

Managing post-harvest systems to enhance agricultural productivity, competitiveness and markets in Western and Central Africa

A keynote speech

By

Dr. Geoffrey C. Mrema

Director

**Rural Infrastructure and Agro-industries Division
Food and Agriculture Organization of the United Nations (FAO)**

Presented at the

**CORAF/WECARD 2nd SCIENCE WEEK
&
NINTH GENERAL ASSEMBLY**

**25-29 May 2010
Cotonou, BENIN**



Your Excellency - the Head of State;
Honourable Ministers;
Distinguished Colleagues,
Ladies and Gentlemen;

Introduction

It is an honour and a great pleasure for me to join you here in Cotonou today as we open this session of the CORAF/WECARD 2nd Science Week and 9th Session of its General Assembly.

I want also to commend CORAF/WECARD for dedicating this Science Week to the very important issue of management of post-harvest systems for competitiveness and markets.

I was asked to speak on the topic “*Managing post-harvest systems to enhance agricultural productivity, competitiveness and markets in Western and Central Africa*”. Obviously being from FAO, I shall be speaking from the perspective of the Organization with of course the usual disclaimer that the views expressed herein may not necessarily reflect the official position of the organization.

Economic Growth, Poverty Reduction

Meeting the goals of income growth, increased food security and improved social well-being remains a major commitment of African governments and their development partners. Various strategies and programmes to improve the present economic and social indicators are being implemented across the continent.

Positive strides have been observed, but recent developments in the international economic scenario, especially the crisis of soaring food prices and the international financial meltdown, have exacerbated the continent's development challenges. For example, because of high food prices, the import bill for cereals of African countries increased substantially by 49 % in 2008 alone, while the financial crisis led to a slow down in economic growth from 6.0 per cent to 5.1 % between 2007 and 2008.

For Sub-Saharan Africa in general and West and Central African countries in particular, these crises have underscored the fragility and the lack of sustainability in the economic growth experienced in during the period 2004-2008; which was rooted in a continued excessive dependence on the production and export of unprocessed primary commodities while paying inadequate attention to the potential contribution of intra-African trade. They served as an urgent reminder that there is still scope for additional, innovative initiatives that can help accelerate economic growth, reduce poverty and foster the social development of Africa.

Importance of Agricultural Post-production Systems in the Economic Growth of Africa

Agriculture remains a key sector in African economies, accounting for up to 70 % of the employment and contributing to about 25 % of the GDP in many countries. It will remain an important source of livelihoods and the cornerstone of food security for many years to come.

While this central role of agriculture in Africa's economic development has been widely accepted, policy makers and development planners increasingly are recognizing the need to focus more attention to the post-production sector in their strategies to promote economic development of the continent. A general consensus has emerged that for agriculture to spur economic growth, investments in the sector should go beyond improvements in on-farm productivity to also cover the post-production segments of value chains.

The potential of the post-production sector as an engine of economic growth is well known. The *World Development Report of 2008* drew attention to the fact that the share of agribusiness and agro-industries in GDP tends to grow as countries move from lower to higher levels of income.

Through their forward and backward linkages, investments in post-production activities, such as value addition through post-harvest handling, agro-processing, and marketing do produce significant multiplier effects. These generate demand for agricultural products and associated inputs and services, thereby creating on- and off-farm employment, enhancing incomes and contributing to value addition and increased public sector revenues. Through these activities, access to markets, finance and technical assistance can be facilitated for smallholder farmers, promoting their inclusion into more modern and efficient value chains.

Empirical evidence shows a strong correlation between the growth of agribusiness and the overall level of economic development. The ratio of the share of GDP generated by agribusiness, compared to the share generated by farming, thus increases from 0.57 for a sample of nine "agriculturally based countries", all located in Sub-Saharan Africa, to 1.98 for a set of eleven "transforming countries" located mainly in Asia. The corresponding figure for a sample of twelve "urbanized countries" amounts to 3.32, while for the USA it stands at 13.

It has also been shown empirically that 63 % of the value added in the agri-food system was created on the farm in agricultural countries that have not undergone a structural transformation. On the other hand, for the USA in contrast, the on farm production accounted for only 7% of the value added by the agri-food system. The remaining value added in the USA agri-food system is created by input producers, agro-industries, transport firms, retailers, restaurants, and others in the agribusiness system. This situation changes therefore as economies are transformed.

