africa has enjoyed continuous and relatively higher growth rates over the past few years, compared to its performance over the decades before. The African growth rate averaged 6.0% per annum in 2007, slowing to 5.1% in 2008 though expected to drop close to 2% in 2009 (ERA, 2009). Nonetheless, the International Monetary Fund (IMF) anticipates growth of 1.7% in 2009 in Africa and a recovery to 4% in 2010, higher than the 3.1% anticipated corresponding growth rates for world output (WEO, October 2009).

Economic performance has varied across subregions and countries in Africa in 2008, reflecting commodity price trends. West and Central Africa grew at 5.4% and 4.9% respectively in 2008 (5.2% and 3.9% in 2007) bucking the global declining trend, according to the Economic Report for Africa (ERA) 2009. GDP growth rates stood lower at 5.4% in North Africa, 5.7% in East Africa and 4.2% in Southern Africa in 2008 and 5.9% in North Africa, 6.3% in East Africa and 6.2% in Southern Africa in 2007.

In terms of per capita growth, Africa has shown nearly \$US300 (the North Africa figure being about \$500) increment in the last decade - a growth performance which could be partly attributed to the relatively better political and economic environment on the continent. Such good performance was also mainly driven by improved export performance and rising investment with a substantial increase in Africa's exports mainly fuelled by the rise in commodity prices in recent years. The years between 2003 and 2008 also saw Africa enjoy considerable gains in terms of trade.

Nonetheless, over the same period, exports grew by 36.7% (IMF, WEFS, April 2008). Due to this fast growth in exports, the export earnings of the continent recorded a rapid increase from about \$130 billion in 2001 to about \$380 billion in 2007 (Holmqvist, 2008). Notwithstanding this good performance in the external sector, the balance of payments shows no encouraging signs.

Another important dimension of Africa's external sector relates to capital inflows and its relation to the private sector in African development. Between 2000 and 2007, private capital inflows into sub-Saharan Africa (SSA) countries increased five-fold from \$11 billion in 2000 to \$53 billion in 2007 (IMF, WEFS- April 2008). One of the reasons for the rise in private capital flows to Africa was that the risks in Africa were somewhat uncorrelated with the risks in USA and Europe, so that there might be a possibility for portfolio diversification into Africa (Devarajan, 2008a).

The ability of some countries to tap into international capital markets (Gabon, Ghana, and Seychelles have recently issued bonds internationally) is also a witness to the rising interest in Africa in terms of private capital flows (Deléchat et al, 2008; Alemayehu et al, 2009). A publication by Goldman Sachs (2008) notes that investor interest in Africa is driven by strong macroeconomic performance, improved governance and a more stable political landscape, debt relief, and rising commodity prices that have led to improved external and fiscal balance and expectations of exchange rate appreciation. Second, there are domestic pull factors such as improved capital market infrastructure, market size, and business environment and the third factor is the increasing interest of emerging markets, especially China and India, to secure natural resources for their growing economies (IMF, WEFS- April 2008).

Two major sectors which are critical for sustainable development in Africa are infrastructure and agriculture. There is an outstanding investment gap to meet infrastructure needs in Africa, especially in the energy subsector. Mostly financed by the public sector, funding available to develop infrastructure in Africa is becoming tighter. Accordingly, private sector participation in infrastructure, although low relative to other regions of the world, is becoming increasingly important. For instance, a total of 4239 infrastructures projects were transferred to the private sector between 1984 and 2008 in Africa. Agriculture on the other hand has the largest export share in Africa and employs the majority of the population.

With a changing macroeconomic environment (manifested by the increase in agricultural products prices in recent years) and emerging intermediaries and suppliers, there are rising opportunities available in agro-industry and agri-business in Africa. Nevertheless, lack of productivity and market access, and macroeconomic factors still remain the main challenges for private sector participation in agriculture.

In summary, the present decade has seen a significant improvement in growth and growth prospects of Africa. However, this optimistic scenario is clouded by the impact of the global economic crisis. For Africa, the task of coping with the global crisis is daunting, especially when seen in the context where the countries have to deal with limited fiscal and monetary space. However, the proof of the crucial role of the private sector for development of the African continent is showcased in the growth and macroeconomic environment, being the best role for the private sector in the last five years, compared to any other period in the recent economic history of the continent.

In this regard, almost all African countries are clear about the importance that they have attached to the development of the private sector as invariably stated in major policy documents of African governments. Thus, there is no question about the commitment of African governments, at least in principle, to private sector development, but the question is whether this is being implemented in practice.

In line with this, this report recognizes that there is a need to identify the major constraints to private sector development in Africa and design an appropriate strategy and detailed action plans. Such actions may be related to market-supporting institutors, financial sector reform, and sectoral growth strategy building on the experience of successful Asian countries, and of some African countries such as Botswana and Mauritius.

The major objective of this report is to contribute to this private sector development endeavour. It is now recognized across the continent that the private sector is the most important agent that could serve as the engine of growth. Since its role is very critical in realizing growth objectives and hence, poverty reduction in Africa, identifying the major challenges for private sector development needs priority attention from policy-makers. One way of embarking on such an endeavour is by developing Public Private Partnerships (PPPs) in key strategic sectors. In an attempt to enhance the participation of the private sector in each of these sectors, sector-specific policy directions are also provided in this report.

The report is organized to begin with a brief assessment of the nature and status of the private sector in Africa. This brief introduction is then followed by chapter two where the

major challenges of private sector development in Africa from macro, global and business environment perspectives are discussed. Chapter three investigates the role of private sector participation in two key sectors, infrastructure provision and agro-industry, where the prospect for significant returns in the short to medium term is relatively high. Chapter four concludes the report and synthesizes the major challenges of private sector development in Africa and the policy directions required to meet them.

# II. Major Challenges for Private Sector Participation and Development

African business firms face various levels of challenges in areas such as starting a business, getting requisite licenses, legal regimes for hiring and firing workers, registering property, obtaining credit, protecting investments and enforcing contracts. Without a proper investment and 'doing business' environment, existing resources (including natural resources, cheap labour and geographical location advantages) cannot be efficiently utilized for the purpose of achieving sustainable growth.

#### 2.1. Investment Climate and Doing Business

The investment climate has a direct implication for shaping the business environment, influenced by such factors as the:

- Challenges of macroeconomic stability (high and variable inflation rates, persistently high government deficits, unsustainable public debts and policy uncertainty);
- Quality of public institutions including the judicial system;
- High levels of corruption and crime;
- Quality of regulations, including the level of taxes;
- Level of financial market sophistication (access to loans and availability of capital markets);
- Availability, quality, and affordability of infrastructure;
- Labour skills and efficiency of labour markets; and
- Quality of innovation.

As a sign of the improvement in macroeconomic management, Africa's GDP growth was continuously above 5% for a consecutive 5 years from 2003-2008. Inflation increased in 2007- 2008 from 6.4% to 10.7% due to global factors, but was reduced by a half in previous years, from 13.4% in 1997-2002 to 7.3% in 2006 (ERA, 2009). On the other hand, negative balances are still anticipated after the financial crisis. Ten SSA countries managed to have surplus fiscal balance in 2008, while the majority of the countries with fiscal deficits scored a modest 5% of GDP. Nine out of ten of the countries with fiscal surplus were oil-exporting countries whose combined surplus was 7.7% in 2008 compared to an average 5% of GDP in 2007 (ERA, 2009).

In the area of institutional strength, according to the Global Competitiveness Index (GCI) 2008-2009<sup>1</sup>, the North Africa region performed well, close to that of the Association of East Asian Nations (ASEAN) average and outperforms the Caribbean and Latin American average. For SSA, the institutional quality index is comparable and even slightly better than the Latin American and Caribbean average, though large disparities exist between countries. Meanwhile, one of the most important challenges affecting institutional quality in Africa is corruption and failure of the judicial system. When regionally assessed, East Africa scores the lowest in terms of judicial independence, while North Africa scores the highest.

Financial institutions in Africa lack the necessary technical capacity and sophistication to fully utilize existing financial resources. Financial intermediaries, such as banks, insurance companies, and pension funds have limited investment instruments (especially for long-term investment) in Africa. Most African countries have private credit financing but as a percentage of GDP, this is less than 20%, while infrastructure loans as a percentage of bank loans are only about 4% on average in SSA.

Human capital in turn largely affects the capacity for innovation, a critical factor for competition, especially in the long run. SSA scores the lowest GCI index in technological readiness and innovation indices. In addition, company spending on research and development (R&D) is low, university-industry research collaboration is minimal, and most research institutions are largely government managed and low budgeted, which limits their capacity. Nevertheless, Kenya, South Africa and Tunisia, followed by Egypt, Nigeria and Senegal are among the top performers in terms of innovation, investing in high-quality research institutions, with university-company collaboration in research and high spending on R&D.

In terms of the business environment, one of the most important concerns of firms in Africa is access to credit. The main challenge in terms of getting credit is the high demand for collateral as a share of credit provided. This is partly due to the high default risk that banks face. The protection of creditors through the legal system increases the availability of credit. Despite such facts, SSA has introduced the fewest reforms in terms of strengthening legal rights (2009 Doing Business Report). On the other hand, access to credit is positively affected by accessibility of credit information available through public and private credit registries. As such, many African countries have introduced credit information reforms.

