

**U.S. Agency for International Development
West Africa Regional Program**

**Initiative to End Hunger in Africa
Action Plan**



**VOLUME IV:
WARP Action Plan Consultancy Reports**

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Table of Contents

Introduction	1
Science and Technology Issues	3
Overview and Priorities for Science and Technology in West Africa, by William A. Masters.....	4
Current USAID Science and Technology Activities in West Africa and How They Might Be Augmented, by Frederick E. Gilbert.....	26
Technology Transfer and Dissemination, by Brent M. Simpson.....	46
Transfert et Dissemination des Technologies by Jorge Oliviera	67
Markets and Trade Issues	82
Regional Interventions to Improve West African Cross-Border Trade by Daniel J. Plunkett and J. Dirck Stryker	83
Development of a Regional Market Information System for Agricultural and Livestock Commodities, by Andy D. Cook.....	97
Producers Organizations	119
Community-Based Producer Organizations, by Jim Bingen	120
Renforcement des Organisations de Producteurs En Afrique de l’Ouest, by Jorge Oliveira	144
Nigeria Trip Report	203
Report to USAID’s West Africa Regional Program on a trip to Nigeria, 18th – 28th January 2003	204

Introduction

This is the fourth and final volume the 2003 Action Plan sets forth by the West Africa Regional Program (WARP) under the Presidential Initiative to End Hunger in Africa (IEHA). The purpose of the Action Plan is to describe WARP's diagnosis of the nature and causes of hunger and presents a strategic vision of how WARP can respond to those challenges, based on an analysis of the agricultural sector in West Africa as well of an assessment of current programs being carried out by national governments, regional organizations, other donors and the numerous United States government programs. The plan also describes investments options in science and technology; markets and trade; producer organizations, and information systems needed to address those challenge, as well as the criteria used for final selection. The types of linkages within USAID as well as between USAID, its partners and local stakeholders are elaborated with a particular cyc towards building the regional platform necessary to sustain agricultural growth.

The process by which the WARP Action Plan was written included a combination of technical assessments and stakeholder consultations. Drawing from technical assistance provided by Abt Associates Inc. under the AICHA task order funded by AFR/SD under the Agricultural Policy Development (APD) indefinite quantity contract¹, WARP commissioned an overview of USAID agricultural objectives and programs in West Africa as well as more specific analyses of lessons learned and investment options in a) research and technology dissemination, b) regional trade and market information systems and c) producer association networks. Those reports are assembled here in this, Volume IV of the WARP IEHA Action Plan.

Because the goal of these papers was to identify investment options fairly rapidly in several fields where WARP did not have recent experience, they were designed as "briefs" by known West Africa experts rather than new studies or literature reviews. Most assignments were extremely short, ranging from five to twelve days. Key ideas and text from these pieces have been incorporated in Volume III of the WARP action plan. At this stage, none of these papers has been heavily edited; they should thus serve as reference and as a basis for further analysis rather than definitive pieces.

Below is a short summary of the other volumes of the WARP IEHA Action Plan.

- Volume I includes the Executive Summary and the WARP IEHA Action Plan and provides an overview of the strategy and selected investments for WARP's engagement in IEHA.
- Volume II, "IEHA Context and the WARP Program for Cutting Hunger in West Africa", describes the problem of hunger in West Africa, how USAID has been responding to that problem, additional activities WARP could undertake consistent with IEHA principles, and an operational plan for implementing selected investments in the FY 03-08 period. This volume draws upon, but does not include, the assessment of agricultural opportunities and challenges found in Volume III.
- Volume III: "IEHA Pillar Assessment", provides a diagnosis of the opportunities and challenges of the agricultural sector in West Africa and a set of investment options

¹ PCE-I-00-99-00033-00, Task Order 5.

which respond to those challenges. It includes findings from the “best-bet” commodity analysis, as well as detailed information on the issues, opportunities, challenges, risks for each of the three IEHA pillars where WARP will focus, namely science and technology, markets and trade, and producer organizations.

Science and Technology Issues

Overview and Priorities for Science and Technology in West Africa²

William A. Masters³

Executive Summary and Investment Priorities

This document specifies interventions by which to develop and deliver valuable innovations to West African farmers, through targeted investments in science and technology at a regional level. The priorities sketched here can be expected to make major contributions to WARP's objective of a politically stable and economically prosperous West Africa, through the use of improved production techniques and marketing institutions by the region's 115 million farm people, whose rapid population growth and limited migration opportunities cause increased dependence on a fragile natural resource base.

Priorities for WARP investment in agricultural science and technology

The proposed priorities flow from the bottom up, to enhance what farmers, the private sector, and local governments are already doing. To complement rather than imitate the work of others, the priorities for WARP S&T investments should be:

- (1) increased investment in science-based innovation, through specialized networks of NARS, IARC and other scientists whose goal is to develop new plant varieties and complementary soil-fertility and crop-protection technologies that fit West African farmers' changing needs; and
- (2) increased investment in policy reform and institutional change, through regional organizations whose goal is to accelerate the multiplication and delivery of seeds and seedlings for new crop varieties, as to expand farmers' access to inorganic fertilizer and crop protection chemicals.

The allocation of resources across the region's diverse agro-ecologies should target those production systems that are of greatest importance to West Africa's farmers and low-income people. In other words, priority setting should begin with the principle of concordance, so that investment shares allocated in proportion to a commodity and region's share of total agricultural output. Concordance is a useful starting point to align WARP investments with farmer needs, but final allocations should also depend on the probability of contributing something new and useful that other organizations do not provide.

Priority-setting across types of technology should target innovations that can be scaled up to reach millions of dispersed, resource-poor farmers. Huge impacts have been achieved with scientific breakthroughs that are embodied in easily replicable, divisible inputs: the initial innovation is difficult, but subsequent applications are relatively easy to copy and spread.

² Please cite as: Masters, William (2002). "Overview and Priorities for Science and Technology in West Africa: A contribution to USAID West Africa Regional Program Agricultural Initiative to Cut Hunger in Africa (AICHA) Action Plan." Abt Associates, Inc. Bethesda, MD. December.

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The key such innovations in agriculture have been new varieties, inorganic fertilizer and crop protection chemicals. Much of the investment needed for such biochemical breakthroughs is on the research end, to develop new varieties and fertilizer compositions appropriate to farmers' conditions, but regulatory reform is needed to permit competitive private-sector delivery of fertilizer and other agro-industrial inputs, and substantial public investment is also needed for seed multiplication and other activities with public-good characteristics.

Specific modalities for WARP investment in agricultural science and technology

The specific mechanisms by which to ensure that WARP S&T investments have maximum impact towards USAID's strategic objectives follow from a simple idea: S&T investments should pay for (1) *science-based innovation*, defined operationally as experiments to create and select desirable new plant varieties and associated agronomic techniques; and (2) *technology delivery*, defined operationally as using public-sector institutions to multiply the resulting new varieties while promoting competitive private trading in other inputs and product markets. Allocations across commodities and regions should follow broadly from the principle of concordance, modified by the (subjective) probability of successful innovation.

Operationally, the following approach is suggested:

1. To allocate resources in FY03 and for FY04, WARP should:
 - 1.1 calculate the approximate share of total farm output accounted for by the major commodities in each focus country (Ghana, Mali, Nigeria) and the region as a whole;
 - 1.2 request proposals from regional networks, institutions and partnerships (including new partnerships), for the conduct of S&T activities that are likely to either:
 - (a) increase the quantity and quality of scientific innovation, producing a larger number of potentially more valuable new plant varieties or other inputs that embody new knowledge and can readily be multiplied and delivered to farmers; or
 - (b) multiply and deliver the results of previous innovations, expanding the number of farmers who have access to the inputs which embody that innovation, so that farmers can choose to use them to the extent that they serve farmers' needs.
 - 1.3 expect to fund proposals roughly in proportion to their output shares, subject to the probability of successfully raising farmers' productivity as specified below.
2. To choose among competing proposals, the probability of success should be scored with the following criteria:
 - 2.1 for the innovation of new techniques, the proposal's budget and operational plan should show a high probability that funds will be used either to conduct laboratory and field experiments that generate new varieties or inputs, or will be used to conduct tests, trials, surveys or other procedures to determine which new inputs are most likely to be most valuable under farmers' conditions, with what accompanying techniques.
 - 2.2 for the delivery of existing techniques, the proposal's justification should summarize the scientific data demonstrating the technique's potential value to farmers, and the economic rationale for why the private sector is unable to multiply and deliver the needed inputs in question; then the proposal's budget and operational plan should

show a high probability that the funds will be used to multiply, control quality and deliver the seeds or other inputs in a cost-effective manner.

3. Given the costs of contracting and administration, it is likely that the most successful proposals will involve, in probable order of relative magnitudes:

- 3.1 The existing commodity networks, proposing seed-multiplication programs to accelerate the spread of their most promising varieties, in which NARS scientists might work with NGOs and private firms to improve seed production and quality control systems within and across countries. It seems likely that several good proposals in this area could be generated quickly, involving expenditures on the order of \$150,000 to \$300,000 each, with each one reaching several thousand farmers in the first year and generating sustained benefits thereafter far in excess of investment cost.
- 3.2 The existing commodity networks, proposing coordinated trials of promising techniques across countries, to ensure that any variety or technique known to be promising in one WARP country is also being tried in others with similar agroecological conditions. It seems likely that several good proposals in this area could be generated quickly, involving expenditures on the order of \$100,000 to \$200,000 each, with each one promising to accelerate the spread of several varieties across several countries, eventually feeding new seed multiplication projects.
- 3.3 New partnerships between institutions including regional bodies (CORAF/WECARD, INSAH, or others), NARS, IARCs, NGOs and Universities, to go beyond the two kinds of proposals above, conducting discovery and delivery programs across countries for a range of innovations in plant genetics, soil fertility management, crop protection and post-harvest handling, or animal genetics and care. Such innovations are most likely to become fundable only in late FY03 or FY04, as WARP gains experience with the funding of specialized S&T activities.

1. Introduction to S&T investments in West Africa

This document describes the setting and priorities for USAID investments in agricultural science and technology at a regional level in West Africa. The “infrastructure for innovation” sketched here can be expected to make major contributions to WARP’s objective of a politically stable and economically prosperous West Africa, by facilitating the development and delivery of improved seeds, fertilizer and other inputs for the region’s 115 million farm household members.

West Africa is a region with exceptionally rapid rural population growth, due to a late and sudden onset of the demographic transition in the 1950s, and limited opportunities for migration to urban or foreign centers of non-farm employment. With more and more people depending on a fixed natural resource base, the use of modern science to improve productivity is crucial for sustainable economic growth.

The development and delivery of appropriate science-based inputs alleviates poverty by raising the productivity of poor peoples’ assets, and lowers the real cost of producing food, industrial inputs and goods for export. In the absence of science-based innovation, West Africa’s rising rural populations will remain trapped in a cycle of resource degradation, worsening poverty, and social instability.

Agricultural S&T is inherently both international and location-specific. It makes progress by moving materials and techniques over long distances, to make innovative combinations – which must then be tried locally to determine their usefulness. WARP can play a key role by accelerating the flow of materials and techniques into and within West Africa, among the focus countries (Ghana, Nigeria and Mali) and throughout the region.

Agricultural S&T is inherently multisectoral. With new science-based inputs, farmers can meet subsistence needs with fewer resources, and invest more in market-oriented activities. The lower cost of food and raw materials raises the payoff to investment and trade around the region, giving people a greater stake in their own futures and in that of their communities.

In sum, the regional S&T priorities sketched here promise high impacts in themselves, and also promise to facilitate progress in the other domains targeted by WARP, as higher productivity fuels the region’s markets and trade, raising demand for market information and empowering people through trade associations.

2. Priorities for WARP investment in agricultural S&T

The purpose of USAID investment in agricultural S&T is to permit sustainable increases in farm output, through the creation and spread of improved production technologies and market institutions. Doing so requires both targeted investments and a more favorable policy environment.

The proposed priorities flow from the bottom up, being chosen to complement what farmers, the private sector, and local governments are already doing or will do in response to the WARP's investments. These priorities specify the principles by which WARP should choose institutional channels, sub-sector weightings, and delivery mechanisms to achieve maximum impact. These priorities are sketched briefly below in section 2.1, with details of the context and rationale for these priorities in section 2.2

2.1 Summary of priority-setting approach and results

Institutional channels: The highest-priority institutions through which WARP should invest are those which will enhance the activities of others, rather than replace them. In particular, WARP should target: (1) networks of researchers across countries, through which they can share materials and techniques used in research, as well as the final products of research activities, and (2) regional institutions that serve multiple countries, to provide services with large scale economies such as biotechnology research or policy harmonization across countries to permit the flow of technical inputs such as seeds and fertilizer.

Sub-sector weightings: The highest-priority commodities and environments to target in WARP-funded regional networks and other institutions are those which are of greatest importance to West Africa's farmers and low-income people. Priority setting across commodities and regions should begin with the principle of concordance, so that investment shares allocated in proportion to a commodity and region's share of total agricultural output.⁴ This implies a larger allocation to basic food crops and resource-poor production systems than is actually given in many agricultural S&T programs.⁵ Concordance is a useful starting point to align donor investments with farmer needs, but final allocations should also depend on the probability of contributing useful innovations in that area – which requires highly specialized, scientific judgment, and depends also on the serendipity of scientists' particular interests, experience and motivation.

Innovations and delivery mechanisms: The highest-priority innovations are those that can readily be scaled up to reach millions of dispersed, resource-poor farmers. Huge impacts have been achieved with scientific breakthroughs that are embodied in easily replicable, divisible inputs: although the initial innovation is difficult, subsequent applications are relatively easy to copy and spread among even among small and remote users. In agriculture, the key embodied inputs have been seeds and seedlings with improved crop genetics, complemented by inorganic fertilizer and crop protection chemicals.⁶ Although much of the investment needed for such biochemical breakthroughs is on the research end, to

⁴ For details on priority-setting, see Alston, Norton and Pardey (1997). For detailed case studies of actual S&T impacts in West Africa, see Masters, Bedingar and Oehmke (1998) or Masters and Ly (2002). These case studies attest to the practical importance of concordance: investments that target small production systems have small impacts.

⁵ Annex Table 1 provides some guidance as to the relative importance of key crops in the continent as a whole; Annex Table 2 provides an example of a real concordance analysis across commodities, showing Mozambique's continued under-investment in S&T for basic food crops.

⁶ Perhaps the most useful agronomic history of productivity improvement is Evans (1993), the most recent and exhaustive economic study of its value to society is Evenson and Gollin (2003). Looking forward, an important assessment of the research frontier in Africa is DeVries and Toenniessen (2001).

develop new varieties and fertilizer compositions appropriate to farmers' conditions, substantial innovation is also needed on the technology-delivery end. Some innovations needed for better technology delivery involve policy reform to promote private-sector input delivery, but they may also require large public investment in seed multiplication and other activities with public-good characteristics.

2.2 Context and principles for priority-setting

The context for the priorities specified here is sketched in the annex figures, which tell the story of Africa's unique position in the world economy.

The story begins with people, and the fact that Africa is lagging a full generation behind Asia in the demographic transition. Annex Figure 1 shows that Africa's population growth rate did not begin to fall until the 1980s, while Asia's began to fall in the 1960s. Among other consequences, the delay is giving Africa's demographic transition a higher peak population growth rate than occurred anywhere else in the world. And although Africa has the world's fastest-growing cities, these still employ relatively few people, so Africa's rural population has been growing very rapidly – about 2 percent per year from the 1960s until the 1990s (Annex Figure 2). This rural population growth is slowing as the cities absorb more and more people, but it is increasingly becoming by far the faster rate of rural population growth in the world.

A related fact is that Africa's delayed demographic transition gives it the world's youngest population, with roughly 85 children for every 100 adults (Annex Figure 3). This demographic burden will eventually become the "demographic dividend" of falling dependency ratio that has contributed heavily to Asia's rapid growth (Williamson and Bloom 2001). But in the meantime, the demographic fact of a rising rural population on the fixed land base provides a powerful prediction about Africa's economic performance: unless agricultural productivity rises sharply, living standards will continue to fall.

Africa's rising rural populations have, until recently, been accommodated by rising area planted and a decline in fallow periods. As long as the land frontier was open, farmers had little incentive to invest in higher yields, so there was no yield growth (Annex Figure 4). Governments shared this lack of interest in increasing yields, as there were low levels and little growth in agricultural research expenditure (Annex Table). The result is that Africa's rate of new variety generation and adoption is about 30 years behind Asia's, and is 20 years behind Latin America, which is the world's other relatively land-abundant region (Annex Figure 5). And, while fertilizer use rates in the rest of the world have converged to an equilibrium rate on the order of 100 kg per hectare of arable land, Africa's use rates rose in the 1960s and 1970s but have since stabilized at one-tenth that level (Annex Figure 6).

2.2.1 Complementing household and community actions

West Africa's uniquely rapid rural population growth has forced people to expand cropped area onto drier and less fertile lands and to reduce fallow periods, leading to a sharp decline in average soil fertility and in moisture availability. Households are actively responding to the change by investing in soil and moisture retention, to save their increasingly scarce

natural resources by using more of their increasingly abundant labor. NRM techniques which once were confined to the most overpopulated parts of West Africa are now spreading widely and rapidly across the region.

Many of the key NRM techniques can best be designed and implemented by the household itself, such as changing seed rates and crop mix; constructing field bunds, ridges, and microcatchments; and managing the flow of crop residues and animal manure. These innovations typically emerge relatively quickly in response to changing circumstances.⁷ Farmers are well-known to experiment continuously with the resources they have, to learn from their neighbors and to adopt profitable innovations quickly as long as they have reasonably well-defined user rights over the resources involved.⁸ As a result, it is difficult for an outside researcher to improve on farmers' application of such household-level techniques—and collective actions may be counterproductive.⁹ The role of research here is to document and anticipate farmers' choices, and assess their implications for outsiders.

Some very important NRM techniques require collective action at the local level, such as restricting access to communally-owned grazing or forest resources; or investing in common assets such as improved wells or retaining walls. The institutional innovations needed for these actions are much more difficult for an individual community to discover and implement, so it can be extremely valuable for outside researchers to analyze the performance of alternative institutional arrangements and to help spread the most successful ones.¹⁰ This kind of technology development and transfer has often been most successfully implemented by NGOs, since they move freely across administrative boundaries to organize communities on a voluntary basis.

A few environmental innovations are best implemented at the national or supra-national level. Such actions include the development and enforcement of biosafety and food safety rules,¹¹ or the management of large-scale resources such as river basins and coastal fisheries. This is the domain of government-to-government exchange, at a relatively high level of technical expertise. WARP may be able to support such initiatives, as well as the NGOs that provide community-level NRM actions, but many other outside donors are focused on these kinds of investments.

For the purpose of priority setting, it seems clear that WARP's unique comparative advantage is to provide farmers, local communities and governments with the science-based

⁷ The dynamics of this process in Niger, where farmers are investing in progressively more costly soil conservation techniques over time, is in Abdoulaye and Lowenberg-DeBoer (2000).

⁸ Kazianga and Masters (2001) show that across farmers in Burkina Faso, those with more security of tenure tend to invest more in soil conservation.

⁹ An example is the relatively low labor productivity found for community work days in building rock bunds in Burkina Faso, in a context where farmers are already making high-productivity NRM investments on their own fields, as documented by Zougmore, Kaboré and Lowenberg-DeBoer, (2000). The value added of collective action would have to be in common-property resources such as groundwater recharge.

¹⁰ An example here is the use of grazing fees to encourage confinement-feeding of animals, which in turn raises the quantity and quality of manure for use on crops. A detailed biophysical simulation model of the long-term effects of such arrangements on natural-resource sustainability is Dalton and Masters (1998).

¹¹ A case in point would be the introduction of quality-certification systems to permit a competitive market for manufacturer infant foods, as described in Masters and Sanogo (2002).

innovations that make their actions more productive, raising the payoff from investment and trade. The most important single kind of innovation is crop genetics, followed closely by animal genetics and animal health. The genetic “blueprints” for plants and animals are beyond the control of farmers, communities or African governments, but can be adapted to changing local conditions by researchers connected to global science. Developing the appropriate genetics, however, must be financed and organized by an outside agency, since it draws on worldwide scientific capacity and produces benefits that spread widely beyond the interests of any one institution or group.

2.2.2 Complementing private-sector and government actions

Beyond the natural resources discussed above, many key elements of the agriculture and food system are man-made, provided by the private sector beyond the farm gate. Decades of agricultural economics research have shown clearly that, wherever property rights are reasonably well defined and enforced, people will invest and trade in an astonishing array of goods and services. Africans are no exception.

The high density and relative efficiency of private sector trade and investment in West Africa, despite an almost complete absence of written contracts, was exhaustively demonstrated in the 1950s and 1960s, by Peter Bauer (1954), William O. Jones (1959, 1972) and many others. But this work also shows that, in Africa as elsewhere, the private sector invests in and trades only *proprietary* things, whose benefits are *excludable* so that costs can be fully recovered from active customers. “Public” goods or services, whose benefits are not excludable, have been notoriously under-provided in Africa for many decades. It is this under-provision of public goods – that is, the weakness of collective institutions capable of raising taxes, providing services and regulating trade in an economically efficient manner – that is now seen as the ultimate cause of low economic growth in Africa as in other low-income regions.¹²

Research on such institutions underlines the fundamental importance of their legitimacy and accountability to local people (Berkowitz, Pistor and Richard 2003): it is not possible for USAID or any other outside entity to create the grass-roots political activity necessary for legitimacy and accountability. But USAID can help raise the payoff to private investment and trade, and in so doing to raise the payoff for improved government institutions. Recognizing this comparative advantage, the key intervention by which USAID can empower the poor is through improved technologies that make more productive use of their limited assets. (For a detailed analysis and statistical test of how improved technologies lead to better governance, see McMillan and Masters 2003.)

¹² See Douglass North (1990) for a descriptive analysis, and Easterly and Levine (2002) for a recent econometric test of this proposition. Masters and McMillan (2001) show that political-economic performance is closely correlated with physical geography, implying that external interventions to alleviate geographic constraints are needed to “jump-start” the system of positive feedback between successful public institutions and a successful private sector. In particular, outside agencies can play a large role in providing S&T to overcome location-specific constraints on farm productivity and public health, which otherwise limit economic growth in the areas where those constraints apply.

WARP's comparative advantage in the S&T area involves both the regional spread of inputs to innovation, such as the genetic material and research techniques used for crop breeding, and also the regional spread of final innovations, such as new varieties and fertilizer compounds. Once developed, many of the final innovations are in fact proprietary inputs which can most efficiently be delivered to farmers through an appropriately deregulated competitive private sector. Gisselquist, Nash and Pray (2002) document the conditions under which relatively successful deregulations in four countries (Bangladesh, India, Turkey and Zimbabwe) have permitted the rise of private inputs-supply chain. In these settings, innovations originally developed by public-sector researchers are then turned over to private firms, subject to public-sector regulation for quality assurance and food safety. Competition among rival firms then makes for energetic and low-cost manufacture or multiplication and then delivery of the input to farmers.

A few inputs, however, are in fact not proprietary – so the public sector must reach further out to farmers with input multiplication and delivery, before the private sector can take over. This turns out to be the case for many kinds of crop seeds and seedlings. All across West Africa, improved varieties developed on research stations are now spreading from farmer to farmer, but they do so very slowly because private investment in seed multiplication or plant nurseries is not forthcoming. For the private sector to be efficient, appropriable benefits from product sales must be sufficient to cover investment costs. Among basic foods, this is really the case only for hybrids of maize, sorghum and millet, whose grain cannot be replanted in future years (so farmers are willing to pay high prices for the seed), but whose seed can be produced uniformly in a centralized manner at relatively low cost (so firms are able to invest in hybrid production). Almost all other kinds of genetic improvement must be delivered to farmers through the public sector, or it will be delivered slowly if at all.

One fundamental obstacle to private-sector delivery for most genetic improvements is that farmers in a particular location need to buy the improved variety only once – and thereafter the farmers in that location can retain and share among neighbors. Thus, introducing an improved seed to a particular location has a huge payoff: for example, the discounted net present value of bringing a kilogram of improved cowpea seed to an area may run into the thousands of dollars. But this benefit is spread among many farmers over several years. Given farmers' transaction costs and discount rates, it is impossible for a private seller to obtain enough of the total benefit to justify their investment in seed production – even if everyone is fully informed about the value of the new seed.

The public good quality of new genetics makes for a large payoff to public investment in seed multiplication, to make successful new varieties spread faster than they could move from farmer to farmer. This payoff is particularly large in the case of vegetatively-propagated plants, where farmer-to-farmer movement is even slower than it is in the case of open-pollinated cereals, and in the case of tree crops, where the payoff to adoption is delayed but potentially very large.

The public role in seed multiplication is partly to accelerate the spread of new genetics, and partly to guarantee that a particular batch of planting material is actually the variety it is claimed to be. Since the buyer cannot observe whether a particular batch of planting material

will in fact have the germination rates and other characteristics expected of well-prepared seeds, the provider of the seed must offer some sort of quality guarantee. In some cases, this can be provided by a third-party inspection and testing service, as for example the "Underwriters' Laboratory" inspects and certifies the safety characteristics of electrical appliances in the United States. (A detailed example of this kind of scheme for West Africa is provided in Masters and Sanogo 2002.) In other cases, it is preferable to assure quality by providing the good on a non-profit or government-supplied basis, as is often done with health care and education.

2.2.3 Gender dimensions of agricultural S&T

West Africa has some of the most unequal gender relations in the world, due largely to the region's poverty and natural-resource dependence (Galor and Weil 1996). But the gender gap is a cause as well as a consequence of continued poverty, because it limits girls' access to education and health services, and limits women's access to property rights and contract enforcement, so that women have limited resources with which to work. In this context, targeting donor investments to girls and women may make above-average contributions to growth as well as equity, precisely because girls and women are starved of resources from other channels.

Developing and delivering improved food crop technologies – particularly biochemical innovations that are divisible and low-cost to adopt – is particularly beneficial to women because it raises their productivity in food production and procurement. Improved seed varieties and management techniques, being technologies that can be adopted without access to credit or formal markets, are therefore among the most successful interventions by which to empower women, by reducing the land and labor they need to feed their families.¹³

In some cases, the introduction of new technology that women can use does increase women's bargaining power and reduces gender disparities, but in general new technology does not directly help close the gender gap. Other interventions are needed as well, in areas outside of the S&T agenda. But in the absence of higher food crop productivity, most Africans will continue to be forced by necessity to devote huge amounts of time and resources to obtaining food – which clearly does weaken the relative power of women in society. So although food-crops research is clearly not sufficient to help West African women reduce discrimination against them, it is probably a necessary element of any successful empowerment strategy.

2.2.4 Natural-resource sustainability dimensions of agricultural S&T

The principal threat to natural resource sustainability in West Africa is soil degradation, from the mining of soil nutrients by crop growth. Successive plantings combine with the effect of soil micro-organisms to draw nutrients and break down soil organic matter, reducing its moisture-retention potential and cation-exchange capacity. Low soil moisture and low fertilizer-use efficiency make it economically very costly to raise yields by simply adding fertilizer: this is profitable only in a few places, where there is better rainfall or irrigation and higher organic matter in the soil, as well as relatively favorable relative prices (from low transport costs to bring fertilizer in and then ship the crop out, and relatively low interest

¹³ One of many studies addressing such mechanisms is Fisher, Warner and Masters (2000).

rates to pay for fertilizer before planting with funds obtained after harvest). John Sanders and his co-authors have focused on this issue for many years, documenting the rapid increase in farmers' use of agronomic improvements to increase moisture retention and soil organic matter, and thereby raise the return to fertilizer adoption (e.g. Shapiro and Sanders 2001, Sanders and Shapiro 2002). They find that farmers typically undertake out-of-season improvements first, such as retaining walls and field bunds, and as labor-land ratios increase they later adopt even more labor-intensive techniques that involve work during peak seasons to maintain ridges and other soil constructs, and to control the timing and placement of manure and inorganic fertilizers for additional phosphorus and nitrogen.

In terms of crop genetics, the short and uncertain duration of Africa's rainfall puts a premium on early-maturing varieties, which allow farmers to stagger their plantings and in some cases actually re-plant a failed stand.¹⁴ Of course, shorter-duration varieties tend to have lower yield potential, simply because they have less time to grow -- but this works only when there is enough soil moisture and nutrients to permit continued growth. Soil degradation has therefore increased the premium for earliness, by reducing the moisture-holding and nutritional quality of soils. In some areas, African farmers' investments in better agronomy could so much enrich their soils that longer growth periods become possible, reversing the past trend towards a preference for shorter-season varieties. The net result is that almost all regions would benefit hugely from an increasing "variety of varieties", providing plant qualities that fit increasingly well into an increasing range of agro-ecological niches.

2.2.5 Molecular biology and transgenics in the West African S&T

A recent assessment of biotechnology interventions in West Africa is provided by Alhassan (2002). It is clear that, where genes for certain traits (e.g. disease or insect resistance, drought tolerance) cannot be crossed into desirable varieties through classical breeding techniques, it may be useful to introduce those genes using the techniques of molecular biology. Perhaps the most immediately valuable, high-impact application of biotechnology in the region would be the introduction of Bt genes to deal with pod sucking bugs on cowpeas. The Network for Genetic Improvement of Cowpea in Africa (NGICA) has done some work on this already: these pests currently cause yield losses of 50 percent or more, and with very conservative assumptions, successful development of appropriate Bt varieties would generate benefits far in excess of program costs (for a case study from Senegal, see Faye 2000).

For small farmers to benefit from biotechnology requires not only a scientific investment, but also regulatory change – and too often, policy-makers have little knowledge of the technologies in question. In West Africa, NGICA has contributed to both the science and the policy environment, contributing significantly to development of biosafety regulations in several countries. And even where regulatory oversight facilitates appropriate innovation, seed multiplication and quality control remains a critical constraint -- an initial assessment of the ability of West Africa seed systems to deal with biotechnology can be found in Lambert and Khonde, 2002.

¹⁴ Earliness has even more value in irrigated or very high-rainfall areas, where it permits double-cropping. Many of Africa's irrigated rice farmers have only recently had access to the appropriate varieties needed for double-cropping, whereas in Asia many farmers already have varieties that permit triple-cropping.

2.2.6 Implementation and the supply of scientists

A key issue in the implementation of any S&T program is the small number and advanced age of PhD-level scientists actually engaged in crop improvement. One of the fundamental facts about Africa is its lack of human capital: relatively few people have scientific educations, and since most benefits of investing in scientific education are not appropriable by individuals, their families or even their governments, the vast bulk of it has been and probably will continue to be donor-funded. After an initial boom in the post-independence period, funds for graduate training fell off, so relatively few scientists are now starting their careers – and the need for African scientists to compete and account for funds from many outside donors makes for an unusually large administrative load, so African scientists typically move from research into administration at relatively young ages. (A particularly dramatic case in point is this year's movement of Africa's best-known rice breeder from active research at WARDA to administration at FARA.) Thus the total number of NARS scientists actually working on crop improvement is astonishingly small. On average, there is probably less than one NARS breeder actually working full time on crop improvement for every million farmers [this fact should be verified—ASTI data give only a limited sample; are there other sources?]. And in the IARCs, there are only 76 scientists doing so for all of Africa (DeVries and Toennissen 2001, p. 49), or one per 8.5 million Africans.¹⁵ The total number of researchers is of course much larger, and they may be doing very valuable work, but the amount of crop improvement that occurs is heavily supply-constrained.

Donors have often circumvented the fundamental supply constraint in African science by turning to interventions that require fewer scientists. The small number of African scientists is undoubtedly a major reason why foreign aid typically does not emphasize S&T solutions to Africa's problems: it is far easier to undertake institutional or political kinds of interventions, because such projects can be staffed by people with less education and with a wider variety of backgrounds. But given that new S&T is essential for productivity growth, there is no escaping the need for more PhD-level scientists. These can be "home grown", through long-term training of Africans, but they can also be imported from abroad for full-time work in Africa, through IARCs and long-term projects, or invited to work part-time in collaboration with Africans, through mechanisms such as USAID's CRSPs.

Although the short-term priorities identified in this paper do not address the supply constraint on African science, doing so should be a major long-term priority for WARP in its FY04 and FY05 activities. Providing more scientists is inherently a regional issue, since PhD-level scientists routinely move from country to country to find the best opportunities in their specialty. Thus it is appropriate for USAID's human-capacity investments to be managed at a regional level. Furthermore, it is appropriate for USAID to support training in the context of collaborative programs that bring U.S. scientific capacity to bear on African problems, so that research and training are done simultaneously. This can be done in CRSPs, but it can also be done through other contracting mechanisms such as USDA cooperative agreements and RFAs for longer-term partnerships. These should focus on the delivery of specific

¹⁵ Of these, DeVries and Toennissen report that almost half (35) are employed by IITA, 15 are at ICRISAT, 9 at WARDA, and the balance spread between CIAT, CIMMYT and CIP.

subject-matter S&T activities, such as genetics or crop protection, allocated across crops and regions in proportion to their relative output shares.

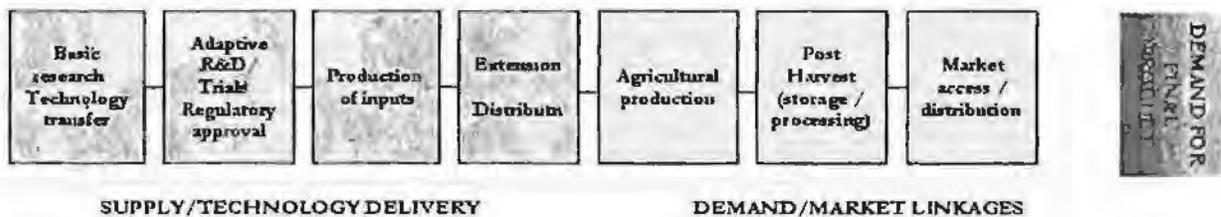
2.2.6 Implementation and the flow of innovation

A crucial question in implementation is whether public-sector S&T institutions successfully respond to farmers' and public needs – and how appropriate or well-adapted the research results really are. The concept of a linear flow from basic to applied research to production and marketing, as illustrated in Figure 1a below, has been substantially modified by the development of increasingly sophisticated scientific methods to something that looks more like Figure 1b.

Increasingly, high-level “basic” researchers are able to take end-user needs into account, and are being asked to do so. And typically, the technologies developed by high-level “basic” researchers are embodied in inputs and used, almost unchanged, by farmers – after field trials are used to establish which of many possible techniques works best under each circumstance. A few of the resulting technologies have appropriate benefits and can be marketed in the private sector, while many others can be disseminated effectively only by public-sector institutions.

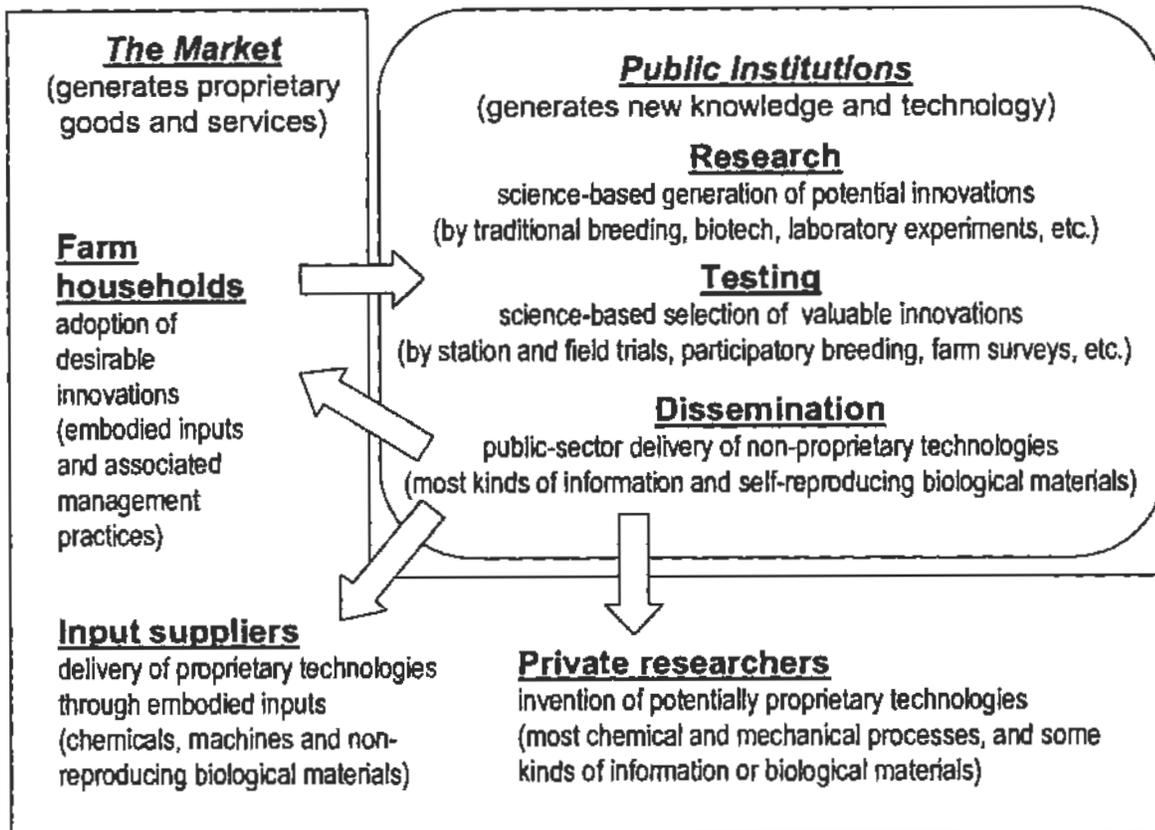
In any case, it is only if information on the socio-economic value of the innovations translates into public funding of research that the cycle of innovation and technical change can continue. Without a sustained flow of research, testing and delivery of innovations from public institutions, private-sector productivity cannot grow.

Figure 1a. Traditional view of technology development and transfer



Source: DFID (RETF Phase 1 Report).

Figure 1b. A new view of science-based innovation and technology delivery



Unpublished documents consulted and available from the author on request

AFR/SD/ANRE, 2001. SO15 Annual Report (Draft). Manuscript revised June 2001 by Michael Johnson.

African Development Bank, "Agriculture And Rural Development Sector, Bank Group Policy." January 2000.

Alhassan, Walter S., "Agro-biotechnology Application in West and Central Africa – 2002 Survey Outcome." Manuscript revised September 2002. International Institute of Tropical Agriculture, Ibadan, Nigeria

CGIAR, "A Multi-Country Agricultural Productivity Program (MAPP) for Africa." Draft issues paper. Document no. AGM02/6/iii. Washington, DC: CGIAR, October 16, 2002.

Faye, Mbene, "Use of Agricultural Biotechnology to Improve Gain from Cowpea Production in Senegal." Purdue University Department of Agricultural Economics, 2000.

Johnson, Michael and Peter Hazell, "Cutting Hunger in Africa Through Smallholder-Led Productivity Growth." Washington, DC: IFPRI, August 23, 2002.

Lambert, Dayton and Mavuangi Khonde, "Seed Sector Challenges for Bt Cowpea in West Africa," Bean/Cowpea CRSP. Purdue University, Department of Agricultural Economics, September, 2002.

Ndjeunga, Jupiter and Bonny R. Ntare, "Research and development options to reduce poverty and hunger by 2015." Draft for discussion (no date).

Ouendeba, Botorou, Tahirou Abdoulaye, and John H. Sanders, "Food Staples in West Africa: Production and Marketing. A Concept Note" Manuscript revised November 2002.

Shapiro, Barry I. and John H. Sanders, "Natural Resource Technologies for Semi-arid Regions of Sub-Saharan Africa." Manuscript revised June 2001.

Stryker, J. Dirck, "Opportunities and Obstacles for Biotechnology in West African Agriculture." Manuscript revised August 8, 2000.

USAID Africa Bureau, "West African Regional Program (WARP) FY2003 Results Review and Resource Request," April 13, 2001.

USAID Africa Bureau Regional Strategy Team, "Strategic Plan FY2001–2008 for the West African Regional Program (WARP)." March 2000.

USAID/WARP, "West Africa Regional Program Annual Report 2002." Released July 1, 2002.

Workshop on a Collaborative Platform for Agricultural Research in Sub-Saharan Africa. ISNAR, WARDA and CTA, March 2001.

World Bank, Africa Region, "Empowering Farmers in Sub-Saharan Africa: Best Practices." *Findings*, no. 33. Africa Technical Department, February 1995.

References Cited (published)

Abdoulaye, Tahirou and J. Lowenberg-DeBoer, "Intensification of Sahelian Farming Systems: Evidence from Niger," *Agricultural Systems* 64: 67-81, 2000.

Alston, Julian, George Norton and Phil Pardey, *Science under Scarcity: Principles and practice for agricultural research evaluation and priority setting*. Ithaca, NY: Cornell University Press, 1995.

Bauer, Peter T., *West African Trade: A Study of Competition, Oligopoly and Monopoly in a Changing Economy*. New York: Cambridge University Press, 1954.

Berkowitz, Daniel, Katharina Pistor and Jean-Francois Richard, "Economic Development, Legality and the Transplant Effect," *European Economic Review* 47(1): 165-195, 2003.

Dalton, Timothy J. and William A. Masters, "Pasture Taxes and Agricultural Intensification in Southern Mali" *Agricultural Economics*, 19(1-2): 27-32, 1998.

DeVries, Joseph and Gary Toenniessen, *Securing the Harvest Biotechnology, Breeding and Seed Systems for African Crops*. New York: CAB International, 2001.

Easterly, William and Ross Levine, "Tropics, Germs, and Crops: How Endowments Influence Economic Development." NBER Working Paper No. 9106. Cambridge: NBER: August 2002.

Fisher, Monica G., Rebecca Warner and William A. Masters, "Gender and Agricultural Change: Crop-Livestock Interaction in Senegal", *Society and Nat. Resources*, 13(3, 2000): 203-222.

Galor, Oded and David N. Weil, "The Gender Gap, Fertility, and Growth," *American Economic Review*, 86(June 1996): 374-387.

Gisselquist, David, John Nash, and Carl Pray, "Deregulating the Transfer of Agricultural Technology: Lessons from Bangladesh, India, Turkey, and Zimbabwe." *World Bank Research Observer* 17(2002): 237-265.

Jones, William O., *Manioc in Africa*. Stanford: Stanford University Press, 1959.

Jones, William O., *Marketing Staple Food Crops in Tropical Africa*. Ithaca: Cornell University Press, 1972.

Kazianga, Harounan and William A. Masters, "Investing in Soils: Field Bunds and Microcatchments in Burkina Faso", *Environment and Development Economics*, 7(3, July 2002): 571-591.

Masters, William A., Touba Bedingar and James F. Oehmke, "The Impact of Agricultural Research in Africa: Aggregate and Case Study Evidence", *Agric. Econ.*, 19(1-2, 1998): 81-86.

Masters, William A. and Margaret S. McMillan, "Climate and Scale in Economic Growth" *Journal of Economic Growth*, 6(3, Sept. 2001): 167-186.

McMillan, Margaret S. and William A. Masters, "An African Growth Trap: Production Technology and the Time-Consistency of Agricultural Taxation, R&D and Investment", *Review of Development Economics*, forthcoming 2003.

North, Douglass C., *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.

Sanders, John H. and Barry I. Shapiro, "Crop Technology Introduction in Semi-arid West Africa: Performance and Future Strategy." *Journal of Crop Production*, forthcoming (manuscript revised March 6, 2002).