The sources of economic growth depend increasingly on knowledge, skills, new technologies, management practices and institutions. In the early stages of agriculture-led growth, agricultural production and exports tend to be dominated by bulk commodities, for which natural resource endowments (and transport infrastructure) are more important determinants of comparative advantage. As countries move more into the production of higher-value agri-food products, comparative advantage is increasingly determined by investments in human capital, technology, R&D, and logistics.

The importance of the post-production sector has been underscored by the recent studies carried out by FAO in preparation for the *High-Level Expert Forum on How to Feed the World in 2050* which was held in Rome in October 2009 as a prelude to the World Summit on Food Security of 2009. The studies indicate that to meet the projected growth in the demand for crop and livestock products, cumulative global investments required in 93 developing countries worldwide in agriculture and downstream support services over the 44 year period between 2006 and 2050 amount to a staggering US\$9.2 trillion [in 2009 US\$].

For Sub-Saharan Africa the estimates indicate that the cumulative amount of investments needed over the same period is US\$940 billion. Noticeably in Sub-Saharan Africa, about 66 percent of these capital investment needs will be required for agribusiness and agro-industries capital outlays, covering items such as cold and dry storage (US\$ 78 billion), rural and wholesale market facilities (US\$159 billion), first stage processing (US\$207 billion), mechanization (US\$59 billion) and other power sources and equipment (US\$115 billion). It is important to note that these are investments that will have to be made primarily by private sector players. The public sector will thus be challenged to create and maintain the conditions whereby investments in agro enterprises and industries - especially the small and medium ones- can be forthcoming.

Further, according to the latest UN projections, world population will rise from 6.8 billion to 9.1 billion in 2050. Nearly all of the population growth will occur in developing countries with Sub-Saharan Africa's population expected to grow the fastest reaching about 2 billion by 2050. In CORAF/WICARD countries, population will increase from its current level of 417 million to over 883 million in 2050. Post-harvest interventions will be critical to ensuring that there is enough food for this population, either directly by reducing the level of post-harvest losses or by providing income generation opportunities for the population.

If one is to assume very conservative estimates of physical post-harvest losses of 10% in cereals, 30 percent in fruits and vegetables and 20% in root and tubers, a simple calculation using 2007 production data for the 22 countries of the region shows that annually some 5.37 million tonnes of cereals, 12.43 million tonnes of fruits and vegetables and 27.59 million tonnes of roots and tubers go to waste as a result of quantitative post-harvest losses alone, amounting to a total monetary value of US\$17.46 billion. The exact monetary value of total losses in the region is considered to be substantially

higher because this figure is based on very conservative estimates of the percentage of quantitative losses occurring for each of these commodities, and also because it does not include qualitative post-harvest losses which lead to reduced market opportunities.

FAO's systematic involvement in the reduction of food losses dates back to the late 1960's with the *Freedom from Hunger Campaign*. Following the first UN World Food Conference held in Rome in 1974, FAO established in 1978 the Action Programme for the *Prevention of Food Losses* (PFL) which ran through to the early 1990s. The purpose of the Programme was to assist developing countries to identify extent and magnitude of post-harvest food losses and to implement programmes for their reduction at the national level through direct action projects.

With the transition to market-driven systems and greater reliance on the private sector, interventions to reduce post-harvest losses must be considered within the context of commodity value chains and focus on systemic interventions that improve the efficiency of the chain as a whole, rather than the disjointed, single-point interventions of the past. The central role of the private sector must be recognised, and post-harvest loss reduction strategies developed should provide economic incentives to all actors in the chain. This needs to be underpinned with an enabling environment that encourages private sector investments and the partnering of the public and private sectors in spearheading growth and development.

The UN *Comprehensive Framework for Action (CFA)* of 2008 developed in response to the soaring food prices crisis, also draws attention to this important role of post-production activities, highlighting the need to stimulate private investments in, among other parts of the agri-food sector, agricultural marketing and processing enterprises which integrate smallholders into domestic and international food supply chains. The latest UNECA Economic Report on Africa draws attention to the need for a structural transformation of the continent's agricultural economy that requires "...walking through the value chain of key agricultural commodities and developing those industries and services, which are necessary for processing, handling and distributing products that meet consumer preferences".