In the area of infrastructure availability, the GCI 2008-2009 index of infrastructure shows that the North African country average is slightly higher than the Latin America and Caribbean average. Nevertheless, SSA scores the lowest index. Infrastructure construction and management are often mobilized by the public sector in Africa, which partly explains why the sector faces poor service quality, misallocation of resources, under-investment, waste, technical inefficiency, overstaffing, theft, non-payment, non-maintenance and low service coverage (World Bank 1994).

In the investment climate survey of the World Bank for Africa, electricity is the top reported constraint. Inefficient power supply, and inadequate transportation and

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<sup>&</sup>lt;sup>1</sup> Refer to the World Economic Forum's Global Competitiveness Report 2009 for further details on calculations methods.

information and communication technology (ICT) are main factors affecting productivity in Africa. Firms in Africa report losing as much as 8% of sales due to power outages and 3% due to transportation delays. The quality of road and transit infrastructure services is especially important in Africa where fourteen countries are landlocked.

On the other hand, costs related to starting a business in Africa are high and have shown decreasing performance. According to the Doing Business Database (2008), it took an average of 56 days in 2007, down from 113 days in 2006, at an average cost of 148% of income per capita to start a business in SSA. Nonetheless, the available evidence suggests that a 10% decrease in the costs involved in starting a business would raise the rate of creation of new registered firms by 1% (Klapper 2006).

It should be noted also that there is variation in the 'doing business' indicators across the subregions. Central Africa and West Africa are subregions where regulations are the most disadvantageous for investors wanting business registration to start a business. North Africa offers the most conducive regulatory environment for firms registering for the first time.

Similarly, using another indicator of doing business, dealing with construction permits, it takes an average of 263 days to obtain permits and utility connections and deal with the relevant inspectors, requirements for building a warehouse, and other associated costs amounting to 2,550% of SSA income per capita. Again, North Africa is the subregion with less onerous regulations and procedures for dealing with licenses, while West Africa is the subregion with the highest costs for dealing with licenses.

Regulation and tax regimes are also important factors affecting investment climate. In SSA, problems related to high tax rates and complicated tax payment systems are mentioned. Changing policies and regulations also make the investment climate risky for investors. For instance, the 2009 Africa Competitiveness Report shows that Africa appears to be the least tax-friendly location, with some of the highest corporate, property, and value-added taxes.

Meanwhile, complying with tax laws consumes an average of 321 hours in SSA where the average total tax rate is among the highest of all regions. For instance, in Cameroon, it takes businesses an average of 1400 hours to comply with taxes while the total tax rate in the Gambia is 286% of profits. There is variation across regions, however. The Central, Eastern and West Africa subregions all have total tax rates on businesses in excess of 75% of profits compared to 32% of profits in the Southern African subregion as a whole and 16% of profits in countries such as Zambia.

The other major concern for investors is related to the issue of protection of investors' investment. Comparison across regions indicates that southern African countries perform better in terms of overall investors protection index, while investors are least protected in the West African subregion. East Africa and North Africa fall below the African average.

The Doing Business report also measures the efficiency of contract enforcement as in a dispute for the sale of goods, by tracking the time taken from when a plaintiff files a lawsuit until the actual payment is effected. Evidence shows that it takes on average more than twenty months to enforce such a contract in SSA at a cost of 49% of the amount claimed.

Protective and rigid labour regulations, especially in terms of hiring and firing workers, are a challenge in Africa. For instance, Sierra Leone, Democratic Republic of Congo (DRC), Angola, Guinea Bissau, Equatorial Guinea and Sao Tome and Principe are among the countries where it is most difficult to hire workers. It is estimated that flexible labour regulation increases entrepreneurship by 30% and also reduces costs to firms (Doing Business Report 2009).

Even if countries have a good investment climate, the prosperity of the private sector lies in firm productivity, which in turn depends on human and physical capital accumulation, and the adoption and adaptation of technology. The World Economic Forum African *Executive Opinion Survey* shows that lack of skills remains a critical problem in Africa.

The Africa Competitiveness Report 2009 further noted that large firms are almost 60% more likely than smaller firms to report skills availability and labour regulations as constraining factors. With larger workforces and more stringent hiring and firing requirements, the problem becomes worse. Increasing the supply of skilled workers has shown a positive impact on employment growth. A 10% improvement in the objective measure of the supply of skilled workers increases employment by 1% (see World Economic Forum, ADI, 2007).

In terms of labour market efficiency, according to the GCI 2008-09, there are small differences between African countries although some best-performing countries have a higher score than the OECD country average. SSA actually scores higher than the Latin American and Caribbean average in labour market efficiency (although rigidity in labour regulations and high non-labour costs remain a challenge). This is due to the fact that most firms have the right number of employees without excess or shortage of employees (Enterprise Survey data). The challenge lies therefore not in labour market efficiency alone but in terms of availability of skilled human power.

For instance, both the SSA Health and Primary Education Index and the Higher Education and Training Index are far lower than the Latin America and Caribbean and South East Asia average.

## 2.2 Key binding constraints for private sector participation/development in Africa

Given the above challenges faced by the private sector in Africa, this report identifies major binding constraints for doing business in Africa by using survey data in the Africa Competitiveness Report 2009<sup>2</sup>. As seen in figure 1, the five major identified constraints for the African continent on average are access to financing, corruption, inefficient government bureaucracy, inadequate supply of infrastructure and inflation. This implies that priority interventions are called for within the financial market, institutional transformation (translated into fighting corruption and bureaucracy), improvement of infrastructure and stabilizing the macroeconomic environment.

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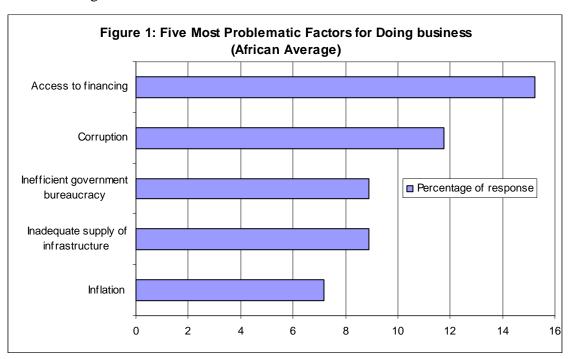
<sup>&</sup>lt;sup>2</sup> The Executive Opinion Survey conducted annually by the World Economic Forum captures the opinions of 2,610 leading business executives from 31 African countries on the investment climate and business environment of the countries in which they operate. The result of the survey is aggregated at the continental and regional level to estimate the five most pertinent factors affecting investment in Africa.

Access to financing remains the top problem in all the subregions (see annex). This confirms the fact that availability of private credit to the private sector is the main challenge it faced. Moreover, the global financial crisis is likely to further reduce access to finance.

African managers place corruption as the second most important problem on average and it remains among the top five for all the subregions. The Africa Competitiveness Report 2009 shows that low-income and oil-rich countries perform worse in terms of corruption payment costs.

Inefficient government bureaucracy is part of the top five problems for all subregions except West Africa. Such challenges translate into increased costs for starting a business, registering property or expanding an already existing activity. Adding up such costs, the 2009 African Competitiveness Report states that Africa has the highest costs of all other regions considered.

Inadequate supply of infrastructure ranges among the top five problems in Africa and for all the subregions except North Africa (see annex). This could be due to the fact that in the North African countries overall, the quality of infrastructure scores higher than the African average.



Source: ECA calculation, using Executive Opinion Survey data in Africa Competitiveness Report 2009

Inflation is also part of the top five concerns in Africa. Due to negative terms of trade for commodity and oil exporters since the financial crisis, and reduction of external financial resources (such as remittances, foreign direct investment (FDI) and Official Development Assistance (ODA), inflation rates remain high in most African countries. In some countries, the decrease in global food prices and oil prices causes in deflation. In order to

insure competitiveness and stabilize inflation, a careful monetary and fiscal policy needs to be introduced.

## 2.3 Empirical Analysis on Binding Constraints

After assessing the possible constraints to private sector development in Africa, a regression was run with private investment related to GDP as a proxy for private sector development as the dependent variable, and the function of the various binding constraints identified as determinants.

Determinants of private investment have been analysed using a variety of different theories<sup>3</sup>. Within the African context, the application of the Tobin-q model is limited, since capital markets in Africa are extremely rudimentary. Jorgenson's user cost model, which incorporates the specificity of African economies, is difficult to employ in Africa where foreign exchange is a constraint, as it requires data on depreciation and cost of capital and labour and assumes substitution between these factors of production. The private investment function used is therefore basically an accelerator-based model (Chenery, 1952), modified to accommodate the external constraint to private investment in developing countries (FitzGerald *et al*, 1992, Alemayehu 2002) and extended to allow the inclusion of other relevant variables such as the business environment, using an Error Correction Model when sufficient data are available, and using cross-section pooling when this is not possible.

The model is estimated using World Bank data for 24 African countries for the year 2004 and 2005, when there are available data for all the variables that relate to the environment for private sector operation. The data are limited to two years because, although there are data on the 'doing business indicator from 2004 to 2008, the other variables required are available only up to 2007 in the World Bank's 2007 database.

