A 10-year strategy for the banana sector in Africa

The Banana 2008
Conference held in
Mombasa, Kenya,
provided the opportunity
for developing a strategy
to help propel the banana
industry as an important
engine of growth in Africa.

It was attended by more than 300 participants from the research and development arena, the private sector, and the business development, production and processing, policymaking, and marketing sectors.

Identifying priorities

The week-long conference focused on the themes markets and trade, production, and innovation systems. Within each theme, subthemes were identified along the whole commodity chain.

The participants identified priorities under the themes that cover the three banana types (dessert banana, plantain, and East African highland banana or EAHB) at three market levels: local, regional, and international.

The table on the next page shows the priorities identified by participants for each banana type and market level.

From priorities to action

Priority setting was the first step in strategy development. The next step was identifying who needs to do what to achieve these priorities.

Improving linkages Improving linkages across the value chain is urgent if the banana sector is to be transformed. Better linkages, which depend on improved information provision and communication between actors, are important in achieving many of the identified priorities. Within markets and trade, for example, the successful matching of supply and demand depends to a large extent on an

information flow through effective linkages.

Similarly for production, improved linkages are critical to solve the current gap between science and practice, and allow farmers to have access to knowledge so that they can address production constraints.

All stakeholders
must recognize their
responsibility to nurture
synergistic relationships
along the commodity
chain. Principal actors
(growers, traders,
agribusiness, processors,
retailers, and consumers)
must be open to sharing
information with other
stakeholders. Supporting
actors (those who



Banana is an important food in West Africa. Photo by IITA.

Priorities for the banana sector in Africa, by banana type and market level.

• = where every group (of 8 people) selected an issue as one of their key three priorities; ϕ = where more than 50% of groups selected the same priority; and o = if less than 50% of groups (but more than 0%). None highlighted a priority. Loc = local market, Reg = regional market, Int = international market

Priorities	Bana East African Highland banana			na type and market Plantain			t level Dessert		
	Loc	Reg	Int	Loc	Reg	Int	Loc	Reg	Int
Markets and trade									
Match supply and demand	•	•	•					•	0
Recognize consumer preferences	0	0	0	•	•	•			
Stabilize raw material inputs									
for processing				•	•	•			
Tailor technologies to scale and									
level of industry					φ	φ	0	0	
Develop business plan (including									
models and policy)							φ	•	φ
Growers select most suitable									
market type	0	0	0				0		
Involve market representatives									
throughout the value chain	0	0	0						
Liberalize trade (agreements)						0	0	0	
Improve input supply systems				0	0	0			
Match exports with regional needs Production					0	0			
Disease-free planting material									
(micro- and macro-propagated)	•		Φ						
Rapid and reliable disease diagnostics	0	0	φ 0	Φ	Φ	•	0	Φ	
Methods for pest and disease control	0	0	0	Ψ	Ψ		•	Ψ	
Ecological durability of intensified	O	O	U	O			•	•	
cultivation systems	0	0		Φ	Φ	Φ	0	0	
Genetic improvement of available				Ψ.	Ψ	Ψ.	Ü		
varieties			0	Φ	Φ	Φ			
Phytosanitary standards developed				•	т.	т.			
and regulated				Φ	Φ	Φ			
Reduction in postharvest losses	0				•	•	•	Φ	
Ripening technologies							0	0	
Innovation systems									
Linkages with agricultural research									
for concerted action, impact									
evaluation, and feedback	•	•	•	•	•	•			
Information services to farmers and									
results communicated to researchers	φ	φ		φ			•	φ	φ
Mechanisms for small farm sectors									
to influence research and policy					φ	φ		φ	
Reward and train research and									
development actors to increase									
the efficiency of impact pathways				φ	φ	φ			
Effective organizations and									
infrastructural linkages		φ						0	

provide services, inputs, and technologies) and those determining the operating environment (Governments and subregional trade organizations) have a key role to play in initiating and promoting new ways of working that encourage stronger linkages. Extension services provide a particularly important link in the banana chain and need to be strengthened—a role and responsibility of Governments.

To improve linkages across regions, participants suggested creating "knowledge platforms" to share current knowledge and to facilitate multisite testing, training, and education with farmers' groups. Regional systems would feed into a pan-African system for consultative priority setting that is charged with exchanging information, strengthening capacity, forging partnerships, and developing policy to support banana production and trade across the continent.

Empowering farmers
The banana sector will be successfully transformed only if infrastructure is improved and the position of producers is strengthened. Farmers are greatly empowered by working together in cooperatives or farmers' associations. Such farmers are in a much better position to address production constraints and to respond to markets.

Information sharing and training are greatly facilitated, and effective innovation systems can develop more easily as the economy of scale is increased from individuals to organizations. Supporting actors, such as NGOs and community based organizations, have a crucial role in promoting the development of farmers' groups. It is also in the interest of agribusinesses to support their creation and operation as it is more efficient and therefore financially viable for them to work with groups for example, in the supply of inputs and purchase of greater volumes of products.