It is heartening to note that the political leadership in Africa recognized this need as African Heads of State and Government in the 2009 AU Summit through the *Sirte Declaration on Investing in Agriculture for Economic Growth and Food Security* explicitly acknowledge the need for proactive measures and interventions to increase investments in agriculture and the continued improvement of sector policies for accelerated economic growth. The Sirte Declaration expresses the pledge of African Heads of State and Government to undertake "... relevant policy and institutional reforms that will stimulate and facilitate accelerated expansion of agriculture related market opportunities... increasing access by smallholder farmers to inputs and the necessary commercial infrastructure and technical skills to fully integrate them into the growing value chains".

Opportunities in Post Production Systems that can be Exploited

Globalization and the increasing interdependence in the world economy have created opportunities which can be the springboard for agriculture-led economic development. Driven by rising per capita incomes, changing technology, trade liberalization and rapid urbanization, dramatic changes have taken place over the last two decades in global agri-food systems in general. The changes in agri-food systems have significant implications for growth, poverty and food security. They open value addition opportunities through agro enterprises relative to primary production.

Agro-processing enterprises increase demand and the effective size of the market for farmers' products. Exporters and agro-processing enterprises provide crucial inputs and services to the farm sector for those who need to access such inputs. This induces productivity and product quality improvements. Agro-industries also stimulate market induced innovation through chains and networks.

Regional and local markets offer growing opportunities for the African agri-food sector. According to the African Union Commission statistics on trade and markets, demand for agricultural commodities and high-value products from Africa is expected to grow from US\$50 billion in 2000 to US\$150 billion by 2030. The collective potential income that farmers could derive at the farm level from increased trade in domestic and cross-border markets alone is expected to be as much as US\$30 billion; developing the necessary market links could raise rural incomes by up to another \$60 billion. [

In addition to these economic forces, a number of social and political drivers are going to induce rapid development of the post-production sector in the West and Central African Region. A key social force is the rapid population growth and high rates of urbanization in the region. The population of the 22 CORAF/WECARD countries considered together is projected to increase from its current level of 417 million to 527 million in 2020 and to over 883 million in 2050. By 2020, an equal number of the population will live in rural and urban areas, while beyond this date the urban population is projected to rapidly outgrow the population in rural areas. By 2050 it is projected that about 67% of the region's population will live in urban areas.

The rapid population growth in the CORAF/WECARD countries calls for development of post-harvest management systems that can deliver the quantity of food required and meet quality requirements of consumers. Urban growth is a potential benefit to the post-production sector because it offers producers and processors access to expanding urban markets and demand for agro-products, especially in processed form. Additionally, the urbanization trends make it necessary to increase agricultural productivity and modernize agri-food chains so as to allow efficient production and supply of foodstuffs to the growing number of urban dwellers.

It is also important to note that in the West and Central Africa, the larger cities and urban areas are located on or close to the Atlantic coast. A high proportion of the population is therefore exposed to imported products. This

literally raises the bar on competitiveness to a global scale. Therefore access to this growing and highly lucrative market is contingent upon establishment of a globally competitive post-production sector. Competition is therefore not only nationally but regionally as well as globally.

This is vividly portrayed by the rice sub-sector. The majority of imported rice is of a high consistency in terms of size, variety, colour and cleanliness. It is also easier to prepare, a characteristic which is particularly important in the urban areas, where consumers value convenience due to busy work schedules. Domestic rice, by contrast, tends to be brown rice. Generally it has been milled one time (de-hulled), is not polished, has great colour variation, may contain mixed varieties in a single bag and has many stones. In this regard quality becomes a key factor.

A characteristic of the urbanization in the West and Central African region which opens opportunities for the post-production system is that the urban environment reinforces the trend for food diversification. When arriving in the cities, migrants bring along specific food processing and consumption practices which are constituents of their social identity. This leads to a diffusion of their original products beyond their traditional geographical and social limits.