Log (Private Investment /GDP) = f (Log (Import/GDP)+Log (Public investment / GDP)  $_{-1}$  + Log (GDP) + Log (Cost of setting up Business / GDP per capita) + Log (Credit to the Private Sector / GDP) + Log (Cost of Registering Property / Property Value to be Registered))

#### Private investment as a share of GDP regressed on its determinants

	Coefficient	t-Statistic
Constant	-7.22	-2.14**
(Import/GDP)	0.68	2.28*
Public Investment to GDP ratio (lagged one period)	-1.31	-4.88*
(GDP)	0.49	2.40*
Cost of Setting up Business as share of per capital	-0.35	-3.40*
GDP		
Credit to the Private Sector / GDP)	0.46	3.69*
Cost of Registering Property / Property values to be	-0.42	-2.36*

<sup>3</sup> The accelerator model (Clark, 1917, Keynes, 1936, Chenery 1952), the Tobin-q model (Tobin, 1969) and Jorgenson's user cost (Jorgenson 1963) are the basic models taken into consideration for the analysis.

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registered)		
Adjusted R-squared	0.77	
F-statistic	7.11	
RESET=0.09 [0.95]		

\*, \*\* Significant at 1 and 10%, respectively

The regression uses the log of first differences for the variables (mostly ratios).

These results support the hypothesis that private investment as a share of GDP in Africa is determined by the business environment and the external constraints as can be seen from the coefficients for imports and the doing business-related indicators as ratios. The results indicate that the impact of import compression on private sector activity is strong. Research using disaggregated imports could represent a productive area for future reporting. The result related to the impact of the business environment on private investment as ratios shows the negative impact of higher costs of doing business (viz. setup and registering). The result shows that credit to the private sector on private investment as ratios has a positive impact (with an elasticity of about a half percentage point).

The next ratio result is that estimation suggests crowding-out of private investment by public investment. Although one needs to be cautious about this because sufficient data points are not available to experiment with different lags, and since the effect of public investment on private investment may take time, the regression suggests a possible negative effect in the short run. This also needs further work across regions and in individual countries.

# III. Enhancing Private Sector Participation in Key Sectors

#### 3.1. Infrastructure

Traditionally, infrastructure industries are monopolies, owned and operated by the public sector. For much of the 20<sup>th</sup> century, infrastructure services in most countries were provided by state-owned utilities that were vertically integrated. Although this model initially produced some desirable results, it ultimately led to serious problems especially in developing countries. These problems included under-investment caused to a large extent by under-pricing, low productivity, poor service delivery, long queues, lack of access to basic services, lack of transparency, and damaging political interference in the operation of these infrastructure entities (World Bank, 2004).

Since the late 1980s, there has been a profound reassessment of public policy towards the infrastructure sectors. There has been a shift towards private management and participation, and private ownership including through privatization of the sector as well as the competitive provision of service within part or all of these sectors. Liberalization first gained a foothold because of the generally poor performance of state-owned monopolies, and second, because of the rapid globalization of world economies, which brought into sharp focus the economic costs of inadequate infrastructure, and has promoted several developing countries to seek new initiatives in promoting competition, involving private and foreign interest in the provision of infrastructure.

In the face of an extraordinarily weak performance in the provision of infrastructure, the debt and fiscal crises that emerged in the early 1980s in many developing and transition economies, and the recognition that infrastructure is a critical tool in sustainable economic growth and international competitiveness, many African countries began to consider alternative means of infrastructure development. Subsequent to the endorsement and promotion of infrastructure privatization by international development agencies, many countries in Africa have been implementing far-reaching infrastructure reforms, including restructuring, privatization, and establishing new approaches to regulation over the past decade.

These reforms are being implemented to promote private investment, provide strong incentives for operating efficiency, and restore the financial viability of virtually bankrupt state-owned network entities, especially through the promotion of more rational pricing policies that would improve service quality and eliminate service backlogs. In addition, the reforms aim to introduce greater transparency in the operations of these industries and also to insulate the operating infrastructure entities from damaging political interference.

## 3.1.1. Progress and challenges in private participation in infrastructure in Africa

Governments around the world have adopted a wide variety of approaches in engaging the private sector in the delivery of infrastructure services. Options range from service contracts, in which relatively few responsibilities and risks are passed to the private sector, to concession contracts and divestitures in which the private sector takes full and significant commercial risks.

According to the World Bank's Private Participation in Infrastructure database, 141 lowand middle-income case countries transferred to the private sector operating risk for a total of 4239 infrastructure projects between 1984 and 2008, attracting investment commitments of \$1,281 billion as indicated in table 1. Nevertheless, actual investment may have been somewhat lower due to some cancelled projects.

Table 1: Private sector infrastructure projects by region (1990-2008)

		Total Investment	Project
Region	Primary Sector	Commitments*	Count
East Asia and Pacific	ENERGY	107690.065	572
	TELECOM	77092.45	68
	TRANSPORT	74589.95	341
	WATER AND		
	SEWERAGE	28776.65952	354
Total East Asia and			
Pacific		288149.1245	1335
Middle East and North			
Africa	ENERGY	17267.79	32
	TELECOM	38981	40
	TRANSPORT	6479.26	31
	WATER AND		
	SEWERAGE	1783	18
Total Middle East and		64511.05	121
Total Mildule East and		04511.05	141

North Africa			
Sub-Saharan Africa	ENERGY	9314.99	97
	TELECOM	49400.685	159
	TRANSPORT	11388.89	85
	WATER AND		
	SEWERAGE	266.3	26
Total Sub-Saharan			
Africa		70370.865	367
Europe and Central Asia	ENERGY	64270.4118	255
	TELECOM	132023.701	303
	TRANSPORT	16871.88	69
	WATER AND		
	SEWERAGE	4388.83	50
<b>Total Europe and</b>			
Central Asia		217554.8228	677
Latin America and the			
Caribbean	ENERGY	150349.126	512
	TELECOM	224176.35	144
	TRANSPORT	96229.34	428
	WATER AND		
	SEWERAGE	23734.964	203
<b>Total Latin America</b>			
and the Caribbean		494489.78	1287
South Asia	ENERGY	56558.73	179
	TELECOM	63212.02	69
	TRANSPORT	26505.28	193
	WATER AND		
	SEWERAGE	331	11
<b>Total South Asia</b>		146607.03	452
TOTAL WORLD			
PROJECT			
<b>INVESTMENT</b> and			
PROJECT COUNT		1281682.672	4239

<sup>\*</sup>in current \$US millions

Source: World Bank and PPIAF, PPI Project Database. (http://ppi.worldbank.org) Date: 11/02/2009

Infrastructure projects with private participation are often financed with a mix of equity and non-resource debt (debt contracted by the project company without resource to project finance). Limited access to such debt can severely damage an economy's ability to attract private investment in infrastructure. Project sponsors will rarely finance infrastructure projects with equity only, or take the project debt fully on their balance sheet.

Sheppard, von Kaludy, and Kumar (2006) identify three related sets of factors that limit Africa's ability to tap into both foreign and local currency markets to raise private finance for infrastructure, especially for long-term debt finance. These are:

- Most African countries have low or non-existent sovereign credit ratings;
- Most local financial markets have limited capacity to finance infrastructure projects, which raises the investment risk compared to projects in many other sectors;
- Those in infrastructure tend to have longer payback and build-out periods and to be more susceptible to political and regulatory interference, which increases the regulatory risks such investment face.

Together, these factors have helped shape the characteristics of infrastructure projects with private participation in Africa, where the projects have typically been small relative to those in other regions, and may have been financed entirely with equity. Projects with economies permitting faster payback and shorter-term debt (such as telecommunications) have tended to be favoured over those with long payback periods (e.g. toll roads), requiring long-term financing to offer services at an affordable price. Such projects have depended crucially on the support of official agencies.

## 3.2.2. Subsectoral reforms and remaining challenges

Water and sanitation: During the 1990s, private participation was broadly hailed as the solution to water sector problems in developing countries. The private sector was expected to provide not only much needed expertise but also enable the funding required for rehabilitating infrastructure and expanding coverage. The private sector investment boom of the late 1990s has been followed by declining investment flows and cancellation or distress of several high-profile projects. Contracts often reflected excessive optimism by both private investors and government, and the socio-political difficulties of raising tariffs to levels covering costs were often underestimated. In addition, financial markets were hesitant to provide non-resource financing for water projects.

However, recent data paint a more nuanced picture. Activity in 2005, (United Nations 2005) suggests that private participation in the water sector is entering a new phase. New private activity is focusing on smaller projects, in which a few countries and/or bulk facilities contractual arrangements involving utilities are combining private operation with public financing, thus enabling new players to enter the market (United Nations 2005).

Due to high country risk in Africa, private operators had been reluctant to invest in the water subsector even during the "concession boom" leading to a predominance of management and lease contracts. As these schemes have proved to be more sustainable, countries including Cote d'Ivoire and Senegal became international success stories for private participation in 2005; while Vitters of the Netherlands won the management contract for Ghana's national water utility in a consortium with Rand Water of South Africa. There have also been a number of effective companies with the privatization of water services in SSA, notably in Ghana, Kenya and South Africa.

**Energy:** Since the 1990s new ways of organizing the industry have been explored. In an effort to improve the technical, commercial and financial performance of utilities, boost sector cash flow, facilitate mobilization of resources for capital investment on a commercial basis thereby releasing public funds for other investments, and extending access to electricity to poor and rural communities, many countries have adopted plans to

reform the structure, operation, and financing of their state-owned electricity utilities. Accordingly, a number of African countries have adopted policies and plans to decentralize and privatize their power sector in order to introduce competition.