Zougmore, Robert, Daniel Kaboré and J. Lowenberg-DeBoer, "Optimal Spacing of Soil Conservation Barriers: Example of Rock Bunds in Burkina Faso," *Agronomy Journal* 92:2 (2000)

Annex Table 1. Relative importance of key food products in Africa, 1961 and 2000

	1961 (population 208 million)				2000 (population 605 million)			
	Prod'n.		Food availability		Prod'n.		Food availability	
	(kg)	(kg)	(cal.)	(protein)	(kg)	(kg)	(cal.)	(protein)
Grand total			2059	53			2226	54
Vegetable products			1918	42			2087	44
Animal products			141	11			140	11
Cereals - excl. beer	146.2	112.0	46.1%	47.7%	120.5	123.7	47.5%	50.9%
Rice (milled equivalent)	10.1	9.3	4.5%	3.8%	12.4	17.7	7.8%	6.6%
Maize	43.6	31.8	13.4%	13.7%	47.4	40.1	15.7%	16.4%
Millet	31.6	22.4	8.6%	8.2%	21.0	17.4	6.2%	6.1%
Sorghum	46.3	32.2	13.0%	14.8%	29.4	23.7	8.8%	10.7%
Starchy roots	224.1	157.6	20.5%	7.4%	260.2	163.1	19.7%	8.1%
Cassava	151.4	111.8	14.7%	4.0%	155.0	103.1	12.4%	3.5%
Pulses	14.0	10.2	4.6%	11.8%	12.1	9.5	4.0%	10.5%
Treenuts	1.9	1.3	0.6%	0.6%	1.5	1.0	0.3%	0.4%
Oilcrops	35.3	6.7	3.8%	5.9%	22.0	5.3	2.8%	5.2%
Groundnuts (shelled eq.)	15.4	3.5	2.5%	4.2%	9.3	2.5	1.7%	3.0%
Vegetable oils	8.8	5.4	6.3%	0.2%	7.2	7.5	8.1%	0.2%
Vegetables	33.8	30.6	1.2%	2.7%	32.1	29.7	1.0%	2.2%
Fruit - excluding wine	84.1	54.3	4.6%	1.9%	68.0	48.5	3.8%	1.7%
Bananas	13.2	7.2	0.6%	0.4%	9.6	6.5	0.5%	0.4%
Plantains	43.6	23.3	2.8%	1.0%	34.9	22.0	2.4%	0.9%
Alcoholic beverages	39.0	38.8	2.2%	0.8%	35.3	33.6	1.8%	0.7%
Meat	12.8	12.7	3.0%	10.1%	11.0	11.4	2.5%	8.3%
Beef and veal	6.2	6.1	1.6%	4.8%	4.6	4.6	1.1%	3.5%
Mutton & goat meat	2.3	2.3	0.5%	1.7%	2.1	2.1	0.4%	1.5%
Pigmeat	0.6	0.6	0.3%	0.4%	1.0	1.0	0.4%	0.6%
Poultry meat	1.0	1.0	0.1%	0.6%	1.7	2.0	0.3%	1.3%
Milk - excl. butter	30.7	27.9	2.4%	4.9%	26.9	27.1	2.2%	4.8%
Eggs	1.2	1.0	0.1%	0.6%	1.8	1.5	0.2%	0.7%
Fish, seafood	5.4	5.9	0.5%	3.2%	6.8	7.6	0.7%	4.2%
Freshwater fish	2.6	2.4	0.2%	1.3%	3.0	2.8	0.2%	1.5%

Source: Author's calculations from FAO (2002), Food Balance Sheets <apps.fao.org>.

Note: Protein totals are in grams; calorie and protein shares are expressed as percent of the per-capita totals. Data shown are for Sub-Saharan Africa as a whole, with considerable variation across countries and regions.

Annex Table 2. (Lack of) Concordance in Mozambique agricultural S&T, 1990s

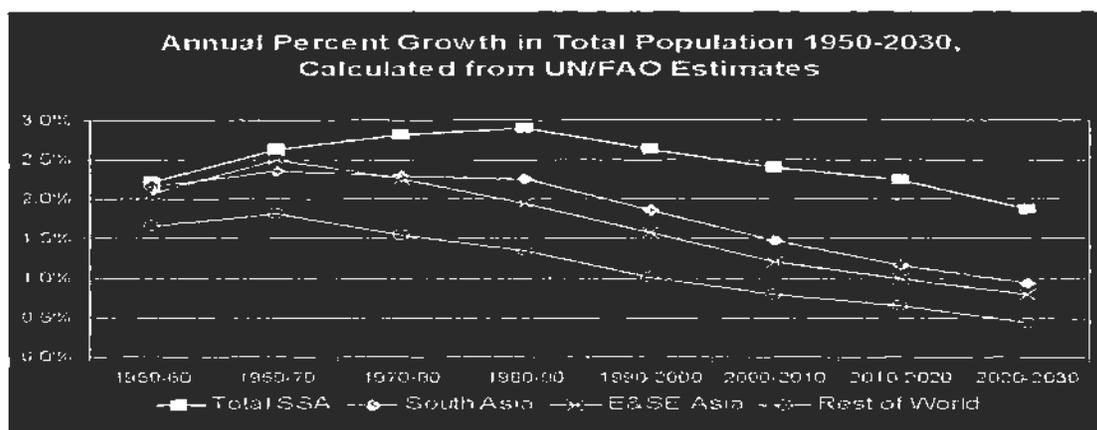
	Share of Agricultural GDP	Share of research expenditure	Research intensity ratio
Cassava	44	15	0.3
Maize	16	12	0.7
Pulses	9	5	0.5
Peanuts	7	5	0.6
Sorghum	6	10	1.6
Rice	4	4	1.0
Cotton	2	15	6.4
Cashew	2	7	3.7
Sweet potato	1	14	14.2

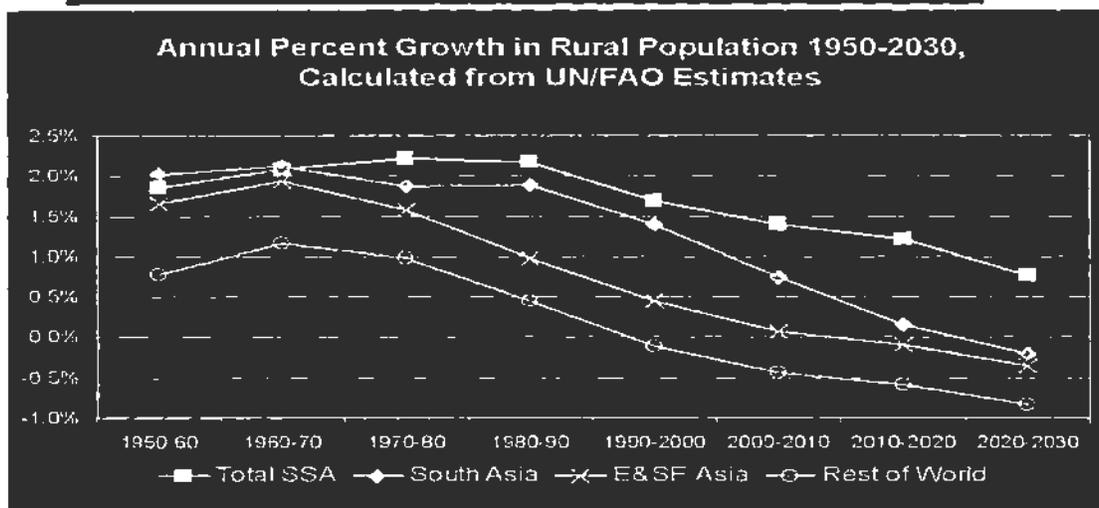
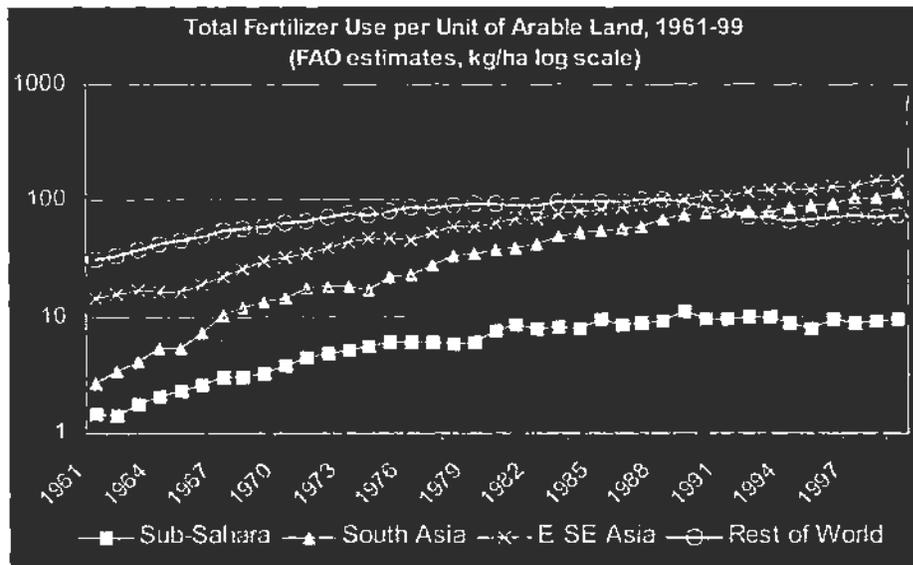
Source: Uaiene, Rafael, 2002. "Priority setting and resource allocation in the National Agronomic Research Institute, Mozambique" (draft, Dec. 2002).

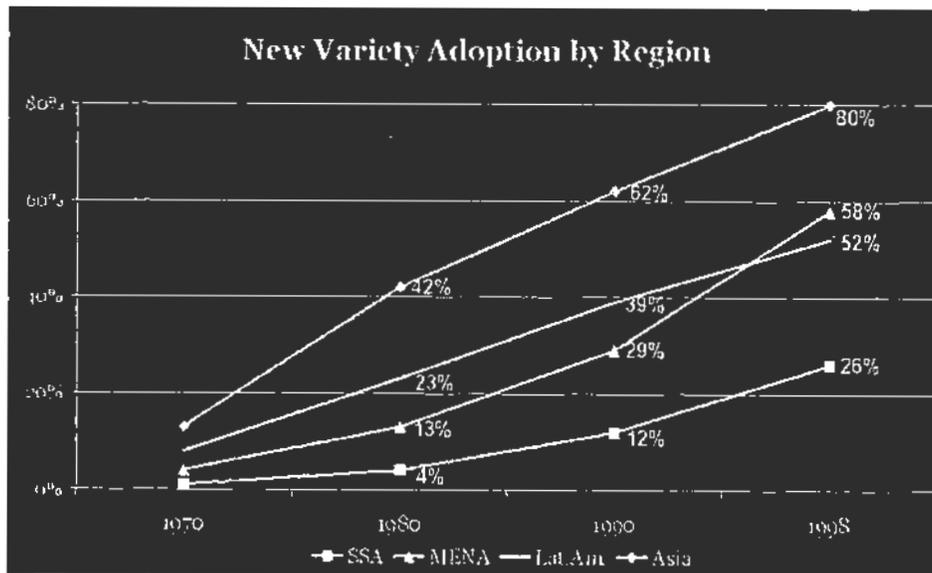
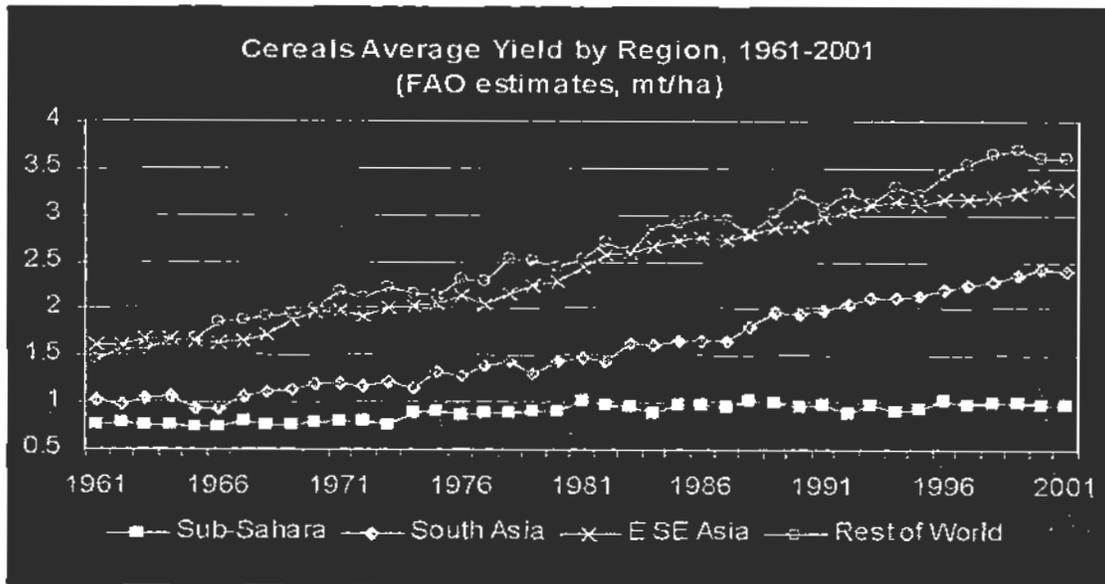
Annex Figures

Source: W.A. Masters, "Institutions and Technology for Food Security." ACES *Global Connect* Seminar at the University of Illinois, Urbana-Champaign, Oct. 3, 2002.

www.agecon.purdue.edu/staff/masters







Source: Calculated from data in Evenson and Gollin, forthcoming 2002.

Expenditure on public R&D by region

	1971	1981	1991
Real US\$ (millions)			
World (153 countries)	7,304	11,247	14,966
LDCs (131 countries)	2,984	5,503	8,009
Sub-Sah. Af. (44 co.)	699	927	968
Expenditure growth (%/yr)			
World	4.3%	2.9%	3.6%
LDCs	6.4%	3.9%	5.1%
SSA	2.5%	0.8%	1.6%

Source: Pardey, Roseboom and Craig 1999, p. 56.

Current USAID Science and Technology Activities in West Africa and How They Might Be Augmented¹⁶

Frederick E. Gilbert¹⁷

1. Agricultural Research in West and Central Africa

1.1. Institutional Landscape

The agricultural research structure within West and Central Africa (WCA) consists of national agricultural research systems (NARS), international agricultural research centers (IARCs) or sub-centers of IARCS and a sub-regional agricultural organization (SRO) charged with coordinating regional research efforts within West and Central Africa. The NARS of all the countries in the region except Equatorial Guinea (where a NARS may not even exist on paper) are members of the SRO, CORAF (The West and Central African Council for Agriculture Research and Development). Like its counterparts in East and Central Africa (ASARECA) and Southern Africa (SACCAR), CORAF is responsible for coordinating, facilitating and strengthening the NARS' engagement in regional research programs.

Two IARCs (also called CG centers or institutions) are headquartered in the region: the International Institute for Tropical Agriculture (IITA) at Ibadan and the West Africa Rice Development Association (WARDA) near Bouake, Ivory Coast (now temporarily also in Abidjan and ICRISAT, Bamako). The following IARCs are involved in the region: International Center for Research in Agroforestry (ICRAF), the International Livestock Research Institute (ILRI), ICRISAT (Institute for Crops Research for the Semi-Arid Tropics), the International Livestock Research Institute (ILRI) and CIMMYT (International Maize and Wheat Improvement Center) IARCs are also referred to as CG institutions. This refers to their relationship to the CGIAR (Consultative Group on International Agricultural Research), which coordinates relations between the IARCs and the donors and other bodies on whose support they depend.

The International Fertilizer Development Center (IFDC) located in Togo is not a CG institution since it is an American body headquartered at Mussel Shoals, Alabama. The Sahel Institute (INSAH) of the CILSS (Inter-State Committee for Drought Control in the Sahel) is not part of the CGIAR-IARC nexus, but it does coordinate and support certain research-related functions for the nine member states and their NARS.

¹⁶ Please cite as: Gilbert, Frederick E. 2003. *Current USAID Science and Technology Activities in West Africa and How They Might Be Augmented: A contribution to the West Africa Regional Program Initiative Action Plan for the Initiative End Hunger in Africa*. Abt Associates, Inc. Bethesda, MD. February.

¹⁷ 3711 Whispering Lane, Falls Church, VA. 22041 Tel:(703) 642-2205; e-mail: 74242.2000@compuserve.com

Other bodies and programs relevant to agricultural research within the region are SPAAR (Special Program for African Agricultural Research) and FARA (Forum for Agricultural Research in Africa). SPAAR is a body that concerns itself with the problems of the NARS and serves as a clearinghouse for donor ideas and efforts directed toward strengthening them. The World Bank provides its secretariat. FARA is a newer body for representing African research institutions vis á vis SPAAR.

USAID Africa Bureau-funded regional agricultural research networks are a significant feature of the landscape throughout West and Central Africa. Some are focused on commodities and some are focused on relieving constraints on production. Four U.S.-supported commodity networks active in West and Central Africa are WECAMAN (West and Central Africa Collaborative Research Network), WCASRN (West and Central Africa Sorghum Research Network), ROCARIZ (West and Central Africa Rice Research and Development Network) and the NRM InterCRSP. The latter draws on the resources of seven CRSPs (see below) in conducting research aimed at adapting and increasing the adoption of appropriate NRM technologies in much of West and Central Africa.

CRSPs (Collaborative Research Support Programs) are carried out by U.S. university-researchers in collaboration with African researchers using USAID central funding. Those most relevant to West and Central Africa are: the Peanut CRSP, the Bean/Cowpea CRSP, INTSORMIL (the International Sorghum and Millet) CRSP, The IPM CRSP, the SANREM (Sustainable Agriculture and Natural Resource Management) CRSP and the Soil Management CRSP. Some USAID programs have reportedly obtained services from CRSPs through buy-ins. CRSPs seldom if ever have Africa-based coordination units.

1.2. Evolution, Strengths and Weaknesses

The NARS, though in many cases once strong and productive, have mostly declined in capability and output. Due to governments' budgetary constraints and tendency during the structural adjustments of the 80s and 90s to under-appreciate agricultural research, the NARS now typically find themselves unable to fund operating budgets for their researchers and their support staff. Salaries for researchers have become inadequate, and some of the best have gone to the IARCs and institutions in developed countries. NARS staffs have difficulty in mounting experiments except those that are internationally supported either by donor development projects or through IARC-supported networks or others such as the CRSPs. Many of the NARS have serious information management and communications problems owing to inadequate computer equipment, Internet access and travel budgets. Lacking ready knowledge of their predecessors' past research and that of their colleagues around the region, national research efforts have tended to repeat past work and duplicate that already underway in other bodies.

The IARC-supported regional research networks have offered a means of addressing the highest priority needs with the active support of NARS scientists and facilities. In some networks a recent approach to activating NARS capabilities and directing them to priority needs has involved competitive grants in response to proposals from teams of researchers.

This collaboration is necessary for the IARCs because their agricultural research programs cannot succeed without the NARS' scientists, facilities and networks. Taken as a whole these bodies seem to operate purposefully. They give reasonable priority to transferring and disseminating the technology they develop, including efforts to support the development of new and more valuable end uses for their commodities.

Because the NARS' weaknesses constrain the regional system in the West and Central region as elsewhere in Africa, SROs like CORAF – whose mission is to facilitate, strengthen and coordinate the NARS' common efforts at the regional level - have been encouraged by the SPAAR and the international agriculture research community. However, CORAF has come to this role only recently. (It started as a body responsible for coordinating cooperation between French agricultural research institutions and the NARS of the francophone countries.) Because its member NARS have had difficulty fulfilling their responsibility to cover core budget of its Secretariat, CORAF is financially constrained and not fully functional. Its strategic plan, being largely a compendium of the CORAF-coordinated networks that does not reflect a systems approach to establishing and realizing regional priority needs, is not well regarded. The culture and operating style of the secretariat sometimes seems more appropriate to a regional authority than that of an organization owned by its members.

1.3. Agriculture and Agricultural Research within the WCA IEHA Action Plan

Regional agricultural research programs have a crucial role to play in any regional program for providing farmers and other economic actors with the technology and information to enable them to raise their productivity and incomes. Unless the present level of research activity is maintained and appropriately focused, the existing flow of benefits from research will fall off in the years to come. If it is increased and if its focus is improved, the flow of benefits should increase. Available analysis suggests that the return on increased investment in agricultural research will yield high returns. For the IEHA program in West and Central Africa this calls for deploying USAID resources, as necessary, to ensure:

1. that USAID-financed activities are focused on commodities and constraints whose priority has been rigorously established;
2. that the volume of research directed to the generation of new technology for priority crops in USAID-financed networks is increased, to the extent practical, through augmented mobilization of NARS scientists within collaborative regional efforts;
3. that these networks also allocate more resources and attention to the transfer and dissemination of on-the-shelf or nearly-on-the-shelf technology, including research on organizational and institutional issues affecting farmers abilities to obtain other needed inputs for the application of new technology; and
4. that the CORAF Secretariat, when receptive and ready, is assisted in reassessing its governing structure, its statutes, operating procedures, organizational structure,

financial strategy and strategic plan in light of its responsibilities and role as an instrumentality of the member NARS for the facilitation of research on legitimate regional priorities, with the Secretariat's and Executive Committee's energies mainly deployed to strengthen that focus and enable the member NARS to become effective partners.

2. Vision for WARP's Science and Technology Agenda

The Initiative to End Hunger in Africa (IEHA) will address the causes of hunger, the most fundamental of which is poverty. Reducing poverty in Africa will be approached primarily through efforts to increase productivity and incomes in the agricultural sector where, directly or indirectly, the vast majority of the population derives its livelihood. The focus will be broad and inclusive so that smallholder income is raised and availability of essential food products is maintained even as opportunities for traditional and non-traditional exports available through globalization are seized.

From a systems perspective, agriculture may be viewed as a process for combining labor, natural resources and purchased inputs to produce products that are stored, transformed and marketed at multiple points between the cultivator and the final consumer. The experience of the past decade and more, has led to a widely shared consensus - known as the "Washington consensus" - that views agriculture not merely as a platform for "dynamic" modern industrial and commercial sectors, but instead as the potential engine of global and domestic market-oriented, private sector-led growth. In this vision, the chief role of government was a) to create a favorable investment climate by withdrawing in favor of the private sector from potentially commercial spheres of activity and b) to safeguard the openness and competitiveness of markets.

Pursuit of this vision has shown, however, that government must also actively work in partnership with the private sector to realize the full potential of market opportunities. This has been demonstrated dramatically in countries engaged in trying to capture non-traditional export opportunities. Areas in which active government support was needed included promulgating and enforcing phyto-sanitary laws, reforming laws pertaining to land-use and tenure, adjusting macro-economic policies, investing in transport infrastructure, strengthening export institutions and even establishing university training programs.

Among the public goods that virtually all governments have long furnished in support of agriculture is research and the transfer and dissemination of the resulting new technologies. During the nineties funding of agricultural research suffered due to budgetary strictures coupled with skepticism about its priority compared to other investments. Perhaps for this reason, considerable research has focused on the impact of agricultural research. It shows that agricultural research has generated high economic rates of return in most countries. Farmers avidly adapt and adopt new technology when its profitability is apparent. Lukas Brader in a recent paper commissioned by the CGIAR noted that virtually all maize cultivated in West and Central Africa consists improved varieties from research programs. The development of early maturing varieties has led to the expansion of maize cultivation

into semi-arid zones hitherto reserved to sorghum. Progress in breeding for Striga resistance has been a major factor in farmer adoption of new sorghum as well as maize varieties. Masters and others found that returns to agricultural research were typically well above the opportunity cost of capital with rates of 20 percent and above common. Problems with the adoption of new technology from research often revolve around the access to fertilizer, pest control and other inputs as well as generally poor government extension and ineffective or inconsistent government policies.

Increases in agriculture sector production and income will become more dependent on technology from research as time passes. As the availability of cultivable new land decreases and rural population growth continues, yields and value-added along the chain from grower to final consumer must increase per unit of cultivated land in order even to maintain current levels of welfare. Agricultural research must not only improve its output of technology in response to farmer needs, but also address the market-derived demands of economic actors all along the processing chain. At the same time more investigation and investment is needed to identify and mitigate barriers to effective transfer and dissemination of new technologies. Much of this research must focus on ways that farmers and other actors can act together to secure needed inputs, financing, production support services normally provided by governments and government policy responses to their needs. Important strides made in improving communications and collaboration between the agricultural research community and its many stakeholders must continue and improve.

3. Proposed S&T Elements for WARP IEHA Action Plan

The Action Plan (AP) is to cover a six-year period from 2003 to 2008. However, it will not be possible to formulate concrete elements for the AP's later years based on the understandings available during the sixty or so days available for its preparation. Therefore, the most practical course available is to lay out steps toward realization of the Vision within two timeframes: Phase I, covering the remainder of 2003-04, and Phase II, covering the remainder of the period. Much of the activity during Phase I will be directed toward defining the scope and content of activities for Phase II. The Vision sets forth a potential agenda to be addressed by the actions comprising Phase II, but some of these may prove to be unnecessary (e.g., given the actions of other donors) or infeasible as a result of decisions or non-decisions of potential partners or budgetary parameters.

Activities during Phase I

3.1. Determine priorities for WARP/IEHA investments in agricultural research:

- 3.1.1. Partners' and Stakeholders' Workshop:** One approach would be to hold a Partners and Stakeholders Workshop with researchers from the major regional research networks, CORAF, selected NARS, other national government representatives, CILSS/INSAH, international NGOs (e.g. World Vision International), regional NGOs, farmers', traders' and processors' organizations, bilateral USAID Missions (with IEHA programs) and major

other agriculture sector donors to consider, discuss and make recommendations concerning the following agenda:

- i. Review and discuss the regional research implications of the non-S&T elements of the planned WARP IEHA and other actors' planned investment programs to increase productivity and incomes from agriculture;
- ii. Based on i. above and available analyses from IFPRI and others, consider which commodities, technologies and other needs should be given priority by agricultural research in support of agricultural development throughout the region;
- iii. Hear from the NGOs, farmers' and other agriculture sector operators' groups their views concerning research support needs to address constraints in all areas, whether pertaining to the agricultural sciences or institutional, organizational and social science issues;
- iv. Hear from the research community representatives the extent to which potential users' expressed research support needs are understood, are or are not being addressed, and are susceptible to treatment by the research community.

Discussion: Such a conference should provide the information needed for the formulation of the priorities to be pursued by the IEHA regional research program and lay the basis for easy future communications among attendees. The participants in such a conference must be carefully selected for their personal knowledge and experience as well as for the constituencies they represent. Women should represent the user groups where they are important or predominate. Those from whom most is expected – such as experts to assess commodity priorities and other technical issues – may require payment for their participation and the preparation of papers. Other participants – such as those from the other donors will be attracted mainly to the extent that they see it as potentially useful. One of the advantages to this approach is that it could facilitate collaboration with other donors. If regarded as successful by the majority of participants, consideration should be given to sponsoring such a meeting annually or biennially. This workshop will probably require a lead-time of around 90 days. The INSAH may offer a good venue and might be able to provide support in preparing and conducting it. It would probably be necessary to give CORAF joint sponsor status.

- 3.1.2. In-House Priorities Setting Exercise:** An alternative approach to a. above would be to draw on work by others (IFPRI's dream model) plus the outcome of analyses (e.g., by Abt) that WARP is presently funding plus informal consultations with other USAID units and donors to determine the

commodities, other technologies and other needs that the WARP program should emphasize in supporting regional agricultural research.

Discussion: This approach would be considerably less productive of information and ideas, but it would also cost less and generate fewer expectations. It may be the more appropriate path to choose if expected IEHA funding for regional agricultural research is expected to build only slowly and not to rise above \$5-6 million over the AP period. This approach to priority determination can probably be accomplished by WARP staff.

Estimated Cost: \$0

3.2. Evaluation of the Regional Research Networks: Based on 1 above as well as other factors such as need for additional funding and ability to entertain USAID's agenda, select from among existing research networks active in West and Central Africa those that potentially can serve as vehicles for research in support of WARP priorities. The Maize (WECAMAN), Sorghum (WCASRN), Rice (ROCARIZ) and Natural Resource Management (NRM InterCRSP) all appear to be strong candidates and have a history of partnership with USAID. The evaluation team should be comprised of an agricultural economist, an agronomist, a technology transfer and dissemination expert and a rural sociologist—all with extensive experience in West and Central Africa. The focus of the evaluation should be on each candidate networks' operational strengths and weaknesses, whether the scale and scope of research is appropriate and how the focus and approach of each could be modified to best accommodate WARP's IEHA priorities. The evaluators should also assess a sample of the activities carried out with the FY 02 TARGET grants made through the West Africa IARCs.

Discussion: This evaluation should be pursued either jointly with other interested donors or, as minimum, take their interests into account. It should provide both donors and the WCA research community with a roadmap for future partnership.

3.3. Minimum Support of Regional Network Coordination: As indicated by the outcome of the priority commodities selection process and until the evaluation of the networks provides the basis for an informed decision, provide the WECAMAN, WCASRN, ROCARIZ and NRM InterCRSP networks at least enough in funds FY 03 and 04 for each to maintain its viability (i.e. retain essential coordination staff and maintain the currency of files and archives).

Discussion: Maintaining this level of support should preserve the networks' future ability to resume active collaboration when fuller funding is available and should that be warranted.

3.4. Technology Transfer and Dissemination (TTD) TARGET Grants: Launch another round of TARGET-type competitive funding of regional proposals for

transfer and dissemination of on-the-shelf or nearly on-the-shelf research technology to farmers. The criteria should be favor activities directed to the needs of small holders, gender equity and other identified priorities.

Discussion: Some of these funds should be again programmed with INSAH's cooperation as INSAH's unless the O2 experience indicates otherwise.

3.5. Incorporate IEHA into WARP Strategic Plan: Based on the Partners' and Stakeholders' Workshop, the evaluation of the networks and the emerging IEHA regional program vision, revise the existing WARP Strategic Plan to encompass the IEHA Action Plan.

Discussion: This should be doable in-house or with the help of one short-term consultant for a few weeks.

3.6. CORAF Secretariat Operations: Absent an indication that it is no longer needed or expected, continue annual contribution to the CORAF Secretariat's operational needs.

Discussion: This is mainly a question of working in a collaborative spirit with the other donors and the West African agricultural research community, including CORAF. Without it, USAID may have little opportunity to influence CORAF's evolution in the next few years.

Activities under Phase II:

In this section it is assumed that IEHA allocations to WARP for support regional agriculture research priorities will be in the range of \$ 6 to \$12 million. The character of most of the activities proposed for consideration is such that they their annual funding can be varied increased or decreased as circumstances warrant.

It appears likely that coming years will see increased funding from a variety of sources for agricultural research in Africa. Some of this funding will flow through the CGIAR Challenge Programs whose content is only beginning to be formulated. This underscores the need, mentioned frequently below, to maintain good communications and coordination with donor and other partners of the West Africa Regional agricultural research community. Responsiveness to changing needs and other donor responses will help to ensure that USAID agricultural investments add real value. Others are treating biotechnology issues and opportunities.

3.7. Partners' and Stakeholders' Workshop: Make this a biennial event.

Discussion: This, like the Regional Outlook Meetings, offers the opportunity to hear from those in touch with grassroots economic actors concerning the constraints they struggle to overcome. The alternative is to mount expensive surveys, to try to attend

the field days and other exchanges sponsored by networks or be guided by such documents as may emanate from donor and recipient government agencies, which are too often out of date and focused on more general developments and trends.

- 3.8. Active Support of Regional Network Coordination:** Augment support of the coordination costs of the regional networks for IEHA priority crops and constraints to their “normal” levels of around \$ 500,000 each.

Discussion: Active coordination, facilitation of professional exchanges, adequate archiving and highly targeted training will enable the selected networks to accomplish more with funds provided for actual research on regional priorities through competitive grants, etc.

- 3.9. Regional Network Research Challenge Grants:** Monitor the adequacy of funds for conduct of research on regional priorities within the research networks and, if needed, provide additional support for it through challenge grants. These funds would augment the Challenge Grant funding already in use in some of the networks. Unlike TARGET grants, which were for application of research technology, these would be for agricultural research per se. Because of this, the approval of proposals should be left to the normal decision-making processes of each network.

Discussion: Straightforward research needs to continue and perhaps increase incrementally to furnish new technology responsive to regional needs. Funds available from other sources may prove sufficient. If not, however, the flow of new technology to users will be decrease and efforts to facilitate transfer and dissemination will, with time, prove less and less fruitful.

- 3.10. Technology Transfer and Dissemination (TTD) TARGET Grants:** Support technology transfer and dissemination through IARCs, INSAH and other partners, as indicated by previous experience, with challenge grants geared specifically to this purpose.

Discussion: These would be a continuation of the USAID TARGET grants both as to focus and the reserving final approval of proposals to USAID.

- 3.11. Address TTD Constraints:** Assess the experience with 4 above and fund research and development that addresses the identified interface and off-station problems that constrain application of proven technology through one or both of the following means:

- a. Constraints to TTD InterNetwork:** This would operate along the lines of the NRM InterCRSP. Thus it would tap the expertise and knowledge available within the regional networks and actively direct those and additional resources

to identify and test solutions to the problems that challenge farmers and other users in their efforts to make use of research technology;

Discussion: Traditionally donors have worked with ministries of agriculture in hopes that the extension services would become effective in bridging the gap between farmers and researchers and would either effectively deliver agriculture inputs or would encourage and empower the private commercial sector to do so. With a very few exceptions, governments have neither become effective themselves nor adopted clear policies of leaving the field to the private sector. For this and perhaps other reasons as well, the private commercial sector has mostly not invested in agricultural input distribution. This initiative would identify and evaluate approaches whereby farmers and other operators, no doubt mostly in groups, have tried to “go out and get” the goods, services and financing they need to apply improved technology. Successful models would be documented and disseminated. This would probably be a bit more expensive than the NRM InterCRSP because the social science researchers needed may not be available within the networks.

b. Micro-Enterprise/Micro-Finance Support for TTD: To the extent indicated by the experience with b. above, provide grants to one or more NGOs to conduct micro-enterprise/micro-finance development programs aimed at implementing promising solutions to the problems encountered by farmers and other users of technology. Examples might include supporting the establishment of farmer organizations for the purpose of securing fertilizer, other inputs and credit as well as information concerning new technologies, training in their use, transport and storage.

Discussion: This would be a matter of funding action by NGOs that provide farmers and other operators the technical assistance and training they need to set up and manage organizations, to deal with commercial interests and financial institutions. It would also offer financing for their initial financial needs through associated revolving credit facilities. The assumption is that this activity can be undertaken at relatively low cost through add-ons to NGO programs already active in West and Central Africa. Thus, it would operate in only a few countries.

- 3.12. **CORAF Reform:** Maintain contact with CORAF and the other donors, such as the European Union and the French, who are interested in the productivity and cost-effectiveness of the West and Central Africa regional agricultural system. When CORAF is prepared to reassess its governing structure, statutes, operating procedures, organizational structure, financial strategy and strategic plan, USAID should consult with other interested donors and, if it appears that U.S. input would add value, support these efforts with technical assistance as necessary for some or all of the following:
- a. Reviewing and, as appropriate, revising its governing structure, statutes, operating procedures and organizational structure to fit its character as an instrumentality of the member NARS.
 - b. Developing a sustainable financing strategy for itself and extending such assistance to the member NARS.
 - c. Engaging the membership in the participatory review and reformulation of its strategic plan so that it reflects priority goals and targets for the development (as opposed to the functioning) of the regional research system as well as choices among program options for addressing them within available resources.

Discussion: The aim is for CORAF to become effective and dependable in serving and representing its membership and in engaging on their behalf as a partner with the donors and the CG system. This will require that the staff time, resources and facilities of the secretariat be strictly reserved for uses that add real value in serving their mandate from the membership. This means that the Secretariat will need to serve as a repository of information and a clearinghouse, rather than an active force, in some matters. The membership will be little motivated to allocate funds to CORAF unless they are satisfied that it is their organization and it realistically serves their collective interests. Developing realistic a strategic plan and a sustainable financing strategy will help to assure realism and purposefulness in pursuit of regional agricultural research priorities.

- 3.13. **CORAF Secretariat Operations:** Maintain support to CORAF Secretariat operations:.

Discussion: See point 6 under I above.

4. USAID/Washington Funded Science and Technology Programs in West Africa

CGIAR - Consultative Group for International Agricultural Research

1. Objectives and justification: To contribute to food security and poverty eradication in developing countries through research, partnerships, capacity building, and policy support, promoting sustainable agricultural development based on the environmentally sound management of natural resources.
2. Nature of activity: Brings together and coordinates public donors, private bodies and 16 IARCs (international agricultural research centers, lately styled "Future Harvest Centers") in support of the IARCs' programs of strategic and applied research. Non-IARC members are all financial contributors. The CGIAR has no constitution, no statutes, no regulations, and no membership laws. Its decisions are taken by consensus.
3. Physical location(s): Secretariat at the World Bank in Washington, D.C. Headquarters for the 16 centers of the CGIAR are distributed all over the world. Satellite offices are often lodged at sister headquarters, although some are free-standing.
4. Institutional attributes: The Secretariat is hosted and supported by the World Bank. IARCs headquartered in West Africa are: International Institute for Tropical Agriculture (IITA) in Ibadan and the West African Rice Development Authority in Bouake. Those with presences and activities in West Africa are the International Center for Research in Agro-Forestry (ICRAF) in Mali, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in Mali and International Livestock Research Institute (ILRI) in Mali.
5. Links to private sector groups, other donor or national programs: Multiple.
6. Programmatic: The U.S. provides core funding of \$27million annually. This money is goes into a pool without further attribution. Missions can pass funds to IARCS in support of special activities by funding Public International Organization (PIO) grants through EGAT. In such cases the IARC is answerable to the Missions concerning its role in the supported activity. In such cases the CGIAR charges no overhead, but the IARC gets 20%.
7. Assessments or Evaluations: Highly regarded for its effectiveness.
8. Names of key contact persons: Meredith Soule, EGAT (202-712-1058)

CORAF/WECARD -West and Central African Council for Agriculture Research and Development

1. Objectives and justification: According to the CORAF website: established as a framework for coordination and exchange of information and lessons learned. Its mission is to encourage South-South exchanges and North-South collaboration in facilitating partnerships, in training, in the identification of common research goals, in carrying out projects and in organizing research teams that serve the sub-region. It has become over time the sub-regional institution representing the national agricultural research systems of West and Central Africa.
2. Nature of activity (including link to IEHA Pillar): Its main function is to make sure that agricultural research priorities are established in a regional fashion and to foster and strengthen the NARS in the collaborative pursuit of a regional agenda. It does this through communications, meetings and other information exchanges. Little information could be found concerning the specific mechanisms and approaches employed, except that CORAF has funds for Competitive Grants and Encouragement Grants provided by the EU. These have been used.

3. **Physical location/Organizational Features:** The headquarters is in Dakar. It is governed by a General Assembly that meets annually and an Executive Committee that meets several times per year. A Scientific and Technical Committee exists in principal.
4. **Institutional location, partners, and affiliations, etc.:** Its main partners are the member NARS. It has secondary partnership relations with the IARCs represented in the region (IITA, WARDA, ICRISAT, ICRAF, ILRI, etc), CGIAR, ISNAR, GFAR, AFDB, SPAAR/FARA, donor agencies, etc. Member countries include all the countries of West and Central Africa except Equatorial Guinea.
5. **Links to private sector groups, other donor or national programs:** It aims to include producers groups and NGOs.
6. **Programmatic:** The member countries support the core costs of the Secretariat while other activities require support from donors or private other funding sources. The EU has provided \$20 million mainly for CORAF's Competitive Grant program and an Encouragement (Incentive?) Fund, but that also supports non-core costs of Secretariat operations. (CORAF website advises that Encouragement Fund must be used for projects involving the NARS of more than one country plus French research institutions.) The French contribute about \$3-400,000 annually. The U.S. has contributed some \$50,000 annually to CORAF and is helping with the development of guidelines for the Competitive Grant program.
7. **Assessments or Evaluations:** Unknown.
8. **Reading through materials mostly drawn from the CORAF website, one gets the strong impression that it has been going through start-up problems involving: financial problems owing in part to too few "financial partners", difficulties in getting some of the processes - e.g. its Scientific and Technical Committee - up an running, inadequate or unclear operating rules and methods (issues concerned the role of the Executive Committee, rules of engagement with the NARS, communicating clear rules and standards concerning the competitive grants with the result that only Francophone NARS applied for Competitive Grants, lack of criteria and indicators for judging the value-added by CORAF) and lack of an adequate strategic plan. Some of the above problems may have been overcome since reports of the 2001 General Assembly meeting were posted on the website. Observers consider the current Secretariat insufficiently systems-orientation in its approach to planning and management.**
9. **Names of key contact persons:** CORAF Secretary General: Dr. Ndiaga Mbaye; USAID: Bahiru Duguma, AFR/SD/ANRE (EGAT).

NRM Inter-CRSP in West Africa

1. **Objectives and justification:** The strategic long-term goal of this network activity is to build a sustainable regional response to changing natural resource management (NRM) needs by reinforcing regional research integration. It aims to address priority regional NRM problems in the West Africa region, building on the expertise and experience of the individual CRSPs and their host partner institutions. It provides support for the Africa Bureau's SO 3 Results Package: increasing the "adoption of improved agricultural policies, programs and strategies." It contributes by increasing broad-based access to technology for selected commodity systems and deploying selected regional and national

public and private sector services in support of their adaptation and adoption by resource users.

2. Nature of activity:

- a. This is a network research program, not a CRSP. However, it draws on the resources of seven CRSPs in the pursuit of its agenda, which focuses on adapting and increasing the adoption of appropriate NRM technologies throughout the Sahel. Three sub-activities were activated (parenthetical notations refer in part to material in b below):
 - i. Restoration and Maintenance of Degraded Range and Farmlands for Increased Productivity in the Sudano-Sahelian Zones of West and Central Africa. (Soil/Water East Group. Participating Countries: Niger -INRAN; Burkina Faso – INERA; Chad – ITRAD; Cameroon – IRAD. US Principal Investigators (PIs) from Alabama A&M, Purdue, Iowa State)
 - ii. Improving and Sustaining Food and Raw Material Production in West Africa: Reversing Soil Acidification, Loss of Organic Matter and Erosive Runoff in Food Production Systems. (Soil/Water West Group. Participating countries: Mali – IER; Senegal – ISRA; Cape Verde – INIDA; The Gambia – NARI. PIs from Hawaii and Virginia Tech).
 - iii. Adaptive Research with Inter CRSP Natural Resource Management Technologies for Regional Transfer in West Africa. (The Regional Technology Transfer Group. Participating Countries: Ghana – SARI,, Niger – INRAN; Mali – IER; Chad – ITRAD; Senegal – ISRA. PIs from Michigan State and Nebraska).
- b. The InterCRSP program structure is designed to test alternative means to link regional researchers, technology transfer agents and farmers. It tested three regional models for integrating adaptive NRM research and technology transfer:
 - i. The East Group Model ties to capitalize of the comparative research and development advantage of each participating country with technologies selected based on each country's relative level of advancement in developing, testing and extending various technologies. Promising technologies from "Adaptive" sites within country are tested for production system compatibility and demonstrated in an "integrative" site. The more successful are candidates for testing in other countries integrative sites;
 - ii. The West Group features the formation of an international interdisciplinary team of researchers to work on solving and transferring solutions to priority NRM problems common to its sub-region. Researchers on particular aspects of a common adaptive NRM problem, sharing results and lessons learned through frequent group interaction. Inter-country site study visits are undertaken and preparation of scientific communications are stressed.
 - iii. The Regional Technology Transfer Model is characterized by its direct link between CRSP technology development and NGO technology transfer expertise. The Bean/Cowpea and INTSORMIL CRSPs collaborate with World Vision International (WVI). As lead NGO, WVI facilitated the establishment of interdisciplinary "Technology Transfer

Teams” for each country comprising representatives of CRSP researchers, NARS, NAES, WVI and other NGOS. For selected technologies, the CRSP and NARS team members implement adaptive research measures while WVI, the NAES and other NGOs carry out transfer activities.

3. Physical location(s)/Organizational Features: U.S. Coordination at the headquarters of the IPM CRSP at Virginia Polytechnic and State University (Virginia Tech) in Blacksburg. The Sahelian NRM/Production Systems Research Pole is coordinated from at INERA.
4. Institutional attributes: INSAH, the NARS and some NAES of the Cape Verde, Senegal, The Gambia, Mali, Burkina Faso, Ghana, Niger, Chad and Cameroon. The participating CRSPs are: Bean/Cowpea, INTSORMIL (sorghum/millet), IPM, Peanut, Pond Dynamics/Aquaculture, SANREM (Sustainable Agriculture and Natural Resource Management) and Soil Management.
5. Links to private sector groups, other donor or national programs: World Vision International (WVI), other NGOs.
6. Programmatic: The InterCRSP has been funded by AFR/SD/ANRE at an annual level approximating that of the other Commodity Research Networks: \$250-350,000. WVI apparently “leverages” some funds. The CRSPs non-InterCRSP activities are centrally funded.
7. Assessments or Evaluations: The two documents chiefly consulted (The West Africa NRM InterCRSP of unknown provenance and the NRM InterCRSP Project in West Africa: a Synthesis of Four and One-Half Years of Field work) depict a rigorously conceived and executed collaborative effort of adaptive research both on technologies and methods of supporting adaptation and adoption by farmers. The former provides a list of positive and negative lessons learned in the process as well as proposed improvements to be built into future efforts following on the conclusion of the current phase in March 2003.
8. Names of key contact persons: Virginia Tech: Mike Bertelson (540-231-6338, bertel@vt.edu); NRM/Production Systems Research Pole at INERA, in Ouagadougou: Francois LOMPO.