Studies in capital cities of different Western and Central African countries have highlighted the widespread diffusion, on a national or even regional space, of some African processed food products that were once restricted to a local and/or to an ethnic group of consumers. Attiéké for instance (a type of cassava couscous), which forty years ago was only known by ethnic groups from Ivory Coast, has spread to many countries in Central Africa. A number of non-tradable have thus become regionally traded products. This adaptation mechanism certainly represents a largely untapped source of growth to generate pro-poor development through food processing.

Another relevant social force stems from the demographic profile of the region where the population is mostly young (18-25 years of age). The youth constitute both a pool of labour and a source of entrepreneurial potential that can be tapped in support of agro-processing, handling, marketing and other activities in the post-production chain. As most of the youth do not see traditional farming as an attractive occupation, especially given the drudgery, low productivity and lack of financial incentives that characterise most operations, the prospects are higher for attracting them in post-production activities.

Opportunities have not been exploited

The above mentioned opportunities for developing the post-production sector have in general not been exploited. With regard to trade, despite the growing international demand for higher-value processed agro-industry products, Africa is yet to make significant progress locally toward adding value to her primary agricultural commodities and to achieve compliance with international standards.

Indeed, African countries contribute less than 10 percent to global value addition. The share of Africa in world agricultural trade has declined from 15% in the 1960s to 5.4% in the 1980s and 3.2% in 2006. Moreover, intra-African trade represents barely 10% of Africa's total agricultural trade. Africa's international trade is dominated by primary commodity exports, which represent almost 60 percent of total export value, with the remaining 40 percent being accounted for by fuels. Among non-fuel primary commodity exports, agricultural products account for more than 25 percent of trade revenues.

As highlighted in the African Economic Report 2009, agriculture has not been sufficiently linked to agribusiness and agro-industries in the Continent. Consequently, innovative programmes for strengthening these linkages are needed.

African markets are of sub-optimal size to ensure profitability of sizeable private investment. Intra-regional exports are relatively low (averaging \$3.8 billion annually between 2000 and 2005) while imports of agricultural commodities from outside the region average US\$33 billion. Agriculture-led growth will be difficult to achieve without strengthening linkages and generating mutual benefits across countries through the development of agro-processing industries and profitable agribusinesses.

Let us take rice as one commodity which requires urgent action by all those who are active in agricultural development in Africa – in 2005 world trade in rice was about 29.58 million metric tonnes. Of this 11 million tonnes or 37% of global imports were imported by countries in SSA. The Western and Central Africa region imported about 7.8 million tonnes which was 77% and 26% of SSA and global total imports respectively.

The rice imports into the West and Central Africa is mostly from Thailand and Vietnam. Entrepreneurs from these countries in collaboration with local traders have set up very efficient supply chains which are dominating this rice trade. The fact that the bulk of the population reside in urban areas which, as pointed out earlier are mostly on the Atlantic coast has made it quite easy for rice imports to be more competitive than locally produced rice.

The freight cost of shipping a tonne of rice from Bangkok to the docks in Apapa near Lagos is about US\$50, while the cost of moving that rice from the docks to a warehouse in Lagos is also about US \$50. Further overland transportation costs are quite high in Africa. Under such conditions it is difficult for the domestic rice sector to be competitive.

What Needs to be Done

Developing agriculture for broad-based economic growth, food security and poverty reduction in Africa requires that we broaden our perspective beyond the narrow confines of on farm production or farming to the entire food and agriculture system. **It requires an integrated approach to investing in improving productivity and efficiency at all the stages of the commodity value chains, from research and development to input markets, farm-**

level production, processing, storage, handling, transportation and distribution to the final consumer.

While the farmer can competently handle the on farm production issues, the processing, storage, handling, transportation and final distribution to the consumer is best handled by agribusiness – be it a small scale trader; or a cooperative or a large scale enterprise. The linkages among these stages are critical to achieving the full contribution of agriculture to broad-based economic growth through greater value-added and income-generating employment. Hence, the food and agriculture system should be conceived as encompassing the farming sector and the agribusiness, industrial and services sectors.