While past and on-going reforms in the power sector in Africa have registered some encouraging results with considerable private sector involvement, especially in improving generated capacity and financial performance in certain utilities, there are still a number of important challenges that are yet to be addressed in order for the continent to break the cycle of poverty.

These include, among others: low energy production; lack of sustained development in technical and financial development performance in the power industry; transport, transmission and distribution challenges; weak share of renewable energy in the energy mix; uneven regional distribution of energy resources; low refinery capacity; low investment and private sector participation in the energy sector; non-efficiency utilization of energy (in building and industries); inadequate policy, regulatory and institutional frameworks; and challenges of energy accessibility and consumption in rural areas.

**Telecommunications:** The record of private participation in infrastructure development in Africa has been largely in the telecommunications sector. Many countries are undergoing sectoral reform and foreign investment is now actively encouraged across the continent as privatization and liberalization are progressively being introduced. More than one-third of all State telecommunication companies have already been privatized and several more are set to undergo privatization in the near future. Some of the biggest markets on the continent including Nigeria and Kenya privatized their national companies in 2006 (International Telecommunication Union (ITU), 2006).

There have also been some noteworthy efforts to expand telecommunication to rural areas through the institution of universal service obligations (USO) and Funds for Rural Communication Development, and in setting targets for the provision of services and the quality and extent of national connectivity. In addition, providers of mobile and telephone services have been licensed in almost all countries of Africa.

The Internet, however, remains out of reach to the vast majority of Africans and is still mostly confined to the larger cities and towns. The lack of telecommunication infrastructure is the most important economic issue currently holding back Africa's development. Despite the availability of low-cost and efficient solutions, there remains a huge unmet demand for telephone connections. There is also a wide disparity between the various subregions of the continent. For example, the Maghreb countries and South Africa have more telecommunication infrastructure than all the 46 countries in SSA.

The lack of competing providers to route international traffic, combined with the over-dependence on satellite technologies and regional market fragmentation into low-volume national markets have resulted in prohibitive prices for international traffic. This impedes the development of internet use as it creates high costs for limited bandwidth (International Telecommunication Union, 2004).

**Transport:** Since the 1990s, the transport sector has undergone major transformation. The transport business has mostly been deregulated, and transport policies have been modified to permit market-oriented decisions, enterprise autonomy, and private

participation in the ownership and management of transport business. Most bus and trucking companies have been privatized and governments are making concessions on the railways, ports and harbours, and airports, especially since 2000 (United Nation, 2005). Various forms of PPP have been tried in airports, seaports, and railways, and more rarely for roads. Investor perception of high risk renders full privatization impractical, so most of private participation in transport infrastructure has taken the form of lease or concessions.

Private contractors are rapidly replacing forced account in the rehabilitation and maintenance of roads and transport infrastructure. In addition, public enterprises have been given considerable autonomy. Arbitrary regulation has been replaced by regulation through concessional performance contracts in the highway sector, setting up more sustainable institutions. Autonomous road agencies and dedicated road funds have become the norm and, in some countries, have started to show positive results.

Nonetheless, Africa is still considerably disadvantaged in all aspects of the transport sector. Less than a fifth of the SSA road network is paved, compared to over a quarter in Latin America and over two-fifths in South Asia (United Nations, 2005). Even paved roads are severely affected by the systematic axle overloading of trucks and poor drainage, with dramatic consequence on safety.

High transport costs handicap Africa's capacity to compete within the global market. Inland transport costs are twice as high in Africa compared to Asia; and international maritime costs are three times higher. These higher costs are due to a combination of factors such as lower road quality, outdated port facilities, time-consuming administrative procedures, and in some countries, insufficient competition between service providers.

#### 3.1.3. Recommendations

## A. Enabling environment: policy and institutional framework

Private participation in infrastructure does not exclude the role of government. Such a role is essential to establish an adequate policy and regulatory framework and contractual arrangements, and meet the ultimate public responsibility of meeting basic population needs. It involves establishing the appropriate institutions, including the relevant regulatory bodies, through:

- Strong political commitment which is essential in the fight against corruption.
- Improvement of the investment climate in general through more favourable legal and regulatory reforms;
- Careful allocation of roles and responsibilities taking existing capacity gaps into
  account is based on resources allocated in line with duties and responsibilities in
  a predictable way. Preserving consistency across government policies also
  requires efforts for strengthening co-ordination mechanisms, vertically across
  government levels and horizontally across jurisdictions
- Clarifying the role of various stakeholders (public and private);
- Strengthening the role of independent subsectoral regulatory bodies; and

• Lifting barriers to the realization of regional integration projects in energy and transportation for development corridors.

For the energy sector, specific recommendations include:

- Strengthening the capacity of policy-makers and energy planners on integrated energy resource planning;
- Energy forecasting and international negotiation for investment in the energy sector; strengthening the capacity of energy regulators and energy subsector managers;
- Improving policy coherence among key energy sectors such as power, wood, water, industries; and
- Modernizing power sector reforms to force more accountability on sustainability issues.

#### **B. PPP in Infrastructure**

PPPs can potentially bring efficiency to public service delivery, where all parties involved (the private sector, government, and the consumers/ public) expect to gain benefits. The government will obtain revenue from leasing state properties or alternatively, by paying for improved public service. The private sector should benefit from obtaining revenue that would cover the costs incurred either from the government or the public (e.g. toll fees). The consumers/public, on the other hand, will enjoy an improved public service delivery.

While being applied in wide area of sectors such as education, health care, and ecotourism, PPPs have been used widely in the area of infrastructure development. In Africa, from 1990-2007, a total of 359 projects in infrastructure have been implemented using private participation<sup>4</sup> through divestiture, concession contracts, management and lease contracts or Greenfield projects<sup>5</sup>.

PPPs are not regular investments and since they require larger amounts of resources, can be subject to abuse and corruption, have complex operations and are subject to a high level of risk. As such, a well-defined and specific policy rationale, and legal, investment and operating frameworks are necessary. Therefore, there is a strong need to build capacity in most African countries for effective implementation of PPPs.

<sup>5</sup> In divestitures, a private entity buys an equity stake in a state-owned enterprise through an asset sale, public offering, or mass privatization program. In concessions, a private entity takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk. In management and lease contracts, a private entity takes over the management of a state-owned enterprise for a fixed period, while ownership and investment decisions remain with the State. In greenfield projects, a private entity or a public-private joint venture builds and operates a new facility for the period specified in the project contract. The facility may return to the public sector at the end of the concession period.

<sup>&</sup>lt;sup>4</sup> Source: World Bank and PPIAF, PPI Project Database. (http://ppi.worldbank.org) Date: 05/04/2009

Capacity building for effective PPP implementation primarily requires identification of policy measures that each African country needs to consider. Based on eight case studies on infrastructure service provision and engagement through PPPs, Farlam (2005) came to the conclusion that for PPPs to be effective in Africa, governments must first fundamentally improve their systems in dealing with the private sector in order to realize the efficiency and effectiveness gains that these partnerships promise. He further noted that those partnerships which have been most successful in Africa are characterized by thorough planning, good communication, strong commitment from both parties and effective monitoring, regulation and enforcement by government.

Moreover, the issue of pricing is also found to be crucial both to avoid political fall-out and to ensure the viability of the contract for business. Farlam (2005) further noted that countries entering into PPPs must recognize that they will require professional contract drafting and monitoring skills. States should first start with small PPPs, such as building and maintaining government offices, as Botswana is doing, to learn and develop the ability to work more effectively with larger PPPs.

Based on a number of studies, including that of UNECA (2009), Farlam (2005), Verspoor (2008), Hammami et al (2006) and Almonte (2007), the following key policy measures are recommended for effective implementation of PPPs in the provision of public services:

- Conduct a thorough needs analysis of infrastructure and basic services and consider all the options to meet these needs.
- Carry out a thorough feasibility report that:
  - o compares public sector provision with private sector provision and that takes into account affordability, value for money and risk transfer, as well as all the financing options
  - o involves all stakeholders;
  - o identifies all the risks of a particular project,
  - o allocates particular parties
  - o devises risk mitigation strategies, and
  - o shows country-specific reviews of the institutional and legal environment for PPPs.
- Appropriate risk allocation across partners as a key element of success. This involves
  an assessment of the party that is most able to manage the risk (the party that is most
  able to influence the probability of occurrence or of dealing with its consequences),
  so as to ensure value for money and sustainability of the partnerships;
- Ensure financial sustainability of partnerships, through appropriate tariff schemes and/or funding mechanisms that allow for the proper operation and maintenance of infrastructure and account for the different levels of affordability;
- Making the cooperation work in the public interest through strong accountability mechanisms, clear and consistent contractual arrangements and relations based on information sharing and consultation with stakeholders, through:
  - o commitment, good faith and willingness of the parties to cooperate and find solutions in the public interest remain crucial. In this context, starting the