TARGET (Technology Applications for Rural Growth and Economic Transformation)/IARC

1. Objectives and justification: To get profitable, productivity enhancing, agricultural technologies, which are now in the pipeline or on the shelf, into the hands of farmers or other end-users.
2. Nature of activity: IARCs were invited to submit Concept Notes (CN) describing opportunities and approaches to realizing them in Africa. This produced 35 CNs from 16 IARCS, of which 11 belonged to CGIAR. These were reviewed first by the Sub-Regional Organizations (SRO = CORAF for West Africa) and send back the IARC with comments. The revised CNs were reviewed in Washington in April – May. Final approvals were granted on May 31, 2002. Six were finally chosen for funding.
3. Physical location(s): The three approved CNs for West Africa were for: Peri-Urban Dairy Production Ghana, Nigeria and Niger); Micro-Dosing Fertilizer (Burkina Faso, Mali and

- Niger) and Increasing Productivity and Market Opportunities for Banana and Plantain (Ghana, Cameroon, Mozambique and Tanzania).
4. Institutional attributes: Peri-Urban Dairy involved ILRI and the Faculties of Food Science and Technology of Obafemi Awolowo University, Nigeria and University of Science and Technology, Ghana. Micro-Dosing Fertilizer involved ICRISAT, CIAT, and IFDC and the Niger NARS. Increasing Productivity and Market Opportunities for Banana and Plantain involved IPGRI (International Plant Genetic Resources Institute), INIBAP (International Network for the Improvement of Banana and Plantain) and IITA. CORAF ran first round of reviews.
 5. Links to private sector groups, other donor or national programs: Micro-dosing involved three NGOs in Mali and three in Burkina Faso plus Project Intrans of FAO and ICRISAT.
 6. Programmatic: This was an AFR initiative undertaken at Natsios' behest to demonstrate early pay-offs from investments in S&T. EGAT was involved, possibly because the invitation to submit proposals was directed to IARCs, though not all were CGIAR institutions. USAID funds committed were \$3.6 million out of a total of some \$ 4m allocated from recalled unused S&T funds.
 7. Assessments or Evaluations: One reviewer thought the quality of the CNs was fairly good overall. There were more that merited funding than could be accommodated. CORAF's comments, which were forwarded along with most of the final CNs, were valuable.
 8. Names of key contact persons. Bahiru Duguma, 712-0491

TARGET (Technology Applications for Rural Growth and Economic Transformation)/WARP

1. Objectives and justification: To get profitable, productivity enhancing, agricultural technologies, which are now in the pipeline or on the shelf, into the hands of farmers or other end users.
2. Nature of activity: Funds were allocated to WARP for "Quick Start" activities in Niger, Burkina Faso and Senegal. The activities were selected based on visits by combined CILSS/INSAH and ROPPA (West Africa Network of Peasant Farmers) to identify national partners and technologies in each country for increasing production of sorghum, millet, maize and cowpeas. The process led to a regional conference where a scientist, an extensionist and a farmer from each country presented, discussed and improved national plans. The interventions featured improved seed, better management of inputs (including fertilizer and pesticides) and improved cultivating practices. The plans were put into action in June.
3. Physical location(s): Niger, Burkina Faso and Senegal
4. Institutional attributes: located at INSAH
5. Links to private sector groups, other donor or national programs: ROPPA (West African Network of Peasant Farmers)
6. Programmatic: This was an AFR initiative undertaken at Natsios' behest to demonstrate early pay-offs from investments in S&T. Out of some \$ 4m allocated to TARGET, of which most were allocated to the IARCs through CGIAR, \$212,000 were allocated to

WARP for projects developed with its partners. Each national project received \$50,000 and the remainder was allocated to planning.

7. Assessments or Evaluations: An SO-6 success story indicates that the average yield increases achieved for sorghum, maize and cowpeas were 25%, 26% and 23%, respectively, and that some 700 farmers benefited, including some who qualified as food insecure.
8. Names of key contact persons: Ryan Washburn, 223-334-6828.

West and Central Africa Maize Collaborative Research Network (WECAMAN)

1. Objectives and justification: To strengthen the capacity and capability of the NARS to undertake and coordinate maize research and to combine their resources to address regional constraints to maize production through the the generation and transfer of appropriate technologies. The strategy has been to exploit the strength of the strong NARS (lead centers) in research personnel, infrastructure, and ecological potentialities for the generation of technologies that can be shared with the other network member countries, particularly the weaker NARS. Major emphasis is placed on the screening and development of technologies that can alleviate the major constraints to production. A recent the emphasis has been on promoting the diffusion and adoption of sustainable technologies through the competitive grant system.
2. Nature of activity:
 - a. Conducts coordinated development of maize varieties with resistance or tolerance to stresses limiting production and sustainable agronomic practices to enhance maize productivity and production.
 - b. Promotes technology transfer and dissemination through strengthening research-extension-farmer linkages (by supporting field days), on-farm tests and demonstrations and sharing information among member countries.
 - c. Encourages and supports sustainable seed production and distribution systems.
 - d. Enhances the capacity of the NARS through consultation visits, a visiting scientist scheme, a regular five-month technician training course and workshops.
 - e. Promotes expansion of the demand for maize by supporting the development of new maize-based food products.
3. Physical location/Organizational Features(s): Coordination at IITA, Ibadan.
4. Institutional attributes: IITA, CIMMYT, OAU/STRC (Scientific and Technical Commission), SAFGRAD (Semi-Arid Food Grains Research and Development).
5. Links to private sector groups, other donor or national programs: NGOs: Sayakawa Global 2000, Sahel Solidarity. The NARS of Nigeria, Cote d'Ivoire, Ghana, Togo, Benin, Cameroon, Burkina Faso, Chad, Senegal, Mali and Guinea are members. UNDP and IFAD are mentioned as providing support "through the UNDP AMS (African Maize Stress) Project."
6. Programmatic: USAID funding through the office of Agriculture, Bureau of Research and Development under grant no. LAC 4111-G-00-3043-00. WECAMAN seems to have been recently funded at about \$350,000 per year by USAID.
7. Assessments or Evaluations: AR covers year ending 9/30/02 and most results are for 2001. Field days held in Nigeria, Togo, Chad and Cameroon; On-farm tests and

demonstrations held in Ghana, Nigeria, Mali, Togo, Benin, Burkina Faso, Nigeria, Senegal, Chad and Cameroon. This led to release or the earmarking for release of new varieties in Togo and Nigeria and to significant sounding findings in most of the other cases. WECAMAN funds community seed production schemes. Despite cited problems in performance and NARS reporting, these produced 4, 084 kg of breeder seed, 23, 547 kg of foundation seed and 202,054 kg of Certified seed in Nigeria, Ghana, Senegal, Mali, Cameroon, Chad and Benin. These need to be converted into micro-enterprises of the participating farmers. The AR calls for an impact assessment of this program element. Two each lead member countries were designated for research on four constraints, and the results achieved by each are summarized. Regional uniform variety trials of four varieties in 12 countries are reported in terse detail. Competitive grants funded agronomic practices. Trials by four of the seven designated lead NARS are summarized in useful detail. NARS capacity building involved 5 consultation visits, three visiting scientist trainings, attendance by six technicians at a five month course at IITA Ferkessedougou, Cote d'Ivoire and (with special USAID funding of \$30,000) a workshop on biotechnology. Demand expansion was pursued with sensory tests for suitability for use in biscuits, beignets, pancakes and "sombian". Scientists in Mali supported the development of a maize syrup and a composite flour.

8. Names of key contact persons: Baffour Badu-Apraku, Network Coordinator, IITA/Ibadan

ROCARIZ (Réseau Ouest et Centre Africain du Riz/ West and Central Africa Rice Research and Development Network)

1. Objectives and justification: ROCARIZ aims to link rice stakeholders in West and Central Africa in order to generate and sustain improved, relevant rice technologies, and to facilitate their transfer and diffusion for rapid adoption by end-users. This is achieved by enhancing NARES' capacity and capability for participatory rice research planning, technology generation, evaluation, and transfer to end-users.
2. Nature of activity: This is a rice research and development network. Formed in April 2000 from WARDA's nine regional Task Forces (TFs) and a network led by CORAF, it links the NARS of most West and Central African countries in a common effort to generate and sustain improved, relevant rice technologies and facilitate their transfer and diffusion for rapid adoption by end-users. Today, ROCARIZ has seven TFs, namely Rice Breeding, Mangrove Swamp Rice, Natural Resource Management, Sahel Natural Resource Management, Integrated Pest Management (IPM), Technology Transfer and Rice Economics. Information is exchanged among member NARS at Biennial Regional Rice Research Review meetings and by Monitoring Tours as well as, no doubt, by other means, including a recently inaugurated newsletter. Small research projects involving member NARS and scientists are funded. Training is provided to staff of member NARS.
3. Physical location/Organizational/Organizational Features: Coordination is hosted by WARDA from near Bouake, Ivory Coast (but is now also located in Abidjan and at ICRISAT/Bamako until things settle down in Ivory Coast). Both WARDA and CORAF provide institutional support and donor coordination. Operations are spread among 22 West and Central African countries and their NARES. Research is managed by a Steering

Committee comprising representatives of NARES scientists, the rice private sector and WARDA.

4. Institutional attributes: WARDA (West Africa Rice Development Association), CORAF, national NARES.
5. Links to private sector groups, other donor or national programs: EU grant covering three years expanded country participation.
6. Programmatic: Rough guess: recently in the range of \$250-300,000. Believe it is funded from SO 15 through a centrally funded mechanism.
7. Assessments or Evaluations; The ANRE Annual Report for 2001 notes that the number of "new technologies" promoted in rice declined slightly during recent years. Sidi Samyang document (circa 02) made no mention of technologies released or earmarked for release. The April 02 Newsletter notes that no activity was conducted under the Technology Transfer TF because the Technology Transfer Scientist was "not in place." A total of 78 projects were funded in 2000, but by 2001 only 67 projects were operating. The number of scientists collaborating with ROCARIZ dropped from 68 in 2000 to 59 in 2001. The Monitoring Tour 2001 revealed that there is "generally weak in-country coordination of outreach programs, because of lack of funding." However it found that "relevant rice-based technologies are being tested/promoted with farmers." Two trainees from NARS completed internships on "anther culture and molecular biology" and ten participants were trained in impact assessment. The Second Biennial Regional Rice Research Review was held during April 9-12, 2002. Over 73 rice research and development papers were presented.
8. Names of key contact persons. USAID: Bahiru Duguma, AFR/SD/ANRE (now EGAT?); WARDA: Sidi Samyang, Network Coordinator.

West and Central Africa Sorghum Research Network (WCASRN)

1. Objectives and justification: The overall objective of the WCASRN network is to improve the production, productivity, and utilization of sorghum, to contribute to greater food security and to enhance the economic and social well-being of the people of the sorghum-producing countries of West and Central Africa. Its sub-objectives are:
 - a. strengthen linkages among sorghum researchers in WCA countries for exchange of plant genetic materials, technologies, and research information
 - b. assist network member countries in improving their research and extension services through human resource development
 - c. coordinate collaborative research among members of the network in the areas of germplasm development and natural resources management research
 - d. facilitate the improvement of sustainable sorghum-based production systems in WCA countries
 - e. promote cooperation between network member countries, and national, regional, and international institutions involved and/or interested in sorghum research and development.
2. Nature of activity: Promotes and pursues: partnerships in varietal development, including participatory breeding, partnership for seed production and distribution, regional exchange and testing of promising materials, and on-farm trials; IPM and NRM; market-

- driven development opportunities for sorghum, particularly addressing lack of efficient sorghum processing machinery and lack of varieties suiting certain end uses; institutional and human resource building through regular training programs, workshops and monitoring tours; technology development, transfer and commercialization.
3. Physical location(s)/Organizational features: Network Coordination Unit at ICRISAT's Samanko station near Bamako. There is a General Assembly and a Steering Committee. Each participating country has a National Coordinator.
 4. Institutional attributes: ICRISAT (technical and administrative backstopping), INTSORMIL, CIRAD, INSAH, NARSs, and NGOs (SG 2000, Winrock International), Governments, USAID. USAID is only donor cited on website. Unnamed development projects. The eighteen participating countries are: Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Côte d'Ivoire, The Gambia, Ghana, Guinea-Bissau, Guinea-Conakry, Mali, Mauritania, Niger, Nigeria, Sierra Leone, Senegal, and Togo.
 5. Links to private sector groups, other donor or national programs: Above NGOs plus agor-industries, food processors, market women restaurants, farmers, farmer associations.
 6. Programmatic: Annual funding from AID has been running at about \$350,000. SO 15 expires in September 03. ANRE has had program management responsibility.
 7. Assessments or Evaluations: Document entitled Highlights of Achievements of WCASRN 1998-2002. It reports, in particular, that: on-farm tests have led to the adoption of 31 varieties in nine countries with subsequent yield increases of over 2-3 MT/ha; IPM approaches targeted a head bugs, grain mold, anthracnose and Striga are stabilizing and increasing yields; use of cover crops has improved soil fertility, reduced soil degradation and increased sorghum yields; development of seed production; distribution systems have led to a substantial increase in farmer seed banks of improved varieties; following consumer preference studies three sorghum food products are now commercially available (sorghum biscuit, couscous and "deli'ken"). Most of the specific reports of above results are dated 2000. Report notes that plans had been based on an expected annual budget of \$500,000, but that they never received more than \$250,000 during the plan period and that this was a problem.
 8. Names of key contact persons: AFR/ANRE (EGAT): Bahiru Duguma (?), Enousa Akintayo, ICRISAT.

Technology Transfer and Dissemination¹⁸

Brent M. Simpson¹⁹

1. Background

General Background

Ten years ago, a survey conducted within the sub-region on the basic structure and orientation of extension practice would have found the majority of national extension programs to be using some variant of the Training and Visit (T&V) system promoted by the World Bank. These systems featured a highly centralized, top-down 'cascade' administrative structure, designed to maximize efficiency in moving new technological recommendations from research out to farmers through bi-weekly meetings with field agents (using demonstrations and contact groups), who in turn were supported by a small cadre of subject matter specialists and regular in-service training.²⁰ Ultimately, the high costs of operating these elaborate structures, combined with the lack of new technologies to extend, led to the eventual abandonment of the model. Although increasingly relegated to the realm of historical footnotes, the T&V experience continues to exert itself through the attitudinal and operational footprint it left upon individuals and programs indoctrinated in its use.

Today few, if any, of the classic T&V programs still operate within the sub-region. The extent of the fall from grace of the T&V model is remarkable for both its breadth and rapidity, and is based upon the combined effect of (i) the mutual recognition by the Bank and implementing countries of the operational shortcomings (or outright failures) of the T&V approach in West Africa, (ii) the shifting of the Bank and other donors to channeling increasingly large shares of operational funds through so-called non-governmental organizations (NGOs),^{21,22} and (iii) based on both the weak performance of the T&V model

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²⁰ A complete description of the T&V model can be found in Benor and Baxter (1984).

²¹ Although an implicit assumption surrounds what is meant by NGO, in reality there is little agreement; many organizational types are found, and no agreed upon typology has yet been established (e.g., White and Eicher, 1999; Uphoff, 1996).

and the withdrawal of financial support, governments have had to face 'a day of reckoning' over what type and size of programs they can support through their own resources, and in response, national programs have begun to gravitate towards alternative methodologies of extension practice and models financing.

Although few entirely new forms of extension service provision have emerged in recent years, there has been an important shifting and re-partitioning of activities among the existing actors. One of the most important trends across the sub-region has been the transfer of basic service provision, such as credit provision and input supply, out of national extension programs and into the private sector. This process began in the mid-1980s with the introduction of structural adjustment policies, and has accelerated through the 1990s. Interestingly, and contrary to the trend among national programs, a surprising number of donor-supported NGOs, large and small, are promoting their own credit schemes and arranging for input delivery. Seed multiplication and dissemination is perhaps the remaining major service area that has remained primarily under public sector control, due largely to the nature of the product and the weak potential for private sector enterprise to profitably provide the service. In terms of their overall content, it is fair to characterize public sector extension programs, as well as most NGOs, as providing public goods (largely in the form of technical advice and recommendations) to farmers across the majority of, but not all, environmental and socio-economic conditions found within each country's borders. In contrast, private sector service providers, and quasi-governmental parastatal organizations, tend to be oriented towards the provision of private goods and services within much more limited geographic and economic domains.

Although the perfunctory characterization of governmental extension program performance as slow, ineffective and grossly inefficient in comparison to NGOs has become standard, the on-the-ground reality is not so clear-cut. Freed from the operational bondage imposed by the T&V system, and armed with cutting-edge approaches and more responsive management styles, national programs are proving to be equally capable of delivering the same types of benefits as NGOs (at the same, or even lower, costs). In addition, due to their large size, national programs are able to generate impact at a speed and scale that are orders of magnitude beyond that possible for most NGOs. Poor infrastructure and policy constraints continue to limit the impact of market forces and the private sector in many countries in providing clearly superior alternatives. In general, African farmers face some of the highest transaction costs in integrating themselves in the marketplace, paying 3 to 5 times the world market prices for inputs, while receiving only a fraction of market value for their produce (AICHA, 2002). While the provision of certain goods and services (e.g., veterinary services) is finding a ready home in market-based transactions, others have not (e.g., seed supply), and may never be fully absorbed by private enterprise. In general, the low educational levels of extension field staff and supervisors, and limited sources of new, viable, technological innovations affect all technology diffusion efforts alike, regardless of the type – public, private, or NGO.

²² Eicher and White (1999) report that: 34% of USAID's budget went to NGOs in 1994 and was expected to increase significantly; the World Bank's funding of NGOs rose from 6% in 1988 to 53% in 1994; and DFID channeling of resources through NGOs increased 400% between 1984 and 1994 (source: ODI, 1995).

Major Issues

As indicated in the introduction, a number of important issues warrant identification and further comment regarding their immediate and mid-term future impact on technology transfer and dissemination efforts in West Africa.²³

The first concerns the general increased **plurality of extension service provision** that has occurred over the past decade. For recipient countries, one of the major fallouts from the waning support among donors for public sector institutions is the structural transformation of how, and by whom, extension services are provided. This is most clearly seen in the emergence of a truly pluralistic organizational landscape, where state extension agencies have had to learn to share the field with an increasingly large number of NGOs. To illustrate the point, in the case of Mali, over 1,800 NGOs are reportedly listed at the national registry office,²⁴ compared to the estimated 800 in 1992. While not all of these organizations carry out direct extension activities, many do. These range from one-person 'briefcase NGO' consultants, to large, principally northern-based, and often times well-funded, organizations that rival and may even exceed the national programs in terms of budget and operational prowess. Despite this trend towards diversification, the fact remains that in most countries within the sub-region, state extension services remain the largest, and single-most important organization engaged in technology dissemination. The reason Guinea, for example, has been able to successfully launch and sustain a massive effort to rapidly multiply and disseminate NERICA rice varieties (NEW RICE for Africa), developed by WARDA (WARDA, 2001), is because they have over 2,000 agents in the field. Similar figures can be cited from neighboring Cote d'Ivoire and Ghana. Compared to the one or two hundred field personnel of the very largest NGOs, and the more typical number of 6 to 7²⁵ field technicians, the potential and real power of public extension services must not be under-valued.

As would be expected, under conditions of appropriate public policies, adequate infrastructure and sufficient effective consumer demand, the private sector has been successful in providing a wide range of production inputs (including, in some contexts, the emergence of private seed companies), certain discrete technical services (such as veterinary), as well as various production credit opportunities, particularly in situations where farmers have achieved higher levels of market integration through cash crop production. The provision of 'public good'-type services, however, such as technical advice on crop production techniques, natural resource management, small enterprise development and others, has not been an area of growth, although Mali is currently experimenting with a limited program (Bingen and Dembèlé, n.d.). Nor has the public sector done particularly well in situations where the farm population is dispersed and generally poor. In response, one

²³ Although often used interchangeably, the terms 'technology transfer' and 'dissemination' are used here, respectively, as they apply to the movement of a technology, management practice or methodology across contexts (inter-regional, inter-national, and inter-organizational), and the subsequent diffusion of a new practice among potential end-users. The adoption (or non-adoption) of a new technology is viewed as a related but separate event, resulting from the internal benefit-cost assessment made by individual enterprise managers once a new alternative is made available.

²⁴ Personal communication from the *Comité de Coordination des Actions des ONG au Mali* (CCA-ONG), Bamako, Mali.

²⁵ A recent survey of 216 major NGOs working in agricultural and natural resources management in the nine CILSS-member countries found on average 12, with a median of 6, staff members working on technical issues.

observer has wondered where the rich body of experience is located that shows farmers living on 1-2 dollars a day “have bought their way out of poverty” (Eicher, 2001: 14). Others have raised questions over the willingness of the private sector to invest in staff training, and how effective for-profit enterprises will be linking with governmental research institutions, among other issues.

The examples of voluntary technology dissemination emanating from certain group-based development efforts, and the increased political advocacy of established farmer unions, fed hopes through the 1990s for the potential involvement of producer associations in technology dissemination activities. The record of evidence to-date, however, shows that these hopes have not been, and may never be, answered. While most associations readily become involved in taking on greater responsibility for input provision and the bulk marketing of members’ produce (as a means of reducing costs and gaining more revenue for their members), there has been little or no involvement in actual technology diffusion activities. Nor does this appear likely to change in the foreseeable future.

A second, closely related and equally important issue is that of the significant changes that have taken place in the **methodological orientation** of extension practice over the past 10-15 years. For governmental extension services, the operational void created by the abandonment of the T&V model has generally been filled by a loosely defined set of ‘participatory practices,’ generally reflecting national extension programs’ struggle to assimilate the language and practices of more participatory and multi-actor orientations to technology dissemination that have characterized the work of their smaller NGO cousins.

One of the primary reasons why NGOs have captured the imaginations of donor organizations and have been so successful in mobilizing funds is the perceived notion of NGOs’ superior effectiveness and efficiency in meeting the needs of target populations through their streamlined, more flexible approaches to programming and use of innovative, responsive, participatory methodologies. The general shift by NGOs to a more process-oriented, demand-driven style of rural development often involves related adult education, local organizational capacity-building and empowerment themes, most of which were lacking in the contemporary governmental programs of the day.²⁶

As one recent review indicates, however, the optimism of the pro-NGO view is founded more on belief (desire) than empirical evidence (White and Eicher, 1999). The factual body of evidence supporting the picture of NGOs’ superiority rests largely on anecdotal glimpses and isolated case studies. Yet an equally persuasive body of anecdotal material and case examples can be compiled showing just the opposite -- that many NGOs may, in fact, be no more effective, even less efficient, and perhaps no more operationally innovative or participatory than the governmental services they are supposedly superior to. Within this atmosphere of uncertainty, one issue is resoundingly clear: given the sheer number of organizations involved, their diverse ideological orientations, unequal resources, disparate levels of trained human resources etc., the resulting challenge of attempting to coordinate or undertake any sort of broad-based, complementary programmatic activities have, in many

²⁶ A review of development history, however, will show that many of these issues have played central roles in earlier strategies of development interventions.

countries, become prohibitively complex. Underlying this observation, and in contrast to what is known about past governmental programs, it is clear how very little we know about NGOs – what they do, where they work, who they target and how they locate new innovations. Given the large portion of financing currently being channeled through NGOs, this basic lack of understanding, and continued ‘blind faith’ in their support, is troubling to say the least.

A third area of concern, affecting equally governmental services, parastatals, NGOs and, presumably the yet-to-emerge cadre of private sector extension employees, is the low **educational levels** of the majority of extension field staff and managers. The rising demands associated with new extension methodologies, and the need to coordinate activities of numerous partner organizations, require field agents and their supervisors to increasingly act as process facilitators, learner-driven adult educators, multi-actor networkers, as well as to assume more prominent roles in up-stream technology development and adaptation efforts (e.g. Neuchâtel Group, 1999). The skill requirements demanded by these activities lay well beyond the educational preparedness of the vast majority of field agents. The one-off, in-service training ‘workshops’ on ‘new’ extension methodologies that became one of the cottage industries of the development enterprise in the 1990s are simply not sufficient to overcome the more basic lack of a sound educational background. Furthermore, and perhaps most troubling of all, an assessment of available educational programs within the sub-region that are capable of meeting the professional demands of the new extension realities would likely come up with only one or two notable candidates (e.g. AEDA, 2000; Zinnah et al. 1998), -- a sobering reminder of the massive failure on the part of donors in taking seriously the need for long-term, institution-building investments within the sub-region. The important exceptions of the tertiary education program for mid-career extension agents at the University of Cape Coast, Ghana (e.g. Zinnah and Naibakelao, 1999), and the launching of a similar program through the University of Mali, deserve to be closely studied by other countries and donors. In general, however, the level of dis-connect between the existing education-research-extension programs,²⁷ and the inability of most countries to offer adequate training opportunities for their own scientific and extension professionals, underlies the question of how countries in West Africa will rise to the challenge of driving an autonomous economic development agenda.

One of the perennial ‘thorns’ in the side of nearly every extension program is the limited **base of innovation** and struggle to find relevant new technologies. One of the persistent complaints levied against national extension programs over the past 20 years has been over their dogged promotion of the same, tired, old technical messages. Where NGOs have shown their superiority has often been through their linkages to, or mobilization of, alternative sources of technical information. Although not a direct relationship, the growing plurality of organizations involved in technology diffusion has tended to result in a growing (though still limited) plurality of technology sources. While on the surface would seem a positive trend, due to the divided, often highly antagonistic, nature of GO-NGO relations, these two levels of diversification – innovation source, and vehicle of dissemination -- have tended to assume and retain stronger lines of vertical integration rather than expanded networks of horizontal

²⁷ The related issue of getting African Universities more involved in agricultural research is only now gaining the attention it deserves (e.g. Michelsen et al., 2003).

exchanges. Governmental extension programs tend to get most, if not all, of their 'technology choices' from governmental research programs, while bi-lateral and multilateral funded-projects, as well as large, northern-based NGOs, tend to utilize and promote their own technical innovations (a common pattern for smaller NGOs is to serve as implementation vehicles of donor specified activities, which often come with their own technical assistance components). Only in those cases where some degree of true inter-organizational collaboration has been established (typically in the context of a specific funding initiative) has there been a real broadening in the pool of innovations sources available to all participating diffusion organizations. The socio-political climate for these types of inter-organizational collaboration varies markedly from country to country, and often from program manager to program manager.

In addition to the struggle to find current, new information, one of the sad truths of agricultural research and technology development is that, outside of the established gene banks, there are often no national, let alone sub-regional or regional, repositories of accumulated wisdom where farmers, extension services, NGOs or others can access a comprehensive range of technological options. Burdened by staff turnover and major policy shifts, individual research organizations tend to operate within their own experiential sphere of current activities, which represent neither the breadth nor historical depth of developments within their own organizations and countries, let alone the larger regional and global environment. Throughout their development, African universities have generally been sideline spectators to the research process, and only now are beginning to receive the attention they deserve in increasing their involvement in research activities (e.g. Michelsen et al., 2003). Set against the backdrop of the long time delays in technology development (few breeding programs, for example, have anything significant to offer in less than a decade), and the truly difficult nature of problems facing research organizations, any potential loss in opportunities due to the inhibited movement of existing technologies should be a major area of concern. The bottom line is that without the basic availability and occasional addition of new, responsive, technical alternatives, any diffusion program -- public, private or non-profit -- will have little to offer their audiences.

Alternative approaches to **extension financing**, intermingled with the related topics of operational structure, need for increased market orientation, investment in human resource development etc., are currently a lightning rod of debate among donors and development scholars focusing on extension issues, and more importantly governmental extension programs as well.

To illustrate the point, the four neighboring countries of Côte d'Ivoire, Ghana, Guinea and Mali have all abandoned their previous T&V-based approaches to extension programming, and are all now pursuing self-described participatory approaches to extension through various mechanisms: Côte d'Ivoire (before the outbreak of violence) through a system of contractual arrangements between line-Ministries and the national extension service for the delivery of specific extension programs; Ghana through its program of national decentralization, which allows for additional district level buy-in to extension programming options (currently focused on expanding the Farmer Field School program); Mali through the increased privatization of services, including experimentation with a limited user-pay

program, offered through the traditional regional and commodity-oriented quasi-governmental organizations; and Guinea through the continuation of a fairly traditional, centrally financed and managed mainline national extension service. Although currently most of these programs receive significant levels of direct and in-direct donor support, financing is intended to devolve entirely to state resources in the future.

Due to the need to fit alternative models of extension financing to the unique national policy orientations, levels of market integration of specific target groups and production systems, and other significant historical, institutional and current contextualizing factors, it is not likely that any one model will emerge for widespread adaptation (in fact the experiences of blindly promoting the same T&V model, irrespective of context, would argue strongly against such a notion). Researchers concentrating on the issues have developed typologies differentiating between alternative approaches based upon the source of financing (public or private) and means of service delivery (public or private), although within these broad parameters a great deal of variation exists (Christoplos et al., 2000; Rivera et al., 2000; SDC, 2001a, b). The current experiments occurring within the sub-region, as well as those from elsewhere on the continent, and beyond, deserve to be closely monitored for the lessons they provide in terms of which of the various financing mechanisms can be best fitted to specific sets of country-level conditions, and how.

Major Approaches & Lessons Learned

Due to their underlying differences (dissemination within, as opposed to transfer across geographic and organizational contexts), it is easiest to address issues related to dissemination and technology transfer separately, although in operational terms most organizations are involved in both types of activities.

1) Dissemination

The widespread diffusion of the language and practice of participatory development has been one of the major changes to extension practice occurring worldwide over the past 20 years. Within the sub-region most of this growth in popularity has occurred in the form of a diffuse body of non-unified 'participatory' techniques and discrete methodologies, although at least one major operational approach is gaining significant exposure. Data from a nine-country survey of 216 NGOs involved in agricultural and NRM technology diffusion in West Africa indicates that some of the most important examples of participatory methodologies include:

- Rapid Rural Appraisal/Participatory Rural Appraisal (RRA/PRA). Introduced through short-term, in-service training or standalone workshops starting in the late 1980s, these approaches have become the 'bread-and-butter' tools of most NGO field activities, and it can probably be safely said that at least an awareness of their general form is now well established within virtually all dissemination organizations across the sub-region. The widespread use of RRA/PRA approaches, however, does not mean that the level of quality, or even observance of the basic principles, is always high;

- Participatory Varietal Selection (PVS). An approach initially targeted at assisting breeders in understanding farmer preference, PVS has since increasingly been used by extension programs to identify and disseminate locally desired varieties. The West

Africa Rice Development Association (WARDA) spear-headed promotion of PVS application through a multi-year annual training and small grants program, which trained a small core of rice breeders and social scientist researchers in every NARS across the sub-region. Use of the approach has since spread through joint field activities, exposure through 'field days'-type demonstrations and various publications;

-Community-Based Seed Systems (CBSS). As a refinement of NGO and FAO decentralized seed multiplication programs of the late 1980s and early 1990s, the CBSS model involves individual farmers and farmer groups in the commercial multiplication and sale of new crop varieties, cutting up to 5 years off the time it takes new varieties to reach farmers. Through the assistance of WARDA scientists, national-level programs have been established in Guinea and Côte d'Ivoire, with other countries considering implementation plans. A wide number of NGOs are using the same or similar approaches in most countries in the sub-region;

-Community-Based Natural Resource Management (CBNRM). Introduced through a broad range of efforts (e.g. FAO, NGOs and bi-lateral assistance), CBNRM is perhaps most closely associated with forest management issues, due to a number of well-researched case studies and a period of popularity in establishing community woodlots in the early 1990s. Nevertheless, the CBNRM approach has been successfully used within the sub-region in the management of soil fertility, grazing lands, water resources, fisheries and wildlife;

-Rural Radio. Although not identified in the recent survey, the rapid growth in the number and diversity of private radio enterprises in recent years (including broadcasting, satellite and internet connectivity) has stimulated interest in using the various mediums to accelerate the dissemination of information on new technologies to rural areas. Efforts are currently being spearheaded by ISNAR, FAO and CIDA, with active programs in several countries within the sub-region, notably Burkina Faso, Ghana and Mali (e.g. Hambly and Kassam, 2002).

In contrast to these individual participatory techniques used by many different governmental and NGO extension programs, the introduction and spread of the Farmer Field School model within the sub-region is unique, in that it constitutes a broader, more comprehensive strategy to extension practice itself. Introduced to West Africa from S.E. Asia in the mid-1990s, through assistance by the FAO Global IPM Facility, significant FFS programs have begun to develop in at least four countries (Ghana, Mali, Burkina Faso and Senegal), covering a range of production systems, from irrigated rice to rainfed cereals, cotton, plantains and vegetables. Involving the use of the principles and practice of adult education, farmer-led experimentation, farmer-to-farmer communication and local organizational development, the FFS model has embraced many of the core features of participatory development and local empowerment. Although not without problems, the potentials offered by the FFS approach appear great, and are only now being explored (Simpson and Owens, 2002).

The lessons learned from these experiences are several. First, and perhaps most surprising, is the observation that given the opportunity and support, governmental extension agencies are every bit as capable of being leaders in the development, refinement and implementation of innovative new approaches to technology dissemination as NGOs (e.g. PVS, CBSS, FFS). Secondly, due to their size and established presence at the village-level, the involvement of

national structures and larger NGOs have been critical in scaling-up the implementation of new practices, as in the case of the CBSS programs in Côte d'Ivoire and FFS in Ghana. It is important to observe, however, that the success of broad-based implementation is closely tied to the successful testing of new approaches in pilot projects and adaptation to local conditions. Where this rule is not observed, the risk of larger scale failures increases rapidly.²⁸ While programmatic size is important for significant impacts, so is the intelligent phasing of implementation. Third, each of the methodologies highlighted (save RRA/PRA, which, as noted, often suffers from quality concerns in their field application) are tied to significant training programs – for example, FFS field training takes place over an entire growing season (or longer, in the case of plantains), and the introduction of PVS methodologies was accomplished through a multi-year training and support program. In the case of Ghana's FFS program, there are also important ties to a parallel program of providing extension agents with tertiary university education (e.g. Zinnah and Naibakelao, 1999) that deserve greater attention on the part of donors.

2) Technology Transfer (TT)

As defined previously, TT is used here to describe the movement of knowledge or technologies across contexts -- inter-regional, intra-regional or organizational. Despite the deserved criticism that ill-conceived TT efforts have received in the past, it is important to note that, other than instances where technologies have been developed within a single organization, all other innovations that have been adopted by farmers within the sub-region involve some form of TT. Used intelligently, TT represents the greatest mechanism to stimulate and sustain rapid agricultural development within the region. This includes the transfer of farmers' indigenous knowledge and perceptions into the region's institutions of research and dissemination, which over the past 10-15 years has proven to be one of the most important sources of technical innovations, particularly in the area of natural resource management (e.g. Simpson, 1999). While many of the important examples of TT are tied to the on-going work of agricultural research organizations, and are not addressed here, several involve specific ties to technology dissemination efforts. Two of the most important include: -CGIAR Centers. WARDA and IITA, which are based in the sub-region, and ICRAF, which also has a presence in the sub-region, have permanent technology transfer specialists on staff, and operate a number of dedicated TT projects (the other CG centers working in the region, ICRISAT and ILRI, apparently do not have TT staff in place). The importance of having staff dedicated to transforming research results into usable technologies and making these available to dissemination agencies, cannot be over emphasized. In addition, both WARDA and IITA facilitate regional and sub-regional networks that serve to assist and partner with national and NGO technology dissemination programs (e.g., ROCARIZ's Technology Transfer Task Force, INGER-Africa, which disseminates rice germplasm throughout Africa). The tying of small operational grants and training opportunities to the ROCARIZ network has been highly successful in keeping different member groups actively involved in regionally

²⁸ Discussed in the contrasting experiences of Ghana and Mali's FFS programs (Simpson and Owen, 2002).

coordinated activities.²⁹ In response to the unique opportunity of the once-in-a-generation technical breakthrough presented by the NERICA rice varieties, WARDA has launched a special standalone effort, the Africa Rice Initiative, to help rapidly move these varieties throughout the region;

-Larger NGOs and Projects. Through their home office technical staff, and hired program officers, the larger NGOs and donor funded projects essentially constitute separate (independent) technology transfer systems, with the ability to extrapolate experiences and cross-fertilize successes from different project sites and countries. In a number of instances, these organizations and projects have proven to be important contributors in the introduction and movement of new technologies across the sub-region. CARE's work in refining the indigenous practice of using rock lines to control soil erosion and promote greater moisture infiltration in Burkina Faso, and its subsequent spread to neighboring countries, is one of many such examples.

In contrast, the record of the private sector's contributions to recent agricultural developments in the sub-region is rather thin. On the one hand, private companies are without doubt the most important providers of basic input materials (e.g. tillage equipment, fertilizers, pesticides, veterinary supplies and formulated animal supplements). However, many of these inputs have not changed appreciably in decades. In those areas where private companies have attempted to become commercially involved in introducing innovations, the record is uneven. The few private seed companies found in the sub-region have found gaining market share difficult, due largely to the characteristics of the major crops (non-hybridized) and the diffuse, often-poor, potential client populations. Foreign agro-chemical companies are increasingly fighting battles on many fronts as they collide headlong with governmental and NGO efforts to safeguard farmers' health, increase profits and reduce environmental damage. In other cases, targeted assistance that involves partnership between public agencies, private entrepreneurs and other actors has helped commercial businesses to become successful purveyors of new technologies, as in the case of local equipment manufacturers producing the ASI rice thresher-cleaner, based upon a modified design from IRRI.

There are several lessons that can be drawn from these examples. First, recent developments by key CGIAR centers within the region have achieved a certain amount of success in helping to bridge the gray area between research and extension. Increasing the number of dedicated TT staff positions, effective networking structures, and the initiation of highly-targeted technology promotion initiatives (e.g., Africa Rice Initiative -- ARI)³⁰ are all promising areas of future investment. Second, the larger NGOs and project-based initiatives constitute additional, and potentially rich, sources of technological innovation and adaptation. However, due to their independent status, different approaches will need to be employed to gain access to and integrate with their considerable resources. Third, for the foreseeable future, placing greater reliance on the private sector and market forces to drive

²⁹ Although not yet established, the promising results of the ROCAFRAMI pilot effort (Ouendeba et al., 2002) deserve close consideration by donors.

³⁰ The Africa Rice Initiative is a WARDA-led for the rapid and broad-based diffusion of NERICA varieties throughout Africa with initial funding from the Government of Japan, UNDP, Rockefeller Foundation and World Bank (<http://www.warda.cgiar.org/warda1/main/Partnerships/ARI.htm>).

the process of technology innovation, transfer and dissemination would probably significantly slow, rather than accelerate, agricultural development within the sub-region, and would likely undesirably skew the type of innovations offered, as well as the access to new technologies based on economic and geographic considerations. More than a decade has passed since the first serious announcements about the coming biotech revolution were issued, and still no major improvements have been delivered. While greater private sector involvement can be achieved, special emphasis will likely need to be placed on establishing the appropriate context and helping fledgling businesses to pick up new technologies and expand their technology dissemination roles.

General Recommendations

Based upon the preceding discussions of major issues, current approaches and lessons learned, several general recommendations can be made for enhancing the identification and movement of technological innovations within the sub-region. These include:

- Taking an aggressive stance on filling key knowledge gaps, the results of which would feed into immediate and longer-term investment planning decisions. Gaps of particular concern include (i) gaining a regional understanding of NGOs and other technology providers' activities, capacities, sources of innovation and the best ways of gaining access and mobilizing their resources, and (ii) the current status and capacities of the region's agricultural universities to train the next generation of agricultural professionals, particularly in the areas of extension education, commodity research and agricultural business training and support;
- Assessing different options for new ways of meeting the critical need for improved access to innovations (e.g. university-managed technology outreach centers, along the lines of the USAID supported PEARL project in Rwanda (Partnership to Enhance Agriculture in Rwanda through Linkages), ATTRA-type³¹ information hubs, and increased use of rural radio opportunities); assessing ways of assisting general and targeted efforts to accelerate technology diffusion and transfer (regional 'dare to share' technology fairs; success story study tours and exchange visits; support for ARI-type initiatives to rapidly expand access to technologies with immediate and exceptional promise);
- Discussing with IARC and NARS partners ways of improving regional TT and dissemination capacities through strengthening the existing sub-regional commodity networks, and the regionally-based CG centers (e.g., funding additional TT positions, providing additional operational funds to selected TT networks). The major importance of improving regional access to new genetic material warrants specific attention. Issues to consider include ways of streamlining release systems, the comparative advantages and requirement of alternative dissemination approaches, ways of supporting the development of private sector seed companies, gene bank

³¹ Appropriate Technology for Rural Areas (ATTRA) is a USDA funded program managed by the National Center for Appropriate Technology serving the information needs of all US farmers on issues related to sustainable agriculture (<http://attra.ncat.org/>).

security, and regional preparedness for post conflict/disaster response measures, among others;

- Assessing WARP's S&T staffing needs in order to establish an in-house capacity to rapidly identify and respond to emerging regional opportunities, and track key developments.

II. Investment Options

The proposed investment options described below for building stronger technology transfer and dissemination (TTD) capacity within the sub-region provide suggestions and guidelines for the six-year period from 2003 to 2008. In general, the actionable items are sequential in nature, intended first to establish the basic understanding and shared vision for WARP and key partners necessary to move forth with more detailed and long-ranging initiatives. It is recognized, and in fact fully expected, that the ultimate longer-term investment decisions taken will evolve significantly from what is suggested here, due to many reasons. As a starting point, however, the following propositions represent an initial 'best bet' assessment of critical leverage points where WARP should focus its attention. The presentation of investment options is organized around two timeframes: *Short Term*, covering the remainder of 2003-04, primarily oriented towards establishing the platform for WARP's long-term TTD investments within the sub-region; and *Medium Term*, covering the remainder of the planning period, and comprising major investment actions that are largely conditional on the outcomes of the short term actions.

A. Short-Term Investments

1. Closing the Knowledge Gaps on Agricultural Technology Diffusion and Regional TTD Education Programs.

Closing the knowledge gap on the specific activities, resources and networks of technology diffusion programs, and establishing a benchmark on the current status of the (few) TTD education programs within the sub-region will be absolutely critical to WARP in formulating an informed agenda for strengthening the major areas of weakness in TTD within the sub-region.

a) Implementation: The existing NGO and Producer Association Inventory, created and partially populated with data from the 9 CILSS countries in 2002, would be the obvious starting place. As a first step, it will be necessary to review and assess the adequacy of the information already collected, and suggest possible additions, such as identifying the 'sources' of technologies being disseminated in various extension programs, which is not currently part of the database. Secondly, an implementation plan will need to be established for expanding the coverage of those countries already represented in the database, and for the inclusion of the remaining, non-CILSS countries within the sub-region. Finally, a summary report on the findings of the survey would need to be generated, including interpretive recommendations of next steps. One possibility would be for holding a sub-regional workshop of key NGOs and other stakeholders involved in technology diffusion, including donors, to review the findings of the study and to discuss and map out a set of follow-on

activities. Because the structure of the database and major data collection instruments are already established, additional investment would have a high marginal rate of return in supporting further data collection and analysis. Time requirements would be roughly 4 months: one month to analyze and review data currently in the database, make modifications to the collection instruments, and draft plans for further data collection; two months for additional data collection and entry into the database; one month to finalize data entry and cleaning, data analysis and final report preparation. The potential of linking the Technology Diffusion Stakeholder workshop with other planned activities would greatly reduce costs.