Achieving this paradigm shift in African agricultural development requires a new vision, top political-level commitment and leadership, as well as renewed efforts of national, regional and international policymakers and development practitioners. This new vision must deal with the fundamental causes of low productivity, competitiveness and resilience of African agriculture in the face of the challenges of globalization and emerging threats such as climate change. The vision must be centred on a regional integration perspective to take advantage of economies of scale, specialization in diversification, and trans-national inter-sectoral growth linkages.

The intervention areas to strengthen the management of post-harvest systems to enhance agricultural productivity and competitiveness in Africa can be categorised in the four broad groups namely:

- Enabling policies and public goods;
- Value chain skills and technologies;
- Post production institutions and services;
- Reinforced financing and risk mitigation mechanisms;

Many of these areas may appear to be outside the core mandate area of the agricultural research systems who are the main stake holders of CORAF/WECARD. However, it is important to recognize that unless these issues are tackled then any increased investment in research in on-farm production is unlikely to have impact. The research agenda therefore needs to be broadened to factor in these issues. Let me high light some of the key elements involved.

Enabling Policies and Public Goods:

Agro enterprises and industries especially the small and medium scale ones are the key players in the post production systems which links the farmer to the consumer. These are essentially private sector activities, but it is the public sector's role to facilitate and create the supporting environment for entrepreneurship to emerge and for private entrepreneurs to find attractive investment opportunities in these sectors. The fact that local business finds it easier to engage in importation of rice from Asia rather than in sourcing the rice locally is indicative of risks involved in the latter.

It is important that we address the constraints that are inhibiting the private sector in the region to engage in the types of investments that enabled agro

enterprises to flourish in other regions of the world, such as Asia and Latin America. The public sector must create the enabling conditions that increase the attractiveness of investments in agro enterprises and industries and reduce their risks. The business environment represents one of the most important drivers of competitiveness for domestic and export oriented agro-enterprises and agro-industries. It is critically important for reducing the cost of doing business and attracting investment.

Many of the most critical aspects of a supportive agro enterprise environment are identical to those which apply to other sectors such as manufacturing and services industries (e.g. good public governance and a stable macroeconomic climate). However, particular attention is needed for aspects of enabling environments that are distinct or particularly important for agro enterprises and industries. I will mention the main ones briefly:

Sector Strategies and Plans

Most countries in the region have relatively well defined agricultural and rural development policies but in many cases these give insufficient attention to the development of agro-enterprises and industries. Strategy development, planning and policy implementation can be enhanced by strengthening the capacity and linkages among public agencies responsible for agriculture, agribusiness and agro-industries, and by reinforcing mechanisms for multi-stakeholder consultation. Support is therefore required for agribusiness and agro-industry strategy development, and for incorporating these strategies into agricultural sector policies, plans and programme frameworks.

In the light of the complexity and range of issues to be addressed to increase the competitiveness of the post-production sector, there is a need to review institutional mandates for influencing, regulating and supporting private sector investments in agro-enterprises and agro-industry. The development and implementation of policies affecting the agricultural sector increasingly depend on ministries and agencies outside of the agricultural ministry. At a minimum, mechanisms are needed to strengthen linkages among public sector agencies responsible for policies, institutions and services impacting on the development of agribusiness and agro-industry especially the small and medium scale ones.

The importance of appropriate strategies and policies can be depicted by the issues which the rice sector is facing in some countries of the region. Even though steps have been taken to protect the local industry using a combination of duties, subsidies on inputs, including fertilizers and mechanization services, as well as credit, a strong supply side response has not been forthcoming because of the un-coordinated policy environment. This creates disincentives for the necessary private-sector investments in key functions of the rice value chain, primarily in processing and input supply.

Legal and Regulatory Frameworks

A legal and regulatory framework, establishing obligations, rules and rights, is a necessity for doing business. While many regulations impact on all economic sectors some regulations have specific implications for agro

enterprises and agro-industries. These include licensing requirements, regulations related to food quality, and safety as well as grades and standards.

In order to facilitate standardization of products, ensure food safety and consumer confidence, support would be needed to develop and build capacity relating to food standards that are responsive to domestic needs and, as needed, comply with regional and international requirements and standards. It is only through such measures that local agricultural products will be able to compete with imported ones.