- discussion early when challenges arise and before conflicts escalate can help diffuse the tensions;
- o engaging private actors to formulate their requirements and constraints, to promote mutual understanding and the appropriateness of contracts; and
- o informed involvement in the process of other actors, such as local communities and regional partners. This is essential for identifying priorities, facilitating maintenance and monitoring performance. However, consultation should be developed according to the principles of clear focus, representation and transparency and be organized strategically at important stages of policy making
- Encourage completion to drive innovation and bring down prices;
- Build effective regulation by developing transparent, credible and effective regulatory agencies that are adapted to the specific needs of the country and in the absence of effective regulatory agencies, create a department within the relevant ministries which is relatively independent and has sufficient resources;
- Provide political guarantees to investors where appropriate;
- Develop capacity at national, provincial and municipal level by sharing expertise and experiences with other governments and government departments, by for example, creating a PPP unit in the Ministry of Finance or other relevant ministry or in the National Treasury to plan, negotiate, implement and monitor PPPs. It is also important to build the capacity of private providers to mobilize and manage resources and delivery of acceptable quality services. However, most important are:
  - establishing a climate of trust and collaboration through institutions that provide a forum for consultation with all stakeholders on policy design and implementation; and
  - o a legal framework that treats private providers on an equal footing with regard to taxation and outcomes, while at the same time providing the flexibility to organize them as they see fit.
- Root out corruption and pre-empt public complaint and suspicion;
- Communicate decisions around privatization and PPPs to the public to build confidence;
- Preserve the balance between the private and the public sector at every step. The State in the developing world is wise to do so. In a weak state, interventionist policies multiply the opportunities for corruption. In most cases, illegitimate privatization has led to the stripping of state assets. There is a need to be conscious of this;
- Ensure macroeconomic stability as this is essential for PPPs. Empirical evidence shows the importance of institutional quality, where less corruption and effective rule of law are associated with PPP projects;
- Ensure responsiveness to users' claims and provide transparent and effective procedures to address complaints. This contributes to building mutual understanding and improving service provision.

#### C. Financing Infrastructure

While the infrastructure needs for Africa are enormous, there is an outstanding gap to meet its investment needs. It is estimated that an overall annual infrastructure funding gap of \$35 billion exists, of which 80% relates to power, with the remainder split across transport and water. There is no real gap for ICT, as this subsector is mostly well financed by the private sector. Looking across countries, about 80% of this gap relates to low-income and fragile countries<sup>6</sup>.

ODA and public finance are recorded as part of the traditional means of financing infrastructure. ODA directed towards Africa has been increasing, reaching a peak of \$25 billion in 2004, with 13.1% of it used for economic infrastructure development<sup>7</sup>. ODA financing amounts to an average contribution of \$4 billion per year, concentrating mainly on transport, water supply and sanitation projects (AICD, 2008). Nevertheless, ODA to SSA as a share of GDP is only 5% and this is not fairly distributed across countries.

Despite pledges made and the Gleneagles commitments to double aid to Africa in 2010, political support for aid increase is decreasing. Thus, since 2007, ODA has fallen by 18%, mostly due to the end of debt relief operations. While ODA growth was positive in 2008, it may not grow as fast in 2009-2010 due to the current global crisis and decreasing political commitment from donor countries, worsened by the current financial crisis (African Economic Outlook, 2009).

On the other hand, except for fragile States, public finance remains the dominant source of finance for infrastructure, totalling \$35 billion on average. Public investment is largely tax-financed and executed through central government budgets, while operating and maintenance expenditure is largely financed from user charges and executed via state-owned enterprises. Current levels of public finance are quite substantial relative to the GDP of low-income States, typically absorbing 6 - 8% of the total (AICD, 2008). Nevertheless, with increasing government budget deficits and with public enterprises inefficient and incapable of filling the investment gaps, such financing becomes unsustainable.

## Facing such challenges, how can Africa fill the investment gap in infrastructure?

While efforts can still be made to mobilize alternative sources of financing, there is still room to mobilize existing resources. Public finance can be increased (without the need for increased revenue) by addressing institutional bottlenecks, and improving administrative procedures. This includes better planning of investment projects, competent feasibility studies, efficient procurement processes and continuous monitoring and evaluation. Partnership of the private sector in public projects has also proven efficient. With such improvements, it is estimated that public investment in infrastructure can increase by 50% without any increase in actual spending (AICD, 2008).

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<sup>&</sup>lt;sup>6</sup> Briceño-Garmendia and others, 2008, in AICD, 2008

<sup>&</sup>lt;sup>7</sup> Hakim Ben Hamouda, Patrick N. Osakwe (2006), "Financing for Development in Africa: Trends, Issues and Challenges", ATPC working paper No 48, UNECA.

On the other hand, mobilizing domestic savings is an area still to be explored. Though saving rates are low in most low-income and post-conflict countries, studies have shown that oil- and resource-rich countries have higher saving rates, comparable to those of East Asia (Algeria, Botswana, DRC, Gabon and Nigeria - see ERA 2009). Nevertheless, the investment ratio is still higher than the savings ratio in these countries, showing that there is need for more resources. As such, deepening regional capital markets, and regional financial integration, along with financial market sophistication can mobilize savings towards investment. Financial intermediaries, such as banks, insurance companies, and pension funds should be provided with investment instruments to provide finance for long-term projects including infrastructure.

Equity swap<sup>8</sup>, by using land and natural resources to finance infrastructure projects, is also an alternative that is being widely used. Using different mechanisms, these resources can be used to pay for various investment projects. Egypt is a good example in using land to finance infrastructure development, raising a total amount of \$4.57 billion since 2005. Countries such as Angola, Democratic Republic of Congo, Gabon, Ghana, Guinea, Nigeria, Sudan and Zimbabwe obtained investment loans from China (amounting to \$3.28 billion as of 2008) for infrastructure development, by using their natural resources such as petroleum, mineral resources, and agricultural products as a mode of repayment. Such types of financing, nevertheless, need to be carefully monitored to avoid risks from price volatility, corruption, environmental degradation and unsustainability.

Added to these available resources, emerging partnerships with non-OECD countries present a financing opportunity for African countries, equivalent to private investment in infrastructure and often greater than ODA. Chinese infrastructure commitment in Africa for instance grew from a mere 0.5 billion in 2000-2001 to \$4.5 billion in 2007. This commitment comes mostly in the form of loans (50%) and export credit (44%), while only 5% comes in the form of FDI and 1% in the form of grants<sup>9</sup>.

Arab funds, on the other hand, are collectively committed \$2.6 billion in 2007, broadly spread across 36 countries in Africa, with about 50% of the resources going to transport projects and 30% to power projects. <sup>10</sup> Indian firms are also emerging as significant players in infrastructure development, funding projects worth \$2.6 billion over the period 2003-2007, averaging \$0.5 per year.

Beyond financing, private participation in infrastructure, or PPP, brings in technology transfer and capacity building. Private sector participation in infrastructure in Africa is skewed towards the less risky ICT investment. In order to encourage private sector investment in riskier subsectors of infrastructure, and transforming institutions and regulations to improve the business environment, provision of long-term access to

<sup>9</sup> Vivien Foster, William Butterfield, Chuan Chen, Natalya Pushak (2009), "Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa, The International Bank for Reconstruction and Development / The World Bank.

<sup>&</sup>lt;sup>8</sup> Or rather known as "Angola Mode of Financing", due to its wide application in Angola in the African context.

<sup>&</sup>lt;sup>10</sup> The funds providing the most support to African infrastructure projects are the Islamic Development Bank, the Arab Bank, the Kuwait Fund, the OPEC Fund, and the Saudi Fund.

financing is necessary. Various types of infrastructure funds are therefore also available, financed by sovereign wealth funds, including funds from the African Diaspora.

Establishing and strengthening private sector led financial institutions is also important. The Africa Finance Corporation (AFC) launched by Nigeria in 2007 provides a good example, since it is expected to play an important role, as a development finance institution, in promoting private sector investment in power, transport and telecommunications infrastructure projects. In addition, investment under PPP and financial support from international development partners would require countries to contribute counterpart funds. In this regard, African governments may need to establish national and regional capital markets, so as to raise counterpart funds required for investment.

Some specific recommendations include:

- To increase funding for infrastructure the following options can be explored:
  - Decreasing administrative costs, implementing institutional transformation, and encouraging private sector participation in order to increase available public funding, without an increase in actual spending;
  - o Mobilizing domestic savings towards investment by using mechanisms such as:
    - Deepening regional capital markets and regional financial integration, along with financial market sophistication
    - Providing investment instruments to financial intermediaries, such as banks, insurance companies, and pension funds, for long term project financing including infrastructure
  - Through the use of equity swap, by using land and natural resources to finance infrastructure projects;
  - o Using emerging partnerships with non-OECD countries such as China, Arab countries, India, etc;
  - Stronger support by development partners through advocacy, funding and technical services to NEPAD-STAP initiatives, and implementation at the national level:
  - Establishing a special fund for regional projects and programmes including development corridors, such as cross-border electricity network, oil and gas pipelines;
  - o Promotion of private sector financing through:
    - Transforming institutions and regulations to improve the business environment
    - Provision of long-term access to financing

- Establishing and strengthening private sector-led financial institutions such as AFC
- Governments' contribution to counterpart funds (e.g. by establishing national and regional capital markets) in order to encourage investment under PPPs and financial support from international development partners.