The review of TTD education programs within the region would best be structured around a small-team scoping mission, involving at least two technical experts -- one in the area of agricultural education program design and evaluation, and the second a TTD specialist. Both should be familiar with the sub-region. The team should focus on assessing the content of the existing education programs and their adequacy for meeting the immediate and long-term professional needs of graduates, the degree of linkage between the education system and front-line extension agencies and other TTD stakeholders, among other issues. Those conducting the study should establish early contact with the FAO Regional Program Officer for Agricultural Education and Extension, based in Accra, in order to identify the specific countries/programs to target. Such a review should be completed within a time period of roughly 60 days, including the preparation of recommendations for next step activities. The possibility of reviewing the results of this assessment at the same time as those of the NGO study (ideally within the context of a large, sub-regional stakeholders' workshop) should seriously be considered. Because the nature of the recommendations from this study are likely to involve proposals for significant, long-term, capacity-building initiatives, the inclusion of representatives from appropriate donor organizations will be critical. Establishing initial contact with these organizations might be part of the terms of reference of the study team members.

b) Anticipated Returns. Although by themselves largely intangible, the knowledge gained from these assessments would be invaluable in terms of providing WARP with the basis for making informed decisions about critical issues impeding enhanced TTD within the sub-region. Without a clear idea of what exactly is occurring within the NGO community, or the status of education programs preparing the next generation(s) of agricultural professional and entrepreneurs, it will be difficult, if not impossible, for WARP to correctly position itself to take meaningful steps towards achieving goals of the IEHA in a sustainable manner.

Returns to this investment could be easily tracked by matching any, and all, follow-on activities that result from the recommendations emerging from these studies and workshop. Establishing further linkage between these studies and the outcomes of any/all follow-on activities is possible, but perhaps not necessary, unless WARP is particularly interested in assessing the returns to investments on basic knowledge-gathering assessments.

c) Risk Factors: There are no immediate risks associated with this particular activity. In general, however, any major investments to human capital formation and institutional strengthening, which might come out of these assessments, are vulnerable to national-scale conflicts and more individually-born risks (such as HIV/AIDs). While conflict mediation is

beyond the scope of WARP's mandate, there are ways of tying in HIV/AIDS education programs to the advanced training of TTD professional staff, which might reduce the impacts of this new source of 'brain drain.'

2. Assessing 'Best Bet' Improvements to Existing TTD Mechanisms within the sub-Region. There are a number of well-established, as well as newly emerging, mechanisms involved, in whole or in part, in TTD activities within the sub-region. These include the commodity or special problem networks, and the activities of the major LARC centers based, or active, within the region. While these mechanisms exist, they often suffer from resource constraints, financial or human, that greatly limit their intended contributions. The addition of well-targeted, sometimes very modest, additional support has the high potential of greatly improving their effectiveness, while avoiding the expense and delays of creating entirely new initiatives from the ground-up.

a) Implementation. Convene a meeting of representatives from key TTD mechanisms, and representative beneficiaries, from within the sub-region to discuss and identify key constraints that prevent their respective vehicles from having greater impact (e.g. operational funds in the form of small or matching grants for NARS partners, key staffing or support positions). Consideration should also be given to including representatives from such organizations as ICRISAT and ILRI, who apparently do not have TTD personnel within the sub-region, but perhaps should. As a follow-on from the meeting, participants should be charged with drafting proposals, sanctioned by their organizations, to alleviate these constraints, which WARP can then review for further action. The possibility of holding this meeting in conjunction with those discussed under 1) should be considered in order to reduce costs, and increase opportunities for synergism. Funding of the proposed activities could be managed through a dedicated 'slice' of a revised TARGET-type program, and/or via independently managed grants.

b) Anticipated Returns. A clear set of investment options that reflect the real and immediate needs of existing TTD vehicles operating within the sub-region. The monitoring of impacts will need to follow the same sort of temporal tracking suggested under 1) above, although would be augmented by reporting requirements of the grant recipients.

c) Risk Factors. No immediate perceived risks.

3. Assessing 'Best Bet' Alternatives for Establishing New TTD Mechanisms within the sub-Region. In addition to the established vehicles for assisting TTD within the sub-region, discussed under 2), there is a potentially larger pool of new investment opportunities that warrant close consideration, based upon their proven success in other areas of Africa and beyond. These include, but are by no means limited to:

- holding sub-regional, or country-cluster, 'Dare to Share' innovation fairs (used in Eastern and Southern Africa and Europe);
- 'success story' study visits or exchanges (featuring examples such as Ghana's TTD Tertiary Education Program, or one of the established Farmer Field School programs);

- opening of Innovation Outreach Centers attached to Universities (such as in the successful USAID-funded PEARL project in Rwanda);
- making greater use of regional Rural Radio Networks that are now operating in many countries in the sub-region;
- establishing an NCAT/ATTRA-type technical information center that would serve as the enduring technical information repository for the sub-region which is currently lacking (either as an independent body, or through one of the CGIAR centers based in the region);
- creating a new regional program along the lines of the ROCAFRAMI proposal to assist producer associations in capturing more of the benefits of increased market integration;
- and others.

a) Implementation. To lay the ground work for this activity, WARP would be well advised to commission a concept paper, outlining the range options from around Africa and the world, and to make time for interacting extensively with the paper's author and perhaps a limited number of other practitioners. In addition, it would be very useful for WARP staff to visit some of the innovative program sites to get a better sense of their scale and potential. The best funding vehicle for this type of initiative might be through a TTD competitive grants mechanism, such as a revised TARGET II program, although perhaps some of the funding options may best be pursued through standalone initiatives. Key options identified through the commissioned paper could be used to help orient the proposal submissions. In designing such an initiative, WARP should consider the potential overlap, or separation, with other USAID mechanisms (e.g., RAISE Plus) so that the maximum level of flexibility and synergism is achieved. If INSAH is to be involved in the proposal review process, it would be advisable that they also participate fully in the preparatory site visits and commissioned paper review to ensure that they have a shared understanding and vision of flavor and intent of the grant competition.

While this activity can be started quickly, it would best if it followed completion of the NGO and TTD Education studies described under 1) in order to capitalize on their lessons in defining key funding objectives and specific targets.

b) Anticipated Returns. Returns will depend entirely on the nature of what activities are funded. The procedures for tracking and evaluating the impact of each grant should be included in the proposal guidelines.

c) Risk Factors. None that can immediately be identified; however, it would be advisable that the grant review panel includes an assessment of potential risk factors in their consideration of the proposals.

4. Holding a sub-Regional Seed System Summit.³² Holding a focused sub-Regional Seed System Summit would be the most effective way of dealing with the wide range of common

³² In light of the importance of the issue, and the growing body of program-level experience, WARP may want to consider holding a similar, through structurally different, sub-regional meeting to review alternative

issues affecting the region's seed systems. Key issues include identifying ways of restructuring dis-functional national variety release mechanisms that can delay the approval for release of new genetic material for years, as well as exploring alternatives to centralized multiplication and dissemination structures that typically add an additional 5-7 years onto the time it takes for released varieties to become available to farmers. Additional issues, such as the sub-region's preparedness for conflict and disaster recovery, gene bank security, and the harmonization of regulations governing experimentation and commercialization of GMOs also require discussion.

a) **Implementation.** A regional Summit of this nature will need to be very carefully planned with close coordination with other partners (e.g. FAO, IITA IPGRI, ISNAR, WARDA) and key national policy-makers. To be successful, it will be essential that several centerpiece reports be commissioned involving summaries of the current status and recent performance of the region's national seed release and multiplication programs, achievement of alternative dissemination approaches (including community-based efforts and private seed companies), and a review of the existing frameworks on material transfer, IPR and GMOs. Due to the importance of adequate preparations for the success of such a summit, the meeting should probably be targeted for no earlier than the beginning of 2004.

b) **Anticipated Returns.** The potential returns are enormous. Policy changes allowing faster, more open access to new varieties by farmers and TTD organizations across the sub-region will be a necessary ingredient in creating the environment for rapid national agricultural growth envisioned by IEHA. The best way of tracking immediate impact will be through monitoring 1) the specific reforms and additional developments undertaken on a country-by-country basis as a result of the summit (which will make investments in establishing a benchmark of current status, as suggest above, essential), and 2) a periodic monitoring of how many new varieties are approved for release and their subsequent multiplication and dissemination through various channels following specific policy reforms. While 2) will provide the major share of relative details necessary for quantifying actual impact, such a monitoring process (or periodic reports) will be costly and time consuming. WARP will need to assess the various pros and cons of quantifying returns to an investment of this nature.

c) **Risk Factors.** Again, there are no immediate risk factors associated with this activity, although long-term security and related risk issues should be included in the summit discussions (e.g. recent events in Côte d'Ivoire, and WARDA's successful rescue of a large share of its germplasm from long-term storage, could easily have turned out differently; the immediate and long-term consequences would have been nothing short of catastrophic).

5. Assessing WARP in-House S&T and TTD Capacities and Needs. To capitalize on its potentials for making significant contributions to regional agricultural growth and development, WARP will need to ensure that it has the in-house S&T and TTD capacity to flexibly initiate, coordinate and track its priority investments. While immediate needs may

extension financing-delivery mechanisms, which could be linked to follow-on WARP funded, or Mission-supported, pilot programs.

not be high, the potential funding levels of IEHA and other mechanisms are such that an anticipation of future needs should drive the process.

a) **Implementation.** To get the most out of such an exercise, it would be advisable to utilize the services of a highly qualified outside facilitator (contact with the CGIAR Organizational Change Program would be useful in identifying suitable candidates). Minimum costs would be limited to investment of staff time, and implementation could be fit into the agencies' operational plans. While this activity will not lead to any immediate activities, it is an essential investment that must be made in order to prepare WARP for taking an active role in the priority areas of the IEHA.

b) **Anticipated Returns.** This can only be assessed in terms of the impact on WARP's ability to track and respond to current and changing needs within the region.

c) **Risk Factors.** None, other than those already faced by current WARP staff.

B. Medium-Term Investments

This section provides illustrative examples of potential areas of medium-term TTD enhancing investments within the sub-region. As noted in the introduction to this section, the priority issues listed here are largely structured around the anticipated outcomes and findings obtained through the more immediate investment option outlined above. Without the benefit of the knowledge gained through such first steps, it is difficult (inappropriate) to outline options with a high level of actionable detail.

1. Strengthening West Africa's TTD Educational Institutions and Human Capital Development. Depending on the findings of the Educational Status assessment, suggested above under A.1., the major medium-term investment area for the sub-region may prove to be a targeted strategy for strengthening the primary educational institutions that are preparing the next generation of agricultural professionals and entrepreneurs. Although the investment in educational institution strengthening has fallen from the list of donor priorities, every serious assessment (including USAID's own) of the necessary elements for stimulating agricultural growth and economic development in Africa highlights the need for a return to the funding of advanced education and institutional strengthening initiatives. Options to be considered include:

- funding advanced degrees at US institutions of higher education;
- upgrading selected universities into regional centers of excellence;
- development of country-based institutional strengthening strategies;
- a temporal, and sequential, integration of all three.

a) **Implementation.** Work in this area should be based on a strategic, highly focused effort to strengthen one or two key institutions (located in a Francophone and Anglophone country). Due to the cost and timeframe for this type of investment, it will be critical to mobilize and coordinate the resources of several major donors.

b) Anticipated Returns. Nothing short of establishing the sub-regional capacity for countries to develop and pursue their own paths of national economic development.

c) Risk Factors. Acute risk factors include the potential fallout from ill-prepared donor exit strategies, and the chance that armed conflict and/or loss of human capital through individually-based threats such as HIV/AIDS may erase hard won gains. Mitigation measures for these threats are few. Much larger risks, however, are associated with doing nothing. Given the significant levels of investment being targeted at the sub-region through various mechanisms over the next 15 years, and the consensus view that knowledge-based, skill-dependant, free-market agricultural developments will play a leading role in sustaining national economic growth, the overall costs associated with stalled, or failed, efforts due to the lack of an educated and trained human resource base are massive in comparison. This is perhaps the most serious risk factor confronting the longer-term development goals of IEHA, and mitigating measures (such as those described here) should be built into planning efforts from the outset.

2. Initiation of a modified TARGET II Grants Program. Assuming positive results flow from the initial activities outlined under 1.B. and C. above (and there is every reason to assume that they will be positive), a funding mechanism will need to be established to respond to identified sub-regional TTD opportunities. Based on the experience with the TARGET program structure, initiating a 'TARGET II' program may be the most expedient means of doing so.

a) Implementation. A strategic decision will need to be made whether to combine the investment options outlined under 1B and C, or to establish separate grant-making mechanisms. There are pros and cons to each. If the combined option is selected, it will be important to partition the grant envelope such that there are reserved portions for each -- the support of broadening the impact of existing mechanisms, and investments in innovative, cutting-edge TTD vehicles.

b) Anticipated Returns. The returns to improved regional TTD will be based on the specific profile of the individual grants made, which can be monitored through the reporting requirements of the grants, and possibly augmented by an end-of-program assessment.

c) Risk Factors. Impossible to predict *a priori*. Basic risk assessment questions should be included as part of the grant evaluation process. However, as an operating principle, a much higher risk threshold should be established for grants pursuing innovative, cutting-edge vehicles for TTD than is set for those strengthening established TTD mechanisms.

3. Seed System Initiatives. Although difficult to predict, the holding of a Seed System Summit, outlined above, will likely lead to the identification of a number of follow-on activities that may require WARP's assistance over the medium-term. These range from policy-level reforms and harmonization, to support of specific alternative seed diffusion mechanisms and targeted support for developing the capacity of private seed companies.

a) Implementation. This will depend on the specific activities to be supported.

b) Anticipated Returns. Without identified programmatic activities, projected returns are impossible to foresee.

c) Risk Factors. No identifiable risks, although the issues associated with potential adverse effects (human and environmental) associated with GMO technologies should be an issue that WARP keeps at the center of its attention in exploring seed system-related issues.

4. ARI-type initiatives. Every scientist and major research organization has the dream of producing results that will have major, widespread development impact. Such results, although not common, do arise. The current example of the NERICA varieties developed at WARDA, and support for their widespread dissemination through the African Rice Initiative and NERICA Network, perhaps typifies this experience. By definition, the potential pay-off for these new technologies is vast, although impossible to foresee or to produce on command. Whether through added support to the current ARI efforts, or future developments, WARP should establish the flexibility and capacity to identify and respond to these types of opportunities as part of its IEHA strategic planning.

a) Implementation. This will depend entirely on the type(s) of opportunities that arise. In general, however, in order for WARP to identify and respond to such opportunities, there will need to be sufficient in-house S&T and TTD capacity within the WARP office, including regular, personal contact with the major research institutions within the sub-region. Investments of this type will likely involve multiple donors, which in turn suggests that WARP should establish a regular (annual) set of meetings among the principle S&T and TTD donors active within the sub-region in order to coordinate efforts.

b) Anticipated Returns. Impossible to predict, although the effective trigger for this type of investment should be significant, fairly immediate and widespread impact.

c) Risk Factors. Cannot be assessed.

Bibliography

- ADEA (Association for the Development of Education in Africa). 2000. "What Works and What's New in Education: Africa Speaks!" Proceedings of the ADEA Biennial Meeting, Johannesburg, South Africa, 5-9, December 1999). 111 pp.
- AICHA (USAID Agricultural Initiative to Cut Hunger in Africa). 2002. Draft 06/14/02. 48 pp.
- Benor, D. and M. Baxter. 1984. *Training and Visit Extension*. Washington, D.C.: The World Bank.
- Bingen, R.J. and E. Dembélé. n.d. "The Business of Extension Reform: Cotton in Mali." Unpublished paper. 6 pp.
- Bingen, R.J., B.M. Simpson and A. Berthé. 1993. "Analysis of Service Delivery Systems to Farmers and Village Associations in the Zone of the *Office de la Haute Vallée du Niger*, Mali." Department of Resource Development Occasional Report. East Lansing: Michigan State University.
- Christoplos, I., J. Farrington and A.D. Kidd. 2000. "Extension, Poverty and Vulnerability." The Neuchâtel Initiative 2000. Uppsala University, Overseas Development Institute, PACTeam. 50 pp.
- Eicher, C.K. 2001. "Africa's Unfinished Business: Building sustainable agricultural research systems." Department of Agricultural Economics Staff Paper 2001-10. East Lansing: Michigan State University. 44 pp.
- Hambly, H. and A. Kassam. 2002. "Listening to Stakeholders: Agricultural research and rural radio linkages." ISNAR Briefing Paper No.48. The Hague: ISNAR. 6 pp.
- ISNAR/WARDA. 2001. "Workshop on a Collaborative Platform for Agricultural Research in Sub-Saharan Africa." The Hague: ISNAR; Bouaké: WARDA. 29 pp.
- Michelsen, H., L. Zuidema, C. Hoste and D. Shaprio. 2003. "Improving Agricultural Research at Universities in Sub-Saharan Africa: A study guide." ISNAR Research Management Guidelines No.6. The Hague: International Service for National Agricultural Research. 116 pp.
- Neuchâtel Group. 1999. "Common Framework on Agricultural Extension." 20 pp.
- ODI (Overseas Development Institute). 1996. "The Impact of NGO Development Projects." *Briefing Paper 2*: 1-4. London: Overseas Development Institute.
- ODI (Overseas Development Institute). 1995. "NGOs and Official Donors." ODI Briefing Paper 4/95: 1-6. London: Overseas Development Institute.

Ouendebe, B., T. Abdoulaye and J.H. Sanders. 2002. "Food Staples in West Africa: Production and Marketing. A Concept Note." 14 pp.

Rivera, W.M., W. Zijp and G. Alex. 2000. "Contracting for Extension: Review of emerging practices." AKIS Good Practice Note. Agricultural Knowledge Information Systems (AKIS) Thematic Groups. Washington, D.C.: The World Bank. 22 pp.

Simpson, B.M. 1999. *The Roots of Change: Human behaviour and agricultural evolution in Mali*. IT Studies in Indigenous Knowledge and Development. London: Intermediate Technology Publications.

Simpson, B.M. and M. Owens. 2002. "Farmer Field Schools and the Future of Agricultural Extension in Agrica." *Journal of International Agricultural and Extension Education* Vol.9(2):29-36.

SDC (Swiss Agency for Development Cooperation). 2001a. "Basic Information and THESIS for the Internet Debate on Financing Extension." 34 pp.

SDC (Swiss Agency for Development Cooperation). 2001b. "Basic Information and CASE EXAMPLES for the Internet Debate on Financing Extension." 21 pp.

Uphoff, N. 1996. "Why NGOs are not a Third Sector: A sectoral analysis with some thoughts on accountability, sustainability and evaluation." In M. Edwards and D. Hulme (eds), *Beyond the Magic Bullet: NGO performance and accountability in the Post-Cold war world*. West Hartford: Kumarian Press. pp. 23-39.

WARDA. 2001. "NERICA: Rice for life." Bouaké: West Africa Rice Development Association. 8 pp.

White, R. and C.K. Eicher. 1999. "NGO's and the African Farmer: A skeptical perspective." Department of Agricultural Economics Staff Paper 99-01. East Lansing: Michigan State University. 40 pp.

Zinnah, M.M., R.E. Steele and D.M. Mattocks. 1998. "From Margin to Mainstream: Revitalization of agricultural extension curricula in universities and colleges in sub-Saharan Africa." In *Training for Agriculture and Rural Development 1997-98*. Rome: Food and Agriculture Organization of the United Nations. pp.16-28.

Zinnah, M.M. and D. Naibakelao. 1999. "Bringing African Universities into Development: The SAFE program at the University of Cape Coast." In *Partnership for Rural Development in sub-Saharan Africa*. CASIN/SAA/Global 2000. pp.65-75.

Transfert et Dissemination des Technologies³³

Jorge Oliveira³⁴

I. Expérience TARGET par INSAH/ICRISAT/O.P. du Burkina Faso, Sénégal, Niger/Recherche/Vulgarisation

L'idée de l'expérience en Transfert de Technologie USAID/INSAH/ICRISAT/PAYS CILSS est née d'une sollicitation du WARP en Novembre 2001 sur la base du projet TARGET. Le bureau du WARP à Bamako a demandé à l'INSAH en collaboration avec l'ICRISAT de préparer un document de projet/action centré sur le transfert des technologies déjà existant dans les spéculations mil, sorgho, maïs, qui pourraient être transmises aux paysans. Cette activité devait se concentrer sur 3 ou 4 pays dépendant du financement que WARP allait obtenir du TARGET.

Une première rencontre a eu lieu entre ces trois entités, qui ont décidé de l'élaboration d'un document basé pour un Grand Agrément et aussi d'approcher les pays sur cette idée. A l'occasion d'une réunion des Comités Techniques et Gestion de l'INSAH avec la présence de tous les directeurs des Institutions de Recherche des pays du CILSS, il a été décidé d'inviter aussi le Président du ROPPA pour une rencontre d'échange d'idée sur cette initiative. L'idée ayant été bien acceptée pour tous les partenaires, le projet a été mis en marche piloter par l'INSAH/ (Entre temps l'ICRISAT a abandonné le groupe sans justification au préalable).

Entre temps le Grand Agrément a été signé entre l'INSAH et le WARP pour un montant de 212.000 US pour couvrir des activités de transfert la Technologie dans trois pays du CILSS (Sénégal, Niger et Burkina). Le choix des pays a obéi aux spéculations de cultures du mil, sorgho et maïs et à des zones Agro-climatologiques convenables).

Une visite sur le terrain de l'INSAH a permis de discuter sur place d'une nouvelle approche pour le transfert de Technologie à savoir : demande par les O.P. de leurs besoins en appui sur certains aspects dans leurs systèmes de cultures, association recherche/vulgarisation pour analyser si la demande peut être satisfaite ; formation des encadreurs et paysans sur le paquet technologique à appliquer, facilitation de l'acquisition des intrants nécessaires (semences améliorées, engrais, équipements etc .) application du paquet technologique.

Les trois pays choisis ont tous adoptés cette même approche comme on peut constater dans les documents préparatoires de la rencontre de concertation du mois de mai 2002. La mise

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en place des fonds a été faite un peu en retard, mais comme il y avait d'autres partenaires dans le projet les activités ont démarré dans le temps prévu.

Une visite sur le terrain a été organisée par l'INSAH au milieu de la saison pour accompagner les travaux. L'équipe du WARP a pu visiter les activités au Burkina au courant du mois de septembre.

Au mois de novembre une rencontre a été organisée à Dakar pour analyser les résultats partiellement disponibles. Ce rapport vous présente pays par pays les résultats finaux partiels (les résultats définitifs sont prévus fin février début mars).

SYNTHSE DES RESULTATS PRELIMINAIRES DE L'INITIATIVE « TRANSFERT DE TECHNOLOGIES »



1. Rappel objectif principal

L'Initiative sur la base du constat d'échecs relatifs à l'appropriation de technologies générées par les principaux bénéficiaires (producteurs), a proposé d'explorer les nouvelles approches qui garantiraient et faciliteraient un transfert rapide et de manière durable. Pour ce faire, un dispositif composé des trois piliers, c'est à dire la recherche, les structures de vulgarisation et les organisations des producteurs, a été mis en place durant la campagne agricole 2002.

2. Evaluation de la campagne agricole 2002

Ce dispositif étalé sur trois pays pilotes (Burkina Faso, Niger et Sénégal) a produit des résultats qui ont été analysés lors de l'atelier d'évaluation de la campagne tenu à Dakar du 25 au 28 novembre 2002. Sur la base de ces analyses, nous pouvons tirer les conclusions a mi-parcours en mettant l'accent sur les éléments suivants :

- I. Situation de référence et tendances d'amélioration (résultats agronomiques);
- II. Perspectives d'amélioration de la production.

Une analyse complète de ces résultats est attendue lorsque les équipes des trois pays auront produit les rapports définitifs de bilan de campagne 2002. Ces rapports sont attendus pour le mois de janvier 2003. Les produits d'entrée retenus sont essentiellement les céréales sèches (mil, sorgho et maïs) qui constituent la base de l'alimentation des populations sahéennes et une légumineuse qui prend de plus en plus de l'importance dans l'alimentation et la génération des revenus, le niébé.

I. Situation de référence et tendances d'amélioration (résultats agronomiques)

1.1. Situation de référence du mil

- ☹ Production dans le système traditionnel, rendement moyen à l'hectare : 400-500 kg
- ☼ Production dans un système intensif (apport de technologies) : 900-1200 kg/ha

l'introduction du paquet technologique dans le système de production induit une augmentation de l'ordre de 28,6% en terme de rendement à l'hectare

1.2. Situation de référence du sorgho

- ☛ Production dans le système traditionnel, rendement moyen à l'hectare : 500-700 kg
- Production dans un système intensif (apport de technologies) : 800-1600kg/ha

l'introduction du paquet technologique dans le système de production induit une augmentation de l'ordre de 25% en terme de rendement à l'hectare

1.3. Situation de référence du Maïs

- ☛ Production dans le système traditionnel, rendement moyen à l'hectare : 1200-2000 kg
- Production dans un système intensif (apport de technologies) : 2100-4500 kg/ha

l'introduction du paquet technologique dans le système de production induit une augmentation de l'ordre de 26% en terme de rendement à l'hectare

1.4. Situation de référence du niébé

- ☛ Production dans le système traditionnel, rendement moyen à l'hectare: 400-600 kg/ha
- Production dans un système intensif (apport de technologies) : 700- 1200 kg/ha

l'introduction du paquet technologique dans le système de production induit une augmentation de l'ordre de 23,5% en terme de rendement à l'hectare

Ces améliorations induites par le paquet technologique (apport d'engrais, traitement phytosanitaire, techniques culturales, variétés améliorées et renforcement des capacités des producteurs) sont une moyenne au niveau des trois pays.

L'analyse des résultats par pays au bilan final donnera un panorama plus précis de l'intérêt de l'appropriation des technologies par les producteurs s'ils se trouvent dans un environnement où ils peuvent librement choisir les modes d'application des technologies et les systèmes de culture qui leur conviennent (pratique sans contraintes)

II. PERSPECTIVES D'AMÉLIORATION DE LA PRODUCTION

Les éléments de conclusion de la réunion du bilan partiel ont mis en exergue les pistes possibles d'amélioration de la production. Ces pistes se résument à :

- Une meilleure utilisation et valorisation de la fumure organique qui, avec une dose raisonnable d'intrants peut sensiblement accroître le rendement ;
- l'intégration agriculture doit être exploitée vue le potentiel existant au Sahel en matière d'élevage. Cette intégration contribuera une production plus importante de la fumure organique ;
- Un meilleur développement des relations partenariales entre les producteurs et les secteurs agroalimentaires (transformation commercialisation) peut être un stimulant à l'amélioration de la production et à la durabilité de l'utilisation des intrants.
- Un renforcement des capacités des organisations des producteurs en amont et en aval pour les préparer à appréhender les lois du marché qui régissent l'économie.

Ces tendances restent à être confirmées lors du bilan final.

2.1. Tableau de comparaison en terme de production (moyenne regionale)

Produits	Superficies emblavées		P° tradi/kg	P° TT/kg	Gain/ha
	Prévue/ha	Réalisée/ha			
Mil	107	124	171.200	390.600	12.900
Sorgho	20	27	13.000	32.400	2.770
Niébé	112	122	56.000	119.000	5.900
Maïs	190	201	304.000	633.150	29.900

- ▼ P° tradi/kg = production traditionnelle
- ▼ P° TT/Kg = production apport technologies
- ▼ ▼ ▼ Gain/ha = différence de gain/ha avec intrants

Le gain le plus élevé revient au Maïs, suivi du Mil et niébé. Cette situation est due au fait que le maïs joue un double rôle dans l'économie des ménages ruraux : culture de soudure et culture de rente (gain monétaire important).

SYNTHESE DES RESULTATS PRELIMINAIRES DE L'INITIATIVE « TRANSFERT DE TECHNOLOGIES »

Dakar, 25-28 novembre 2002

I. Programmation et réalisation sur le plan agronomique

Pays/technologies	Nature activités	Technologies	Superficies		Bénéficiaires		Rendements moyen	
			Prévi.	Réalis.	Prévi.	Réalis.	Tradit.	Réalis.
Burkina Faso	Valorisation technologies							
Variétés améliorés Techniques culturales Gestion fertilité Gestion économique Production semences	1. Maïs	SA + TC+ F+PS+Eco	185 ha	196 ha	108	135	1,2t-2,0t	1,8t-4,8 t
	2. Niébé	SA + TC+ F+PS+Eco	86 ha	92 ha	196	304	0,3t-0,6t	Partiel 0,78 t
	3. Mil	SA + TC+ F+PS+Eco	18 ha	18 ha	12	24	0,4t-0,5t	0,4t-0,78t
	4. Embouche ovine	Intégration agri-élev Formation 41 agents	120 ovins,	-	-	-	-	En cours
Niger	Valorisation technologies							
Variétés améliorés Techniques culturales Production semences Fumure minérale (DAP) Matériel agricole	1. Mil	SA+TC+F+PS+MA	44 ha	57 ha	49	54	0,4t-0,7t	0,9-1,2t
	2. Sorgho	SA+TC+F+PS+Ma	5 ha	7,5 ha	4	11	0,5t-0,8t	0,8t-1,6t
	3. Niébé	SA+TC+F+PS+MA	12 ha	13 ha	8	14	0,4t-0,7t	0,6t-1t
	Formation en culture attelée asine (Houe HATTA) 60 producteurs formés							
Production semences station	Mil, Niébé et Sorgho	Production parcelles vitrines (PS)	5 ha	2 ha	-	-	En cours	En cours

SA : Semences Améliorées ; TC : Techniques culturales ; PS : Production Semences ; MA : Matériel Agricole ; F : Fertilisation Minérale ; Eco : Gestion Economique ;

☉ Les Résultats présentés sont partiels, car les récoltes ne sont pas terminées dans certains endroits

☉ Production de support audiovisuel par l'équipe du Niger (support disponible)

I. Programmation et réalisation sur le plan agronomique (suite)

Pays/technologies	Nature activités	Technologies	Superficies		Bénéficiaires		Rendements moyen	
			Prévi.	Réalis.	Prévis.	Réalis.	Traditi.	Réalis.
Sénégal	Valorisation technologies							
Variétés améliorées Fertilité Protection phyto Matériel agricole Techniques culturelles	1. Sorgho	SA+F+PP+MA+TC	15 ha	19,5 ha	30	39	0,6t-0,9t	NS
	2. Niébé	PP+F+SA+TC	15 ha	17 ha	30	34	0,5t-0,8t	NS
	3. Mil	SA+F+ MA+TC	45 ha	49 ha	90	98	0,3t-0,7t	NS
	4. Maïs	SA+F+MA+TC+PP	5 ha	15 ha	10	30	1,5t-2t	NS

SA : Semences améliorées ; F : Fertilisation minérale ; PP : traitement Phytosanitaire ; TC : Techniques culturelles ; Ma : Matériel Agricole
NS : Résultats non signalés pendant la réunion, mais en cours

II. Autres résultats obtenus

Pays/résultats	Nature activités	Technologies	Bénéficiaires	
			Prévisions	Réalisations
Burkina Faso	Formation	Organisation coopérative et services		
Renforcement capacités	1. Producteurs	FEPA-B + FENOP + FNGN Questions de marketing, commercialisation, contractualisation	160	208
	2. Encadreurs	FEPA-B, FENOP	6	11
	3. Analyses Economiques	Maïs : marge brute moyenne : 227.000 F/ha Niébé : marge brute moyenne 83.112 F/ha Mil : marge brute moyenne : 172.000 F/ha		
Résultats économiques				
Niger/résultats	Nature activités	Technologies	Bénéficiaires	
Renforcement des capacités	Formation	DAP, houe HATTA, application engrais chimiques	Prévisions	Réalisations
	Producteurs + encadreurs	Utilisation DAP, Maniement HATTA, identification engrais chimiques	140	152
Sénégal/résultats	Aucun résultats structurés sur le renforcement des capacités n'a été communiqué lors de la réunion.			

II. Intervention des O.P. dans la recherche et diffusion des Nouvelles Technologies

BURKINA FASO

1. Expériences en matière d'implication et d'engagement des producteurs dans le processus de développement participatif de technologies. Leur implication dans le processus de recherche.

Face à leurs préoccupations en matière de production agricole, les producteurs à travers leurs organisations professionnelles ont pris peu à peu l'habitude de recourir aux services de la recherche. Mais d'une manière générale, l'implication des producteurs dans le processus de recherche-développement s'est faite à travers deux modalités :

La participation des producteurs aux mécanismes de concertation et de partenariat mis en place au niveau de la recherche.

Il s'agit d'un ensemble de mécanismes mis en place par la recherche en vue de permettre aux producteurs d'influencer le processus de recherche en faisant valoir leurs points de vue, leurs souhaits...

Plusieurs mécanismes sont actuellement en cours au Burkina, dont :

- Les Comités Techniques Régionaux (CTR), instances se tenant tous les deux ans dans les régions de recherche avec pour objectif de présenter les résultats de recherche aux utilisateurs de la région concernés, et de leur permettre d'exprimer leurs besoins
- Les Comités Techniques Nationaux (CTN) qui se tiennent en cas de besoin mais au niveau national et dont le but est d'échanger et de présenter des acquis de recherche à des utilisateurs et de recueillir leur feed-back sur des sujets d'envergure nationale comme la gestion durable de la fertilité des sols, la production de semences de qualité, l'irrigation agricole...
- Le Conseil Scientifique et de Gestion (CSG de l'Institut de l'Environnement et de recherches Agricoles (INERA), instance se réunissant deux fois par an et dont le but est de permettre aux différents partenaires de la recherche agricole de donner leur point de vue et d'approuver les actions de recherche. Les représentants des producteurs participent et font valoir leurs préoccupations. Cette instance décide également de l'allocation budgétaire à faire pour la conduite des différentes activités de recherche.

NB. La liste des mécanismes n'est pas exhaustive ; il s'agit de donner quelques exemples de ceux permettant aux producteurs de participer au processus de recherche.

Le point faible général que l'on peut noter à ce niveau est que la qualité de la participation des producteurs à ces instances n'est pas à la hauteur des attentes en raison de leur faible capacités. Des actions ont été entreprises ces dernières années par la recherche (amélioration des techniques de communication : l'utilisation des langues locales, des théâtres-forums, des panels de discussion avec les producteurs, des sketches...) pour améliorer le dialogue avec les producteurs pendant la tenue des CTR.

2. Partenariat Producteurs – Recherche

Pour satisfaire leurs besoins en matière de production agricole, les producteurs apprennent peu à peu à tisser des partenariats avec la recherche. Ce processus qui est en cours d'émergence a été renforcé ces dernières années par la mise en place par l'INERA d'une stratégie en matière de développement participatif de technologies. Le principe de cette approche est d'organiser la recherche en réponse à une demande faite par les producteurs (demand driven research).

Plusieurs partenariats Producteurs-Recherche sont actuellement en cours dans le pays et cela permet aux producteurs d'avoir accès à de nombreuses technologies et de les utiliser à grande échelle. On peut citer quelques exemples avec les partenariats :

INERA-FEPA-B pour l'adaptation et la diffusion de technologies relatives au maïs, au mil et au niébé.

INERA-FNGN NESTLE (Fédération Nationale des Groupements Naam) pour les expérimentations et la diffusion de technologies sur le niébé, le mil, les cultures maraîchères...

INERA-FENOP : pour l'expérimentation et la diffusion de technologies relatives au maïs, au niébé.

INERA-UNCPC-B (Union Nationale des Producteurs de Coton du Burkina) pour la recherche et la diffusion de technologies concernant le coton. Il faut souligner que ce partenariat est établi via la société cotonnière (SOFITEX) et la recherche cotonnière est financée à plus de 95% pour ces acteurs de la filière coton.

NB. Dans d'autres pas comme la Guinée, ces types de partenariats sont également émergents et on peut citer le partenariat entre la fédération des pays du Fouta Djallon (FPPD) et l'Institut de recherche agronomique de Guinée (IRAG) autour des spéculations comme la pomme de terre, l'oignon.

3. Rôle des producteurs et des O.P. dans la dissémination et la diffusion des technologies.

Suite au désengagement des Etats et les réorganisations intervenues au sein des structures publiques de vulgarisation, les producteurs s'organisent peu à peu pour gérer eux-mêmes les activités de vulgarisation.

Aspects organisationnels

La prise en charge des activités de vulgarisation est généralement assurée par les organisations de producteurs au profit de leurs membres. Ces O.P. assurent généralement cette fonction :

1. En ayant recours à des techniciens recrutés, évalués et payés par les O.P. au profit de leurs membres,
2. En formant des producteurs dits : « producteurs relais ou animateurs endogènes » qui assurent les formations et la diffusion de l'information au sein des différents membres. Il faut souligner que cette démarche a beaucoup inspiré certains projets ou programmes de développement qui ont mis en place des dispositifs de formation de producteurs auxiliaires de vulgarisation pour pallier l'insuffisance de personnel disponible au sein des services de vulgarisation.

Méthodes utilisées

En plus des formations et des démonstrations, les O.P. valorisent d'autres canaux de diffusion des technologies comme les radios FM. C'est le cas par exemple de certaines O.P. comme la FNGN qui dispose de sa propre radio FM « la voie du paysan ».

Expériences des O.P. en matière de diffusion de technologies.

Les expériences sont variées en la matière et on peut citer quelques cas :

- a. La fédération nationale des groupements Naam (FNGN) qui dispose de sa propre organisation interne en matière de vulgarisation. Les activités de vulgarisation sont soutenues par une radio rurale « la voie du paysan ». Cette organisation entretient des partenariats avec la recherche au niveau national pour l'accès aux innovations, les structures étatiques de vulgarisation pour certaines formations spécialisées, les ONG nationales et étrangères pour les questions de financement, d'appui technique.
- b. L'union des coopératives agricoles et maraîchères du Burkina (UCOBAM) qui dispose également de sa propre organisation en matière de transfert de technologies. Elle entretient des partenariats avec la recherche, les structures publiques de vulgarisation...

- c. Les producteurs de coton (UNPC-B) qui au travers de la société cotonnière dispose de leur propre réseau de diffusion de technologies. Des partenariats sont également établis avec la recherche, les ONG....

NB. Il faut souligner que le Burkina a élaboré récemment de nouvelles approches en matière de vulgarisation qui favorisent la plus grande implication des acteurs du privé (OP, ONG...) dans les activités de vulgarisation.

Le problème majeur actuellement vécu est que les capacités (stratégiques, organisationnelles, financières) de ces acteurs demeurent encore faibles pour gérer ces questions de transfert de technologies au profit de leurs membres.

SÉNÉGAL

1. Expérience en matière d'implication et d'engagement des producteurs dans le processus de développement participatif de Technologies. Leur implication dans le processus de recherche

Les producteurs n'ont jamais eu un cadre réellement autonome pour exprimer de façon concertée leurs besoins en technologies. Les cadres d'expression qui ont existé, ont été des initiatives externes (coopératives, groupements, groupes de contact etc). La conséquence est qu'en réalité les besoins ont été depuis par l'encadrement au nom des producteurs .

La démarche n'était pas dictée par la demande exprimée par les producteurs, mais par l'offre des intervenants qui choisissaient les innovations qu'ils jugeaient utiles pour accroître la production et qu'ils essayaient de promouvoir auprès des producteurs. Les véritables préoccupations des acteurs n'étant pas prises en compte malgré la volonté de responsabilisation des producteurs prônée par la nouvelle politique agricole.

Il est important aussi de mentionner que longue tutelle de l'encadrement des services de l'administration du développement ont peu développé les capacités d'initiatives des O.P. des fédérations et des unions, installant ainsi une forte dépendance. L'absence d'appuis techniques et financiers adaptés à la situation des O.P., fédération et unions n'a pas également permis de rendre les organismes performants au regard des services attendus d'eux par des producteurs.

Pour l'essentiel, les expériences de collaboration entre ONG et O.P. dans le cadre du développement rural se sont traduites par le développement des méthodes et outils participatifs de recherche et d'action, ainsi que par des formations pour le renforcement de capacités institutionnelles et techniques des O.P. Cependant ces actions avaient généralement une portée limitée.

Malgré les efforts consentis, l'impact de la recherche agricole sur le développement agricole reste généralement faible à cause de sa faible implication et liaison avec les producteurs ruraux.

2. Partenariat Producteurs – Recherche

Avec la nouvelle structure d'encadrement ANCAR (Agence Nationale du Conseil Agricole et Rural) implanté au Sénégal, le partenariat est fondamental dans la nouvelle approche conseil agricole et rural. Le nouveau conseil agricole et rural en raison de sa complexité exige pour être opérationnel et efficace, un partenariat fort entre les acteurs du développement agricole et rural (Etat/collectivités locales/O.P./privés). Ce cadre est cohérent avec la décentralisation et la volonté de renforcer les capacités des O.P. pour qu'elles soient aptes à participer à la définition et à l'application des orientations politiques pour le secteur agricole.

Le partenariat doit s'exercer à plusieurs niveaux :

- a. Niveau local (communauté rurale et arrondissement) : le partenariat ANCAR/Recherche/O.P. permet de réaliser un diagnostic partagé pour identifier les besoins des paysans en conseil agricole et rural et de recherche. Le cadre local de concertation des organisations de Producteurs (CLCOP) est le second cadre qui existe à l'échelle de la communauté rurale.
- b. Niveau arrondissement pour la mise en cohérence et validation des programmes
- c. Niveau Régional : Il existe une cellule de Recherche et développement
- d. Niveau National – Validation des programmes par le Comité National d'Orientation

3. Rôle des producteurs et des O.P. dans la dissémination et la diffusion des Technologies

Avec le processus de désengagement de l'Etat des activités productives et les marchés a laissé à l'initiative privée la responsabilité d'assurer, par le jeu de la libre concurrence, la croissance économique nécessaire au développement humain durable au Sénégal.

C'est ainsi qu'avec l'appui du PSAOP il a été créé les cadres locaux de concertation des organisation de producteurs (CLCOP). Avec ce cadre la communauté rurale dispose d'un instrument approprié de renforcement de leurs capacités et de négociations et diffusion des technologies. Cependant toutes ces initiatives sont très récentes et la fonctionnalité d'un tel dispositif dépend de la capacité des producteurs et de leurs Organisations à se positionner dans ce nouveau contexte.

Un exemple dans, la communauté de Saré Bidji la situation alimentaire locale préoccupant beaucoup les producteurs ruraux, qui en réalisant un diagnostic participatif du développement

des cultures céréalières, ils ont décidé de l'intensification de la culture du maïs. Avec l'appui de l'Agence exécution technique et de la Direction régionale de l'agence nationale du conseil agricole et rurale la CLCOP s'est employée à mettre cette option en œuvre un facilitant un partenariat entre la Direction du développement rural, de la SODEFITEX et les O.P. concernées par cette action prioritaire. Cette facilitation a abouti à la mise en place de l'Union des Producteurs de maïs de Saré Bidji, sous le couvert de laquelle plus d'une trentaine l'O.P. ont pu accéder au crédit de campagne (semences, herbicides, engrais) pour la valorisation d'une centaine d'hectares.

Plusieurs exemples de ce genre sont répandus au Sénégal aujourd'hui à travers le CLCOP pour les aménagements hydro-agricoles, pour la culture du riz, la promotion des unités avicoles, et la promotion des cultures maraîchères.

Il y en a évidemment des fortes contraintes dans la mise en œuvre de ces initiatives dues à l'analphabétisme, accès limité au crédit et au marché des facteurs de production.

MALI

1. Expériences en matière d'implication et d'engagement des producteurs dans le processus de développement participatif de technologies. Leur implication dans le processus de recherche

Une des innovations centrales de la réforme de l'Institut d'Economie Rurale a été la mise en place de structures de concertation entre les chercheurs et les utilisateurs de résultats de la recherche.

En effet depuis 1994 l'IER en partenariat avec les bailleurs de fonds a mis en place au niveau régional des commissions régionales des utilisateurs des résultats de la recherche (CRU). Au niveau national il a été créé une Commission Nationale des Utilisateurs (CNU) constituée par les présidents des CRU.

L'objectif de CRU est d'améliorer l'adaptation des programmes de recherche et accroître le taux d'adoption par les producteurs des propositions techniques qu'elle formule.

Pour cela elle participe au processus de planification de la recherche (analyse des contraintes, identification des thèmes de recherche, définition des caractéristiques des technologies à développer, évaluation des résultats de la recherche) à travers une série de réunions et de discussions au cours desquelles les besoins et priorités de recherche des utilisateurs sont discutés et pris en compte. Les idées de recherche émises par les utilisateurs sont transformées par les chercheurs en projet de recherche. Actuellement, il y a au niveau de chaque région du Pays, un collège composé d'un représentant de chacune des soixante organisations participant aux activités des CRU. Au sein du collège qui constitue l'instance de décision et d'orientation, est élu le Bureau CRU composé par 20 membres.