Markets and Trade Infrastructure

One of the most binding constraints to greater and more widespread private investment in agriculture in the region is deficient infrastructure (e.g. power and transport). The improvement of market and trade related infrastructure at the national and regional levels is essential to lower costs and boost the development of agribusiness and agro-industry, particularly in the light of growing opportunities in regional markets.

Market and trade infrastructure underlying transportation and communication systems, as well as electricity, water and sanitation services, etc., are public goods and as a consequence, governments have a leading role in ensuring adequate investment. Required interventions in this domain are for undertaking appraisals, developing financing proposals and as appropriate helping to establish public-private partnerships to accelerate development and ensure maintenance of infrastructure impacting on the agricultural sector, with particular attention to market and trade related infrastructure.

The issue of infrastructure is particularly pertinent given the high costs of transportation in the region and the fact that a larger % of the population – and hence the market - will be residing on the Atlantic coast or within a short distance from it. These urban dwellers as is now evident with rice imports, may be able to get their requirements more cheaply through global supply chains. Internal transportation costs are just too high and these need to be reduced by among other things improvements in the infrastructure – including rural infrastructure.

National and Regional Trade Policies

Given the high potential for regional trade in the region, there is a need to ensure that trade policies create appropriate incentives for individuals and enterprises to operate regionally and globally, including eliminating tariff and non tariff barriers to intra-regional trade. There is also a need to harmonize national investment codes at regional level.

To succeed in establishing enabling trade policies, policy makers and technical officers need to be able to consider and respond to a wide range of technical issues covered by World Trade Organization (WTO) agreements, sanitary and phytosanitary (SPS) agreements, and related agreements that could pose potential barriers or provide opportunities for trade. A key area of support is therefore the development of trade policies and agreements

specifically related to the agricultural sector including support for capacity building.

Development of Value Chain Skills and Technologies: Producer, Commodity and Industry Associations

These associations have a key role to play in competitiveness of the post-production sector as they have a valuable role in supporting joint action, networking among members, facilitating linkages with other enterprises and organizations, and enhancing participation in policy and planning.

Producer organizations, in particular, can strengthen the capacities of farmers to understand and meet market requirements, and can help small producers achieve economies of scale in buying inputs and marketing their products. Support is required to improve the effectiveness of these associations in providing services to their members and enhance their viability and sustainability.

Value Chains Development and Facilitation

Given the trends we have already highlighted (urbanization, demand for quality and convenience) the value chain approach is the one that would maximise the competitiveness of the post-production sector, as it takes a holistic view from 'farm to plate', i.e. from production (including the inputs and methods used) and across the chain until the product reaches the final consumer.

Facilitation of business and organizational linkages is the central activity of value chains development. It helps in developing productive partnerships between producers and firms and among firms in value chains. Support is required to organizations that provide value chain facilitation services, to ensure that their services are sustainable. The public sector could intervene in value chains development to help ensure that progress being made in one part of the value chain is not negated by poor performance in other parts of the chain.

For example, an analysis of the value chain for domestically produced rice in some countries of the region shows a largely fragmented production and milling industry, lack of incentives because there are so many participants in the chain that the benefits at each step are spread very thin, and a lack of a consistent, reliable supply of high-grade paddy to the mills. Thus, due to these constraints, even though steps have been taken to protect the local industry using a combination of duty, subsidies on of the inputs into the rice industry, including fertilizers and mechanization services, as well as credit, a strong supply side response has not been forthcoming.

A key research area is to identify and address trade-offs between value chain development objectives and those for poverty reduction and food security. Rapid agro-industry development could displace small farmers, processors, stores, and traders who depend on traditional marketing and distribution channels at a pace which does not allow enough time to create alternative opportunities. Therefore another research area is related to governance

issues in the chain to ensure that the benefits are spread fairly to all chain participants.

Business Development Services

In order to foster the competitiveness of the post-production sector, support is needed to promote business development services related to finance, accounting and marketing which are required by producers and agro-based enterprises. These services are particularly critical to smallholder farmers, small firms and new start-ups, whose transaction costs are large relative to the size of their output. To enhance the access of farmers and SMEs to essential services, support is required for the replication and scaling-up of successful models for provision of business development services. This is a potential area of socio-economic and agribusiness research.