## 3.2 Agro-industry and Agri-business in Africa

Agriculture remains a very important sector in most African countries although it is still largely traditional and dominated by farmers with small land holdings. Directly and indirectly, agriculture is the source of livelihood for the majority of poor people in Africa, and is a significant contributor to exports and aggregate output. In Africa, agriculture accounts for an average of 8.0% of merchandise exports, 51.2% of employment and 16.5% of value added in GDP for the period 2002-2007 (table 1).

The corresponding figures were 5.9%, 40.0% and 49.1% for all developing countries, and 6.5%, 30.8% and 3.0% for the world as a whole. Agriculture is especially important for the East African subregion, contributing 38.0% to merchandise imports, 74.5% to total employment, and 32.7% of GDP. In addition, agriculture provides input to the secondary and tertiary sectors.

Table 1 Significance of agriculture in Africa, 2002-2007 (in percentage)

	Share of agricultural exports in total merchandise exports	Share of agricultural employment in total employment	Share of value added in GDP	Share of agricultural population in total population
	2002-2006	2002-2006	2003-2007	2002-2006
Central Africa	4.5		20.7	60.8
East Africa	38.0	74.6	32.7	76.5
North Africa	3.7	32.2	13.5	35.1
Southern Africa	7.3	21.7	5.3	44.7
AFRICA	8.0	51.2	16.5	52.2
<b>Developing</b> economies	5.9	40.0	10.2	49.1
World	6.5	30.8	3.0	40.5

Source: UNCTAD (2009); Table III.3 page 101

Given its importance for poverty alleviation and economic development in African countries, development of the agricultural sector should be near the top of the economic development agenda of African countries. Over the last several years, there have been intensified efforts by African governments, regional economic organizations, and the international community to give agriculture the attention required to foster a more competitive position for African products in the global market, and to improve natural resource management.

Africa itself sees agriculture as the answer to economic stagnation and has made it the heart of African development as reflected in the New Partnership for Africa's Development (NEPAD). The Partnership has conceived the Comprehensive African Agricultural Development Programme (CAADP) with the assistance of the Food and Agriculture Organization (FAO) of the United Nations. CAADP has identified four key pillars needed to enhance the competitiveness of African agriculture. These are to:

- Improve agricultural research and technology dissemination and adoption;
- Increase food supply chains, reduce hunger and improve response to emergencies;
- Extend areas under sustainable land management and reliable water control systems; and
- Improve rural infrastructure and trade-related capacities for market access (ECA 2009a).

In 2003, African Heads of State and Government committed themselves to allocate at least 10% of their national budgets to agriculture in Maputo, Mozambique. At the international level, international finance agencies and development partners have pledged or increased their support to agricultural sectors especially in development of markets and agri-business skill and policy advocacy in many African countries.

USAID, for example, is supporting initiatives in selected African countries that enhance competitiveness. Two such initiatives are the Regional Agricultural Trade Expansion Support (RATES) project and the AGOA programme. AfDB supports the Agricultural Market Promotion and Regional Integration Project (AMPRIP). The Commission of the European Communities, in a communication to the Council in October 2005, recommended that EU should also target support at increasing the competitiveness and productivity of African agriculture.

Over the past two decades, a number of demand and supply factors, both within and outside Africa, have led to changes in the agri-business sector that have the potential to transform the agricultural sector, and may have significant implications for economic growth, poverty reduction, diversification and food security.

Firstly, the soaring prices for many traditional agricultural products suggest that the long-term decline in agricultural real prices has ended and that an agricultural growth strategy based on expanding agri-business and agro-industry is more viable now than it has been over the past two decades.

Secondly, within the Africa region, rising per capita incomes, trade liberalization, technological changes, urbanization, changing diets, and an increasing number of wage-earning women are leading to greater demand for high-value commodities, processed products and prepared foods.

Thirdly, intermediaries and suppliers on the continent are rising to meet the increase in demand for more and better-quality agricultural products through changes in their agribusiness systems. Some of the substantial organizational and institutional changes that have taken place in Africa in the agricultural sector are:

- More large-scale retailers and manufacturers are relying on specialized procurement channels and dedicated wholesalers;
- Food is increasingly being "pulled" in to formal sector retail outlets, such as supermarkets, rather than grown for sale in local markets;
- Agri-business enterprises are getting larger as firms seek economies of scale in food manufacturing, marketing and distribution;
- Private sector standards for quality and safety are proliferating.

Consequently, the agro-industry and agri-business sectors in many African countries are moving rapidly towards market-driven systems, with a greater emphasis on input markets and growth of post-production enterprises. The role of the private sector is becoming increasingly important as small-holder farming is becoming commercialized, and the impact of agri-business and agro-industry on economic and social development is increasingly felt.

Many governments in Africa are responding to these changes through policy and programme reforms, increased investments and the rebalancing and stretching of institutional services, all designed to accelerate the pace of agri-business and agro-industrial development.

#### 3.2.1. Challenges for private sector participation in African agriculture

In spite of the existing and emerging business opportunities available in the agro-industry and agri-business sectors in Africa, there remain a number of challenges faced by private sector firms in taking advantage of these opportunities. Despite the efforts made, African agriculture is still characterized by under-production and lack of competitiveness, especially for staple foods and export commodities. A combination of factors is responsible, including low productivity of the agricultural sector, insecurity in land ownership, inadequate market access and infrastructure, variations in the quality of output, and lack of market information (ECA, 2009a). Factors that affect the participation of the private sector in agriculture in Africa can be discussed under three broad areas: Production-related factors; market- and support service-related factors; and macroeconomic-related factors.

#### A. Production-related factors:

Low productivity: The productivity of agriculture in most African countries is low as a result of low land and labour productivity. The productivity of land in Africa increased from \$9.7/hectare (or 6% of world average) in the period 1979-1981 to only \$18.3/hectare (or 7% of the world average) in the period 2005-2007. Land productivity in Africa is estimated to be 42% and 50% of those of Asia and Latin America, respectively. The main reason for relatively low land productivity in Africa in comparison to other regions is that Asia and Latin America have more irrigated land and use more fertilizers and machinery than Africa (ECA 2009a).

Although it increased by 39.5% over the period from 1979-1981 to 2003-2005, labour productivity is significantly lower in Africa compared with other developing regions, amounting to only 57 and 58% of those of Latin America and Asia, respectively. Labour productivity in different countries is influenced by many factors, including the production

system used, weather, the availability of complementary inputs such as improved seeds and fertilizers, the quality of the labour force, and the use of modern farming technology.

Insecure property rights in land: Protection of individual property rights, especially for land, is an important determinant of investment and productivity. There are three important ways in which secure private property rights increase investment. First, the high risk of expropriation by private individuals or by the State dampens incentives to invest in the maintenance and improvement of property. Second, secure private property rights enable owners to use the property as collateral for loans, improving business access to finance. Third, secure and transferable property rights tend to increase investment if this encourages trade to those who value the property more than the current owner (Besley 1995).

Taking this into account, land ownership in Africa has low legal coverage. According to Dam (2006), in Africa only 2-10% of the total land area is covered under the formal legal system. The remainder is communal or customary land operating under traditional institutions outside the formal legal system. Communal ownership implies the absence of individual property titles which are important in providing incentives to invest in land and to provide access to credit by using the formal titles as security (Dam 2006). For such benefits of secure land titling to accrue, the appropriate infrastructure for allowing land registration, transferability, and enforcement of property rights by the legal and judicial systems is urgently needed.

Another challenge preventing secure property rights in land is the presence of a great deal of discrimination in access to land, based on social and economic status and gender. It is difficult to fight the government. Other obstacles are the long and costly procedures to defend an individual property right, restriction of land ownership to nationals, and ethnic and other cleavages that prevent ownership outside one's place of origin (ECA 2009). Meanwhile, on average, it takes 81 days to register property in SSA, the third-highest after South Asia (106 days) and East Asia and Pacific (98 days), at an average cost of 10% of the property value, higher than in any other region (World Bank 2009b).

*Under-utilization of prevailing farm resources*: The low yield experienced by small-holder producers is due to untimely farm operation (late planting and weeding, poor land preparation, and inappropriate harvesting techniques.

*Poor post-harvest management*: Between 20-40% of crop yield is lost due to poor post-harvest handling, including stage facilities (FAO 2005). Post-harvest losses are highest with perishable products such as horticulture, dairy and fresh produce with high moisture content, including bananas and root crops. The lack of storage and processing facilities limit the potential for farmers to add value to their agricultural produce to enhance their competitiveness.

## B. Markets and Support Facilities and Services Related Factors

Inadequate market access and infrastructure<sup>11</sup>: Promoting agricultural investment and productivity requires improved market access and adequate service infrastructure, including better road networks, communications, rural electrification and water supply.

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<sup>&</sup>lt;sup>11</sup> This section draws heavily on ECA (2009a).

For improved agro-industrialization and domestic and regional trade, the key prerequisites are competitive power and road/rail freight tariffs. SSA performs poorly in all areas of enabling infrastructure and policy relative to other developing regions. In terms of paved road density, SSA has a low coverage of 31 km/1,000 km2, which amounts to only 23% of the average in other developing regions. Most roads in Africa are unpaved and impassable during the wet season. Improvement of domestic and regional roads has great potential for reducing transportation costs, increasing overland trade and enhancing the global competitiveness of African agriculture.