Aux termes des six années d'existence, les CRU ont participé activement aux instances de la recherche et fait approuver une douzaine de projets de recherche. Ces projets qui sont pour la plupart en cours d'exécution par des chercheurs de l'IER et des ONG en interaction avec les CRDU, ont été financés sur les fonds des utilisateurs.

Aussi l'organisation de journées portes ouvertes dans chaque centre régional de recherche agronomique sont une opportunité de participation des paysans et O.P. pour s'informer sur l'état des innovations techniques en cours de génération, et de mieux comprendre le processus de transfert de technologie.

Les associations de producteurs telles que le CRU, le ROPPA, l'AOPP et l'APCAM, donnent aux membres des informations sur les nouvelles pratiques de production et leur apprennent des méthodes efficaces de gestion.

En ce qui concerne la dissémination, ces associations collaborent, avec les structures d'encadrement comme le système de vulgarisation national ou les ONG ou les projets pour répandre une nouvelle technologie.

Avec la mise en place par les services de vulgarisations d'un conseiller agricole polyvalent auprès des agriculteurs a permis de 1992 à 1996 à augmenter les visites de contacts qui a passé de 255 participants à 1.124 (dont 912 paysans). Cette expérience a permis la rapide propagation de plusieurs innovations en milieu rural.

Les ONG aussi jouent un rôle important dans le transfert de technologie au Mali, parmi les innovations apportées et réussies dans les dernières années on peut citer : les caisses d'épargne et crédit ; les technologies locales améliorées (semences, meules, foyers, ruches, greniers et compost pour la fertilisation) les banques de céréales, l'accès des femmes au crédit, l'approche participative, la gestion de l'environnement avec la participation des populations elles-mêmes, l'alphabétisation fonctionnelle.

2. Partenariat – Producteurs – Recherche

La coordination et contrôle de la recherche agricole sont assurés par le comité national de la recherche agricole à travers ses différentes commissions (commissions scientifique, commission financière, commission des utilisateurs).

La programmation de la recherche se fait à travers un système de remontée de la demande sociale qui fait intervenir tous les acteurs du système national de recherche (producteurs, transformateurs, services publics de vulgarisation, ONG, associations des producteurs...)

Le Plan Stratégique constitue la base de travail pour l'ensemble des structures de recherche qui comprend 2 niveaux :

Niveau régional qui fonctionne sur une base annuelle, dont les instances sont :

- Le Comité des utilisateurs qui est un forum de discussions des idées de projets et des résultats entre chercheurs et utilisateurs directs des résultats de recherche,
- Le Comité Technique régional qui est un forum de discussions sur les projets de recherche,
- Conseil régional de recherche qui est l'organe de décision au niveau régional.

Niveau national – les instances sont :

- Le Comité de programme qui solutionne les projets et discute des résultats au niveau des instituts de recherche avant de les soumettre aux instances du CNRD.
- La Commission Scientifique du CNRA qui évalue en dernier ressort les projets et résultats de la recherche
- Le Conseil d'Administration qui approuve les budgets de recherche.

3. Le Partenariat entre les Services de Vulgarisation, la Recherche les ONG, les fondations, les firmes et les O. P. a permis de mettre en place plusieurs initiatives tels que :

- a. le programme de diffusion des nouvelles variétés de cultures vivrières (mil, sorgho, maïs, riz) et des légumineuses (arachide et niébé). Les écarts de rendements entre les parcelles de démonstrations avec les nouvelles variétés et les parcelles témoins avec les variétés traditionnelles ont variés de :
 - Mil - de 23 à 103 %
 - Sorgho - de 16 à 75 %
 - Maïs - de 13 à 22 %
 - Riz - de 25 à 31 %
 - Arachide - de 11%
 - Niébé - de 47 à 102%.

Cette expérience a fortement accru le taux d'utilisation des semences améliorées ainsi que les activités de production des villages semenciers.

- b. la mise en place d'un réseau de néo-alphabètes choisis et formés parmi la population pour assurer le relais de certaines activités de vulgarisation en milieu rural, a contribué à renforcer la capacité des producteurs non seulement au niveau des exploitations, mais aussi au niveau communautaire. L'utilisation de ses néo-

alphabètes comme relais des vulgarisateurs, a permis de mieux asseoir leurs connaissances et de les rendre opérationnelles.

- c. L'implication et la responsabilisation des O.P. par rapport à certaines activités (évaluation des besoins en engrais, examen des demandes, recouvrement de crédit) du processus d'approvisionnement en engrais permettent aux producteurs de disposer à temps opportun des engrais de qualité et le moins cher possible.
- d. L'existence de fonds de roulement pour les O.P. afin d'acheter des semences auprès des producteurs semenciers, l'amélioration des conditions de stockages a permis une appropriation effective de la fonction de production et de distribution de semences de qualité.
- e. L'ONG « Afrique Vert » organise depuis 4 ans des bourses de céréales qui donnent un pouvoir de négociation aux producteurs. La stratégie consiste à regrouper l'offre des producteurs dans un lieu donné et à y faire venir les commerçants. Les céréales sont vendues au plus offrant. Cette démarche permet aux producteurs d'obtenir des prix plus élevés que ceux pratiqués sur le marché ordinaire. Les commerçants trouvent également leur compte dans la mesure où ils font des économies substantielles sur les frais de collecte.
- f. Les associations de producteurs ont travaillé avec l'APROFA (Agence Privée pour la promotion des Filières), le CAE pour l'exportation des fruits et légumes et pour la transformation de certains produits (oignon, tomate, viande, lait, mangue).

Markets and Trade Issues

Regional Interventions to Improve West African Cross-Border Trade³⁵

Daniel J. Plunkett and J. Dirck Stryker³⁶

I. Summary

Growth in cross-border trade in agricultural products can have direct benefits for food security and gender equality in West Africa. Practiced by both small-scale and more-established traders, cross-border trade in basic foodstuffs creates employment in the field and in the market, boosting rural incomes and rationalizing food distribution across a broader geographic area.

The paper discusses several areas of opportunity for USAID-supported interventions to encourage cross-border trade in agricultural products. Opportunities exist for activities related to production and processing, market information, and trade logistics. Twelve detailed potential interventions are recommended and briefly outlined. These involve reinforcing production and processing for the market, better market information; and trade facilitation.

Given USAID's stated objectives for AICHA, the top investment priority should be a program to improve the quality of shea butter produced and marketed by poor, rural women in the main shea-growing belt in Mali, Burkina Faso, and elsewhere.

Specific interventions for USAID to support in this and other areas might include:

Reinforcing Production and Processing for the Market

1. Establish standards for shea butter in the principal markets in Mali and Burkina Faso in order to improve marketability.
2. Draw upon research by TECHNOSERVE in a Ghana to reduce the odor of shea in shea butter in order to upgrade the quality of shea butter for use in cosmetics.
3. Upgrade the quality of rice hulling, using known technology, sort the milled rice for better quality, and develop a label for locally-grown (Malian) rice, which is often preferred in the region, to create cross-border markets.
4. Eliminate restrictions on imports of ingredients for animal feeds (e.g., maize, fish meal) and encourage their importation for the feed industry when prices of these ingredients on the local market are high.

Better Market Information

5. Expand the collection and dissemination of market information for staple foodstuffs and other products, which are critical to the food security of the poor.

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6. Install electronic billboards in market towns to report the price and availability of basic foodstuffs in local and regional markets, including vulnerable areas identified by FEWS-NET or other food security monitoring systems.

Trade Facilitation

7. Disseminate and publicize information on the costs of delays and bribes, as well as who is causing these costs to be incurred, at various barriers along major transportation corridors.
8. Complement World Bank efforts to establish customs posts in close proximity opposite each other along the frontiers to facilitate cooperation and assure no cheating.
9. Continue to examine how to develop a system of warehouse receipts that can be used as collateral for bank loans to finance trade.
10. Develop an ECOWAS badge for small-scale cross-border women traders in order to identify these traders as knowledgeable regarding the rules and regulations applying to trade within ECOWAS.
11. Produce informational tools (cards, pamphlets) on the free movement of basic foodstuffs within ECOWAS.
12. Encourage the creation of community-based economic interest groups among women traders, giving them the right to fill out customs declarations and lobby for improvements linked to trade.

II. Opportunities for Increasing Cross-Border Trade in West Africa

Facilitating cross-border trade in all products and services will help promote food security through an overall increase in economic activity. Increasing volumes of cross-border trade in agriculture and food products, in particular, will help rationalize distribution of food across West Africa and provide economic opportunities for women and smallholder farmers. Small-scale cross-border trade in basic foodstuffs is largely free of customs duty under the ECOWAS Trade Liberalization Scheme. As pointed out recently at a USAID-supported activity on regional integration, “trading food commodities to achieve greater regional food security enhances the welfare of both sending and receiving countries” (Tyner 2002, p.11). Unfortunately, not all customs officials and other authorities recognize this principle. Female traders cite government inspections and police/customs roadblocks as the two most important obstacles to cross-border trade (Morris and Dadson 2000, p.4).

Women make up a large share of those participating in small-scale cross-border trade. Women cross-border traders now exist at all scales of operation, from carrying individual loads to owning a number of trucks.³⁷ Support for women traders has proven to be a way to help new, female-headed small businesses to grow (Morris and Saul, 2000, p.8). In West Africa, women economic operators are often able to organize themselves more coherently in groups and associations than male counterparts. In the interest of promoting food security through increasing cross-border agricultural trade, trade facilitation measures could increase “border tolerance” for female traders carrying basic foodstuffs across regional borders and help these businesses grow.

The goals of AICHA are to “rapidly and sustainably increase agricultural growth and rural incomes in sub-Saharan Africa.” Facilitating cross-border trade in basic foodstuffs, at both formal and informal levels, can contribute significantly to deepening the integration of regional markets and smoothing out food deficits in vulnerable areas.

Given the small-scale nature of production and marketing within West Africa, the potential USAID interventions discussed below would reinforce the smallholder-oriented agricultural growth strategy of AICHA. The principal measures involve: reinforcing production and processing for the market, better market information; and trade facilitation.

II.A Reinforcing Production and Processing for the Market

II.A.i Raising the Quality of Shea Butter

Shea butter is a value-added product with outstanding export growth potential for West Africa, given the region’s predominance in the number of trees worldwide. A proven export market exists for shea nuts, but as a result of the lack of quality standards, West African shea

³⁷ While the use of a truck is usually the most common mode for cross-border trading, according to one estimate for Ghana, substantial shares of trade occur via headloading (27%) and either a donkey cart or pushcart (19%) (Morris and Dadson, p.16).

butter is considered to be a sub-standard product on the international market (CAE/Chemonics, Vol. III, p. 16). Given the direct impact of the shea nut sector on the rural poor, building local capacity to meet export demand for this unique product should be the highest priority in a regional strategy for boosting cross-border trade.

The main export markets for shea nuts are the EU and Japan, with annual imports of about 20,000 tons at a value of 2 billion CFA francs (equal to about \$3.3 million). The recent change in European Union rules to permit the use of up to 5 percent shea butter in the production of chocolate provides an excellent opportunity to expand shea production. Demand for shea butter is also strong and growing in the cosmetic industry.

The AIRD sectoral contribution to the Integrated Framework analysis for Mali³⁸ identified lack of consistent quality as the main hindrance to greater exports of shea butter made by small-scale producers. The quality of butter from Mali, the largest producer, is not as good as that from other neighboring countries such as Burkina Faso (Abt Associates, 2002, Vol. II, p. 75). Complicating the search for a solution is the range of processing methods presently in use across the main shea tree belt in Mali, Burkina Faso, and elsewhere, with no one technique standing out as necessarily better than the others.

Shea butter is produced almost exclusively by women in rural villages. About 4-5 million women in West Africa are involved in the collection, processing, and marketing of shea nuts and butter, providing about 80 percent of their incomes. These women must be the target of capacity-building efforts to encourage them to produce shea butter of more consistent, higher quality. Therefore, explaining the demands of the end-users to the women harvesting, storing, and processing the shea nuts could rapidly lead to better quality in the market, improving sales of both shea nuts and shea butter in local markets, and attracting the interest of traders serving international market demand.

Action: Develop **marketing standards for shea butter** in Burkina Faso and Mali, where most of the shea butter markets are located, and disseminate those standards to the women in the villages. A small number of local female trainers could be employed to train the village associations in the proper techniques for drying shea nuts and producing shea butter of a consistent quality.

II.A.ii. Reducing the Shea Odor of Shea Butter

An important use of shea butter is in the fabrication of cosmetics. The demand for butter for this purpose has increased very substantially in recent years. One of the drawbacks limiting the use of shea butter in the manufacture of cosmetics has been the shea odor that is introduced by the shea butter. TECHNOSERVE in Ghana has worked on this problem and has come up with a technique for eliminating the shea odor. This technique should be transferred to other countries in West Africa, where potential production for the market is greater than in Ghana.

³⁸ Stryker, Plunkett and Coulibaly (2002).

Action: Draw upon research by TECHNOSERVE in a Ghana to reduce the odor of shea in shea butter in Burkina Faso and Mali in order to upgrade the quality of shea butter for use in cosmetics.

II.A.iii. Creating Cross-Border Markets for Malian Rice

West Africa is one of the largest rice-importing regions of the world, importing nearly 4 million tons worth more than a billion dollars per year. At the same time, Mali has a unique asset in the irrigation potential of the Office du Niger, which could lead to substantially different trading patterns for rice within the region over the next 10-20 years (Barry et al 1998; Abt Associates 2002). Mali is on the cusp of becoming a net exporter of rice and could provide substantial quantities of rice to other countries within West Africa, competing in northern regions of the coastal countries and even in coastal cities. This would benefit both producers, many of whom are very small scale, and consumers, who even at very low levels of income consume substantial quantities of rice. This would make a substantial contribution to improved food security.

One problem is that the quality of Malian rice is often considered by consumers in the coastal countries to be low in relation to that of imported rice. This is the case, for example, in Cote d'Ivoire, where consumers prefer a less broken rice than is produced and consumed in Mali. This problem can be alleviated through better milling and by sorting, a need highlighted by the Mali Trade Team (Abt Associates 2002, Annex C, p.7). The Centre Agro-Entreprise has been working on this for several years with good results. However, in order to advertise the rice as of superior quality, there is a need to package and label the rice so that it can be distinguished from other rice in the market.³⁹

Action: Upgrade the quality of rice hulling, using known technology, sort the milled rice for better quality, and develop a label for locally-grown (Malian) rice to be sold in the markets of neighboring countries. Consider development of a rice trading warehouse in Sikasso to attract regional traders.

II.A.iv Eliminate Restrictions on Imports of Feed Ingredients

In many regions of West Africa, livestock production contributes an important part to the national economy. Throughout the region, there are established trading patterns in both live animals and meat. In West Africa, expanding livestock production has usually meant greater numbers of animals under traditional extensive grazing patterns. However, these traditional resources are limited, and future expansion of production based on the use of these resources is not likely to be very great. Although some further expansion may occur using crop residues and by-products, this avenue, too, is highly constrained. Any attempt to go past these limits using traditional production techniques risks overgrazing and severe environmental damage.

³⁹ This is consistent with the findings of the Mali Trade Team that USAID can best promote export development through interventions in "downstream performance" (Abt Associates 2002, Annex C, p.6).

The market for livestock products in West Africa continues to expand as a result of rising incomes and growing urbanization. The ability of the interior countries to meet this demand without destroying the environment depends on the intensification of livestock production through use of cultivated forage and livestock feeds, including poultry as well as supplementary ruminant feed. There are a number of feed producers in Mali, Burkina Faso, and the other interior countries, but production is limited by the availability and price of the ingredients going into these feeds. As an example, feed producers are currently having a difficult time supplying feeds at reasonable prices because of the high cost of maize and fish meal. These ingredients could be imported at lower cost than their prices on the local market, but this practice is not encouraged because of the belief that the West Africa countries should be able to produce locally all of its requirements. There is a major need to promote market and trade liberalization in these products in order to promote feed production. This will also help to stabilize the prices of maize and other feed ingredients, which will further encourage their production.

Action: **Eliminate restrictions on imports of ingredients for animal feeds** (e.g., maize, fish meal) and encourage their importation for the feed industry when prices of these ingredients on the local market are high.

II.B. Better Market Information

II.B.i. Nontradables

A program for greater market information on nontradable staples would encourage more efficient trading and investment in market infrastructure for the processing and distribution of basic foods such as yams, cassava, potatoes, cowpeas, dry beans, shea nuts, fish, and fruits and vegetables. Further, by gaining improved access to information about what food is available in local markets and at what cost, the poor and food-insecure of the region could make better spending decisions within their limited means. If combined with basic nutrition information, overall food security could be reinforced.

While some form of market information system exists in most countries of West Africa, the market price and availability observations of these systems are not easily available to the public, especially small-scale women traders. Furthermore, the range of products is limited primarily to cereals and livestock. Providing up-to-date information in public marketplaces on observed prices for basic foodstuffs in local and nearby regional markets will allow traders of all sizes to better gauge the profitability of transporting foodstuffs to neighboring regions.

Action: Collect and disseminate **expanded market information on nontradables**, which are the basic foodstuffs of the poor. As these products attract no customs duty, there exists the potential for greatly increasing the volume of food products traded across borders within West Africa to meet shortages in food-deficit areas. As much of this trade is conducted by women traders, both small-scale and more-established, expanding trade in basic foodstuffs could hold significant benefits for household incomes and nutrition.

II.B.ii Vulnerable Areas

After widespread hunger during the droughts of the early 1980s, West Africa, with the help of the donor community, has made impressive progress on improving food security and combating drought at the regional level. Among West African institutions, CILLS has primary responsibility for matters related to food security and agriculture (Stryker 2002, p.7). In order to promote regional trade in agriculture and food products, national officials and stakeholders have been organized into National Coordinating Committees (*Cadres Nationaux de Concertation*), permitting sectoral interests to be expressed at the regional level.

The USAID-supported Famine Early Warning System Network (FEWS-NET) and other efforts have greatly improved the analysis of food insecurity and vulnerability within the region. One benefit is a greater capacity to coordinate the interaction of food aid shipments with local commercial market trade in basic grains and other foodstuffs. In vulnerable areas, it can be expected that the price of basic foodstuffs will be higher than elsewhere. Reporting the market prices of basic foodstuffs and other information in vulnerable areas within the region-wide information system should encourage regional traders to take advantage of the opportunities provided in those food-deficit areas. One mechanism might be to install electronic billboards in market towns to report price and availability of basic foodstuffs throughout the region and especially in vulnerable areas identified by FEWS-NET and other providers of vulnerability analysis.

Action: To reduce the vulnerability of the poor, provide electronic billboards showing local and regional market information on a daily basis.⁴⁰ The billboards could also be employed to provide basic nutritional education and advertise to mothers where they can get help feeding and inoculating their babies. Link with FEWS-NET and other providers of vulnerability analysis to provide market information on prices in food-deficit markets within the West Africa region.

II.C Trade Facilitation

II.C.i. Administrative Roadblocks

Government inspections and police/customs roadblocks are often cited as the two most important obstacles to cross-border trade. This has been a persistent and intractable problem after more than a decade. The system of compensation for the police, customs, and gendarmes (known by the French acronym, PDG) officials involved in trade must be reformed, since the unauthorized bribes are the means for these officials to assure their own livelihood security. The police and gendarmes, in particular, often go unpaid for months on

⁴⁰ Given the unreliability of electricity supply, a simple backup such as a car battery is advisable. One of the downsides of installing an electronic billboard in market towns would be the risk of theft. An alternative method would be expanded dissemination of food price information within regional markets via radio.

end, and must live from what they can reasonably get along the roadways. National Customs services are said to be the least problematic of the PCG, given that they are the best-paid, have the best working conditions, and are transferred with regularity on a scheduled basis (Morris and Dadson 2000, p.24). However, even here there exist multiple problems, some of them emanating from recent changes in customs taxes and procedures as a result of the establishment of a customs union within the West African Economic and Monetary Union and its extension to other ECOWAS countries.

Over the past few years, there has been an effort to establish observatories for documenting unauthorized taxes by PDG officials. The intent of the observatories is to provide evidence of the abuses that regularly take place to national and local officials, as well as to the general public, in an effort to foster political will based on the demonstrated unnecessary costs of regional trade. For example, the numerous stops to check papers increase transaction costs due to long delays and the need to stop dozens of times en route to show papers and pay a small fee. It is estimated that traders often lose 8 or more days in wages per year in delays and in paying the requisite bribes and unauthorized fees (Morris and Dadson 2000, p.14).

It is clear that the PDG system can only change if national authorities at all levels demonstrate political will that is backed by widespread public awareness. This will require both increasing the compensation of PDG officials and focusing on greater transparency and publicity regarding the actual costs of doing business en route. The information collected by the observatories is useful market information that should be incorporated as part of the region-wide market information system and very widely disseminated. This requires effective use of the press, radio, and television. There may also be a role for voluntary reporting of the costs of doing business by truckers and traders in public marketplaces along cross-border routes.

One other practical trade facilitation measure to reduce administrative roadblocks would be cooperation in the construction of joint border posts. As the World Bank is also considering investing in joint border posts along key transportation corridors of West Africa, there may be ways for USAID to support the World Bank's process or to invest in complementary facilities. There would be many benefits to the establishment and operation of joint border posts, including reduced opportunities for corruption, faster inspection of goods, improved customs cooperation, more uniform application of customs tariffs, and more reliable trade statistics.

Action: Support establishing **joint customs posts** opposite each other along the frontiers to facilitate customs cooperation and reduce the possibility for cheating. This effort should be coordinated with the World Bank, which is preparing to support joint customs posts along certain key transportation corridors (Abidjan-Ouagadougou-Niamey, Abidjan-Bamako-Ouagadougou).

Action: Produce and distribute **informational tools** (laminated cards, pamphlets) on the free movement of basic foodstuffs within ECOWAS to increase the leverage of cross-border traders in dealing with police, customs, and gendarmes. Dissemination

efforts could include training-the-trainers activities led by community-based groups, such as women's groups.

Action: Develop an ECOWAS badge for women traders belonging to community- or producer-based associations who have undergone some basic training in the rules related to cross-border trading in duty-free commodities. Such a badge could facilitate border procedures, as women on foot or on public transport could pass more easily.⁴¹ The badge, which could be awarded based on standards developed by women traders themselves, would contribute to the greater professionalism of the main small-scale traders.

Action: Disseminate market information on illicit costs of doing business along key regional routes, such as between Sikasso-Abidjan and Ouagadougou-Accra. One method could be to provide a facility at public marketplaces for truckers and traders to regularly record their actual costs of doing business along key cross-border routes and provide this information through public billboards or radio. These efforts should be led, to the extent possible, by local private sector groups. Information from already-existing observatories can be integrated with new information reported voluntarily by truckers and shippers. The information should be posted on billboards in market towns and available on the region-wide agricultural market information system (SIM), coordinated by CILLS.

Action: Move to increase compensation of PDG officials to the point that they do not require bribes as a means of supplementing their incomes to bring them up to a satisfactory living standard.

Action: Link bilateral and regional assistance from USAID to measured improvement in reducing the number of customs checkpoints and administrative hassles.

Action: Link eligibility under AGOA to measured improvement in reducing the number of customs checkpoints and administrative hassles.

Action: Link eligibility to the Millennium Challenge Fund to measured improvement in reducing the number of customs checkpoints and administrative hassles

II.C.ii. Warehouse Receipts

Warehouse receipts are designed to increase liquidity in commodity markets, allowing producers as well as traders to consolidate marketable and exportable commodity volumes (Mandl and Mukhebi 2002, p.24). Under a collateralized warehouse receipts system, producers and traders can convert inventories of agricultural products into readily tradable products. Warehouse receipts are negotiable instruments that can be traded sold, swapped, and used as collateral to support borrowing (La Grange 2002, p.4).

⁴¹ Such a badge could include an embedded hologram for storing information and could conceivably represent a means of collecting VAT from small-scale traders.

Often, the issuing of tradable warehouse receipts is linked to inventory financing. Such schemes have been undertaken elsewhere in Africa, notably South Africa, Zimbabwe, Tanzania, Zambia, and Ethiopia (Mandl and Mukhebi 2002, p.19).

A recent feasibility study on establishment of a warehouse receipts program in three countries (Guinea, Mali, and Senegal) recommended undertaking such a program in the latter two countries (La Grange 2002). Significant work remains to be done to determine the feasibility of actually implementing such a scheme. The study cites weak legal systems as the principal constraint to developing a warehouse receipts program, with the evident need to create a regulatory environment to reduce the risks to banks and traders. Other needs include: a system for certification of warehouses in rural areas; quality standards for the specific products; oversight of the scheme; and campaigns to familiarize farmers and traders with the system. A successful warehouse receipts system would contribute to the upgrading of the consistency and quality of basic grains and other commodities. Working with associations of smallholders or rural cooperatives could be one method for attracting large numbers of participants.

Warehouse receipts programs are established for specific commodities with transparent quality requirements. In Mali, stakeholders are reportedly interested in warehouse receipt programs for maize, sorghum, millet, rice, livestock, dried fish, and vegetables, all products that are critical to the food security of the poor. In Senegal, where La Grange suggests a warehouse receipt program might have the best chance for success, the products to be considered include groundnuts, certified groundnut seed, maize, rice, sorghum, and dried fish. For Guinea, the likely commodities would include coffee, cashew nuts, millet, and rice (La Grange 2002, pp.9-14).

One area of risk for a warehouse receipts program is the lack of interested guarantors. It may be possible to involve one of the three regional guarantee funds, backed by multilateral organizations. These include the “Fonds africain de garantie et de coopération économique” in Benin, the “Fonds de solidarité africaine” in Niger and the “Fonds de garantie des investissements privés en Afrique de l’Ouest” based in Togo.

The issue of available options for greater trade financing at the regional level deserves more in-depth study, perhaps within the context of the USAID-supported Trade Hub Activity.

Action: Continue to support the conceptual planning and implementation for establishment of a system of **warehouse receipts** in order to increase liquidity and improve trade financing. Based on the consultant’s recent study, the initial pilot countries should be in Mali and Senegal. While many details remain to be examined to determine the feasibility of such a scheme, a warehouse receipts program would encourage aggregation of local production into sufficient volumes for export to regional markets. Training in the use of the new instruments could be directed at associations of commercial traders, including women’s groups. The most immediate action for USAID to take is more-detailed work regarding the potential planning and implementation of such a scheme, perhaps based on the model legislation developed by the IMF’s Common Fund for Commodities.

The terms of reference for a design-and-implement project could include:

- Work with associations of smallholders or rural cooperatives on aggregation techniques for marketable-sized loads.
- Work with the three regional guarantee funds on a joint mechanism for guaranteeing warehouse receipts that could be used throughout ECOWAS.
- Develop rural collateral management companies.
- Effect changes to the national regulatory environments to reduce the risks to banks and traders.
- Develop a system for certification of warehouses in rural areas.
- Develop quality standards for the specific products to be included in each country.
- Launch campaign to familiarize farmers and traders with the system

II.C.iii. Economic Interest Groupings for Women

“Trans-border trade is typically handled by traders with fewer assets than overseas traders. More women are involved in trans-border trade than overseas trade; and thus its economic impact is felt by middle and lower-income households in Ghana” (Morris and Dadson 2000, p.22).

In many West African countries, licensed freight forwarders hold a rather privileged position in the infrastructure of trade, for example, by holding the authority to fill out customs declarations. Most freight forwarders do not have large fleets of vehicles. The dangerously overloaded trucks one sees creating potholes in the roads of West Africa are operated by independent owner-operators or by drivers working for someone wealthy enough to own a truck. Under this fragmented system lacking vertical coordination, the freight forwarders cannot be held accountable for the poor condition of the trucks. In some countries, the truckers’ unions do little to serve the interests of the industry, representing simply one more group to pay off to get things rolling.

In at least one country of West Africa, Mali, the establishment of economic interest groups (*groupements d’intérêt économique*) has facilitated cross-border trade as these small groups, comprised largely of women traders, are now permitted to fill out customs declarations (Morris, p.17). With a clear legal identity, these groups provide economic empowerment for women traders. Two activities that might be taken by these groups include (1) awarding badges to women traders that identify them as knowledgeable regarding ECOWAS rules and procedures for regional trade, and (2) creating and distributing informational tools (laminated cards, pamphlets) on rules and regulations regarding the free movement of basic foodstuffs within ECOWAS to increase the leverage of cross-border traders in dealing with police, customs, and gendarmes.

Efforts to harmonize the commercial law of the region (OHADA) also present an opportunity to intervene in order to improve the competitiveness of community-based groups and associations of women traders gathered together for their economic interest.

Action: **Encourage the establishment of economic interest groupings among women traders.** These groups provide much-needed competition for freight forwarders, who otherwise have a legal monopoly to fill out customs declarations.

III. References

- Abt Associates (2002). "Mali Trade Development Program." Prepared for USAID/Bamako.
- Barry, Abdoul W., Salif B. Diarra and Daouda Diarra (1998). "Promoting Malian Rice Exports in the Subregion." Eager Research Report. October.
- Centre Agro-Entreprise (CAE/Chemonics) (2001). "Etude pour la Promotion des Filières Agro-Industrielles, Volume II: Analyse de l'Etat des Filières des Céréales." Yiriwa Conseil. Bamako. February.
- CILLS (2001a). "Réunion des Cadres Nationaux de Concertation...Préparatoire a la 6è Réunion de Ministres Chargés de l'Agriculture et des Ressources Animales." Rapport de Synthèse. October 22-25.
- CILLS (2001b). "6è Réunion de Ministres Chargés de l'Agriculture et des Ressources Animales." Compte Rendu des Travaux. October 27.
- La Grange, Mark D. (2002). "Feasibility Study for a Regional Warehouse Receipt Program for Mali, Senegal and Guinea." Abt Associates. October.
- Lue, Carol, Kathryn Nash, and Lynn Salinger (2002). "Survey of West Africa Financial and Monetary Systems." Prepared for USAID/WARP. January.
- Mandi, Paul and Adrian Mukhebi (2002). "Commodity Market Information and Risk Management: The Case for a Commodity Exchange and Warehouse Receipt System for Uganda." Prepared for the Uganda Delegation of the European Community. February.
- Jeffrey Metzel, Abou Doumbia and Lamissa Diakite (1998). "Prospects for Developing Malian Red Meat and Livestock Exports." Eager Research Report. July.
- Morris, Gayle A. and John Dadson (May 2000). "Ghana: Cross-Border Trade Issues." Eager Research Report. May.
- Morris, Gayle A. and Mahir Saul (2000). "Women's Business Links: A Preliminary Assessment of Women Cross-Border Traders in West Africa." Prepared by WIDTECH for USAID/WARP. August.
- Private Sector Forum on Regional Integration in West Africa (2002). "Conclusions of the Forum." Held in Accra, Ghana, October 23-24.
- Stryker, J. Dirck (2002). "Towards a Viable West African Forum." Prepared for USAID/WARP. January 31.

Stryker, J. Dirck and Massa Coulibaly (2002). "Private Sector Investment in the Office du Niger: Proposal for a Non-Bank Financial Institution." Prepared for USAID/Bamako. January.

Stryker, J. Dirck, Daniel J. Plunkett, and Massa Coulibaly (2002). "Mali Trade Capacity Needs Assessment—Subsector Analysis." Prepared for USAID/Bamako as a contribution to the multilateral Integrated Framework. May.

Tyner, Wallace E. (2002). "Constraints and Opportunities for Regional Integration of Agribusiness and Related Industries in West Africa."

Development of a Regional Market Information System for Agricultural and Livestock Commodities⁴²

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1. Introduction

A regional market information system (MIS) can play an important role in promoting increased trade within West Africa. Until recently, an MIS served mostly government and donors and, in practice, depended largely on donor funding. Many failed after donor funding disappeared. Establishing sustainable market-information systems that serve not only government and donors but also the private sector and other agencies requires a demand-driven model. This means that MIS interventions must go beyond the important technical details of collection methodology and database management to consider the responsiveness of the system to users' needs, particularly those who can pay for MIS services, and the institutional setting in which the MIS exists.

This paper justifies demand-driven MISs (section 2), provides a historical context in West Africa (section 3), explains the co-evolution of MISs and trader organisations (section 4), describes the steps needed to build a sustainable regional network of MISs (section 5), and suggests donor support to enable that (section 6). In an appendix, it includes a summary table of the state of MISs in the different ECOWAS states.

2. Justification

Regional trade is an engine of growth for West African countries. Trade allows economies to grow faster than the rate of domestic demand, thus permitting accelerated economic development. Governments should therefore design policy to promote trade efficiently. Two effective and complementary trade policies are the promotion of improved MISs and of traders' organisations.

Traders in a competitive market have an interest in reducing business transaction costs. Reduced costs hold out the prospect of increased profits, at least in the short run. Government also has an interest in reduced business transaction costs because, in the long

⁴² Please cite as: Cook, Andrew D. (2003). "Development of a regional market information system for agricultural and livestock commodities under Initiative to End Hunger in Africa funding through USAID's West Africa Regional Program". Abt Associates, Inc. Bethesda, MD. February.

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run, a competitive market will pass on the benefits in the form of higher prices for producers and lower costs for consumers, thus raising the welfare of both.

Better market information reduces traders' transaction costs. It allows them to find markets that they would not otherwise have found and to conclude more profitable deals. A lack of accurate market information acts as a non-tariff trade barrier to inhibit intra-regional trade. Buyers may turn to imports from outside Africa if they do not know what is available from neighbouring countries or do not trust suppliers from those countries to deliver reliably. Improved market information and building reliable commercial contacts (through a traders' network) help to remove this non-tariff trade barrier and expand regional trade, thereby leading to accelerated economic growth.

An MIS that provides information responding to traders' needs usually performs best. Traders' livelihoods depend on knowing how markets work and they are best placed to judge which extra information is likely to profit them most. Thus MISs should collaborate with traders' organisations to keep current with commercial needs, which may change considerably over time.

Equally, traders' organisations have an interest in collaborating with and supporting MISs that provide them with useful information more cheaply than they can themselves provide it to their members. However, the extra benefit accruing to the trader in terms of better market information may not justify the costs of his joining such an organisation. A traders' organisation that organises itself to offer more than just privileged access to market information will tend to attract more members and to succeed more than one that does not. For instance, an organisation that actively lobbies government in traders' interests or that negotiates or litigates (or credibly threatens to litigate) on behalf of its members (who are perhaps too small individually to contemplate such actions) will provide extra motivation to traders to join such an organisation – and to pay subscriptions to do so.

Those favouring good governance in West Africa should encourage the strengthening of traders' organisations. Their feedback fosters more responsive government, and is all the more important when they represent the voices of small or medium-sized traders, an important element of civil society. However, MISs must also consider the interests of groups beyond traders, including farmers, agro-processors, consumers and policy makers: they too can also benefit from better market information.

There thus arises the possibility of a virtuous circle. Government supports MIS services generating increased commerce worth more than the cost of those services. Traders access the information predominantly through their organisation, which also furnishes them with other services that, collectively, more than justify the cost of joining it. Part of the organisation's activity consists of providing feedback to government in the form of lobbying for well-honed and well-implemented policy to continue to promote accelerated economic growth. There arises a simultaneous deepening and broadening of both profitable commercial options and participation in civil society.

3. History

Some West African MISs date to the colonial era when price collection started. Post-independence governments have altered these and created others. However, for a long time they evolved in isolation with unconnected components and wasteful duplication of functions. Until recently, these MISs dealt uniquely with information within countries, rather than importing information from others. A given country would typically have (a) several unco-ordinated systems covering different commodities – different systems often covered agriculture and livestock – and (b) parallel systems covering the same commodity. Data collected in markets found their way to the capital city at a leisurely pace, with aggregation of quantities and averaging of prices at each successive stage in the administrative hierarchy until they formed part of national annual reports in a hermetically sealed system that bypassed the private sector. Traders used their own informal MISs for their decision-making.

Since the 1980s, efforts have taken place to remedy these shortcomings, initially to improve food-security monitoring. Faxes, and then e-mail, have greatly accelerated data transmission; computerisation of MISs has encouraged rapid and more sophisticated analysis. As importantly as these technical changes, MISs have adapted to serve the private sector, first by sending price bulletins to traders and posting tables of price information in marketplaces, then by broadcasting price information by radio in local languages.

In adjusting to the needs of traders, some MISs began to incorporate price data from other countries, where available. For instance, in the early 1990s, CILSS briefly ran an MIS that faxed livestock prices between Burkina Faso, Côte d'Ivoire and Mali; over a longer period, the commercial attaché in Niger's consulate in Kano faxed weekly prices back to Niamey (though little was then done with those data).

In 2000, six Francophone countries formally constituted an MIS network to exchange data on price and availability of agricultural and livestock commodities. These were Burkina Faso, Côte d'Ivoire, Guinea, Mali, Niger and Senegal. By the time the network met again in January 2002, the countries included Benin (with a nascent MIS) and Togo (apparently on the point of creating one). Issues of methodological harmonisation, data exchange, links to the private and public sectors, enlargement to include other countries in the region, sustainable financing and cost recovery, among others, remain to be fully resolved, but the network represents an important step forward.

The network of MISs grew out of activities funded by USAID. Its Sahel Regional Program supported the *Institut du Sahel's* food-security program, PRISAS, allowing the creation of an informal network of West African food-security analysts who worked together. USAID/Mali subsequently supported a series of *conférences régionales* (discussed below) at which some of these analysts decided to create the MIS network.

Institutionally, the nascent regional network has always leant heavily on Mali's MIS, the *Observatoire des marchés agricoles* – OMA, originally funded by USAID/Mali and with important contributions from other donors – because of its well-trained and experienced staff, supported by a second project, *Projet d'appui au système d'information décentralisée du*

marché agricole au Mali – PASIDMA, currently funded by USAID/Mali. However, this is a tenuous basis for long-term regional institutionalisation: the network needs formal regional funding.

In August and September 2002, USAID/WARP took its first step into this area, funding the installation of computers equipped for e-mail for MISs in the network that lacked them. WARP sees the MIS network as a valuable step towards promoting regional trade and, in principle, would like to support its development with funding from the *Agricultural initiative to cut hunger in Africa*.

4. The MIS network and the traders' network

MISs continue to provide valuable data that inform food-security analysis by government (and donors). However, in addition, many argue that, in contributing to more efficient markets and thus driving trade, MISs help reduce the impact of shocks – such as drought – on the economy and thus the need for food aid and other government interventions. However, their efficiency in doing so depends on the quality of roads and the purchasing power of the populations experiencing the shock. (Analysts can measure the strength of the market linkages before and after the provision of improved market information in a variety of ways: correlation analysis, Ravallion analysis and co-integration analysis.) This “trade-based food security” approach justifies an MIS focus on supplying commercially useful data to the private sector.

Informal contact has existed between some well-informed traders and their national MISs for some time. Formal regional collaboration between traders of agricultural and livestock commodities and the public sector, including MISs, took a significant step forward with the first *Conférence régionale sur les perspectives agricoles en Afrique de l'Ouest*, sponsored by USAID in 1999. The *conference* gave traders access to information on agricultural marketing that previously would have remained in government offices. Two other *conférences* followed in 2000 and 2001.

In parallel, networks of traders have formed a regional network: the *Réseau des Opérateurs Economiques du Secteur Agro-Alimentaire de l'Afrique de l'Ouest* (ROESAO) to improve regional trading conditions. Like the MIS network, this network of traders also grew out of the *conférences régionales*. Indeed, it was through these conferences that the key actors got to know each other and it was at the second conference that they formally created the network.

ROESAO is only one of several private-sector networks that have arisen in West Africa since 1990. Its members tend to be established medium-sized businessmen who want to expand their regional trade. However, large businesses, which generally have their own sophisticated MISs, may have an incentive to join these networks, at least partially in order to

benefit from the information exchanged, which often differs from that collected by their own MISs.

The *conférences régionales* and the ROESAO meetings have gone a long way bring the public and private sectors together, to meet traders' demand for stronger links to counterparts in other countries, and to provide a platform on which they can strategise about how to overcome a dearth of information, which they perceive as a non-tariff trade barrier. In this context, when the first West African MIS network meeting took place in 2000, it did so with traders already beginning to formulate their MIS needs.

The MIS network meetings have furthered cross-fertilisation between traders and MIS officials: traders and MIS officials attend both. The new ideas that those attending these fora have taken back to their own countries have changed the thinking about the role of MIS at the national level. In each country concerned, the MIS network now pays more heed to the needs of the private sector.

From a role once played completely inside government, national MISs have now evolved to serve two masters: they provide information useful to both the public and private sectors. This has brought about a need for autonomy from government, which is often a difficult balancing act because, though they typically now receive most of their funding from donors, government still tends to regard MISs as one of their agencies. Moreover, MISs will probably eventually require government to pay a large part of their costs to become sustainable. However, it is important too that a national MIS does not become the tool of particular private-sector interests that have an interest in biasing the system's data to its own ends. Retaining managerial autonomy – and the perception of managerial autonomy – from *any* interest group are important in order to avoid undermining internal morale and credibility with respect to the outside world.

In concluding this section on the impact of traders of agricultural and livestock commodities on MISs, we should note that they are not the only non-governmental constituency for MIS services. Farmers, processors, consumers, bankers, input traders and NGOs – as individuals or in association – as well as donors & lenders, and international agencies also want access to MIS outputs. In negotiations with MIS, government may represent poorer and less-organised farmers and herders and may fund MIS provision of information they need as a public good. However, most of these groups are capable not only of identifying the market information they need but also paying at least some part of the cost of its provision.

An MIS should demonstrate an institutional responsiveness that capitalises on these needs. Indeed, an MIS should go further, courting these groups and showing them how it can offer them a service to their advantage. An entrepreneurial MIS would sell its services to clients outside the country. However, most MISs will take several years to reach that stage and they should become entrepreneurial only to the extent that they have capacity to produce the services they agree to deliver, in order to maintain their credibility.

5. Developing a regional network of MISs

Developing a West African MIS network requires:

1. reinforcing existing national MISs and supporting the setting up of national MISs where in countries where they do not yet exist
2. enabling national MISs to interact synergistically.

A regional MIS network would boost intra-regional trade; national MISs would do the same but also increase domestic marketing. However, it would be difficult to attribute increments of trade or marketing to an MIS effect. However, there are ways of measuring the success of the systems without any extra research:

- Firstly, noting feedback systematically provides a good measure of the effect of the broadcasts: How many letters, faxes, letters, telephone calls and e-mail does the MIS get from those who listen to its broadcasts and those who read its bulletins and market posters? What is the nature of this feedback: complaints that broadcasts are too long, too detailed, in the wrong language – or too short, insufficiently detailed, and well delivered?
- Secondly, monitoring and evaluation can estimate geographical coverage of penetration by user group (farmer, small trader, exporter, etc.) and how useful to they find it?
- Thirdly, how many entities pay for MIS data? How much do they pay annually? What proportion of the recurrent MIS budget does government pay?

These criteria form attractive criteria by which WARP may evaluate the success of the MIS project. In the third case, an MIS might aim for a 20 percent government contribution and 10 percent of its data sold by year 3, rising to 33 percent and 20 percent, respectively, in year 5.

5.1 Building and reinforcing functional national MISs

The model: Mali's *Observatoire des Marchés Agricoles*

The combination of an efficient, responsive national MIS with both public and private-sector stakeholders can work well. The case of Mali makes this clear. The Malian government understands market dynamics better, and has made better policy decisions, because of the information and analysis it has received from OMA. As a measure of its appreciation of OMA's value, government pays its operating expenses of 100M Fcfa per year. OMA also earns fees for non-core work done while continuing to retain private-sector support because of the valuable information it provides.

Staatz, Diarra and Traoré (2002) attribute OMA's success to several groups of factors. Firstly, the system has had the freedom to respond flexibly over time to private-sector needs, due to continuity of managerial autonomy and sustained donor support. User-needs studies and national workshops have provided a consensus on priorities. Evolving frank and constructive dialogue with traders has generated a sense of ownership that leads them to put pressure on the system to perform. Democracy in Mali reinforces this receptive atmosphere. Secondly, shrewd recruitment and appropriate training has resulted in a strong technical team, while good management has instilled team commitment. Thirdly, OMA has aimed to function as a coordinating and facilitating body, strengthening traders' networks and working towards more effective marketing extension programmes, while leaving the commerce itself

to the traders. Fourthly, the system has consciously kept a balance between public and private roles: a home in the partly independent Chamber of Agriculture keeps the MIS at arm's length from government. Fifthly, setting up management and technical committees has brought in expertise and perspectives from other parts of both the public and private sectors, and allowed the promotion of a transparent image.