Production Better linkages and farmers' organizations will greatly facilitate the optimization of production practices, and also help to guide research priorities. Key actors who work with farmers in addressing production priorities are those providing technical services, particularly the extension services, and those working to develop new technologies and stimulate innovation, particularly NARS and the international research community. Actors determining the policy and operating environments also have a role in facilitating access to technologies and services. Banana genetic resources support production systems. Collecting, characterizing, and sharing banana

germplasm will require the continuing efforts of the international agricultural research centers, NARS, advanced research institutes, and regional research organizations and networks.

Markets and trade
Again, effective linkages
and participation in
farmers' organizations
are needed to enhance
farmers' abilities to
understand and respond
to markets at all levels.
However, markets are
rapidly changing, and
responding effectively
and appropriately will be
a major challenge across
the banana chain.

At the local and regional level, expanding urban markets and the flourishing supermarket sector will offer many opportunities for banana growers and traders. Improved transport and market infrastructure, provided by local and national governments, is critical to stimulating growth in this area. Processing into innovative and durable new products will become more important to reach more distant regional markets and to smooth out seasonal discrepancies in supply and demand. Agribusinesses and regional trade organizations can guide interventions, with support from governments. Market information will be critical: the need to share this information will bring in actors in the

communications field, such as the providers of mobile phone networks.

At the international level the dessert banana will continue to dominate trade, but changes in European trade tariffs will mean that production and freight systems in Africa will need to become far more competitive. There may be opportunities for well-organized farmers' groups, for example, in supplying "fair trade" and similarly certified bananas. The main actors include international traders, airlines and shipping companies, supermarkets, standard-setting and certification organizations, governments, and regional and international trade organizations. Inland production areas are seriously

disadvantaged with regard to transport costs and will require creative market opportunities, such as value-added processing.

Promoting innovation
Effective linkages are at
the heart of successful
innovation systems.

The Agricultural Science, Technology and Innovation (ASTI) system was adopted as the take-off point for promoting innovation.

In this model, effective linkages and empowered farmers were recognized as holding the key to innovation in the banana sector. Information and communication pathways are also fundamental. There is potential for innovation in all relationships across the banana chain, with all principal

actors involved. Those who focus on supplying new technologies and promoting innovation are particularly important, specifically research organizations at all levels (national, regional, and international). The private sector also has a crucial role in facilitating innovation as a source of new technologies and also as a conduit for transferring technologies that may be familiar in a different context to a new set of banana producers or marketers.

Implementing the strategy

The Forum for Agricultural Research in Africa (FARA) and its various elements will be pivotal to transforming Africa's banana sector. The framework of FARA is the Comprehensive Africa



Banana being transported by truck to city centers, Uganda. Photo by IITA.

Agriculture Development Programme (CAADP) which has four pillars. Pillar IV aims to enhance agricultural research, technology dissemination and adoption, and its implementation is governed by the Framework for African Agricultural Productivity. The goals are to integrate natural resource management, encourage adoption of appropriate germplasm, develop sustainable market chains, and stimulate policies for sustainable agriculture. The banana strategy addresses these goals specifically for the banana sector, and thus fits squarely into the mandate of FARA.

Implementation of the strategy will begin by building an informed knowledge base organized around innovation platforms that both involve stakeholders and encourage ownership. Implementation of the strategy can happen under existing institutional arrangements. For research issues, NARS join into the subregional organizations such as West and Central African Council for Agricultural Research and Development (WECARD), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), and the Southern African Development Community. For trade issues the key bodies are the Economic Community of West African States (ECOWAS)



and the Common Market for Eastern and Southern Africa (COMESA). All of these, in turn, feed into FARA. Technical backstopping and technology validation at the regional level will be facilitated by the research centers of the CGIAR and their numerous and diverse research partners, both within Africa and outside the continent. Additional support in specific areas will come from the Technical Centre for Agricultural and Rural Cooperation and the African Agricultural Technology Foundation.

Banana researchers in Africa have been accustomed to collaborating within regional networks: Réseau Musa pour l'Afrique Centrale et Occidentale is a part of WECARD and the Banana Research Network for Eastern and Southern Africa is under the auspices of ASARECA. These networks have recently been widened to include NGOs and private sector participants. Links to banana researchers in other regions, for the exchange of information and technologies and for

collaborative problemsolving research, are promoted through the global ProMusa network, which also constitutes the Banana and Plantain Section of the International Society for Horticultural Sciences.

Innovation platforms are now envisaged that will unite researchers, extension agents, farmers and farmers' organizations, agribusiness staff, traders, policymakers, and development partners. Research priorities and technology dissemination strategies will need to be market-oriented and participatory, and use approaches such as collective action by farmers, farmer-to-farmer learning, market-led technology adoption, and mutual learning in the market chain.

The strategy for transforming the banana sector in Africa fits precisely in the FARA model for agricultural innovation and economic development, and can be implemented under existing institutional arrangements. Participants believe that this would facilitate increased visibility and the mobilization of the breadth of expertise and depth of resources needed for its successful implementation. Such an outcome could indeed help banana to realize its full potential as a major economic driver for sustainable and equitable development in Africa.