ICT is critical in modern-day transactions but Africa lags behind in this area, as represented by its fixed-line density, mobile density, international calls and Internet dial-up services. Fixed-line density is 10/1,000 people, while mobile density is 55/1,000 people. Fixed-line and mobile density in Africa are about 13% and 64% of the averages in other developing regions, respectively. At \$0.80/3 minutes, international calls cost four times as much as those of other developing regions, while Internet dial-up service at \$50/ month is two and a half times that of other developing regions.

Electricity coverage, especially rural electrification, is critical for the development of agro-industries. Overall, generation capacity in Africa is 37MW (megawatt) per million people, which is only 11% of the average in other developing regions. Electricity coverage as a percentage of the population is only 16% compared with 41% in other developing regions. Power tariffs are higher in Africa compared with other developing regions.

Apart from these infrastructure gaps critical for the development of agriculture and agrobusiness, the simplification of customs clearance and improvement of port facilities are essential for regional trade and development of a more integrated agricultural market in Africa. Customs services in Africa perform weakly in this area. For instance, customs clearance time ranges from one day in Ethiopia to 25.4 days in Nigeria, averaging 12.70 days for the continent (IMF 2007). Delays at ports (coastal and inland) also imply the need for improvement of port-handling facilities.

Market and distribution system: For the domestic market, existing marketing facilities are poorly managed or underutilized, partly due to the low volume of fresh products that are marketed through informal channels. There is no substantive effort to check for quality, safety and hygiene, such as the levels of residuals. Available packaging and transport facilities are not specialized to meet the handling requirements of the commodities, resulting in high losses during transportation.

*Poor access to financial services*: Africa continues to display low farm capitalization and investments. The use of farm credit is low due to poor access to financial services, high costs in borrowing and high risks linked to agricultural credit.

#### C. Macroeconomic Factors

Macroeconomic stability and a predictable policy-making environment are indispensable prerequisites for effective private sector development. An unstable macroeconomic environment creates uncertainties about relative prices which undermines long-term output planning and deters investment. Macroeconomic actors and policies that negatively affect the competitiveness and productivity of agriculture include:

- High interest rates on agricultural loans and poor access to them;
- Tariffs on imports of agricultural inputs;
- Poorly managed trade liberalization strategies
- Poor implementation and support of national, regional and international trade policies; and
- Absence of subsidies on local production vis-à-vis subsidies in advanced economies.

#### 3.2.2. Recommendations

## A. Enabling policies and institutions

Policy-makers should examine the elements of cost-competitiveness through a thorough analysis of agricultural price policies and their effect on farm income. This analysis is crucial for deciding whether and where new investments (both public and private) should be made in processing and marketing. Agricultural policies must be focused and provide clear and specific incentives to promote specific commodities chains with clear competitive advantage. Policies must be backed by the necessary financial resources to implement them. Socioeconomic transformation of Africa's rural sector is a major prerequisite for enhancing productivity and its competitiveness. Basic education for the youth and functional education for adults, improved sanitation, and access to potable water, power, telecommunications and roads are also basic requirements.

Meanwhile, cross-regional appraisals and country case studies have focused on such issues as farm-agri-business linkages, farm commercialization, contract farming, small enterprise development and retail procurement practices. (World Bank 2008)

Taken together, a number of priorities for policy reform and institutional strengthening have been identified; these include:

- Development of industry and producers;
- Legal and regulatory framework for resources, assets and business operations;
- Clarification of institutional mandate for supporting investment in agri-business and agro-industries; and
- Public sector cooperation with the private sector

Trade off between the pace and nature of agro-industrial development and poverty and food security objectives. Rapid agro-industrial development could displace small farmers, processors, stores and traders who depend on traditional marketing and distribution channels. The pace of change may not allow enough time to create alternative opportunities. Moreover, it is unlikely that policies aimed at agri-business opportunities and agro-industry development can simultaneously address the challenges of food insecurity and poverty.

Review of institutional mandates with regard to how they may influence, regulate and support private sector investment in agri-business and agro-industry. Ministries of Agriculture operate under specific mandates and few if any ministries have clarified their

mission as it pertains to enabling agri-business and agro-industry development. Mechanisms are also needed to strengthen the linkage among public agencies responsible for policies and services impacting agri-business and agro-industry.

A legal and regulatory framework to define rules and determine rights and obligations with respect to resources, assets and business operations. This is particularly important. The rules and regulations under which commodity markets exchange and auctions operate impact heavily on agro-business investments. Creating a sound regulatory framework is also crucially important for establishing rules relating to employment conditions and contracting that affect agri-business profitability and the distribution of benefits from agro-business development.

Industrial, commodity, regional, and professional associations. These include producer organizations and cooperatives and they have valuable roles to play in connecting producers and clients, crystallizing and expressing the viewpoints of similar groups taking collective actions, networking among themselves to facilitate linkages with other enterprises and organizations, and providing training, advice on information technology issues and legal support.

Strengthening public sector/private sector cooperation. Communication and cooperation between the public and private sectors are essential because agro-industry development is generally driven by the private sector. The public sector can, for example, direct research and technology investments to support private sector innovation and product development. Public-private sector cooperation can enhance the efficiency of regulatory frameworks and private sector compliance.

# B. Agro-industry and value chain programmes that enhance private sector participation

A value chain encompasses all integrated values connected to a generating activity (ERA 2009). There is an increasing need for value chain programmes to promote the delivery of services to agri-business, create value-added opportunities for small farmers and help farmers respond to changing markets and consumer requirements.

Farmer-market-agri-business linkages: Promoting and strengthening agri-business linkages is vital to reducing transaction costs and guaranteeing supplies. Contract farming, forward marketing, warehouse receipts, commodity brokerage, auctions and other marketing strategies, especially through farmers associations, should be encouraged. Contract farming, for instance, ensures that producers meet the required quality and quantity of the goods produced and in a timely and regular manner in which the supplies are required. If well-managed, contracting farming offers a potential solution to link small producers to formal markets.

Financial services and capital markets: Effective rural financial institutions can help to support the investment needed to improve competitiveness and spread the benefits of competition across communities. Attention is needed to strengthening and increasing the outreach of various financial intermediaries, both formal and informal. To improve access to credit, governments should develop and improve specific financial systems through the promotion of financial services in rural areas. For long-term investments, the

combination of grants and trust funds could be promoted and supported.

*Market development:* The development of competitive markets, along with the supporting institutions and infrastructure, especially in rural areas, is likely to contribute enormously to increased productivity and the overall quality of life in developing countries. An effective market infrastructure and strict food safety standards are requisite for accessing international markets. The smooth flow of products through the supply chain from farm gate to the export destination, including organized promotion programmes, is a necessity in winning export markets.

**Post-harvest management:** Enhancing post-harvest management requires identifying simple and affordable post-handling materials and facilities and addressing problems in the entire value chain to reduce losses. These measures would help ensure that the product is highly acceptable in terms of quality and at a competitive price. Measures are required to improve facilities for bulking produce, sorting, grading, and packaging and storage.

# C. The Potential Role of PPPs in Agri-business and Agro-industry in Africa<sup>12</sup>

A major component of competitiveness in agricultural value chains is access to affordable, reliable and efficient physical infrastructure. This includes infrastructure that supports on-farm production (irrigation, energy, transportation, pre- and post-harvest storage), ensures efficient trading and exchange (telecommunications, covered markets), adds value to the domestic economy (agro-processing and packaging facilities), and which enables produce to move rapidly and efficiently from farm-gate to processing facilities and on to wholesalers (transportation and bulk storage). These infrastructures are either inadequate or lacking in most African countries where governments have weak capacity to carry out these tasks on their own. In a recent report on agricultural investment in Africa by the UK Department for International Development (DFID), poor access to infrastructure services was cited as "the greatest impediment to growth of agribusinesses".

However, low population densities, remote locations and weather-dependent production systems make participation by the private sector in agricultural infrastructure highly risky. An analysis of the World Bank's Private Participation in Infrastructure database attributes just 1% of total infrastructure investment value directly to the development of agriculture between 2003 and 2005 for developing countries.

The use of PPPs is one way to overcome the lack of investment in infrastructure in the agricultural sector. Private companies and associations can often meet the need for public goods more efficiently than the public sector because they are more motivated and have money for research, quality certification, and market development and are more likely to attract managers with a commercial orientation. Yet, the public sector still has a necessary role, namely, to establish policies and the regulatory environment and ensure the public goals are met in the long term.

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<sup>&</sup>lt;sup>12</sup> This section draws on ECA (2009c).

The use of PPPs in agriculture in Africa: Many African governments are now using PPPs to channel resources, including donor resources, to improve ICT infrastructure, improve management of the natural resource base, and to expand access to information, facilitate transportation and trade, achieve economies of scales, advance research and extension, improve adherence to quality standards, and facilitate market development.

Several PPP models have been identified within the context of agricultural development in Africa. Though varying in specific objectives, these models have been established to provide a wide range of services along the various steps of value chain, including input distribution, marketing, processing, export, and product development. In general, the most common form of PPPs used by governments is operational partnerships that address well-defined problems and establish collaborative frameworks to address them. This is the appropriate strategy to address small- and medium-sized enterprises.