Once OMA had taken time to identify users that it could efficiently service, the technical side began. In response to user needs and with stakeholder agreement, OMA broadened the range of price data covered from the traditional cereals and livestock to include those from fruits, vegetables, fish and input markets at the farm gate, wholesale and retail levels. After having identified potential sources and providers of information, it instituted close control of data quality in the markets chosen.

OMA has used a decentralised model for data handling, with remote units linked electronically to each other and to headquarters, allowing rapid transmission of data and efficient networking. It has automated data processing to avoid delays at this stage. Some final products use print media – weekly & monthly situation reports; special bulletins on outlook, market volume and export prospects – and OMA maintains close collaboration with written and electronic press to develop these reports. Others take form of radio broadcasts on local and national radio. Different products and media allow the system's information to reach a range of potential customers.

Drawing on their successful experience in Mali, Professor John Staatz of MSU and Dr Niama Nango Dembélé of PASIDMA recommend a two-phase project for developing national MISs (Staatz n.d.). Phase 1 consists of research for up to a year to study:

1. the basic structure, conduct, and performance of the markets to monitor, by commodity, to get a sense of the major actors in these markets, the major market channels, how these vary in space and over time, some of the perceived problems in market performance, and the most important monitoring points in the system
2. the potential clients for a MIS, tightly defined, with some information on the heterogeneity within each group, especially with respect to their information needs
3. the priority data needs of each group in terms of commodity, periodicity, medium of delivery, and the extent to which the data input can change the market
4. the process, such as national workshops, by which to reach consensus about which data the MIS collects and diffuses
5. current data collection systems, to avoid duplicating existing services and to find ways of adding value to the work of those services
6. the optimal mix in the proposed MIS between data collection, data analysis, and policy analysis, to avoid forcing too many functions into a single organisation

7. the most appropriate institutional home(s) for an MIS, taking into account: (a) where the market news portion of the system would be close enough to the clients that they would feel some ownership of it, (b) where the data would not risk manipulation, (c) whether the MIS would have a managerial or technical advisory board to assure credibility, (d) a location that reinforces managerial autonomy and (e) linkages between separate units that may perform different MIS functions.
8. the information diffusion strategy (medium, periodicity, payment), bearing in mind that in some countries radio stations charge significant fees for airtime
9. appropriate rendering of technical terms in local languages
10. a strategy to build sustainable financing of the system: (a) public funding for the “public good” functions of the system, (b) “fee-for-service” products, (c) legal and accounting issues, (d) private consulting by MIS staff
11. linkages to existing regional market information networks
12. external sources of backstopping needed
13. the staff recruitment and staff development plan

A second, operational phase would follow for 3-4 years. Openness to feedback remains important during this phase, despite the importance of the findings of the first-phase research.

MIS subject matter

MISs might enrich their offerings in a variety of ways. A donor representative has suggested that a regional information system should include both production and marketing data for agricultural and livestock commodities. Analysts equipped with both types of data would be better able to interpret trends in the regional agricultural economy. Alternatively, MISs might include trade volumes or estimates of commodity stocks. Measures of stocks in, and flows of commodities into or out of, markets add significantly to an understanding of market dynamics. Other add-ons might include transport costs, phytosanitary information, or details of trade fairs.

So far, MISs have dealt mostly with market prices because they already find themselves stretched without including other elements. In the specific case of stocks and trade flows, it is notoriously difficult to obtain data with any accuracy: keeping track of all flows between markets, even at major border posts, takes considerable effort; and informal operators have no reason to share the information about their stocks with outsiders. Thus MISs generally consider collection of these data a poor use of resources. Individual MISs, or even the regional system, may eventually find that the demand for information goes beyond price data and respond accordingly. In the meantime, it makes sense to avoid diverting scarce resources from the central task of timely diffusion of price data that traders currently want.

Though trying to report on stocks and trade flows of agricultural commodities may be a waste of time, East African MIS experts note that traders greatly appreciate forecasts of crop production (and consumption). Government offices harbour such information but rarely think to make it available to the private sector in combination with price data.

Representatives of CILSS countries meet annually to combine estimates of food balances, largely based on estimates of cereal harvests, to estimate sub-regional food deficits. They make these estimates public several months after the harvest by which time they probably hold little commercial value.

Even limiting themselves to price data, MISs have difficult choices of what to collect and diffuse (and perhaps analyse). Members of traders' organisations prefer wholesale prices because they tend to work on this scale. However, using wholesale data restricts coverage to a relatively small number of markets that trade quantities on such a scale, thus reducing the usefulness of these data for food-security work, which wants dense market coverage.

Individual electronic bids

MISs can now offer an electronic service to members of traders' organisations that can provide some extra data as a by-product. Traders would post requirements on an MIS website or broadcast them by e-mail to a list of MIS e-mail addresses, e.g., "Amadou Enterprises has 5,000 tonnes of this year's maize to sell at 15,000 Fcfa per tonne, collected from Ségou, Mali". Traders can post (a) bids as well as offers, (b) with or without delivery to destination, or (c) for immediate or future delivery. This virtual market offers a significant service to some medium-sized traders who may not have good access to foreign markets and whose concerns about doing business with an unknown potential business partner in another country will be partially assuaged by the knowledge that he or she is a member of the traders' association in that country. The MIS gains too, by getting direct access to the volumes and prices of what are typically large wholesale transactions – data to which its data collectors in the field would not have access. (The Kenya Agricultural Commodity Exchange already operates such a system for the business community in East African countries but it remains underused: businessfolk prefer trading with faces or voices they know.)

Fee-based operations

In the long run, it seems clear that governments will have to finance MISs in order to get public goods in the form of a flow of basic market data for producers and traders. However, an MIS may partially subsidise its core services with cost recovery or profits from the provision of private goods. OMA and Niger's MIS already generate some revenue in this way. These activities may take the form of additional work for non-government agencies and the private sector, such as:

- more frequent (or more extensive) reports that use data collected but not normally made public
- analysis of data that the MIS would otherwise present raw, without value added
- data collection and analysis on a topic contracted specifically for a client (later made public once the commercial value of the information drops). The International

Fertilizer Development Center has hired OMA to collect prices in agricultural input markets.

An MIS with core public-good responsibilities provides a good platform of experience and skills on which to build these private-good services. In evolving towards a partially self-financing arrangement, MISs will have to take an entrepreneurial approach, not just by responding to market demand but also by developing and marketing products targeted at its prospective clients and enlarging the client base.

Gender and HIV/AIDS considerations

Rarely do existing MISs consider information of particular importance to disadvantaged groups in society. To the extent that they consider users' needs, they tend to concentrate on commodities that are of interest to the members of the traders' organisations, dominated by men, rather than those of interest to women, e.g. vegetables. This also holds true of MIS activities with respect to other disadvantaged groups. At the outset, an MIS must make important decisions on which interest groups to include in the debate about needs. IEHA funding would require MIS to address women's needs, at a minimum. This will require study in each country.

Traders and drivers of lorries they hire frequently travel both within their countries and regionally to buy and sell. This travel puts them at high risk of contracting HIV/AIDS through casual sexual relationships. However, the need for all national institutions to join the fight against HIV/AIDS has not yet reached the MISs in West Africa. Probably because they are struggling just to attain their basic goals, they overlook this factor and do not communicate any HIV/AIDS messages along with their market information. However, MISs have no special competence in designing HIV/AIDS messages. National anti-AIDS programmes can do this. The MIS would then broadcast them as public-service announcements during its popular programmes of market prices.

Management autonomy

Each national MISs should have strong relations with business organisations that allows it to receive feedback to fine-tune its services to commercial needs. In addition, where possible, each should have its institutional home outside government, with flexibility to serve both government and business on an equal footing and with credibility in both sectors.

5.2 Harmonisation of the MIS network

Expanding the network

A regional network should cover all West Africa, corresponding to the Economic Community of West African States, ECOWAS. However, the current group of MISs in the regional network are preponderantly Francophone and members of the *Union économique et monétaire ouest-africain*, UEMOA (as well as ECOWAS). There remains a cultural and linguistic jump for the regional network to move beyond the UEMOA-focused grouping to one that includes all the countries in the region.

UEMOA's member countries share a common currency, a common language (except for Guinea-Bissau), similar legal and administrative system, and many close historical ties. UEMOA countries have recently enacted a common *Organisation de l'Harmonisation du Droit des Affaires en Afrique*, a legal framework for regional business. They are relatively homogeneous and working with them alone is tempting because it would be easier. However, doing so would impose a constraint on intra-regional trade linkages that seems unlikely to correspond to cross-border commercial opportunities.

Business culture in Anglophone countries is more direct, with less deference to the authorities, than in Francophone countries. To the extent that increased trade, including that between Anglophone and Franco phone countries, justifies MIS expansion, it will be necessary to ensure that MIS end-users from these different backgrounds understand each other, and those overseeing their interactions must budget for simultaneous interpretation at meetings and translation of documents.

Nigeria

In particular, careful planning must precede bringing Nigeria into the MIS network. Differences in language, business culture, and administrative and legal systems aside, Nigeria accounts for approximately a third of the regional economy, dwarfing any other economy in the region. Mutual ignorance tends to bring about a fear of Nigeria by economic operators from elsewhere and an indifference about the rest of West Africa by a Nigerian business community understandably focussed on its own large internal market. Relatively weak communications and business exchanges perpetuate this situation. Building links between Nigeria and the rest of West Africa at the public and at the private levels will take careful planning. However, the greatest potential for increased regional trade lies in facilitating these liaisons.

Table 1 summarises Nigeria's market information systems. The Nigerian Ministry of Agriculture and Rural Development (FMARD) has three market information systems, none of which meets the goals of its public-sector users. The Field Project Monitoring Unit (FPMU) in each state reports to the Minister of Agriculture through FMARD's Department of Planning, Research and Statistics (DPRS). The government funds this system poorly and data reach Abuja slowly. In parallel, the Federal Ministry of Agriculture and Rural Development (FMARD) has had a system in which agents of the Agricultural Projects Department (APD) in each state collect data in a sample of the state's markets. They transfer copies to the FMARD's Projects Coordinating Unit (PCU) in Abuja for national collation. PCU obtains better data than DPRS because of donor funding. However, PCU has no mandate to diffuse prices for business decision-making and has made little use of media for broadcasting.

Table 1
Nigerian market information systems for agricultural commodities

	Market-chain level	Commodities	Diffusion
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		retail	wholesale	inputs	crops	livestock	admin.	media	internet
FMARD	FPMU	x			x	(x)	x		
	PCU	x			x	x	x	(x)	
	SGRD		(x)			x	x		
FOS & CBN			x		x				x
USAID-funded	RUSEP	x	x	(x)	x			x	x
	DAIMINA	x	x	x	(x)			x	x

Notes:

1. Parentheses indicate less than full coverage in space or time
2. "admin." = "for administrative use"
3. Maximum lag in availability: admin. – 1 year; media – 1 week, internet – 1 day.

The Central Bank of Nigeria (CBN) and the Federal Office of Statistics (FOS) collect data for the national accounts and consumer price index (CPI) respectively. The retail prices that FOS gathers for its CPI take up to six months to reach Abuja; FOS does not diffuse them. CBN and FOS sometimes use DPRS and PCU data. Many FOS publications appear years after the collection of the data they contain. However, CBN plays an important role in setting up the Commodity Exchange Market (CEM), which will operate simultaneously in Lagos and Abuja. When CEM opens, probably later in 2003, it will generate real-time data on quantities traded and the associated wholesale prices, which should be available electronically. Commodities will include: grains, cowpeas & beans, cassava products, and tree-crop products. If the exchange spawns sufficient business, it will become the wholesale reference market for Nigeria and probably for its neighbouring countries.

Two projects financed by USAID/Nigeria are in the process of improving the availability of price information to Nigeria's traders in agricultural commodities and inputs. The Rural Sector Enhancement Program (RUSEP)⁴⁵ gathers retail data in three markets in four (of 36) states. Data flow in by mobile phone, e-mail and fax. PCU and the ADP office in each state each have recording studios that they have hitherto used only for recording radio programmes of agronomic advice for farmers. Now RUSEP uses them to record MIS programmes for radio diffusion. The broadcasts take place in the major language of that state by the most expeditious radio station.

RUSEP plans to work with FMARD to build capacity in PCU and equip it with computers and cellphones to allow the unit to oversee this process itself. Simultaneously, it is negotiating with a major newspaper, *The monitor*, for a column on agricultural market information that journalists will write based on PCU data; it also plans to promote the posting of agricultural prices in marketplaces. RUSEP maintains a web site with Nigerian MIS data. Among its other goals are: to expand activities to more states and to include daily wholesale prices in what it offers the market. The challenge is to do all this while maintaining both data quality and speed of transmission. RUSEP intends that the demand for data from the private sector – professional associations and traders – should drive the system.

⁴⁵ USAID/Nigeria finances RUSEP; the International Institute for Tropical Agriculture (IITA) and Winrock International manage it. IITA houses RUSEP on its Ibadan campus.

Thus it seems that RUSEP follows most of the steps that made OMA a success in Mali. However, one notable difference is that the programme intends to build the national MIS within government: it sees the advantages of building it at arm's length from government but believes that doing so would create much more work and major additional costs. Perhaps it is for government to debate the transfer of certain PCU functions into a different institutional setting where they become more independent of government. On the other hand, this may seem perverse in Nigeria, where the private sector fights to remain close to government. Unfortunately, USAID funding should end at the end of September 2003, though it appears that an extension may prolong this for another six months. However, in either case, there will not be enough time to fully institutionalise the system. Similarly, under current funding, it seems very unlikely to have the time to integrate its MIS into a West African MIS network, though it expresses an interest in doing so as a logical extension of its current work.

Developing Agricultural Input Markets in Nigeria (DAIMINA), run by IFDC, principally attempts to redynamise the fertiliser market, which slumped in the mid 1990s. DAIMINA is working to integrate the prices of fertiliser and other inputs into an improved MIS that will link to regional networks. Throughout Nigeria, DAIMINA uses ADP enumerators to gather weekly wholesale and retail prices of agricultural inputs and, in the states where it has formed trade associations for inputs to agriculture, it also gathers prices of agricultural commodities. Trade associations that DAIMINA has set up also contribute data. This currently results in up-to-date monthly data on input and crop prices. From March 2003, PCU and the ADPs should be organising radio broadcasts of these data.

Crop-chemical companies, consumer groups, seed companies and food-processing companies have all started contacting the project for details of input markets. In addition, it has established links for cotton growers with their counterparts in Kenya in order to help them obtain improved seed. The project aims eventually to have access to the previous day's market data. DAIMINA launches its web site in February 2003 and its data should then appear on the site.

DAIMINA collaborates with PCU in these MIS activities and co-ordinates with RUSEP. It concedes there exists some duplication of functions between the two projects. For its part, RUSEP notes that it works with the seed component of DAIMINA but does not know what DAIMINA is doing in MIS. Under current proposed funding, DAIMINA will continue until 2009, in contrast to RUSEP's proposed end in September 2003, with a possible extension until March 2004.

Thus there exist two USAID-funded activities that promise to dovetail well into the WARP network. Both already have websites. Both work actively with the private sector. Both have expressed an interest in linking with any network that WARP may fund. At least DAIMINA should continue its operations for the next seven years, by which time it should have become self sustaining. In addition, should CEM take off, it will become important to link its output into a regional MIS network.⁴⁶

⁴⁶ For more detail on Nigerian MISs, see the author's report: *Report to USAID's West Africa Regional Program on a trip to Nigeria, 18th – 28th January 2003*

Other regional market information networks

In addition to the nascent network of market information systems that PASIDMA has facilitated, two other comparable networks, based in Abuja and Lomé, have recently started. A third, with a classic food-security perspective, will start soon.

Since October 2000, IFDC has run the African Agricultural Market Information Network (AFAMIN), financed by the Dutch government and based at IFDC's Africa headquarters in Lomé. AFAMIN's web site provides links to country-specific sites in Burkina Faso, Ghana, Mali, Nigeria and Togo, as well as providing information on agricultural policies and regulations; fertilisers, pesticides, seeds, crops and livestock; and an interactive buy-and-sell section. It aims to link farmers' organisations, agri-input companies, financial institutions, government agencies and donor agencies. AFAMIN intends to add Benin, Senegal and Côte d'Ivoire to its system. It is not clear how much further than the web site AFAMIN's activities extend. (IFDC c2002)

Complementing AFAMIN, the Marketing Inputs Regionally (MIR) project – also run by IFDC – will network countries with the aim of developing trade in agricultural inputs. The Dutch government will finance MIR for seven years from January 2003. Based at ECOWAS headquarters in Abuja, its first phase will electronically link MISs for Ghana, Mali, Nigeria and Togo. A second phase will include Burkina Faso.

Separately, ECOWAS has just signed an agreement with FAO for a Technical Cooperation Project (TCP) that for “Strengthening and Coordination of Information Systems on Food Insecurity, Vulnerability and Food Trade in the ECOWAS Countries”. The two partners have designed the TCP “to lay the foundations to assist the implementation of a regional food security information system (RFSIS) covering all the ECOWAS countries, based on the existing information systems” (FAO and ECOWAS 2001). As such, this regional network will link together classic food-security-oriented MISs, such as those that exist at AGRHYMET, USAID/FEWS, FAO/GIEWS, WFP/VAM and EC/RESAL, focussing on the provision of information on “geographical zones and populations that are particularly vulnerable to food crises”. It is not trader-focussed. In implementing RFSIS, the TCP will support the setting up of an agricultural data bank at the sub-regional level and the monitoring of agricultural product prices and stocks and the sub-regional trade in food, livestock, fresh and processed fish, etc. RFSIS will thus contribute to identifying obstacles to sub-regional trade. It will also provide an early-warning and forecasting function for regional decision-making. The project document emphasises the harmonisation of approaches and tools in food-security information management and in avoiding duplication of other institutions' information systems. (FAO and ECOWAS 2001)

In contributing to regional MIS linkages, WARP will want to take into account the work that AFAMIN and MIR have already started. Ongoing dialogue, leading to a rational division of funding responsibilities between USAID and the Dutch Cooperation could significantly reduce the cost of WARP's contribution to this effort.

The role of regional organisations

An important element in developing MISs for improved regional trade is agreement by the major regional organisations. Before investing in this area, donors reach agreement with regional organisations on an efficient and mutually acceptable way to allow MIS expansion to full regional coverage.

ECOWAS has agreed that CILSS (*Comité inter-états pour la lutte contre la sécheresse dans le Sahel*) based in Ouagadougou will perform food-security work for the entire West African region, not just the Sahelian states. However, as noted above, the ECOWAS secretariat in Abuja will soon receive TCP support from FAO to set up a regional network of classic food-security information systems, including their MIS components. It would seem more appropriate for CILSS to run this classic food-security network operate and that ECOWAS (and/or UEMOA, which has its own trade strategy), with a stronger mandate for regional economic integration should play a role in a trader-oriented MIS network.

Donor collaboration

Donors are currently aligned with different West African regional organisations. France and the EC preferentially support UEMOA; the US has historically funded CILSS and has committed itself to working with ECOWAS. In this context, it is important that donors agree to harmonise their funding for, and co-ordinate on funding to, an MIS network that can meet regional institutions' goals.

As noted above, collaboration with the Dutch Co-operation on linking a WARP-funded MIS network to existing MIS networks is important.

MIS network structure

MISs have collectively adopted a decentralised, distributed model for their regional network. As with the internet, no single location exists to which MISs send data, where it is processed, and from which it is then diffused. In contrast, a centralised information centre would have the advantage of working with a single regional database for analysis, diffusion and archiving in a unified fashion. Dealing with all data in a single hub appears to offer advantages of cost saving and ease of data handling once all inputs have been consolidated. However, with its current resources, the regional network considers such a system too cumbersome, preferring a simpler decentralised model of bilateral exchanges of harmonised data. Further, failure at the hub condemns all national systems to suffer. Finally, a decentralised system has advantages of greater responsiveness to national needs through subsidiarity.

Annual meetings resolve general issues and allow planning to take place. On the assumption that most intra-regional trade will involve countries with common borders, more frequent sub-regional meetings (of both MIS and traders' organisations) may prove advantageous, involving e.g. the following groups of countries: Guinea-Mali-Senegal, Benin-Niger-Nigeria, Burkina Faso-Ghana-Togo.

A single network website can provide information for both national MIS researchers and the regional business community; discussion of day-to-day issues can take place by e-mail; backstopping travel can deal with most unforeseen issues that e-mail cannot resolve. Both the MIS network and ROESAO can operate well using this low-cost model but only as long as national offices use electronic communication well. Those providing support may have to organise training in management of spreadsheets and databases but also in skills as simple as typing so that ordering, analysis and transmission of data and any associated commentary take place efficiently.

Regional standards

The network of MISs requires standardisation of at least data-formats to allow easy comparison of prices between countries. This standardisation has already begun, with the adoption at the second SIM network meeting in January 2002 of a set of commodities for which MISs will exchange prices, along with the corresponding units of analysis and data-collection frequency. Each national MIS will have reasons to go beyond this list, according to its own needs, developing its national operations in a variety of dimensions – data collected, diffusion methodologies, relations with government and the private sector – as long as these do not conflict with its core network responsibilities.

Regional radio broadcasts

A MIS network might organise regional weekly market-information broadcasts for West Africa in English and/or French, broadcast regionally on the short wave band or nationally on AM or FM radio. The network might also provide up-to-date prices and other market information via the WorldSpace Foundation, which may provide an ongoing project to launch a USAID-funded East African regional trade information system with free bandwidth. The foundation's Assistant Director for International Programmes is Aaron Sundsmo (asundsmo@worldspace.org).

6. USAID/WARP support to MIS-related initiatives

USAID/WARP should promote the setting up of a sustainable West African network of MISs. This section presents a ten-year vision of how that might be done, starting with the existing network members and methodically increasing membership until all ECOWAS countries join after five years, and gradually decreasing support over the next five years. This would result in a funding requirement that would start at a level comparable to that of the existing PASIDMA project, grow to a peak in years 5 and 6, and then decline to year 10 (although this paper does not provide a budget). WARP might want to fund this process, described below, on its own or with other donors. Judicious collaboration with USAID/Nigeria and with the Dutch Co-operation (for regional MIS networks) should considerably reduce the period needed to develop this system, but WARP should not underestimate the time taken to set up sustainable systems without a strong MIS tradition (e.g. Sierra Leone) or the institutional reinforcement that will facilitate sustainability.

A network of MISs requires a project to develop it. PASIDMA plays a pivotal role in supporting the current nascent network under the guise of reinforcing Malian MIS capacity. Though there remains more work ahead to improve the Malian MIS, the time has come to give PASIDMA an ECOWAS-wide mandate, reinforce it, and rename it, perhaps as the *Projet d'appui au réseau ouest-africain d'information sur les marchés agricoles*, PAROAIMA, and as the West African Agricultural Market Information Network Support (WAAMINS) project. Five-year renewable USAID/WARP funding would give the project the scope to fully develop the system.

PAROAIMA would have offices in Bamako or Ouagadougou and in Abuja, with daily electronic contact. The choice of a Bamako office has the advantages that it is the current location of considerable MIS expertise. Conversely, Ouagadougou hosts UEMOA, an economic and monetary organisation that would benefit from direct exposure to trade and marketing issues arising from MISs and traders' associations. One of the existing USAID/Nigeria-funded MIS projects would house the Abuja office, which would develop and maintain relations with ECOWAS (which, like UEMOA, would benefit from exposure to trade and marketing issues raised by a user-driven MIS), the Nigerian government and the Nigerian private sector. It would also support the flow of information and study tours between Nigerian MISs and traders with those in other countries, and vice versa. Staff in both offices would be fluent in both English and French.

In designing PAROAIMA, WARP would want to ensure the appropriate institutional context, through formal consultation with (a) USAID bilateral missions in West Africa, (b) ECOWAS, UEMOA and CILSS (c) other donors and lenders involved in this type of activity, particularly the Dutch. Consensus at the start, and regular consultation thereafter, will make the project's activities easier and more successful.

PAROAIMA should explain clearly to national governments the advantages an MIS can bring, in order to mobilise state funding for sustainability. To the extent that states commit to supporting the operating costs of their own MISs, WARP's investment need cover only human capital development within the MIS and acquisition of new information technologies. In addition, it will be necessary to build a constituency for MIS among private-sector groups because, in a democratic environment, governments not only listen to individuals contacting them directly but also to lobby groups within the business community. At key moments, such as the instigation or restructuring of an MIS, the best way to address the public and private sectors at the same time is often to hold public meetings. At the meetings, various parties can feel that they have had a chance to air their views in the debate over the design of the MIS and, in turn, can publicly endorse the concept.

PAROAIMA would run for five years, renewable for a second five-year period. Over the course of its first five years, it would sequentially bring into the MIS network countries not currently members. Every six months, it would start a "new country assessment" following the phase 1 methodology outlined above by Staatz and Dembélé. A year after the start of PAROAIMA, a joint regional meeting of the MIS network and the *conférence* would debate the recommendations of the first such assessment and the proposed workplan for the country just assessed. The meeting would include representatives from the public and private sectors

of all ECOWAS countries, not just those with members in either the MIS network or the *conférence*. In subsequent years, the joint regional meeting would consider two such assessments.

The order of inclusion of non-member countries in this process would depend on the:

1. the apparent readiness of existing information-system structures to participate
2. the enthusiasm and degree of organisation of traders and other potential end-users
3. the level of complementarity of market information about that country for existing members (as revealed by member-country preferences for new countries).

An initial rapid-reconnaissance appraisal (RRA) of each non-member country would reveal the degree to which countries meet the first two of these criteria. Information relevant to the third would emerge via a poll of member countries. After the RRA and the poll, at the first annual meeting organised by PAROAIMA, members would reach consensus on the order of inclusion. This decision would allow PAROAIMA to draw up a five-year expansion workplan and, with donor approval, start the phase 1 “new country assessments” in the non-member countries. The workplan would also include some ongoing support to existing member-country MISs and to the network.

This phase 1 process would treat Nigeria like all other prospective members because, although larger and more complex, its economy will still lend itself to the same “new country assessment” methodology. Moreover, once it joins the network, the presence of at least one MIS project funded by USAID/Nigeria means that Nigeria will not require considerably more capacity building support than other countries. Indeed, for this reason, it may be easier and faster to bring Nigeria on stream than, say, The Gambia, which probably does not already have project support for a domestic MIS.

In an effort to accelerate membership growth without straining PAROAIMA’s funding envelope, non-member countries may choose to develop their MISs by completing the “new country assessments” under separate financing (but using the network-approved core methodology). Non-membership of a given country for part of the first five years would not exclude public or private-sector organisations there from receiving market information from the regional network, either by accessing the network web site or by receiving informal e-mails of prices. .

Over the course of the first five years, the process outlined would cover all non-member countries. However, due to the phasing of the start of development work over the course of the first five years, at the end of that period some MISs would have only recently begun to receive support. Moreover, it seems likely that at least several others will require continuing – though declining – support as they institutionalise their activities and adapt to acquire the skills needed to meet end-users’ needs. For this reason, donors should foresee the need for a second five-year period, but one including quickly diminishing levels of funding for the network as a whole and for the more mature MISs, and defining a clear exit strategy for donors over years 6 – 10.

PAROAIMA would fund a variety of activities, outlined below. Some actors in these activities would have the means to self-finance, or partially so. The project would therefore

use its funds to leverage further funds from other donors and from the beneficiaries themselves. For instance, it would limit grants for transport and/or lodging from private-sector participants to these meetings. However, it would fund MIS staff and outside experts to these meetings where they did not have other financing.

As the network expanded to include Anglophone countries within ECOWAS, it would be important to include budgets for simultaneous interpretation at meetings and translation of documents, from English to French and vice versa.

In all this, the traders' network and the MIS network would be complementary. Both are institutional arrangements to promote regional trade. Traders provide MIS with information on market opportunities and they are the first clients of a regional network of MISs.

PAROAIMA would have several functions, details of which would depend on the workplans developed during each phase of the project according to the process described above:

1. It would liaise with other regional networks of MISs, establish links with them, and work to harmonise methodologies and synergistic work plans.
2. It would perform, or contract and oversee, the "new country assessments" in the non-member countries.
3. It would provide support to national MISs as they come into being and evolve. Funding to national MISs should be conditional on full network participation.
4. It would organise multi-country training courses in French and, as Anglophone countries join the network, in English to cover management, database use, economics and other skills needed for efficient MIS operations. These should be open to staff of newly joined and more established MISs, according to need. PAROAIMA would also serve as a clearing-house for study trips for staff of less sophisticated MISs to the offices of the more sophisticated.
5. It would channel continuing funding to the annual MIS network meetings. For promotional reasons, where practical, each of these meetings should take place in a country with a newly-established MIS.
6. It would support a bilingual (English/French) web page for the MIS network to parts of which national MISs could have access to add their most recent data to their databases and post offers or bids from members of *bone fide* traders' associations in their country.
7. It would provide ongoing support to the *Conférence régionale sur les perspectives agricoles en Afrique de l'Ouest*. This support would take the form of limited funding to support annual meetings of the organisation and more localised *ad hoc* meetings of *conférence* members from adjacent countries to develop specific plans for development of agricultural trade between pairs or trios of countries, e.g., Guinea-Mali-

Senegal, Benin-Niger-Nigeria, Burkina Faso-Ghana-Togo. Funding could also cover specific training needs and study tours.

8. It would continue PASIDMA's support to ROESAO, particularly through responding to innovative proposals from this network or its members.
9. Where appropriate, it would also support initiatives by end-users other than traders: farmers, processors, consumers, bankers, input traders and NGOs.
10. It would promote the mainstreaming of gender and HIV/AIDS issues into the work of the individual national MISs and at the network level.
11. If USAID/WARP could obtain the collaboration of the Voice of America or WorldSpace for weekly market-information broadcasts for West Africa in English and/or French, it would organise these broadcasts. Alternatively, it would make available to member MISs programmes of regional market content for national broadcasts, or use web-radio to diffuse such programmes.

Bibliography

- APCAM, PASIDMA-MSU & USAID 1999. *1^{er} édition de la conférence régionale sur les perspectives agricoles en Afrique de l'Ouest* Bamako, 7 – 8 avril
- APCAM, OMA-PASIDMA-CAE & USAID 2000. *2^{eme} édition de la conférence régionale sur les perspectives agricoles en Afrique de l'Ouest* Bamako, 7 – 8 février
- APCAM, OMA-PASIDMA & USAID 2001. *3^{eme} édition de la conférence régionale sur les perspectives agricoles en Afrique de l'Ouest* Bamako, 13 – 15 mars
- FAO and ECOWAS 2001. *Strengthening and coordination of information systems on food insecurity, vulnerability and food trade in the ECOWAS countries* Project document TCP/RAF/0179(A), November
- IFDC c2002. *IFDC-DAIMINA (Developing agri input markets in Nigeria) launches AFAMIN Nigeria website* Abuja
- Réseau des SIM 2002. *Deuxième rencontre du Réseau des SIM* Cotonou, 16 – 18 janvier
- ROESAO 2000. *Première rencontre du réseau des opérateurs économiques du secteur agro-alimentaire de l'Afrique de l'Ouest* Niamey, 10 – 11 août
- Staatz, J. n.d. *Notes on Developing an Agricultural Market Information System: Lessons from Mali* Michigan State University, Dept. of Agricultural Economics, mimeograph
- Staatz, J., Diarra, S. and Traoré, A. 2002. *Developing Sustainable Agricultural Information Services: Lessons from Mali* PowerPoint presentation, May

MIS status of ECOWAS countries, December 2002

	MIS exists?	MIS network member?	Commodities included?			Traders' organisation exists?	Radio broadcasts?	e-mail?	Cost recovery?	Other details
			cereals	livestock	other (specify)					
Benin	yes	Yes	yes	no	fruit & veg, fish	Yes	Yes	yes	no	local FM broadcasts
Burkina Faso	yes	Yes	yes	no		Yes	Yes	yes		
Côte d'Ivoire	yes	Yes	yes	no?	fruit & veg	Yes	Yes	yes		Information pertains to the period before September 2002
Gambia	?	No								
Ghana	?	No								
Guinea	yes	Yes	yes	no	palm-oil	Yes	Yes	yes	yes	Cost recovery plan and fee schedule adopted
Guinea-Bissau	?	No								
Liberia	?	No								
Mali	yes	Yes	yes	yes	inputs, horticulture, fish	Yes	Yes	yes	yes	local FM broadcasts
Niger	yes	Yes	yes	yes	horticulture	Yes	sometimes	yes	yes	separate MISs for cereals and livestock
Nigeria	several	No	yes		inputs	Yes	some	yes	no	3 Min. of Ag. MISs, 2 USAID projects, Commodity exchange
Senegal	yes	Yes	yes			Yes	Yes	yes	no	separate MIS for imported rice
Sierra Leone	?	No								
Togo	no	No	no	no		No	No	no	no	The grain board collects some price data for government use only.
Total	?	7								

Producers Organizations

Community-Based Producer Organizations⁴⁷

Jim Bingen⁴⁸

POLICY BACKGROUND OBSERVATIONS

Beginning in the 1980s, most governments in the sub-region began adopting a relatively uniform set of fiscal and economic policies that included the liberalization of agricultural marketing. Specific reforms differ from country to country, but commonly include measures to encourage greater private sector participation in agricultural marketing functions, the reduction or elimination of public subsidies for agricultural input and product marketing, and agricultural export diversification.

As government agencies have withdrawn from the market, both governments and donor agencies continue to promote a wide variety of producer organizations to fill the gaps in government services. Although reforms have been implemented in a number of countries, the legacy of governmental paternalism has not been easy to shed. Government officers, whether in research or extension services continue to be reluctant to turn over responsibilities to producers. Moreover, rarely do the reforms challenge the continued influence of traditional village elite in producer organizations. Furthermore, few, if any, reform programs have successfully addressed the endemic under-capitalization and limited management skills that have always threatened the viability of producer groups in the sub-region. Finally, many groups are tied directly to donor agency financed international and national NGO programs. As a result, they are primarily loose groupings of farmers created principally (and opportunistically) to gain access to production credit and supplies; they rarely continue when the donors shift their funding and program priorities.

The recent World Bank paper, *From Action to Impact: The Africa Region's Rural Strategy*, nicely summarizes conventional wisdom concerning the contribution of "voluntary producers' organizations" to rural development. As part of the "institutional foundation" of rural development, "producers' organizations amplify the political voice of smallholder producers, reduce the costs of marketing of inputs and outputs, and provide a forum for members to share information, coordinate activities and make collective decisions. Producers' organizations create opportunities for producers to get more involved in value-adding activities such as input supply, credit, processing, marketing and distribution"⁴⁹. The acknowledgement that farmers' organizations might contribute to amplifying the political

⁴⁷ Please cite as: Bingen, James (2003). *Community-Based Producer Organizations: A Contribution to the West Africa Regional Program Action Plan for the Initiative to End Hunger in Africa*. Abt Associates, Inc. Bethesda, MD. March.

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⁴⁹ World Bank (2002). *From Action to Impact: The Africa Region's Rural Strategy*. Washington, DC, The World Bank, Rural Development Operations, the Africa Region: 16

voice of small farmers is an important step forward in thinking about the complementarities between political power and markets.

Current national and regional networks of producer organizations in West Africa tend to be composed of a mix of at least three types of groups. The mix of these different types will be important in designing effective support strategies.

Largely Commercial Groups.

Members of this type of group tend to operate largely commercial, export-oriented farms. These farms are usually run by retired civil servants, including school teachers, and the retirement income provides them the ability to be well capitalized⁵⁰. When groups are composed largely of producers who represent this kind of farm type, member relationships are commonly 'contractual' since group membership offers a collective opportunity for each member to protect shared, and largely commercial, interests. Most export crop cooperatives fall into this category.

Mixed Farming Groups.

This type of group tends to be built around the protection of members' interests in one cash crop. But, in contrast to the largely commercial groups, the members tend to operate small-scale, diversified production enterprises that are less highly capitalized. In addition, members of this type of group depend less heavily upon marketing a single commodity as the principal source of farm income. A wide range of groups engaged in various types of contractual production and marketing programs are commonly found in this category.

Subsistence-Oriented, Mixed Farming Groups.

A wide variety of self-help or mutual labor associations illustrate this type of group. These groups are usually village- or community-based, and they are built commonly around customary principles or ideas of promoting and protecting individual and collective well-being. Members operate farm enterprises that are characterized by very low levels of capitalization and they do not rely on the market as a principal source of farm income. Non-tradable commodities tend to dominate their production systems and labor may be the primary and often only asset. Non-governmental organizations and government agencies tend to be involved in establishing these kinds of groups.

This typology offers one means to understand the involvement of different types of producer groups in agricultural marketing, agro-enterprises and in technology development. Producer groups whose members' enterprises are highly capitalized and who produce for a highly competitive market are usually interested in seeking ways to be involved in marketing and/or controlling important phases of agricultural technology development. Since the profitability of the members' enterprises depends largely on assured access to markets and on assuring the use of the most highly productive, and cost-effective technology, members should be expected to act as market entrepreneurs and to push their group to stay in front of the 'technology development curve.' Similarly, these largely commercial-based groups will not only be more aware of how policy changes affect their role in marketing and technology

⁵⁰ Large plantations as found in Ghana or Côte d'Ivoire would be at one end of the continuum of this category; more frequently found are larger (10+ hectare) fruit and cotton farms that often rely on tractor power.

development, but they will tend to have the capacity to take action to protect their interests. In addition, groups with highly commercialized interests tend to attract greater attention by government decision-makers.

As the level of capitalization and degree of dependence on the market among members declines, producer groups tend to take a more limited, discrete and functional role in marketing and technology development. The activities in which groups become involved usually reflect the most immediate and concrete interests of their members. For example, organizations comprised of largely mixed farming enterprises that are highly capitalized and which rely on marketing at least one cash crop might see joint marketing or the promotion of improved cultivation practices as an effective way to maintain their competitive edge.

Producer Organizations and Policies.

When considering the opportunities that producers networks confront, and the ways in which these networks might be supported in order to work more effectively with producer organizations in the sub-region, it is useful to distinguish among the types of policies in which different types of groups might become involved. *Economic, fiscal and financial policies* include the national and international dimensions of commodity and input prices as well as taxes and tariffs on goods and supplies. *Technology policies* deal primarily with the priorities for the development and use of biological, chemical and mechanical technology. Finally, *institutional policies* include the rules, norms and procedures such as those addressing land use and tenure laws, as well as the agencies that deal with activities, including extension, research, marketing and the delivery of rural services.

Some types of policy are more susceptible to influence by producer organizations than others. Most groups find it difficult to influence all types, and few are skilled in influencing economic, fiscal and financial policies. The more highly capitalized, or commercially based groups tend to have a comparative advantage over less highly capitalized groups in lobbying. But all groups usually find the need to create coalitions with other groups, NGOs, etc. in order to influence policy. In addition, different policies compel farmer groups to confront the countervailing pressures of other, and perhaps better-organized groups in society. For example, urban-based, consumer groups commonly win the debate over food pricing policy. As a result of these kinds of hurdles, small producer organizations tend to limit their "policy concerns" to assuring access to agricultural services or to improving the terms upon which such services are delivered.

Historical Background. Villager and producer organizations have been active in networks across the Sahel and West Africa since the early 1970s. The two best known networks that helped to form several current farmer-leaders or lay the foundation for new networking initiatives are **INADES-Formation**, and the *Association Internationale Six-S (Se Servir de la Saison Sèche en Savane et au Sahel)*, which was established in 1976 in response to the mid-1970s drought, and involved village, producer and NGO leaders from Burkina Faso, Senegal, Benin, Mali, Togo, Niger, Mauritania, Guinea-Bissau and the Gambia.

Since the late 1970s and into the 1980s, producer organizations in West Africa arose and evolved largely in response to broader economic, agricultural and rural development policy

changes driven by economic structural adjustment and steps toward governmental decentralization. The Senegalese network or Federation of Non-Governmental Organizations (FONGS) established in 1978, and initially influenced by the Six-S Association, was one of the most well-known of this generation of national networks of village-based and smallholder producer organizations.

By the early 1990s, and as the second wave of democratization spread across West Africa, the CILSS/Club du Sahel brought together several separate, yet related West African groups (e.g., FONGS, or the newly established Malian cotton farmers' union, SYCOV), as well as European-based non-governmental groups that supported various types of local organizations and networks, to launch and provide financial support for an informal "Plate-forme" of producer organizations in CILSS-member countries⁵¹. These investments, and the experiences gained in coordinating producer groups across the Sahel since the 1970s, contributed directly to the creation of ROPPA.

PRODUCER ORGANIZATION NETWORKS IN WEST AFRICA - OVERVIEW

There are two major types of networks of producer organizations that are active in the West Africa sub-region.

The first type includes those based in the sub-region:

- **ROPPA** (*Le Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest*), created in July 2000, and with a headquarters recently opened in Ouagadougou, this network brings together representatives of farmers' organizations from: Bénin, Burkina Faso, Côte d'Ivoire, Gambie, Guinée, Guinée-Bissau, Mali, Niger, Sénégal, and Togo; and it plans to expand its membership to farmers' associations from the ECOWAS member countries.
- **INADES-Formation**, headquartered in Côte d'Ivoire and with national programs since the 1970s in Cameroon, Chad, Togo, Côte d'Ivoire and Burkina Faso, and,
- **The Regional Network Project of Chambers of Agriculture** (PRIECA/AO, *Projet pour le renforcement de l'Interface entre Etat et Chambre d'Agriculture de l'Afrique de l'Ouest*), supported by the CMA/ADC, *La Conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest et du Centre*⁵², or the regional conference of the Ministers of Agriculture of West and Central Africa; the project includes national chamber affiliates in Mali, Togo, Bénin, Côte d'Ivoire and Guinea, as well as Niger and Burkina Faso where legislation creating chambers is pending.
- **INTERFACE**, established in 1997 as part of the CILSS Sahel 21 initiative, is based in Ouagadougou in order to encourage collaboration among many women-led small agri-businesses and micro-enterprises, unions, cooperatives and NGOs. The network seeks to identify and expand marketing opportunities, as well as improve business skills and capacity of its member groups.

⁵¹ The Plate-forme emerged from the CILSS/Club du Sahel-sponsored 1994 Praia Conference on Land Tenure and Decentralization and the follow-on 1996 meeting in Koudougou, Burkina Faso.

⁵² The CMA/ADC, established in 1991 by 14 West African and 6 Central African governments, is the one regional governmental organization that is concerned with producer organizations, agricultural development and the creation of a regional agricultural market.

- **REFESA, Réseau des Femmes Sahéliennes**, was established 1997 as part of the CILSS Sahel 21 initiative for the purpose of strengthening national networks of women in each CILSS-member country.

Supportive of the above networks are two additional regional network organizations:

- **FRAO/WARF**, the West Africa Rural Foundation in Dakar, whose goal is to help rural communities develop their own resources and capacities for achieving a greater measure of self-sufficiency, and,
- **CORAF/WECARD**, the West and Central African Council for Agricultural Research and Development, established in 1987 by representatives from the national agricultural research institutes from 14 countries, seeks to improve the capacity of agricultural research throughout the region.