Producer and SME Capacity Building

In order to have a profitable and competitive sector involved in post-harvest, value addition and marketing activities, farmers and other smaller scale value chain actors must have the capacity to understand and meet the timing, quality and safety requirements of their customers. Support is therefore required in developing and delivering appropriate capacity building programmes.

Research, Technology Development and Transfer, Training

Many potentially useful technologies are “sitting on the shelves” while the private sector is struggling to commercialize a limited range of outdated technologies. A key area which requires attention by CORAF/WECARD is the increased attention needed in developing and transferring improved agricultural and food engineering technologies (including for processing machinery, equipment, tools and packaging materials), and operational and logistical systems for improving efficiency along value chains.

Public-private collaboration and partnership in research and dissemination of research results can improve the technologies available to small scale producers, processors and other value chain actors. There is scope for producing such equipment and technology at the regional or continental level based on technology acquired through South-South cooperation, from such countries as Brazil, Thailand, India etc.

At the moment, agricultural research, education and extension systems in the region are heavily focused on issues related to production systems such as breeding, agronomy, and soil management. Thus, while there is ample skills set in these domains there is paucity of the same when it comes to post-harvest components of the chain.

To accelerate agricultural sector development and enhance its contributions to overall economic development, there is an urgent need for CORAF/WECARD to take measures to build skills and technologies that improve efficiency and productivity along the post-production parts of the value chains as a complement to the support being provided to increase productivity in primary production. Support is required in re-focusing and

reinforcing university and vocational training in agriculture and engineering in order to mainstream the building of capacities in post-harvest handling, value-adding processing, agribusiness development and management, and agro-industrial skills.

Innovative Institutions and Services:

In the region, most of the agricultural sector institutions and services are focused on supporting producers and production systems. There is a need to establish new or re-orient existing agricultural institutions and support services to create a versatile network of institutions capable of dealing with the needs of the post-harvest sector. Research support is required to further validate, upscale and replicate these innovations through pilots and prototypes, combined with evaluation and capacity building.

There are four main institutional innovations which could be given as an example in this respect:

1. Contract farming and out-grower schemes which link farmers to markets;
2. Business incubators, hubs and clusters for supporting business planning and start up, improving provision of services and strengthening inter-firm communication and cooperation;
3. Research, technology and agro-food parks which seek to establish a critical mass of inter-linked enterprises, services, investment and infrastructure development;
4. Product labelling and certification schemes which provide a basis for differentiating products, thereby increasing value beyond conventional products sold in local markets; and
5. Commodity exchanges and market information systems

These are all new areas and our research systems could undertake studies to document which ones work or do not work and reasons for success or failure. Such studies should then inform the policy making and development process.

Financing and Risk Mitigation

Poor access to finance has long hampered the development of agro enterprise and industry in the region, especially in rural areas. There is increasing evidence of the existence of liquidity in the continent's commercial banking system. However, in a sample of nine countries in Sub-Saharan Africa (Tanzania, Uganda, Nigeria, Ghana, Malawi, Sierra Leone, Mozambique, Kenya and Botswana), the average commercial bank loans and advances to the agriculture sector in 2008 was less than 6 percent of the total loan portfolio, compared to 47 percent for services and personal loans.

As mentioned above, the key to unleashing the flow of private and financial sector resources is to increase profitability and reduce risk. While the elements of the enabling environment can be expected to improve the profitability-risk ratio by improving productivity and efficiency and reducing the costs of doing business, mechanisms are required to mobilize resources and

mitigate the costs and risks for prospective investors and financial services providers. These include financial instruments such as loan guarantees etc.

Moving Forward

An application of the agenda identified above will help unlock the enormous potential of agro-industries to contribute to the region's long-term prosperity. These are already some very successful stories in the region: cassava development in Nigeria, pineapple in Ghana, fonio from Mali and various traditional pre-cooked cassava products exported from Cameroon and DR Congo to Diaspora populations in Europe. However, most of the challenges militating against the competitiveness and profitability of the post-production sector transcend national borders. Therefore a regional approach needs to be taken to tackle them. New trade strategies are required for the development of regional value chains.

Some over arching principles for moving forward include:

(1) *Alignment with CAADP*: While contributing to the overall objectives of CAADP, post-harvest interventions address primarily Pillar II, which aims to accelerate growth in the agriculture sector by raising the capacities of private entrepreneurs to meet market requirements.