The effective use of PPPs in agriculture: policy issues: The persistent challenge seems to be to know when and where PPPs are a value-adding proposition for infrastructure in market-oriented agricultural development, and how best to formulate the financial and institutional arrangements for such collaboration. Planning the role for public-private collaboration in the construction, operation or maintenance of infrastructure for agricultural production needs to move beyond focusing only on questions of commercial finance and risk transfer. It needs to look also at the likelihood that such arrangements will deliver improved outcomes aligned with both the government's intended growth strategy for the agricultural sector - be that improved productivity, greater crop or livestock diversity, technology transfer or employment generation - and the intended market, be that local, urban or export. To this end, better use should be made of Value Chain Analysis (VCA).

Because infrastructure for agricultural development is likely to be, in part, exclusionary (more so for irrigation, trading centres and agro-processing facilities, less so for roads or for telecommunications under a USO), the politics of private sector participation may run counter to the public interest. The current disquiet around private sector participation in infrastructure does not only arise from the issue of private companies benefiting from the financing of public services. It also surrounds whether the public sector should be subsidizing what are essentially private sector ventures, targeted at minority public interests that include agricultural producers, traders and processors. The tests here are threefold: (a) does the proposed infrastructure deliver on some broad public interest such as increased trade, technology transfer, employment opportunities or social development goal such as food security; (b) would the infrastructure project take place without participation of the private sector; and (c) does involvement of the private sector bring better "value for money" compared with solely public sector provision

#### IV. Conclusion

The analysis in this paper has shown some of the major constraints that are the stumbling blocks for private sector participation in African development. These constraints range from lack of a conducive business environment and investment climate to sector-specific issues, such as private sector participation in public infrastructure and agro-industry. The report identified major constraints affecting competitiveness in Africa such as access to

financing, corruption, inefficient government bureaucracy, inadequate supply of infrastructure and inflation as well as lack of productive capacity in the private sector itself.

The policy direction that emanates from this report can be seen from two broad angles. The first relates to the issue of addressing the major challenges of private sector development in Africa. The second refers to issues related to the agriculture and infrastructure sectors that complement the first set of recommendations.

The general policy direction should consider the following actions:

- First, enhance the capacity of the private sector to develop a core productive capacity through the creation of a skilled labour force, building the private sector's technological capability through research and encouraging FDI;
- Second, gearing policies towards increasing private sector participation in public projects (PPPs) needs to be the direction pursued. The advantage of such policies is two fold. It facilitates economic growth of the region through investment in key strategic sectors (such as infrastructure and agriculture) and employment creation. It also helps the development of the private sector by offering it growth opportunities;
- Third, improving business confidence in Africa through an enabling investment and business environment is critical, for this strengthens the domestic private sector and attracts foreign investors. Macroeconomic and investment policies aimed at building investor confidence need to be in place in the region. The legal and regulatory environment should also be crafted in such a way that first helps the domestic business community to operate formally in compliance with the regulations and law of the land;
- Fourth, the global economy is dynamic and challenging. It is also fast changing with the emergence of newly industrializing countries such as Brazil, China, India, and East Asia's fast-growing economies. Africa needs to have a strategy of engagement with these countries, so that both groups will mutually benefit from their engagement;
- Fifth, various mechanisms need to be used to mobilize resources that can be used to finance public and private projects. This may range from domestic resource mobilization to creation and deepening of regional financial markets. External finance using emerging and historical partners is important. Also, tapping into sovereign wealth funds is an important new source of funding for both infrastructure and agriculture, especially as traditional sources of funding may slow and food security is at risk in many countries.

## From the sector perspective:

In the case of infrastructure, in order to expand and strengthen PPPs:

When planning private participation in public projects, African countries should undertake a thorough feasibility report that: weighs both public and private options and the PPP option; identifies all the risks of a particular project; examines issues of risk transfer; reviews all the financing options available; gives consideration to

- all of the stakeholders; takes affordability into account, value for money, and presents country-specific reviews of the institutional and legal environment.
- It is also necessary to develop capacity at national, provincial and municipal levels, through sharing of expertise and experiences with other levels of government and related government departments. It is strongly advised that a PPP unit be created within the Ministry that has responsibility for planning, negotiating, implementing and monitoring PPPs. It is also important to build the capacity of private providers to mobilize and manage resources and delivery of acceptable quality services.

When it comes to sectoral issues in this framework, sector-specific policy directions need to be considered:

- Within the infrastructure sector, potential can be better realized through a lifting of barriers to the implementation of regional integration projects in energy and transportation, especially along the development corridors;
- Particular emphasis needs to be given to the importance of the energy sector, where a significant investment gap exists. Integrated energy resource planning would take into account sustainability issues, including on the supply side, hydro, coal, wood fuels, nuclear power and non-traditional sources of energy, as well as coordination with household and plant energy demand including from the mining and manufacturing sectors. It would call for the building-up of international partnerships for investment in the energy sector. Strengthening the capacity of policy-makers, energy regulators, energy subsector managers and energy planners is necessary for the objective of energy development to be realized;
- For sustainable development of the agro-industry sector, agricultural policies must be focused and provide clear and specific incentives to promote participation in commodity value chains offering a clear competitive advantage. Promoting and strengthening agri-business linkages is vital to reducing transaction costs, guaranteeing demand for agricultural supplies, and providing incentives for participation in export markets. Forward marketing, buffer stocks, commodity brokerage, auctions and other marketing strategies with support provided by government, farmers associations and the private sector, including transnational corporations (TNCs), adoption of contract farming models (that do not disturb the land rights of the small farmer or community) are all strategies that should be encouraged; and
- It may be noted that policies aimed at enhancing agri-business opportunities and agro-industry development, risk displacing small businesses, processors and traders, often in the informal sector, who depend on traditional marketing and distribution channels.

Once the general policy directions and sector-related recommendations outlined above are implemented and made country specific, the active participation of the private sector in African development can be expected to follow.

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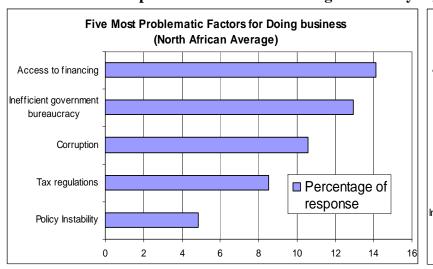
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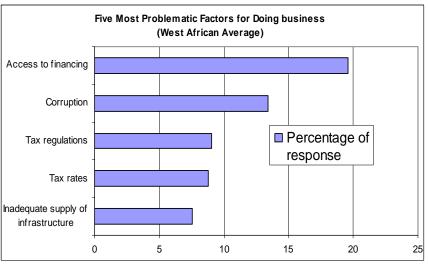
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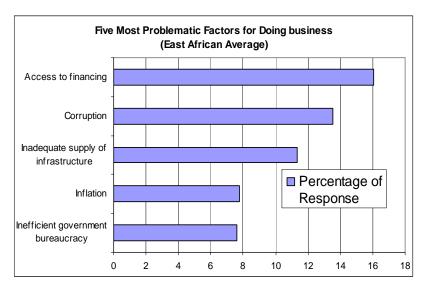
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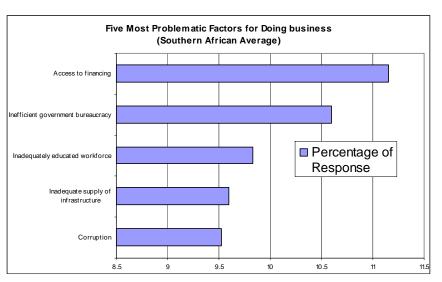
## **Annexes**

Annex 1: Five most problematic factors in doing business by region

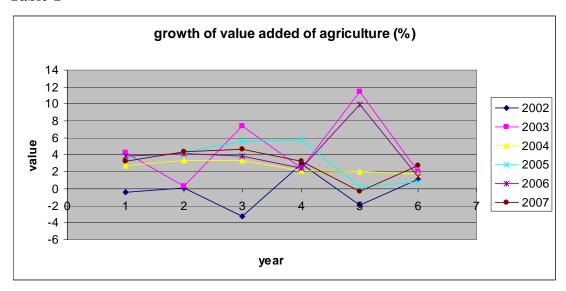








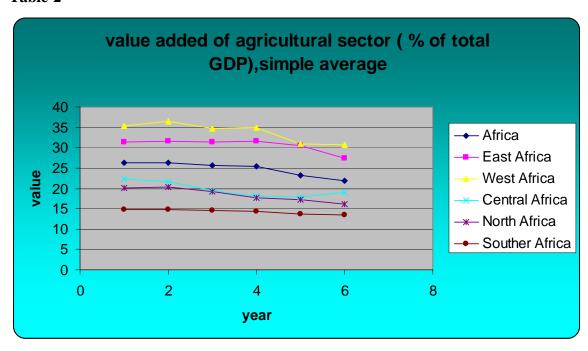
Annex 2 Table-1



Source: UNECA (2009)

The value added of agricultural sector to the total GDP in Africa ranges from 14.7% in southern Africa to 35.4% in west Africa in 2002.though its total value added in the GDP decreases in 2007 (east Africa-27.49% west Africa-30.73% central Africa-18.96% northern Africa -16.08% southern Africa-13.5%) still contributes a fundamental share of the total value added to the GDP .

Table-2



Source: UNECA (2009)