The second type of network includes those based in Europe and working directly with the Africa-based networks and/or with members of these networks. These Europe-based networks include:

- **APM-Afrique (*Agricultures-Paysannes-Sociétés et Mondialisation-Afrique*)** sponsored principally by the foundation, *Charles Léopold Mayer pour le Progrès de l'Homme* (FPH) in Paris with additional financial support from the French Ministry of Foreign Affairs, the European Union, IFAD, CTA and the Gaia Foundation
- **IFAP/FIAP**, (The International Federation of Agricultural Producers) based in Paris and with 100 national organizations of “family farmers” in 71 countries; most of the member groups in West Africa are associate members and include those agricultural and development groups who work on behalf of farmers
- **ICA**, (International Cooperative Alliance) a Geneva-based international non-governmental organization that unites, represents and serves co-operatives worldwide. It is closely affiliated with the Geneva-based partnership, COPAC (The Committee for the Promotion and Advancement of Cooperatives) of representatives of the cooperative movement, farmers’ organizations (e.g. IFAP), the UNDP, the FAO and the ILO in order promote and coordinate sustainable cooperative development through policy dialogues, technical cooperation and information, and concrete collaborative activities.
- **Agri-Terra** founded in 1997 as a non-governmental network to promote, facilitate and support cooperation between “rural people’s organizations” in the Netherlands and in developing countries.
- **Inter-Réseaux-Développement Rural** (Paris) seeks to encourage and sustain discussions of a wide range of rural development issues (in a global context) and information exchange among grassroots activists in Africa. Created in 1996 from the merger of three networks *Groupements Associations Villageoises et Organisations Paysannes (GAO)*; *Recherche-Développement (RD)*; and *Stratégies Alimentaires (SA)*, the Inter-Réseaux is based in Paris and funded by principally by the French Ministry of Foreign Affairs (DGCID/DCT/EPS).

STATUS OF EXISTING REGIONAL AND NATIONAL NETWORKS

In addition to continued economic structural adjustment policies, and especially continued agricultural sector reforms, producer organizations and networks operate in a new context of

global competitiveness between Northern and Southern farmers, as well as continued but variable democratization and governmental decentralization. Different producer organization networks respond to these opportunities in different ways.

ROPPA

In July 2000 representatives of producer organizations from Bénin, Burkina Faso, Côte d'Ivoire, Gambie, Guinée, Guinée-Bissau, Mali, Niger, Sénégal, and Togo met in Cotonou in order to establish a new type of West African network to focus on the role of producer organizations in context of West African regional integration. Building on many shared experiences through networking activities sponsored by CILSS/Club du Sahel or various European groups (APM-Afrique, Inter-Réseaux, etc.) these representatives sought to create a sub-regional capacity to represent smallholder producer interests in rural development and agricultural policy discussions held under the auspices of the West African Economic and Monetary Union (UEMOA)⁵³.

In this sub-regional framework, ROPPA members are committed to:

- promoting the values of smallholder (peasant) agriculture as the basis of family agriculture⁵⁴;
- assuring the best use and sharing of information about different experiences of members;
- helping organizations in each country become more involved in national policy making; and,
- encouraging solidarity among organizations and growers, including representation at regional and international arenas and cooperation with other regional organizations.

More specifically, ROPPA seeks to create a policy voice for West African smallholders in discussions to standardize the Common Exterior Tariff, OHADA and judicial systems, and the preparation of a sub-regional Agricultural Policy. In order to develop this policy voice, ROPPA recognizes the opportunities provided across West Africa as more countries decentralize government administration and thereby create the occasion for more grassroots actors to become involved in policy. At the same time ROPPA recognizes that these actors require new capacities for this kind of involvement. In response, ROPPA seeks to:

- reinforce the establishment of a farmer *plateforme* or coordinating/federating body in each country;
- strengthen the capacity of national level groups in each country to become involved in policy making; and
- move producer organizations from a production-only focus to a concern with policy issues.

ROPPA is governed by a sub-regional "Convention" or Conference composed of 7 delegates from each country. Each country delegation must be representative of the diversity of farmer groups in the country and include at least one women representative. The Conference is expected to meet at least twice a year. The Executive Committee, composed of 10 members,

⁵³ ROPPA is considering how to expand its membership to producer organizations from the ECOWAS member countries.

⁵⁴ This objective specifically and deliberately sets ROPPA apart from efforts to promote commodity-based groups and networks, especially for cotton.

two of which must be women, is elected for 3 years and is responsible for management and implementation of Conference decisions. After working out of the CNCR offices in Dakar since 2000, the ROPPA Executive Committee recently established its own regional office, including a small a technical support group, in Ouagadougou⁵⁵.

With start-up funding from several of its partners, the ROPPA Executive Committee devoted its efforts throughout 2001 to setting up its network across the region and participating in the development of an agricultural policy for the UEMOA that reflects the importance of the farm family and the need to focus on how support for agriculture contributes to redistribution, instead of just accumulation of income. Specifically, ROPPA has sought to bring this orientation into agricultural research and extension in Senegal through ANCAR. Specific ROPPA programs designed to help it achieve its overall objectives include the establishment of a Regional Fund (*Le Fonds sous régional pour le renforcement des capacités des OP*) that would be managed by the African Development Bank in Lomé and designed as a support fund to strengthen the capacity of national producer organizations to become effectively involved in national policy discussions, but within a regional and international perspective. The Fund is expected to be operational in 2003 and it is currently supported by Swiss Cooperation, SOS Faim, Agri-Terra, French Cooperation. Additional assistance is expected from the Club du Sahel, as well as from Luxemburg, Holland and Canada.

In addition, ROPPA seeks to establish what it calls the Rural Identity Card, or a grassroots information system that is helpful directly to farmer's groups in participating in policy-making decisions and setting priorities, and the *DABA*, or an alliance of farmers and artisans to create a regional finance structure that responsive to their needs.

ROPPA plans to organize a roundtable meeting of ROPPA partners during 2003, but meanwhile most of its partners meet regularly as the Brussels Group (Groupe de Bruxelles). This group includes NGOs and several government agencies in Europe that have collaborated in various ways for about 10 years in support of farmer associations, and who have most recently started supporting ROPPA. The group meets informally to discuss their continuing work in support of farmer associations, to exchange experiences and information, and to review their lobbying and advocacy role regarding donor policies in support of producer organizations. As a result of support from several Brussels Group NGOs (Agri-Terra, SOS-Faim, Italian NGOs), ROPPA has also gained access to policy forums such as the European Union, FAO, and other European and international professional agricultural groups.

Chambers of Agriculture

With support from the FAO since the mid-1990s, several countries, Mali, Togo, Bénin, Côte d'Ivoire and Guinea, have established national networks of regional Chambers of Agriculture. Legislation is pending in Niger to create similar consular bodies; with support from the FAO since 1998, Burkina Faso expects to complete the regional elections for each regional chamber in a newly established national network of Chambers by the end of 2003. Through the recent *PRIECA/AO*, (*Projet pour le renforcement de l'Interface entre Etat et*

⁵⁵ The Executive Committee also has an advisory committee composed of representatives of partner groups and resource people.

Chambre d'Agriculture de l'Afrique de l'Ouest), the West African Council of Ministers of Agriculture is attempting to reinforce the capacity of these bodies in each country.

Nevertheless, in each country the Chambers are almost completely lacking in any analytical capacity to serve as effective consular bodies and most farmers and producer organization leaders are wary of the representative function of these bodies since they continue to be staffed by seconded civil servants.

The Chamber of Agriculture in Mali has been established the longest and it illustrates the range of issues raised by these bodies in West Africa.

Mali Case Study.

In 1993 APCAM (The Permanent Assembly of the Chambers of Agriculture) and the nine Regional Chambers of Agriculture were created as Mali's only legally recognized consultative and professional bodies of agricultural interests. Since their establishment, the APCAM and Chambers have earned a widely accepted reputation as representatives of a broad range of Malian agricultural interests in local-, regional- and national-level discussions with government ministries and administrators. Local (*cercle*) and regional chambers regularly help local producers deal with a wide variety of immediate and specific concerns issues related to agricultural research, production and marketing. At the same time, APCAM plays an important national level role in mediating many contentious issues among actors in the agricultural sector, as well as participating in most agricultural policy discussions, such as land tenure reform and the review of cooperative regulations, among others.

After several years of technical support from the Food and Agriculture Organization of the United Nations, a multi-donor project, *Projet d'Appui aux Services Agricoles et aux Organisations Paysannes (PASAOP)* was designed to strengthen this representative and policy-making role of the APCAM and the Chambers of Agriculture. Specifically the project seeks to improve both APCAM's and the Chambers' professional consultative capacity as well as their information and communication activities.

As currently conceived, however, this project does not adequately address the challenges that Mali's new, decentralized system of territorial administration poses to the political position enjoyed by the Chambers. First, the project does not specifically address critical organizational needs of the chambers at the level of the *cercle* or the *commune*. Second, the project seeks to strengthen the representative role of the Chamber. But it does not address the implications for the Chambers to play this role effectively with the new decentralized collective bodies that no longer provide the regional or local (*cercle*) Chambers clearly defined opportunities (such as the former local or regional development committees, CLDs or CRDs) to participate in local development policy-making.

In order for the Chambers to fulfill their professional consultative role in Mali's new decentralized system, they will need the capacity to take a more proactive advocacy approach to the planning and decision-making in the new *communes*, the *conseils de cercle* and the regional assemblies. More broadly for the Chambers to play a constructive and active role in achieving the promises of decentralization, they will need both the capacity to reach out to the wide range of agricultural interests in Mali and to redefine and reformulate their

representative and advocacy role. In short, if the Chambers are to respond successfully to the challenges of decentralization, they need to use privileged corporatist-like relationship with government to build themselves into an independent group that represents agricultural interests in Mali.

Established by law as a consultative body to speak on behalf of the country's agricultural interests, the Chamber (APCAM and the Regional Chambers) enjoys a privileged position in agricultural and rural development policy deliberations and conflict resolution. On an almost daily basis, both well-organized agriculture and livestock cooperatives, as well as village-level associations of small-scale producers request the elected regional or *cercle* Chamber presidents to address a wide range of their problems and concerns. The government as well looks to the Chamber for policy advice and for assistance in dealing with critical issues such as the continuing 'cotton crisis.'

The Challenge of Decentralization. In its legally authorized representative and consular role for Malian agricultural interests, the Chamber responds to government requests and can submit questions and advice concerning agricultural and rural development to the government. In addition to the organizational and political challenges inherent in advising government and representing interests across four sectors, the Chamber, especially at the regional and local levels, confronts another and potentially more complex, set of issues in Mali's new system of decentralized administration.

The Chamber, as the country's legally recognized body to speak for the *monde rural*, continues to enjoy well-defined points of access to government decision-makers, especially at the national level. Dramatic changes in the decentralized regional and local deliberative and policy-making structures, however, have eliminated privileged points of access for Chamber representatives at the regional and *cercle* levels. Elected communal and *cercle* councils and the regional assemblies have replaced the local and regional development committees on which the Chamber was once represented. Consequently, while local level government officials and producers still rely on Chamber staff and representatives for short-term problem-solving, the new decentralized representative structures no longer reserve a place for the Chamber in their policy-making deliberations.

Opportunities to inform elected representatives and speak for rural interests exist at the communal, *cercle* and regional levels. As the communal councils prepare their annual development programs for example, representatives of the Chamber from villages within the commune could help to assure that council members have information that might inform their decision-making. The *Conseils de Cercles* apparently will establish their own "technical services" to help inform delegates at this level. The President of the *Cercle* Chamber of Agriculture clearly would be in an excellent position to inform the technical advisor for agricultural and rural development of critical issues of importance to the Chamber. Similarly, the Regional Assemblies will establish various "working commissions" that will require access to information for their decision-making. For example, the Segou Chamber of Agriculture could become a key resource for the Assembly's *Commission Chargé du Monde Rural, de la Protection de l'Environnement, de l'Organisation des Activités de la Production Rurale et de l'Aménagement*.

These kinds of changes, however, suggest that the Chamber's continued effectiveness in regional and local policy-making will depend upon its ability to act more as an interest group that not only represents a point of view, but provides information to decision-makers. In other words, the future consultative role of the Chamber will depend less on its performance as a "transmission belt" between government and the rural world, and more on its capacity to lobby and to be of service to local, elected decision-makers.

Representation and Advocacy. There are three types of limitations on the Chamber's capacity for advocacy. First, the vertical flow of information between the regional and *cercle* offices is limited at best. Serious communication and logistic constraints significantly impede the effective exchange of ideas and concerns between regional and *cercle* levels of the Chamber. The horizontal flow of information is similarly limited or non-existent. Neither the regions nor the *cercles* within a region have a means for regularly sharing information or discussing their activities and problems.

Second, government seconded civil servants assure the technical backstopping for the elected officials at the national, regional and local levels. Many technical positions remain to be filled, and the experience, as well as the interest and enthusiasm of the seconded technicians for the work of the Chamber vary widely. Numerous external demands on the time of both staff and elected representatives seriously affect the regularity of staff meetings, and both budget and logistic limitations preclude regular exchanges among Chamber staff and representatives within the regions. Consequently, the technical capacity of the Chamber to identify policy concerns and constraints, as well as propose policy options remains at best limited.

Third, and closely linked to the Chamber's weak technical capacity, the Chamber lacks a mechanism for systematically identifying and formulating the issues and policies that cut across diverse sectoral interests. Such a capacity will be necessary for the Chamber to develop an effective program of support that is recognized as valuable by sectoral-based professional organizations.

As a result of these weaknesses, Chamber Presidents constantly find themselves in a reactive, almost fire-fighting mode, rather than in a proactive mode. Most their problem-solving remains localized, even though a specific and immediate problem may be simply a manifestation of a much larger policy issue that should receive the attention of government officials. Thus, if the Chamber expects to continue playing a valued role in regional and local level policy deliberations, it will need to assure the flow and exchange of information within and among the local chambers, as well as its access to quality technical staff.

Family Farming or Professional Organizations? In contrast to most types of farmer groups – associations, *tons villageois*, cooperatives, *GIEs*, etc. – the Chamber is not a membership organization. Instead of members (*adherents*), the Chamber speaks for, and is mandated to support both individual *ressortissants*, as well as those representing what are termed "professional interests" in the agricultural, livestock, fisheries and forestry sectors. In order to meet this objective, the Chamber maintains an inventory of the "professional associations"

active in each *cercle* and region⁵⁶. This inventory, however, provides only address and basic identification information (name, registration number) for each association. As such, these inventories can serve only as the most elementary point of departure for developing any program of support to these groups or providing useful information to decision-makers.

Over the last 10 years there has been a veritable explosion of largely NGO-supported farmer and village groups throughout the country⁵⁷. Depending on the concentration of NGOs in a region, it is common to find farmers who 'belong' to four, five or six associations. In fact in some areas, so many little projects have come and gone for so long that farmers joke about just waiting for the next project or group to join. As the number and types of local level groups continues to multiply in the regions, the Chamber will need to improve the quality of its inventories. First, a more detailed and descriptive inventory organized in a relational database is indispensable for identifying and carrying out a support program. Second, and equally important, such an inventory will be an important source of information for helping the Chamber develop its (new) representational role at the local level.

Democratization and Decentralization. It is difficult to generalize how peasants see the process of democratization, much less territorial decentralization in Mali. It is probably safe to suggest, however, that democracy and decentralization mean little or nothing in the everyday lives of the vast majority of Malians in rural areas. A small and growing group of smallholders – literate, often educated and members of farmer unions – are beginning to recognize and act upon their role as rural citizens. For this group, open and democratic elections, or opportunities to have problems addressed by the Chamber are welcome, but reflect only the surface of democracy. Smallholders demand a deeper democracy built around at least two guarantees. First, they seek a guarantee for their interests to be truly represented in those professional associations that currently speak in their name. Second, they seek the means to hold government technical services and agencies responsive and accountable. In particular, many smallholders see the cotton and rice parastatals as “islands of the past” in the sea of democracy.

The future of democratic development in Mali will depend on the ways in which the process of decentralization allows smallholders to develop and become respected as citizens with legitimate interests and concerns vis-à-vis government technical services and agencies. Unless smallholders begin to have a concrete means of holding these services and agencies accountable through their elected decentralized bodies, they will quickly see Malian democracy as one more empty, unfulfilled promise.

Since 1991, the Chamber – at both national and local levels – has played an important role in the emergence of the farmers' movement; this movement represents an important effort by

⁵⁶ The PASAOP identifies professional agricultural organizations (OPAs) as all farmer organizations that are associative, mutualist, cooperative, union or private in nature. This deceptively appealing bureaucratic shorthand denomination (OPA) diverts attention away from consideration of the significant political and policy implications represented by the fundamentally different ways in which the members of each group contribute to, and control capital formation and distribution.

⁵⁷ As the PASAOP notes, however, the distribution of NGO activities diverges widely from region to region République du Mali, M. D. R. (2000). Programme d'Appui aux Services Agricoles et aux Organisations Paysannes (PASAOP). Bamako, Secrétariat Général, Cellule de Planification et de Statistique.

smallholders to gain a real measure of accountability from parastatal development agencies as well as government technical services and agencies. The statutory position of the Chamber has facilitated its consultative role in negotiating the demands of the unions with the government. But based on the Chamber's statutory position, the government also expects significant conformity between the Chamber's activities and positions and government policy.

Consequently, if the Chamber seeks to continue to play a legitimate role in representing a wide variety of rural interests – some of which may run directly contrary to government positions – it will need to establish its policy independence and autonomy from government. As the emergence and policy role of other cross-cutting farmer organizations, such as the *Cooordiantion Nationale des Organisations Professionnelles Paysannes(CNOP)* indicates, the Chamber can no longer rely on its statutory position to guarantee its legitimacy with smallholders. Having the capacity to identify local level interests and concerns as well as its own policy analysis capacity would help the Chamber establish the kind of independence needed to define its legitimate role.

Similarly, this type capacity will also permit local Chambers to assure that the smallholder concerns and interests of the *monde rural* get expressed. With a capacity to listen to concerns expressed in the villages and communes, and to identify those day-to-day problems and concerns that are manifestations of larger policy issues, local chambers have a unique opportunity to help deepen Malian democracy.

INTERFACE

This loose network of smaller agri-business groups, many of which are women's groups involved in various kinds of agro-food processing, arose from the 1994 CILSS Sahel 21 initiative to launch a closer association with a range of civil society organizations.

The overall objectives of this network align closely with those of ROPPA and include a focus on strengthening member business and management skills as well as promoting national policies that encourage the emergence of agro-entrepreneurs both nationally and across the sub-region. More specifically, the network is interested in projects and policies that facilitate its members' access to: credit; national, regional and international markets; improved technical information (especially from agricultural research); and, processing technology. While this network is still very much in its formative stages, its affiliation with several regional and international forums is a first step toward the achievement of some of these objectives. For example, the network participates in: the CILSS-sponsored Private Sector *Plateforme* and the ACP Business Forum (Brussels); the ACP Science and Technology Group; the CILSS Food Security Coordinating Committee (*Comité de Concertation de Sécurité Alimentaire/CILSS*); and, the Sub-Saharan Africa Forum for Agricultural Research (FARA).

In contrast to most other networks, Interface is represented beyond the CILSS-member states and includes national committees in: Bénin, Burkina Faso, Cape Verde, The Gambia, Ghana, Guinea-Conakry, Mali, Mauritania, Niger, Nigeria, Senegal and Togo. There is considerable disparity in the business skills, experience, and interests among the national member groups

that this network tries to accommodate. Meanwhile, these national members rely on the existence of the network as a source of support in: creating and strengthening their national organizations; lobbying for small-scale credit and savings programs; improving transportation infrastructure; finding business partners; participating in national and regional exhibitions; locating improved processing technology; undertaking a region-wide survey of food and agricultural grades and standards that are important for improving agricultural trade.

INADES-Formation

INADES-Formation, or the African Institute for Economic and Social Development – African Training Center) is a non-profit organization that is legally established in the Côte d’Ivoire with national offices in 10 countries, including Burkina Faso, Chad, Côte d’Ivoire and Togo. It also operates in Bénin, Guinea, Mali, Niger and Senegal.

Established in the early 1970s, **INADES-Formation** promotes adult training, self-help and education programs based on techniques and methods that enable adults to analyze together their situation, identify appropriate solutions within their own means, and organize as a community to voice their concerns and become engaged in policy discussions. Programs are based upon and seek to express local knowledge and expertise as well as preserve natural resources. In addition to a cadre of about 250 women and men trainers from a variety of disciplines, the network has an extensive range of training and educational materials (booklets, technical leaflets, posters, slides, radio broadcasts, etc.) available in English, French and Jula. Training activities are directed to rural people in general, but also to specific categories such as members of producer organizations, rural adult trainers and to non-governmental organizations. All INADES-Formation programs depend upon external financial support through projects or from among their 30 partner support groups.

Selected Country Programs – Brief Descriptions

Burkina Faso. Since 1975, the priority fields of intervention in Burkina have been: soil degradation control, farmer organizations, women’s participation in development, and civic education. The program has a staff of 21, among whom 10 are trainers. Specific projects include: village water supply financed by the IDB; an *Acacia albida* project supported by the Jean Paul II Foundation; and a training program for producer organizations funded by Intermon and US for Africa.

Chad. Established in 1978, the Chad program focuses on environmental protection, sustainable agriculture, producer organizations, civic education, women and income generating activities. The program has a staff of 37, among whom 17 are trainers.

Côte d’Ivoire. Also established in 1978, the national program in Côte d’Ivoire has included projects that support producer organizations, environment/soil fertility, and food crops marketing. The staff of 17 included 8 trainers. Some of their projects included: a training program for CIDT agricultural advisers, the integrated development of Bonoua, a young farmer settlement project in Guiglo, and the diagnosis of training needs and development of a program for SODEPRA staff.

Togo. Stated in 1972, the Togo program is among the oldest national INADES programs. With a staff of 25, including 10 trainers, this program supports projects in environment and deforestation, village water supply, crop and income management, and civic education. Training projects have included a World Bank funded project to re-train agricultural agents and a UNFPA supported training program for women *animatrices* in the Togo Ministry of Women's Advancement.

WOMEN'S ASSOCIATIONS

REFESA, Réseau des Femmes Sahéliennes

This regional network of Sahelian women emerged from the CILSS-sponsored Sahel 21. The network is based in Dakar but operates through national network committees (*Cadre de concertation du Comité National REFESA*) in each country. Similar to ROPPA, this network seeks to develop the operational and policy capacity of women's groups in each country with a particular emphasis on issues such as health, the environment and renewable energy, small-scale agricultural processing, and new entrepreneurial opportunities for women.

Unlike ROPPA, there is a huge difference between REFESA's proposed program and its actual activities. Without the benefit of long years of "networking" among themselves and with numerous European NGOs and donor agencies, this network lacks the experiential and support base for taking the initiative to launch its proposed programs.

Perhaps even more than ROPPA, the member organizations from each country may be individually more influential in their respective countries than the network is on a region-wide basis. For example, the two major women's groups, the FNGPF, the *Fédération Nationale des Groupements Féminines*, and the DIRFEL, the *Directoire de Femmes en Elevage*, are members of the influential CNCR, *Conseil National de Concertation et de Coopération des Ruraux*. The FNGPF includes about 1,000,000 women and seeks to improve members access to credit and to facilitate marketing. The DIRFEL has about 15,000 members interested in improved milk production and processing, as well as on-farm cattle fattening and poultry programs.

Status in Mali of: CAFO, *Coordination des Associations et ONG Féminines*, and COFEM, the *Collectif des Femmes du Mali*.

ROPPA AND REFESA - SPECIFIC CAPACITY ISSUES

Decision-Making Processes. The network's principal strengths derive from its capacity to speak in the name of the sub-regions' producers in important regional policy-making settings such as the UEMOA, and to have access to international forums such as NEPAD and groups associated with the European Community. ROPPA's successes in bringing agricultural import tariffs to the attention of the UEMOA, as well as the establishment of a regional support fund under the auspices of the African Development Bank, are significant – if not landmark – accomplishments, due as much to the establishment of producer organization representation in the member countries as to the long experience and expertise of the network's leadership.

National Depth. Without question, ROPPA has been instrumental in establishing national coordinating bodies of producer organizations in each of its 10 member countries. This work built heavily upon the earlier investments led by the Club du Sahel in creating national *plateformes*. But ROPPA has taken the next critical step in this process by helping the national coordinating bodies to become officially recognized or to obtain juridical approval, an indispensable step for any producer organization to participate in governmental policy discussions.

Part of ROPPA's mission involves the development of more productive relationships with its national members, and it is somewhat premature to evaluate the "depth" of these relationships, that vary widely from country to country, at this early stage in ROPPA's program. The significant overlap between ROPPA's Executive Committee and the CNCR in Senegal helps to assure a close working relationship. In contrast, ROPPA finds itself in the middle of a major policy controversy concerning producer organizations in Burkina Faso.

ROPPA continues to be represented in Burkina Faso by FENOP, the *Fédération Nationale des Organisations Paysannes* that was created in 1996. Its members include about 200 unions of producer organizations covering approximately 500,000 peasant farmers. FENOP was part of the national CCOF, the *Cadre de Coordination des Organisations Paysannes du Faso*, thereby "deepening" ROPPA's contacts. In November 2002, however, the government replaced the CCOF with the CPF, the *Confédération Paysanne du Faso*. It is estimated that this new national group includes 60% of the producer organizations in Burkina and 45% of the individual producers. The member organizations include: the FEPA/B, (*Fédération des Professionnels Agricoles au Burkina*); the UNJPA/B, (*Union Nationale des Jeunes Producteurs Agricoles du Burkina*); the UMPC/B, (*Union Nationale des Producteurs de Coton du Burkina*); the FENAFER/B, (*Fédération Nationale des Femmes Rurales au Burkina*); and the FEB (*Fédération des Eleveurs du Burkina*). Since this new national body, supported by the government, focuses on promoting export, and commodity oriented agriculture, FENOP with its orientation to family-based agriculture policy (consistent with ROPPA) stepped away from the CPF and established itself as a non-governmental organization.

Access to Agricultural Services, Disseminating Technologies and Information, and Managing Resources. For several years, it has been widely known that agricultural technology policy issues are not the top priority for producer organizations⁵⁸. At the same time, various types of efforts to involve producers and producer organizations in agricultural research and information dissemination traces its roots in sub-Saharan Africa traces its roots at least back to the era of farming systems research during the 1980s. Without question, much remains to be accomplished. As a November 2002 World Bank sponsored workshop on Extension and Rural Development concluded, building the capacity of producer organizations is only one part of the puzzle. Attention must be given equally and simultaneously to building the capacity of the public sector, and service providers as well as

⁵⁸ See Michael Bratton and R. James Bingen. 1994. "Farmer Organization and Agricultural Policy in Africa – Introduction." *African Rural and Urban Studies* 1,1: 7-30.

linking these efforts to the modernization of the agricultural education system⁵⁹. In other words, it is not just a question for ROPPA to attempt to build the capacity of producer organizations to demand agricultural technology and dissemination, or services. This effort must be integrated into a larger program of support and capacity-building in the public sector.

The most common approach – supported principally by the World Bank – across most of West Africa to encourage more “demand driven research” directly from farmers (and by implication from producer organizations) involves the establishment of regional users commissions or technical committees in the national decentralized (regionalized) agricultural research institutes. These regionalized bodies include representatives from a variety of categories of producers instead of producers as direct representatives of producer organizations. This is meant to keep the discussions oriented more toward technical rather than policy-related concerns. Moreover, interviews with commission members in Mali found that producer members do not discern a relationship between their position on the Commission and the membership in a producer organization⁶⁰. Consequently, part of ROPPA’s capacity-building agenda may need to include ways to help forge such connections if ROPPA seeks to help its member organizations in each country improve their role in gaining access to agricultural services, technology and information.

At the same time, experiences with the national research institute in Burkina Faso (INERA) to design and implement specific research programs in direct collaboration with producer organizations offer an alternative approach. Some of the experiences that bear further investigation include:

- INERA-FEPA-B for the adaptation and diffusion of maize, millet and cowpea (*niébé*) technologies.
- INERA-FNGN/NESTLE (*Fédération Nationale des Groupements Naam*) for experimentation and diffusion of cowpea, millet and vegetable crop technologies.
- INERA-FENOP for the experimentation and diffusion of maize and cowpea technology.
- INERA-UNCPC-B (*Union Nationale des Producteurs de Coton du Burkina*) for cotton research funded by the national cotton company, SOFITEX. (A similar arrangement exists in Mali.)

(Apparently similar arrangements are being negotiated between the Guinean (Conakry) national agricultural research institute, IRAG (*L’Institut de Recherche Agronomique de Guinée*) and producer organizations, such as the *Fédération des Pays du Fouta Djallalon* (FPFD) for research on potatoes and onions.)

The experiences with Senegal’s National Agricultural Advisory Service, ANCAR (*Agence Nationale de Conseil Agricole et Rural*) and the establishment of the new, local coordinating committees, CLCOP, (*Cadres Locaux de Concertation des Organisations Paysannes*) offers

⁵⁹ World Bank. 2003. “Extension and Rural Development – Converging Views for Institutional Approaches?” Workshop Summary. November 12-14, 2002. Washington, DC: The World Bank.

⁶⁰ See Jim Bingen, Diana Carney, Edmond Dembélé. 1991. “The Malian Union of Cotton and Food Crop Producers: Its Current and Potential Role in Technology Development and Transfer.” ODI Agricultural Research & Extension Network. London: ODI.

another and different approach to this issue. In this arrangement, the expectation is that State services, local communal authorities, producer organizations and the private sector will consult on their development priorities. This will obviously create the need for considerable local level capacity-building in producer organizations. In one cotton growing area in Senegal, for example, this type of consultation apparently has led not only to the creation of a new producer organization, the Union of Maize Growers in Saré Bidji (*Union des Producteurs de Maïs de Saré Bidji*), but to improved access to short-term production credit for the 30 member groups of this new union.

Other Capacity Issues. Uniformly across the sub-region, there is a very shallow pool of producer organization leaders. The few individuals who have benefited from support and investments over the past 10 years tend to be solicited for more remunerative opportunities with NGOs, international agencies and bilateral assistance programs. Continued extremely low levels of literacy may perhaps more profoundly continue to hinder most efforts to support producer organizations. Some groups, such as CLUSA, make literacy training the *sine qua non* for their production and marketing support programs, but this organization continues to be in the minority regarding this approach. As some newly retired civil servants return home to farm (one of the more interesting yet unexamined “benefits” of structural adjustment and early retirements from government downsizing), there is a new pool of “expertise” in the countryside that might strengthen the farmers movement in each country. Nevertheless, organizational and management skills are not generalized, thereby hampering the ability of most small producers to secure loans, seek alternative marketing channels, not to mention assuring organizational transparency and openness in financial oversight and accountability.

Anglophone West Africa. ROPPA does not currently cover producer organizations in the West African countries of Nigeria, Ghana, Sierra Leone or Liberia. Limited information about producer organizations in Ghana and Nigeria helps to illustrate some of the issues confronting ROPPA as it considers expanding its network into Anglophone West Africa.

Ghana

Only two groups, The Ghana National Association of Farmers and Fishermen, and the Cocoa Coffee Sheanut Farmers’ Association are listed as Associate Members of IFAP, the International Federation of Agricultural Producers. No information is available about these organizations or their relationship with IFAP.

For almost two years, FAO has been working to encourage the government to revise its Cooperative Act, to prepare a different set of regulations for producer organizations that are not cooperatives, and to prepare a policy regarding non-governmental organizations. In short, there does not appear to be a clear-cut government commitment in Ghana to promoting cooperatives, producer organizations or the role for NGOs in supporting farmer-based programs. In addition, some evidence suggests that when the government does prepare its producer organization policies, the government agencies working with these organizations will require considerable capacity-building as well.

Nigeria

Recent policy documents addressing agricultural and integrated rural development policy do not address producer organizations. Moreover, producer organizations are not part of the soon to be published Poverty Reduction Strategy Paper.

Relatively few non-governmental organizations function in Nigeria to train members of associations in co-operative principles, to obtain access to more and better inputs, or to improve their business management skills. Similarly, the agricultural extension programs at the state and federal levels are not equipped to provide significant training or incentives for profitable co-operative activity.

Most producer associations or cooperatives establish themselves around a commodity or, in some cases, a production locality (e.g., in northern Nigeria, a *fadama*, or valley bottom, with rich soils that remains moist, or can be irrigated, for a second annual crop). Many of these groups may be federated up to the national level. For example, “primary” co-operatives are grassroots associations at the level of the village or a Local Government Area. “Secondary” co-operatives generally operate at the state level. Both register with the state government Department of Co-operative Societies. An “apex” co-operative is national and works directly with the Department of Co-operatives, a regulatory arm of the Federal Ministry of Agriculture and Rural Development.

Despite this neatly defined organizational structure, the operational reality of cooperatives appears quite different. Individuals or cliques often co-opt the primary cooperatives for political gains. Similarly, the apex cooperatives often do not have the national authority, expertise or information that their names suggest. Furthermore, some commodities, such as cocoa, have more than one “national” producer organization vying for producer loyalty and policy support. In addition to this structure, there are two national associations of apex organizations, the All-Farmers’ Apex Association of Nigeria and the National Farmers’ Association of Nigeria, that group together 47 national commodity-based associations.

“Enclave projects” supported through the Department of Rural Development, (FMARD) encourage farmers to work project land cooperatively, provide land, inputs, land preparation, water and feeder roads, and thereby offer another opportunity for producers to act collectively. These projects promote profitable crops in each agro-ecological zone (e.g. cashew or oil palm), ensure a processing link, and focus on nutrition and HIV/AIDS. These do tend to be showcase projects and apparently are attractive to retired high-ranking civil servants and other privileged members of society.

MAJOR INITIATIVES SUPPORTING PRODUCER ORGANIZATIONS

The current producer organization networks in the sub-region, and ROPPA in particular, rely heavily on continued technical and financial support from a variety of Europe-based non-profit networks. The contribution of “membership” or participation by a handful of producer organization leaders for almost 20 years in these networks to the current status of regional networks cannot be overemphasized. The Europe-based groups provide critically important (but often overlooked) opportunities for producer organization leaders to exchange ideas and information with each other and with supporters in Europe. In addition to promoting solidarity among producer groups in West Africa, these relationships are the source of ideas

and assistance for tackling difficult policy and organizational issues. For example, ROPPA's capacity to formulate a UEMOA agricultural development strategy, as well as support for changing national policies to assure the juridical status of producer organizations, derives in no small way from the broader international backstopping through these Europe-based networks.

Réseau APM – Afrique

Supported largely by one foundation, Charles Léopold Mayer pour le progrès de l'Homme (FPH) this network was launched at Mbour, Senegal in 1995 to serve as a "space for reflection" among those working with, and supporting, farmers' associations in West Africa. It includes participants from Tanzania and Zimbabwe and a variable number of donors including the French Ministry of Foreign Affairs, European Union, IFAD, CTA and the Gaia Foundation.

Unlike many other support networks, APM-Afrique brings together a diverse group of actors, including representatives of a variety of types of farmers' associations (unions, associations, etc.), representatives from NGOs that support farmers' associations, and government agencies especially concerned about the role of farmers' associations in agricultural development policy and programs.

The networking activities of APM enhance its support role for producer organizations. For example, APM-Afrique is represented on the CGIAR NGO committee; it participates in the meetings of the Conference of Ministers of Agriculture for West and Central Africa (CMAOC); and, it participates in the FRBC Fund in Cameroon (*Fonds de recherche sur base compétitive au Cameroun*).

Over the last 10 years APM-Afrique support for food security and subsector work has included sponsorship of regional workshops on cotton, rice, cocoa and coffee, often in collaboration with types of support groups such as CIEPAC, IRAM, CIRAD and SOLAGRAL. Some of these include: a Cotton Workshop in Ségou, a Rice Workshop in St. Louis; Rural Training in Cameroon; Food Security in Bamako; World Meeting in Cameroon; a CIRAD-sponsored workshop on Producers Associations and the Disengagement of the State; and the *Observatoire Coton* Workshop in Bénin in 2000.

More specifically, APM-Afrique contributed directly to the emergence of groups such as the CNOP-CAM in Cameroon; the CROW in Gabon; the AOPP in Mali and the expansion of FUPRO in Benin.

The current APM-Afrique program focuses on:

- The UPFA, or the *Université Paysanne Africaine*, with funding from the French Ministry of Foreign Affairs for training producer organization leaders;
- Agrarian reform and land tenure projects in Cameroon, Senegal and Ghana in partnership with IFAD;
- GMOs and intellectual property rights; and,

- The *Programme Fédérateur de Recherche-Action*, or a peasant-farmer solidarity movement in response to globalization and linked with a comparable network activity in Latin America.

At its General Assembly meeting in May 2002 in Mbalmayo, APM-Afrique delegates expressed interest in exploring relationships between the network and farmers' organizations in each country, as well as establishing relationships with other networks, especially ROPPA.

IFAP/FIPA, The International Federation of Agricultural Producers

Established in 1946 "to secure the fullest cooperation between organizations of agricultural producers in meeting the optimum nutritional and consumptive requirements of the peoples of the world," IFAP membership includes 100 national organizations of "family farmers" in 71 countries. Many members in sub-Saharan Africa are associate members.

The Federation sponsors several issues forums to develop policy briefs related to biotechnology, trade, poverty and land, environment and cooperatives. It also sponsors commodity groups to deal with issues concerning sugar, meat and feeds, dairy, grains and oilseeds. In addition it supports a separate committee on Women in Agriculture established in 1992. The purpose of this committee is to:

- Promote the status and situation of women farmers and their families all over the world;
- Empower women farmers through their full and effective participation in farmers' organizations at all levels, in decision-making bodies, and in IFAP activities;
- Enable IFAP to play a leading role in supporting member organizations' activities involving women, as well as in advocating women farmers interests throughout the international system.
- Encourage solidarity among women farmers, especially between industrialized and developing countries, and countries in transition.

An IFAP African Farmers Committee serves as a permanent forum where African farmers organizations meet and work together on a regular basis. This African Regional Committee last met in February 2001 in Cairo to address the theme of "Role of farmers' organizations in fostering economic cooperation and integration of African economies." This committee also serves as the principal point of collaboration with ROPPA.

AgriTerra

Established in 1997 to promote, facilitate and support "lasting cooperation linkages" between rural people's organizations in the Netherlands (the LTO-Nederland and the regional LTO organizations, the Dutch rural women's organizations and their federation (CPVO), the National Cooperative Council for Agriculture and Horticulture (NCR) and the Dutch Agricultural Youth Organization (NAJK)⁰, AgriTerra promotes direct farmer-to-farmer cooperation.

Linkage programs in West Africa include:

- Women from the National Federation of Agricultural Professionals (FEPA/B) Burkina Faso with the Catholic Women's Organization (KVO), and the Zij-Actief Limburg to focus on issues related to the division of labor and care-giving; economic independence; women in decision-making functions; and access to land;
- The Federation of Unions of Producers in Benin (FUPRO) Benin with the Agricultural Youth Association Friesland (AJF) and the Farmers' Organization of the Northern Netherlands (NLTO) for organizational strengthening; family farming; and cooperatives;
- The Union des Producteurs Privés and Union des Femmes Senegal with the Limburg Agricultural and Horticultural Union (LLTB) to deal with the position of rural women within FUGIAM; and
- Support for the Eastern Women's Cooperative Movement (EWCM) Sierra Leone to work on credit extension; institutional strengthening; from emergency aid to structural aid.

In addition Agriterra develops strong working relations with the international networks in which the participating Dutch rural membership organizations are actively engaged, and that also count members in developing countries, e.g., IFAP. Equally important, in 1999, Agriterra, together with the Association of Country Women of the World initiated a program of support for regional conferences and workshops, and the strengthening of the association.

POSSIBLE WARP/IEHA INVESTMENTS

ROPPA

While financial support to the regional fund will be important, it should be tied to providing various types of technical support to the Executive Committee and/or involvement on the Advisory Committee. In particular, such technical support to ROPPA could assist in:

- *Improving the technical capacity of ROPPA to help the national platforms of producer organizations achieve juridical recognition and legitimacy.*

This could involve financial support for ROPPA to convene national level workshops to address and resolve issues and to deal with the articulation between the national platforms and the regional organization. In order to develop this capacity, WARP could consider helping ROPPA design and carry-out a "capacity and representational assessment" (including access to and use of internet technology) of the member producer organizations that belong to the platform in each country. Such an issues-oriented inventory (in contrast to a collection of largely descriptive information of little programmatic use) would help ROPPA develop a "support strategy" for the national platforms as well as develop a support program (for external funding) more responsive the needs of producer organizations in each country. Such a strategy could involve the more effective use of internet communication technology that would help improve communications within the network, but also provide access to a wide variety of commercial and marketing information.

One separate part of such an inventory should include an assessment of the relationship of various producer groups in each country to the country's Chamber of Agriculture, with specific attention to how these relationships offer opportunities for, or create constraints on national-level policy discussions. At the current time, very little is known about these "policy relationships" at national or even local levels in

each country, and this information will be especially important if political and territorial decentralization is to become a reality throughout the sub-region.

A role for WARP. The FAO continues to support Chambers and several World Bank projects provide technical and financial support, but it is not clear that these support programs provide an effective voice for producers at local levels in each country. WARP could make an important contribution to strengthening producer organizations across the sub-region by raising this issue in donor agency discussions. In addition, and in the context of a technical assistance program, WARP should consider the most effective means for contributing directly to the ROPPA regional fund managed through the West African Development Bank.

- *Defining specific policies and concrete programs consistent with the farm family orientation in contrast to thinking more narrowly about export crop production.* Based on ROPPA's participation in UEMOA discussions, long-term and short-term technical assistance could be assigned to work with ROPPA staff to help improve their policy expertise on specified topics.
- *Thinking about the policy implications of a "rural livelihoods" approach in the new global context, including attention to the implications of HIV/AIDS.* This might involve the assignment of a short- or long-term consultant to help develop the necessary expertise. Such support could also focus on designing short-term production credit programs in each country. As the major export commodity programs become privatized, producer needs for access to this type of credit will increase.
- *Identifying an operational gender-based program.* ROPPA could use short- and long-term technical assistance in order to develop this type of program and perhaps develop a strategy for supporting and working more closely with REFESA.
- *Defining a sub-regional literacy policy and strategy.* Based on an up-to-date inventory based in part on the assessment described above, ROPPA could exercise sub-regional leadership in seeking increased funding for, and program attention to, local-level literacy programs.
- *Support for expanding ROPPA into the sub-region's Anglophone countries.* Financial and technical assistance could be considered to design and implement an inventory of the "state of producer organizations" in Ghana and Nigeria, and perhaps in Sierra Leone and Liberia. Similar to the capacity assessment described above, this inventory would need to focus on capacity and representation issues. But it should also specifically identify the network of national and international relationships (for marketing, technical and financial support, etc.) in which these groups operate.

REFESA

- WARP might consider convening a workshop to address specifically the issue of strengthening women's organizations in the sub-region. The evidence suggests that REFESA is largely a network in name only. Prior to identifying a specific technical and financial support program for the network, a policy and program workshop based on a "capacity and representational assessment" as described above, could contribute significantly to promoting a more dynamic and successful network among women's organizations. Such an inventory and workshop could be organized around a specific theme of continuing importance, such as women and land tenure.
- More specific support activities could focus on identifying the ways in which REFESA could become a sub-regional organization (beyond the CILSS member states), or dealing more specifically with organizational issues related to improved communications among various types of women producer organizations in each country and across the sub-region.

Specific recommendations related to links networks with agricultural extension services, agricultural research services, and agro-processors.

- Consideration should be given to the type of region-wide training that would be most appropriate for agricultural researchers and other agents to understand the dynamics and challenges of working with producer organizations. The agricultural research and sometimes the various types of "extension programs" in each country have established various types of consultative relationships with producer organizations. The World Bank is starting a review of these relationships that have been part of its recent programs in support of agricultural research and extension. In addition to following this evaluation, WARP could identify other collaborative activities (e.g., in Burkina Faso) supported through other donor programs. An important part of such a survey would involve identifying the conditions for, or characteristics of the "success story" collaborative efforts between producer associations and government agencies responsible for technology development and for dissemination. Attention might also be given to how these relationship can be used to provide more development of, and effective access to improved seed.

Since most of the on-going evaluations of these relationships will likely focus on the more structural features of these collaborative relationships, WARP could focus on the more dynamic and long-lasting contribution that would come from identifying why it is important professionally for researchers to work more collaboratively with producers, and subsequently creating the conditions to sustain such relationships.

Specific recommendations related to linking farmer groups to other services and determine how best to support and scale up such successes.

The relationships of West African producer organizations to various and overlapping international networks have been and will continue to be indispensable to their successes in each country and throughout the sub-region.

- WARP should give serious consideration to finding an appropriate and effective way to begin participating in some of these international networking and support groups such as the Brussels Group, or support for networks such as APM-Afrique.

- In order to expand beyond Francophone Africa, it might be useful to explore how INTERFACE might provide a link with producer associations in Nigeria. This should be based on a more specific assessment of the current organizational, operational and policy capacities of INTERFACE.