Pillar II also seeks to promote the regulatory and policy framework needed to facilitate the emergence of regional economic spaces that would spur the expansion of regional trade and cross-country investments. In West Africa alone, some 12 countries have signed their CAADP compacts, while other countries are preparing their compacts.

(2) *Integrate into Regional Organizations, Alliances and Initiatives*: A comprehensive programme for commercialising agriculture through raising the competitiveness of the post-production sector cannot successfully operate only at national levels as it deals with issues that transcend national boundaries. The existence and growing importance of regional organizations in the regions (such as ECOWAS) offers an institutional setting in which such programmes could be facilitated.

It is important to that such programmes are complementary to ongoing initiatives led by regional organizations that support the strengthening of market linkages and regional trade capacities in the region.

What does all this mean for FAO?

In March 2010 in Abuja, Nigeria *the Africa Agribusiness and Agro-industries Development Initiative (3ADI)* was launched during the High-Level Conference on the Development of Agribusiness and Agro-industries (HLCD-3A) which was chaired by H.E. President Goodluck Jonathan of Nigeria. This High level Conference was hosted by the Federal Government of Nigeria was organized by five international agencies namely; FAO; UNIDO; UNECA; IFAD and the AfDB; under the auspices of the African Union Commission {AUC}.

The Conference brought together senior officials and Ministers of Agriculture as well as those of Commerce and Industry from all the African countries. Several Heads of State and Governments attended the conference and approved 3ADI which incorporates a programme framework and associated financial modalities to foster the development of agribusiness and agro-industries in Africa. The 3AD initiative seeks to increase private sector investment flows into the agriculture sector in Africa by mobilizing resources for agribusiness and agro-industrial development from domestic and international financial systems.

The 3ADI has two prongs – one a programme framework covering some of the areas I have highlighted today and the second prong is a financial facility which it is hoped will significantly increase investments from national, regional and international financial systems to the African agribusiness and agro-industries which will lead a significant increase in the proportion of agricultural produce in Africa that is transformed into differentiated high value products. The AfDB is currently leading the effort to structure and mobilize resources for the financial facility for the 3ADI while FAO and UNIDO are actively involved in the programme framework. More information on this can be found on the HLCD-3A website.

Concluding Remarks

With the transition to market-driven systems and greater reliance on the private sector, interventions in the post-harvest sector must be considered within the context of the value chains and focus on systemic interventions that improve the efficiency of the chain as a whole, rather than the disjointed, single-point interventions of the past. The central role of the private sector must be recognised, and strategies developed that provide economic incentives to all actors in the chain. This needs to be underpinned with an enabling environment that encourages private sector investment and the partnering of the public and private sectors in spearheading growth and development

Ladies and Gentlemen, your deliberations will be an important step to pave the way towards the development of modernized, profitable and inclusive agricultural sector in CORAD/WECARD countries and Africa in general. As pointed out earlier the CORAF region imports over 25% of the rice traded in the global market. Most of these imports are from South East Asia – particularly Thailand and Vietnam. It is important to recognize that countries like Vietnam were themselves importers of rice not long ago but have managed in the past decade to build very competitive global supply chains for rice.

The other staple food in Africa and this region in particular are the roots and tubers including cassava; yams and plantains. Given the demographic trends of West and Central Africa with increased urbanization concentrated on the Atlantic coast we need to set up efficient post productions value chains – more so as these commodities are essentially perishable without post production processing. It is important to recognize that currently there are many entrepreneurs in South East Asia who are exporting millions of tonnes

of dried cassava pellets to Europe for the feed industry. Similarly the post production cassava industry in Latin America is quite advanced.

Given WTO agreements and globalization there is nothing to stop such entrepreneurs from starting to supply cassava products to this region and Africa at large. This only means that in developing the post production sector and in order to catch up with the rest of the World, Africa has to run while others walk as a prominent African leader once said - and in this case running will have to mean sprinting and not just jogging!

Let me conclude my remarks by reaffirming the commitment of FAO to assist, to the extent possible, in implementing the decisions taken at this meeting.

Thank You.

DN/GCM/Rome – 20th May 2010.