**Renforcement des Organisations de Producteurs
En Afrique de l'Ouest : Informations, Analyses et Propositions pour la
contribution du Abt au Plan d'Action du WARP dans le cadre de l'IEHA⁶¹**

Jorge Oliveira⁶²

RESUME

En ce qui concerne des organisations ou institutions qui supportent les O.P. en Afrique de l'Ouest il a été identifié 3 types de situations :

1. Organisations au niveau régional qui fonctionnent comme un réseau avec une certaine autonomie et entièrement gérées par des éléments élus parmi les membres.

Dans la plus part des cas toutes ces organisations sont très récentes.

- 1.1. La Plate-forme des organisations paysannes du Sahel qui a vu le jour à Koudougou au Burkina Faso/août 1996 à l'initiative des leaders paysans ayant pris part à la Conférence du CILSS à Praia en 1994. A sa constitution, la plate-forme paysanne sahélienne s'est dotée de statut, d'un règlement intérieur et d'un plan d'action.
- 1.2. Le ROPPA – La genèse de la création du ROPPA a commencé en novembre 1998 avec la participation de certaines O.P. à la deuxième Conférence du Parti, à la Convention de Lutte contre la Désertification, suivi de la rencontre de Ouagadougou en septembre 1999 et de l'atelier de Dakar en Décembre 1999 culminant avec sa création en juillet 2000 à Cotonou avec le nom de Réseau des Organisations Paysannes et Producteurs Agricoles de l'Afrique de l'Ouest. Il est représenté dans 10 pays.
- 1.3. Le REFESA réseau des femmes sahéliennes est créé à Banjul en septembre 1997 suite à l'exercice de réflexion sur l'avenir du Sahel appelé Sahel 21. Pour le moment elle reste au niveau des pays sahéliens seulement.
- 1.4. INTERFACE réseau informel des professionnels de l'agro-business, micro-entreprises, unions, coopératives et ONG. Créé en 1997 à Ouagadougou, suite à l'exercice de Sahel 21 couvre actuellement 13 pays de l'Afrique de l'Ouest.

⁶¹ Please cite as: Oliveira, Jorge. 2003. "Renforcement des Organisations de Producteurs en Afrique de l'Ouest : Informations, Analyses et Propositions pour la contribution du Abt au Plan d'Action du WARP dans le cadre de l'IEHA". Abt Associates, Inc. Bethesda, MD. February.

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1.5. CHAMBRE D'AGRICULTURE – Dans mon point de vue on ne peut considérer les Chambres d'Agriculture comme constituant un réseau au niveau régional, mais surtout un réseau national dans chaque pays. La plus ancienne c'est celle du Mali créée en 1993.

2. Organisations inter-étatiques à caractère régional

2.1. Le CILSS – Le plus ancien de l'Afrique de l'Ouest créé en 1973 couvrant 8 pays de cette région plus le Tchad.

2.2. La CEDEAO la seule organisation couvrant tous les pays de l'Afrique de l'Ouest (sauf la Mauritanie) Organisation à caractère économique et politique. La description de cette organisation n'a pas été incluse dans le rapport.

2.3. UEMOA – Union Economique et Monétaire de l'Afrique de l'Ouest créée en 1994 couvre seulement 8 pays. Collaborant avec les O.P. dans l'élaboration de la Politique Agricole commune et dans la facilitation à la participation au grand Forum sur le marché mondial.

2.4. CMA/AO – La Conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest et du Centre a été créée en 1991 et regroupe 20 pays de ces deux régions. Elle collabore avec les O.P. dans la constitution des Chambres d'Agriculture, facilitation dans la participation aux grands Forums sur le marché régional et mondial.

2.5. La FRAO – Fondation Rurale de l'Afrique de l'Ouest, héritière du Programme de Recherches et d'Appui aux associations paysannes, couvrant 5 pays de l'Afrique de l'Ouest.

3. Situation au niveau national

Au niveau national comme le rapport le décrit nous avons rencontré avec des situations diverses dans les correspondants du ROPPA issus des Plate-formes paysannes et constitués dans la plupart en confédérations.

Les Chambres d'Agriculture seulement au Mali elles sont bien organisées tant au niveau national que régional (pays) au Sénégal il existe une Chambre du Commerce et d'Agriculture mais pas d'initiative forte pour la création d'une Chambre d'Agriculture autonome. Au Burkina il est prévu pour le moment seulement la création des Chambres d'Agriculture au niveau des régions du pays.

Les Organisations Faïtières existent dans tous les trois pays avec des degrés d'organisation un peu différents. Plus fortes au Sénégal et au Burkina moins évidentes au Mali.

Dans les trois pays il existe des services de vulgarisation en mutation avec l'appui des grands projets financés par la Banque Mondiale.

SUGGESTIONS ET RECOMMANDATIONS

Après avoir interviewé une série de leaders des O.P. et discuté avec eux le contexte actuel de leur implantation dans les structures de développement du pays, d'avoir lu plusieurs documents, acte constitutif, plan d'action ou projet liés aux différentes organisations régionales et nationales je peux faire la constatation suivante :

En ce qui concerne le niveau régional, la position du ROPPA me paraît plus indiquée comme organisation à supporter.

Les Chambres d'Agriculture ne sont pas encore constituées en réseau dans le vrai sens du terme, malgré les efforts de la CMA/AOC la seule organisation que j'ai trouvé avec l'intérêt de constituer ce réseau. En plus les paysans ou leaders des organisations paysannes méfient des Chambres d'agriculture contrôlée par les Etats avec des fonctionnaires payés directement par ceux-ci. Dans les trois pays visités seulement au Mali la Chambre d'Agriculture paraît jouer un rôle important au niveau national et à l'intérieur du pays.

Si un appui doit être donné au réseau de Chambres d'Agriculture de l'Afrique de l'Ouest il doit être fait après que la situation des cadres nationaux de concertation des O.P. soient complètement installés et leurs champs d'actions et inter-action bien clarifiés.

Le ROPPA comme on peut voir dans la description de son apparition doit aussi continuer leurs efforts auprès des Plate-formes paysannes sahéliennes pour qu'il n'y ait pas de contradictions au moment de la constitution du cadre national de concertation (répondant ou membre du ROPPA régional).

A ce stade un appui doit être prévu comme support du niveau institutionnel pour permettre au ROPPA Régional de faire des ateliers ou rencontres dans tous les pays membres pour clarifier le problème du représentant national du réseau régional.

Aussi il est nécessaire que le ROPPA puisse couvrir le plus rapidement possible les autres pays surtout anglophones (Nigeria, Ghana, Sierra Leone, Libéria) avant que d'autres mouvements puissent apparaître pour créer des perturbations et divisions entre les O.P. ROPPA aura besoin d'un support dans cette action.

Les domaines d'intervention de l'USAID/WARP peuvent être ciblés dans des actions suivantes :

1. Formation – à tous les niveaux régional et national et dans, les aspects de management, organisationnels, institutionnelles etc.
2. Information/Communication – Organisation d'un système de Communication efficace entre les membres du réseau à travers Internet. Fournir des équipements où ils n'existent pas.

Accès à des adresses, internationales sur le commerce, marché, prix etc.

3. Participation à leur fonds de renforcement de capacités géré par la BOAD.
4. En collaboration avec les Agences de l'USAID National contribuer pour aider les pays à installer des systèmes de crédits privés pour soutenir non seulement les actions et projet de développement des O.P. mais aussi des crédits pour les petites exploitations au niveau familiale.
5. En collaboration avec les Agences de l'USAID National contribuer à aider les O.P. la recherche et la vulgarisation dans l'opération multiplication/commercialisation et distribution de Semences améliorées.
6. Appuyer toutes initiatives de collaboration entre O.P./Recherche/Vulgarisation dans les actions de transfert de technologie. Continuer pendant 2 ou 3 ans avec l'expérience de l'année 2002 du Sénégal, Niger et Burkina Faso/INSAH.

Le REFESA c'est une autre organisation qui mérite d'être appuyé dans le sens d'améliorer leur coordination, mais surtout dans la résolution des problèmes du foncier dont les femmes se plaignent beaucoup dans toute la sous-région.

Même si pour le moment les membres du REFESA veulent rester seulement au niveau du pays du Sahel il faudra commencer à penser dans une future extension aux autres pays.

Des activités de formation dans tous les domaines pour les O.P. féminines sont envisageables ainsi qu'une amélioration de leurs systèmes de communication inter et intra pays.

Il existe un document au niveau du WARP des propositions d'appui au REFESA que j'ai pris connaissance à la fin de ma mission.

L'INTERFACE, c'est une organisation dont je recommanderais un appui pour renforcer leurs capacité institutionnel au niveau régional ainsi qu'au niveau national, faciliter leurs capacités de transfert de technologie et l'élaboration et mise en œuvre des projets.

3.

Avec le ROPPA et INTERFACE le WARP pourrait signer des conventions de coopération, mais avec le REFESA il peut être envisagé à travers la Convention du CILSS/ Programme Majeur GRN/Unité de Développement Local jusqu'à ce que leur autonomie soit plus claire.

Si je peux avancer quelque chose au niveau de financement j'aurais proposé pour le :

ROPPA : 100.000 US\$ par an dans une convention et contribution au Fonds de Renforcement de Capacité

REFESA : 50.000 US\$/an

INTERFACE : 50.000 US\$/an

4. RAPPORT MALI

- I. Informations sur les grandes structures s'occupant des organisations paysannes au niveau des pays
 1. APCAM (Assemblée Permanente des Chambres d'Agriculture du Mali)
 2. CNOP (Coordination Nationale des Organisations Paysannes du Mali)
 3. DNAMR (Direction Nationale d'Appui au Monde Rural)
 4. PASAOP (Projet d'Appui aux Services Agricoles et aux Organisations de Producteurs).

- II. Entrevue avec les Leaders des O.P. Nationales
 1. APCAM
 2. CNOP
 3. AGRIMA

- III. Liste des personnes rencontrées

- IV. Liste des documents consultés.

I. Informations sur les grandes structures s'occupant des Organisations Paysannes (O.P.)

Au Mali il y a trois grandes structures qui sont chargées de l'appui aux organisations paysannes:

1. **APCAM** : Assemblée Permanente des Chambres d'Agriculture du Mali
2. **CNOP** : Coordination Nationale des Organisations Paysannes du Mali
3. **DNAMR** : Direction Nationale d'Appui au Monde Rural
4. **PASAOP** : Projet d'Appui aux Services Agricoles et aux Organisations de Producteurs.

1. L'APCAM a été créée par Décret Présidentiel en août 1993 en même temps que les chambres régionales de l'Agriculture.

Il est un établissement public à caractère professionnel doté de la personnalité morale et d'autonomie financière et fonctionne comme un organe consultatif et professionnel d'intérêt agricole.

A ce titre il donne des avis à la demande des pouvoirs publics ou formule des suggestions de leur propre initiative sur les questions agricoles ou relatives au Monde Rural notamment :

- la politique des prix, des revenus, du crédit et de la commercialisation des produits agricoles;
- la réglementation relative aux activités agricoles, pastorales, forestières, piscicoles, fiscales et douanières concernant les activités rurales;
- la formation professionnelle ;
- les moyens à mettre en œuvre afin d'accroître le développement de l'agriculture.

Aussi, elle peut exercer un rôle d'intervention en matière agricole notamment :

- encourager, créer, subventionner toute entreprise d'intérêt agricole ou participer à leur capital social;
- fonder, acquérir, administrer des établissements d'enseignement professionnels agricoles, d'après avis du Ministère chargé de l'enseignement professionnel.

Les ressources de l'APCAM du Mali sont constituées par :

- les revenus et intérêts des biens, fonds et valeurs leur appartenant ;

- les taxes, droits ou primes, redevances d'utilisateurs perçus en rémunération des services qu'elle rend ;
- les subventions de l'Etat ou tout organisme public en privé ;
- les recettes exceptionnelles ;
- les subventions d'équipement ;
- le produit des emprunts autorisés par arrêté du Ministre chargé de la tutelle de la Chambre d'Agriculture ;
- le produit du remboursement des prêts et avances;
- les dons et legs ;
- toutes autres ressources de caractère annuel et permanent.

Organisation

1. L'Assemblée Permanente des Chambres de l'Agriculture du Mali au niveau National avec siège à Bamako est composée par :

- Les présidents des Chambres Régionales d'Agriculture ;
- Deux membres pour chaque Chambre Régionale d'Agriculture ;
- Cinq membres associés choisis avec voix consultative.

2. La Chambre Régionale de l'Agriculture (une dans chaque région administrative) composée par:

- Trois membres élus par cercle ;
- Cinq membres représentant les organisations professionnelles ;
- Trois membres associés.

3. L'Assemblée des délégués consulaires de cercle au niveau des Cercles

4. L'Assemblée des délégués consulaires de l'Arrondissement au niveau de l'Arrondissement

5. Représentants du village au niveau des Villages.

L'APCAM a : un Président, huit vice-présidents correspondant aux présidents des huit chambres régionales et un secrétaire général.

L'APCAM est membre du réseau des chambres d'agriculture de l'Afrique de l'Ouest (Mali, Côte d'Ivoire, Guinée-Conakry, Bénin et Togo), elle assure la présidence en ce moment pour 3 ans.

2. CNOP (Coordination Nationale des Organisations Paysannes du Mali) a été créée en mai 2002 dans un Forum par un comité de pilotage. Elle est une structure informelle dotée d'une personnalité morale et ayant une responsabilité collégiale dans la gestion de ses activités.

La CNOP exerce ses activités sur toute étendue du territoire national. L'exercice social adopté est celui de l'Institution qui assure la coordination technique (ROPPA/MALI).

Le but de la CNOP est de :

- Contribuer au développement rural durable du Monde Malien ;
- Coordonner la lutte pour la défense des intérêts des paysans des O.P.

L'objectif général est de faciliter les échanges entre les grandes O.P. Sur les questions d'intérêt stratégique pour le développement du Monde Malien.

Les objectifs spécifiques sont :

- Organiser la mise en débat des thèmes d'intérêt stratégique pour le développement rural comme : foncier, la politique agricole, la décentralisation, la commercialisation des produits agricoles, les enjeux internationaux, OMC, OGM.
- Prendre en charge la participation des O.P. en ce qui concerne les grands projets et programmes; PASAOP, PASE, FODESA, Recherche/Vulgarisation, PNIR.
- Approfondir au niveau des O.P. membres et des cellules régionales de la CNOP sur les thèmes faisant objet d'échanges Capitaliser les expériences et pratiques novatrices du Mali et dans le reste du Monde pour l'amélioration des conditions de vie du monde rural.
- Prendre en charge des questions comme la Sécurité Alimentaire, le renforcement des capacités, le plaidoyer et le lobby du monde rural.
- Diffuser l'information sur tout ce qui concerne l'environnement du monde rural.

Modalités d'adhésion

Toutes O.P. autres que les membres fondateurs désirant adhérer à la CNOP doivent :

- être parrainées par deux institutions membres ;
- soumettre la demande d'adhésion à l'Assemblée Générale ;
- payer un droit d'adhésion de 100.000 FCFA et une cotisation annuelle de 50.000 FCFA.

Les organes de la CNOP sont :

- l'Assemblée générale (2 fois par an),
- le Comité de Coordination,

- la Coordination technique,
- les Cellules Régionales,
- les O.P. membres.

Les ressources de la CNOP sont :

- les droits d'adhésion des O.P. membres,
- les cotisations annuelles,
- les contributions des partenaires,
- les legs et les dons.
- Le Fonds de renforcement des capacités du ROPPA sera géré comme les autres ressources de la CNOP

Rapport avec le ROPPA :

- le CNOP est la structure représentative des O.P. dans le ROPPA ;
- les délégués de la convention du ROPPA sont choisis par le CNOP ; et ils sont :
- COPAKA (Concertation des paysans de la région de Kayes (2 membres)
- AOPP (Association des Organisations Professionnelles (1 membre)
- SEXDGON (Syndicat des Exploitants Agricoles de l'Office du Niger (1 membre)
- CMCR (Comité Régional de Concertation des Réseaux de Sikasso (1 membre)
- SYPATIO (Syndicat des Paysans du Mali, Ouest)
- APCAM (Assemblée Permanente des Chambres d'Agriculture du Mali (1 membre)

3. La DNAMR (Direction Nationale d'Appui au Monde Rural) a été créée en septembre 1996 dans le cadre de la restructuration du Ministère de Développement Rural.

Cette restructuration a supprimé les directions suivantes :

- Direction Nationale de l'Agriculture ;
- Direction Nationale de l'Élevage ;
- Direction Nationale des Ressources Forestières, Fauniques et Halieutiques ;
- Direction Nationale de Génie Rural ;
- Direction Nationale de l'Action Coopérative et du Développement Régional et local ;
- Service National de la Protection Végétale.

Qui ont été remplacées au niveau National par :

- Direction Nationale d'Appui au Monde Rural ;
- Direction Nationale de l'Aménagement et de l'Équipement Rural ;
- Direction Générale de la Réglementation et du Contrôle du Secteur du Développement.

La mission dévolue à la DNAMR porte sur l'élaboration des éléments de la politique du Gouvernement en matière de promotion du monde rural ainsi que la mise en œuvre de ladite politique.

A cet effet elle est principalement chargée d'appuyer les activités agricoles auprès des paysans, paysannes, des groupements professionnels du Secteur rural et des collectivités décentralisées notamment par :

- le conseil rural et la vulgarisation agricole ;
- la formation, l'information et la communication ;
- la promotion des filières agricoles ;
- l'organisation et l'animation du monde rural.

Elle assure entre autres :

- la prévention des fléaux et la protection des végétaux et des animaux ;
- le renforcement de la liaison Recherche/Vulgarisation ;
- la centralisation, le traitement et la dispersion des données statistiques sur les activités du secteur agricole ;
- le suivi et l'évaluation des actions de développement.

Parmi ces structures il y a ceux qui intéressent d'écrire en détail pour ses liaisons avec les O.P.

* *La division d'Appui à l'organisation du Monde Rural* qui est chargé en rapport avec les organismes consulaires et organisations forestières professionnelles de :

- procéder aux études et analyses permettant d'asseoir une politique nationale d'émergence et de promotion d'organisations à caractères coopératives viables et dynamiques ;
- appuyer la promotion d'organisations professionnelles et activités économiques des femmes jeunes et des autres groupes spécifiques et de veiller à leur prise en compte de manière durable et équitable par les différents projets et programmes de développement ;
- promouvoir l'insertion des femmes, de jeunes et des autres groupes spécifiques dans les circuits économiques du monde rural tenant compte de leur rôle de producteurs et les productrices agricoles ;
- veiller à la représentation des producteurs et des productrices au niveau des instances de décision pour la prise en compte de leurs intérêts ;
- suivre et coordonner la mise en œuvre des politiques en matière d'organisations en monde rural.

* *La Division Conseil Rural et Vulgarisation* qui a pour mission :

- concevoir les stratégies de transfert des techniques et technologiques de production et la valorisation (transformation, conservation) aux exploitants ruraux et exploitantes rurales ;
- appuyer, suivre et coordonner la mise en œuvre desdites stratégies ;

- développer une stratégie permettant une meilleure intervention et en appui des ONG par l'orientation à la canalisation de leurs actions vers les zones d'intervention et l'harmonisation de leurs programmes d'appui avec ceux des structures nationales.
- établir des canaux de concertation et de collaboration avec les ONG et d'assurer le Suivi de leur intervention ;
- développer une politique de liaison recherche/vulgarisation en relation avec les services de recherche et de suivre sa mise en œuvre.

Les structures de la DNAMR descendent au niveau des régions des préfectures et des communes, arrondissement.

4. Le PASAOP (Projet d'Appui aux Services Agricoles et aux Organisations de Producteurs).

Ce projet financé par la Banque Mondiale et autres partenaires (USAID, France, Pays Bas, Suisse, et E.U.) à hauteur de 148,4 millions de US dollars répartis en trois phases pour une durée de 11 ans.

Les objectifs généraux sont d'établir un cadre institutionnel propice à une plus grande efficacité dans la prestation de Services agricoles, aux exploitants agricoles. Elle s'appuiera sur la décentralisation de fonctions essentielles du Ministère de l'Agriculture, Pêche et Elevage, encouragera l'émergence d'acteurs privés dans l'exécution des Services d'appui à l'agriculture, et renforcera le pouvoir des organisations de producteurs. Des mécanismes axés sur la demande seront mis en place avec l'aide des différents acteurs pour la conception, le choix, le financement et l'exécution des programmes et projets en matière d'innovation et de transfert de technologie, de façon à améliorer la pertinence, l'efficacité et les viabilités de ces activités.

Les objectifs spécifiques sont de :

- recentrer les services du Ministère ;
- appuyer les efforts du Programme National de Lutte contre le SIDA (PNLS)
- développer une stratégie à long terme et un plan d'action en moyen terme pour la formation et la communication en milieu rural ;
- consolider les efforts entrepris avec l'appui du Projet de Recherche Agricole (PNRA) ;
- consolider des efforts entrepris avec l'appui du Programme de Vulgarisation Agricole (PNVA) ;
- établir les Services de Conseil Technique (SCT) sur une base pilote ;
- rendre les organisations de producteurs (O.P.) plus efficaces.

Au courant de l'année 2003 l'expérience de transférer des activités de vulgarisation au secteur privé sera essayé dans 5 région des Pays.

II. Entrevue avec les Leaders des O.P. Nationales

1. Entrevue avec un membre de l'APCAM

- a. Membre de la FIPA, (Fédération Internationale des Producteurs Agricoles assurant la 1ère Vice-Présidence), Président du Club de la FIDA pour l'Afrique Sub-Saharienne dans le cadre de la lutte contre la pauvreté.

Elle collabore avec :

- le ROPPA (Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest).
- la CMA/AOC (Conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest et du Centre) avec un projet régional de renforcement de l'interface Etat chambre de l'Agriculture de l'Afrique de l'Ouest ;
- l'APCAE (Assemblée Permanente des Chambres Agriculture Economique) ;
- l'UEMOA (Union Economique et Monétaire Ouest Africaine)
- la SADO (Sécurité Alimentaire Durable en Afrique de l'Ouest et du Centre)
- le CILSS (Comité Permanent Inter-Etat de Lutte contre la Sécheresse au Sahel) Plate-forme Paysanne

Au niveau national l'APCAM collabore et appui un grand nombre d'organisations paysanne entre autres ceux qui sont membres du collège électoral AOPP (Association des Organisations Professionnelles et Paysannes), UNCPN (Union Nationale des Coopératives de Planteurs maraîchers), SYCOV (Syndicat des Producteurs de Coton et cultures vivrières), CNC (Commission Nationale d'Utilisateurs des résultats de recherche), APRAM (Association des Pêcheurs Résidents au Mali).

L'APCAM gère aussi un certain nombre de projets :

- PACEM (Projet d'Appui aux cultures de céréales au Mali, financé par l'ACDI et UPAC)
 - PASIDEM (Projet d'Appui au Système décentralisé du Marché Agricole, financé par USAID/Michigan State University)
 - APROFA (Agence pour la promotion des filières Agricoles, financé par la Banque Mondiale)
 - PASPE (Projet d'Appui au Secteur Privé de l'Elevage) financé par la France
 - PASE (Programme d'Amélioration des Systèmes d'Exploitation) zone cotonnière financée par la France.
- b. Les principales avantages d'appartenir à un réseau, c'est la lisibilité de l'organisation vis à vis de l'extérieur. La possibilité d'avoir une coordination au niveau régional sur divers sujets; la circulation de l'information; être présent dans les grands forums régionaux, continental et mondial; le renforcement de capacité (Ex projet avec le CMA/AOC en capacity building).

- c. l'appartenance à un réseau permet à l'APCAM de renforcer la capacité de ses membres en divers domaines tels que : management, administration et comptabilité, accès au crédit, participation au discussion sur les marchés (OMC, AGOA etc). Le représentant de l'APCAM a participé à la réunion d'AGOA aux Iles Maurice au mois de janvier 2003; aux voyages d'études; de jumelage avec des chambres d'autres pays.
- d. En ce qui concerne les possibilités de financement de la part de WARP/USAID l'APCAM a souhaité voir une intervention dans le domaine du crédit et équipement transfert de technologie, suivi d'appui dans le renforcement de capacité dans l'amélioration de son fonctionnement avec possibilité de l'utilisation d'antennes entre le siège et les différents démembrements.

Pour l'impact de ces financements ils pensent que ça pourra améliorer la productivité des exploitations paysannes, sécuriser leurs revenus, amélioré le niveau de sécurité alimentaire, renforcer les structures existantes, améliorer les capacités des producteurs dans les négociations échange, marchés etc, améliorer la pratique de gestion des ressources naturelles.

A propos des risques il existe des couches vulnérables qui sont sujet aux fléaux VIH/SIDA des conflits entre agriculteurs et éleveurs, les problèmes du foncier. Mais pour eux les échanges entre les organisations, l'application de la bonne technologie par les paysans, l'accompagnement par les programmes d'éducation, santé de la reproduction et de gestion de ressources naturelles permet de minimiser ces risques.

La meilleure façon de combler les lacunes en information c'est de former les membres sur les procédures d'administration, de négociation et faire circuler les informations sur les opportunités d'investissements; une bonne connaissance des missions des différentes organisations partenaires; faire participer les partenaires dans les débats et renforcer la capacité de plaidoyer.

2. Entrevue avec un membre de Coordination Nationale des Organisations Professionnels au Mali (CNOP):

- a. Un des grands avantages d'appartenir au ROPPA c'est l'harmonisation et la création d'une structure dans chaque pays représentative de toutes les formes d'organisations paysannes et rurales.

La CNOP a participé dans les travaux de définition de la politique agricole commune des pays de l'UEMOA.

La visibilité au niveau national a amélioré. Elle a pu bénéficier d'un Programme de renforcement de capacité pour la lutte contre la désertification et la pauvreté d'un montant à peu près de 130 millions de FCFA.

Aussi, elle a bénéficié avec la participation de certains de ses membres dans les négociations de l'OMC.

Les principales faiblesses sont le manque de fonds proposés pour financés les actions dans le pays et certains problèmes d'ordre institutionnel au niveau national.

- b. L'utilité c'est la possibilité d'une harmonisation et la facilité de compréhension interne dans une cadre national de consensus et d'échange. La facilité d'accès aux informations sur : la politique agricole, la commercialisation des céréales, l'évaluation des risques climatiques etc.

Accès à la participation au grand Forum National International.

Facilité dans l'acceptation du concept d'exploitation familiale.

- c. Pour la CNOP en principe il n'y a pas d'inconvénient d'appartenir à un réseau et les avantages sont nombreux, comme cité antérieurement, mais il est possible de faire un peut plus dans l'accélération de la mise en place du fond de renforcement la capacité; de mobiliser d'autres partenaires pour participer à ce fond; améliorer des moyens de communications avec le réseau et à l'intérieur du pays; augmenter les lobbies du ROPPA en faveur des pays auprès des partenaires.
- d. En ce qui concerne les besoins de financement, la CNOP, souhaiterait la participation de l'USAID au fonds de renforcement de capacité (géré par la BOAD) ; aide pour la mise en place d'un fonds spécial pour le crédit dirigé aux actions de productions, transformation, et commercialisation, appui institutionnel, appui au financement de la production et commercialisation de semences.

Les organisations spécifiques les femmes sont :

CAFO : Comité de Coordination des Associations et ONG féminines;

REFESA : Réseau des femmes sahéliennes ;

Coordination générale des femmes de Kayes, Sikasso.

3. Entrevue avec un membre de AGRIMA (Mr. Mahamadi Dembélé)

AGRIMA (Agriculture au Mali) c'est un groupement d'intérêt économique (GIE) membre de la plate-forme paysanne, et agréé à l'APCAM.

- a. Pour la question sur les forces et les faiblesses ils pense que le réseau a amélioré l'entente entre les O.P. (faïtières), meilleur accès aux ressources, possibilité de

participer aux débats au niveau national et régional. Dans le cas concret du Mali il y a une faiblesse dans la concentration des pouvoirs du Président de la Plate-forme (Au Mali il existe pour le moment les deux structures Plate-formes Paysannes et coordination nationale des O.P. CNOP).

- b. En ce qui concerne l'utilité du réseau, il donne une possibilité d'augmenter la capacité de gestion des O.P., il peut être considéré comme une garantie morale, facilite l'intégration régionale.
- c. Les avantages sont la possibilité de formation à travers des ateliers organisés par le réseau, la recherche de financement, possibilité de participer au grand Forum, être en contact avec d'autres expériences et servir d'interface avec les partenaires.
- d. Pour les besoins de financement AGRIMA veut se spécialiser en multiplication de semences et de plantes fruitières et pour ça il ils ont besoin d'appui pour les équipements et intrants.

LISTE DES PERSONNES RENCONTREES AU MALI

1. Mr. SEKOU A. CISSE, Secrétaire Permanent du CONACILSS
2. Mr. CAMARA, Directeur National de l'Appui au Monde Rural
3. Mr. AMIDOU SANGARE, Responsable Liaison Recherche/Vulgarisation (DNAMR)
4. Mr. BOUARE, Secrétaire Général APCAM
5. Mr. TIDIANI DIARRA, Secrétaire Général Adjoint APCAM
6. Mr. BIRAMA KEITA, Coordinateur Adjoint du PASAOP
7. Mr. SALIF SISSOKO, CNOP, Mali
8. Mr. MAMADI DEMBELE, Administrateur AGRIMA (Agriculture au Mali)
Groupement d'Intérêt Economique (GIE) membre de la Plate-forme Paysanne
9. Mr. SOULEYMANE KEITA, Président de la Plate-Forme Paysanne au Mali
10. Mr. ALPHA KERGNA, IER (Institut d'Economie Rurale)

LISTE DES DOCUMENTS CONSULTES AU MALI

1. Renforcement de la participation des Organisations Non Gouvernementales et des O.P. de la Sous-région de l'Afrique de l'Ouest et du Centre dans la recherche agricole pour le développement – Direction Nationale d'Appui au Monde Rural
2. Communication sur le Partenariat entre la DNAMR et les ONG évoluant dans le Secteur du Développement Rural, Direction Nationale d'Appui au Monde Rural
3. Programme de Renforcement Institutionnel du réseau d'organisation de base et des plate-formes des O.P. dans le cadre de la lutte contre la désertification et la pauvreté dans les pays du Sénégal, Mali, Burkina Faso et Niger. FAO/Coopération Italienne
4. Décret fixant l'organisation et les modalités de fonctionnement des Chambres Régionales d'Agriculture et de l'Assemblée Permanente des Chambres d'Agriculture du Mali – Primature – Secrétariat Général du Gouvernement – août 1993
5. Loi portant la création des Chambres Régionales d'Agriculture et de l'Assemblée Permanente des Chambres de l'Agriculture du Mali – août 1993
6. Brochure sur l'organisation de l'Assemblée Permanente des Chambres d'Agriculture du Mali (APCAM)
7. Document complet du PASAOP du Mali – Banque Mondiale
8. Document sur l'organisation de la CNOP (Coordination Nationale des Organisations Paysannes au Mali)
9. Inventaire et analyse des services d'appui et de financement de la production agricole – Dr. BINO TEME

RAPPORT SENEGAL

I. Informations sur les Grandes Structures s'occupant des organisations paysannes au niveau du pays

1. C.N.C.R.
2. ANCAR
3. I.T.A.

II. Informations sur les Organisations à caractère régional basé au Sénégal s'intéressant aux O.P.

1. ROPPA
2. C.M.A/AOC
3. FRAO
4. CORAF
5. INTERFACE
6. REFESA

III. Entrevue avec les Leaders des O.P. Régionales et Nationales.

C.N.C.R
ROPPA
INTERFACE
REFESA

IV. Liste des Personnes rencontrées

V. Liste des Documents consultés

I. Informations sur les grandes structures s'occupant des organisations paysannes au niveau du Pays.

1. CNCR : Conseil National de Concertation et de Coopération des Ruraux (Sénégal)

Le CNCR a été créé en 1993 avec la finalité de contribuer au développement d'une agriculture paysanne qui assure une promotion socio-économique durable des exploitations familiales.

Ses objectifs sont de :

- Promouvoir la concertation et la coopération de ses membres ;
- Favoriser un partenariat avec ses membres d'une part entre l'Etat et les autres partenaires publics et privés d'autre part ;
- Favoriser l'émergence et le développement d'une plate-forme de concertation entre les organisations paysannes de l'Afrique de l'Ouest.

Les principes d'actions sont :

- La reconnaissance de l'autorité de l'Etat pour la définition des politiques agricoles ;
- L'acceptation de l'intégrité et de l'autonomie des fédérations membres ;
- La reconnaissance de l'existence d'autres acteurs dans l'arène du développement rural ;
- L'assomption par les ruraux de leur destinée.

Organisation

Les organes de gouvernance du CNCR, exclusivement composés des éléments élus sont :

- Le Congrès (chaque 4 ans)
- Le Conseil d'Administration (chaque mois).
- Le Bureau Exécutif (chaque deux mois)
- Le Secrétariat Général.

Au niveau des régions, le CNCR dispose d'un organe consultatif. Le Conseil régional de concertation et de coopération des ruraux (CNR) qui descend au niveau communautaire et arrondissement.

Une cellule d'appui technique a été créée pour appuyer le fonctionnement de ces organes.

Le CNCR compte actuellement de dix neuf (19) membres :

- FONGS (Fédération des ONG du Sénégal)
- FENAFIE/PECHE (Fédération Nationale des GIE des Pêcheurs)
- FNGIE/H (Fédération Nationale des GIE des Horticulteurs)
- FNGIE/E (Fédération Nationale des GIE des Eleveurs)

- UNCE (Union Nationale des Coopératives d'Éleveurs du Sénégal)
- FENOFOR (Fédération Nationale des Organismes d'Exploitants Forestiers du Sénégal)
- UNCAS (Union Nationale des Coopératives Agricoles du Sénégal)
- UNCEFS (Union Nationale des Coopératives d'Exploitants Forestiers du Sénégal)
- FNGPS (Fédération Nationale des Groupements de Promotions Féminines du Sénégal)
- FPA (Fédération des Périmètres Autogérés de la Vallée du Fleuve Sénégal)
- ADEMA (Association pour le Développement de Mamarel et Villages environnants)
- FPTI (Fédération de Producteur de Tomate Industrielle)
- FMPC (Fédération Nationale de Producteurs de Coton)
- UNMS (Union Nationale de Groupements Maraîchers du Sénégal)
- FNPM (Fédération Nationale de Producteurs Maraîchers de la Zone de Myales)
- FEPROBA (Fédération des producteurs du Bassin de l'Anambé).

Il y a quatre nouveaux membres qui attendent l'approbation par le Congrès pour devenir membre.

Le CNCR couvre une population d'à peu près **trois millions de personnes** dans les différentes fédérations et ses démembrements.

Le CNCR participe avec 7 personnes à la Convention du ROPPA et 2 personnes (1 homme et 1 femme) au Comité Exécutif de cette organisation régionale.

Le CNCR gère ou fait partie des Programmes et projets suivants :

- Composante « organisations de producteurs » du Programme des Services Agricoles et des Organisations de Producteurs PSAOP (**6 milliards de FCFA**) ;
- Coordination du cadre de concertation entre les organisations de producteurs et des services de recherche et conseil agricole et rural, en assurant aussi la présidence ;
- Programme d'Appui au Renforcement institutionnel du CNCR et de ses membres ;
- Programme d'Appui à la Concertation Etat Profession Agricole PACZPA ;
- Programme des radios rurales locales de la Francophonie
- Programme spécial de Sécurité Alimentaire – PSSA (750 millions FCFA)
- Conseil d'Administration de l'ANCAR
- Conseil d'Administration de l'ITA (Institut de Technologie Alimentaire)
- Président du Comité de gestion du FNRAA (Fonds National de Recherche Agricole et Alimentaire)
- Comité de Pilotage du PNIR (Programme National d'Infrastructure Rural) ;
- Comité de pilotage du Centre de Formation Polyvalent) ;
- Comité de pilotage du PMAC (Programme de Modernisation et Intensification Agricole).

2. ANCAR (Agence Nationale de Conseil Agricole et Rural)

L'ANCAR a été créée par le Gouvernement du Sénégal lors de la réunion interministérielle tenue le 17 mars 1997. L'ANCAR est une des cinq composantes ou agences d'exécution du PSAOP.

Statut Juridique

L'ANCAR est une Société Anonyme à Participation Publique Majoritaire. Cela permet une autonomie de gestion, une plus grande facilité d'évolution dans l'ouverture du capital à d'autres partenaires dont les organisations paysannes, des délais de constitution plus souples. Avec ce statut, l'Etat a pu associer pleinement ses partenaires des Organisations de Producteurs, des Collectivités Locales et du Secteur Privé. Ce partenariat sera renforcé à terme pour aboutir au désengagement partiel de l'Etat au profit des partenaires notamment les Organisations de Producteurs. L'Etat du Sénégal deviendra à partir de ce moment l'actionnaire minoritaire et l'obligation de résultat déterminera l'allocation de ressources financières à l'Agence.

Le capital est réparti comme suit : Etat du Sénégal : 51% ; Organisations Paysannes : 28% ; Secteur Privé et Industriel : 14% ; Collectivités Locales : 7%. L'implication des OP, des Collectivités et du Secteur Privé dans la gestion et le financement de l'ANCAR modifie les types relations habituelles connues entre les producteurs et les institutions chargées du développement rural. L'ANCAR sera redevable et comptable de ses résultats devant les bénéficiaires.

Instances de décision

	Composition	Présidence
Assemblée Générale	Tous les actionnaires	Représentant désigné par l'actionnaire majoritaire (l'Etat)
Conseil d'Administration	- 4 représentants du gouvernement - 3 représentants des O.P - 3 représentants du secteur privé - 2 représentants des collectivités locales	Un Représentant de l'Etat

Missions de L'ANCAR

La création de l'ANCAR a été rendue nécessaire du fait des faibles performances du secteur agricole malgré la mise en œuvre du PNVA et la riche expérience du Sénégal en matière d'encadrement ou d'appui au monde rural. En effet, plusieurs politiques agricoles et programmes de développement rural très ambitieux ont été mis en place et exécutés jusqu'à ce jour.

Sur le plan institutionnel, différentes structures ont été créées pour mettre en œuvre ces programmes. Le dispositif institutionnel chargé de porter les programmes de développement agricole ou d'encadrement du monde rural s'est renforcé et diversifié suite aux changements des politiques et de stratégies d'intervention.

Le mandat de l'ANCAR est de faire du Conseil Agricole et Rural sur l'ensemble du pays selon une nouvelle approche basé sur le partenariat avec les principaux acteurs. Désormais la mission de conseil agricole et rural est confiée exclusivement⁶³ à l'ANCAR en raison de son caractère officiel et de la particularité de l'approche qui la sous-tend.

A cet effet, seule l'ANCAR dispose, à l'échelle du territoire national, les prérogatives institutionnelles :

- d'élaborer, d'améliorer et de diffuser le conseil agricole et rural ;
- d'harmoniser les méthodes d'intervention ;
- d'évaluer l'impact du conseil agricole et rural ;
- d'assurer son efficacité et sa cohérence.

Les objectifs centraux assignés à l'Agence sont :

- changer fondamentalement la méthodologie d'approche en matière de conseil agricole et rural, en passant de la vulgarisation thématique à un conseil agricole et rural global qui prend en compte l'ensemble des besoins d'appui des producteurs ;
- impliquer les bénéficiaires dans tout le processus d'élaboration, de mise en œuvre et d'évaluation du conseil agricole ;
- améliorer l'élaboration et la diffusion du conseil agricole grâce à un cadre cohérent ANCAR-RECHERCHE – O.P.
- assurer l'intermédiation entre les producteurs et les prestataires de services spécifiques dans le domaine du conseil agricole et rural, dans le cadre d'un partenariat organisé ;
- harmoniser les méthodes d'intervention des acteurs institutions qui offrent du Conseil agricole ;
- obtenir un meilleur rapport entre les résultats du conseil agricole et ses coûts.

⁶³ L'exclusivité ne veut pas dire que l'ANCAR fait seule tout le Conseil et partout. L'exclusivité tient au fait, d'une part, que l'ANCAR est la seule institution à laquelle l'Etat a confié officiellement la mission unique de faire du CAR, d'autre part, l'approche du CAR est une approche nouvelle qui crée la rupture avec les démarches et méthodes antérieures utilisées.

Organisation de l'ANCAR

Les cinq principes régissent l'organisation de l'ANCAR sont :

- contribuer à promouvoir le transfert de responsabilité aux O.P, aux Collectivités Locales et au Secteur Privé ;
- épouser et consolider la décentralisation ;
- assurer une professionnalisation du conseil agricole et rural ;
- permettre d'améliorer le ratio du coût du conseil agricole sur les résultats obtenus ;
- garantir un partenariat entre l'Etat, les Collectivités Locales et les O.P impliquées dans les activités de conseil agricole et rural.

A cet effet l'Agence est organisée comme suit :

- une direction générale légère chargée d'impulser, de coordonner et de contrôler ;
- dix directions régionales responsabilisées dans la gestion administrative et financière. Chaque direction régionale est responsable de la programmation et de la mise en œuvre des activités de conseil agricole et rural avec les Collectivités Locales.

Dispositif

Les programmes de conseil agricole et rural seront élaborés et exécutés au niveau des communautés rurales avec les producteurs. Le dispositif régional prévu est présenté comme suit :

Echelle	Personnel Technique
10 Régions (10 directions régionales)	10 Directeurs régionaux 40 Adjoints 68 Techniciens spécialisés
91 Arrondissements	91 Chefs d'équipes
320 Communautés Rurales	459 Conseillers agricoles
13.000 Villages et 480.000 Exploitations Agricoles	22 Enquêteurs

Ce dispositif sera déployé de façon progressive sur une durée de quatre ans. La mise en place du personnel de base (conseillers agricoles, chefs d'équipe et techniciens spécialisés) se fera au rythme de la création des Cadres Locaux de Concertation des Organisations Paysannes (CLCOP) ou d'identification d'autres cadres de concertation, dans les communautés rurales.

Etant donné la nature très complexe qu'aura la demande de conseil agricole et rural (du fait de sa diversité, de sa spécialité, des besoins en informations de nature pouvant être parfois

spécialisés : demande en matière de gestion, d'organisation ou de marketing, etc.) l'Agence renforcera progressivement ses capacités en terme de spécialisation et de diversification de son personnel.

Modalités de travail

Dans les Communautés Rurales

Au niveau de la communauté rurale, le programme de conseil agricole sera bâti sur la demande des producteurs. La demande sera déterminée à partir d'un diagnostic qui sera réalisé par les producteurs, le personnel de base de l'ANCAR et les autres acteurs du développement rural de la zone. Les activités de conseil agricole et rural seront formulées par les producteurs et les conseillers agricoles et ruraux de l'ANCAR. Les activités identifiées feront l'objet de contrats annuels ou pluriannuels entre, d'une part, la communauté rurale, les O.P concernées, d'autre part, l'ANCAR (le conseiller agricole et rural).

Le contrat présente les activités du conseil agricole et rural, les résultats attends, le budget, et les engagement de chaque partie contractante (communauté rurale, O.P, ANCAR). Les conseillers agricoles et ruraux compléteront les activités des auxiliaires villageois engagés par des O.P ou une ONG. Les modalités de travail des conseillers avec les auxiliaires seront présentées dans un contrat annuel entre l'ANCAR, les O.P ou l'ONG.

Dans les zones avec encadrement par une SRDR ou un Projet

Dans les zones avec encadrement par une Société Régionale de Développement Rural (SRDR) ou par un Projet, il est prévu à la afin de la première phase du PSAOP, une évaluation comparative des activités de conseil agricole des SRDR ou des Projets avec celles de l'ANCAR.

Cette évaluation sera faite sur la base de l'exécution technique des programmes, le coût et la satisfaction des bénéficiaires. Les résultats de l'évaluation comparée ANCAR/SRDR ou ANCAR/Projet permettront de procéder dans les zones concernées à une redéfinition de la fonction de conseil.

A cet effet, des protocoles d'accord ANCAR/SRDR ou ANCAR/projet seront élaborés et discutés entre les parties. Ces protocoles d'accord définiront : (i) les modalités de l'intervention de l'ANCAR avec chaque SRDR ou Projet ; (ii) les critères et les indicateurs de l'évaluation comparée des activités de conseil agricole et rural de l'ANCAR avec celles de la SRDR ou du Projet. A ce sujet, une concertation a été initiée avec les SRDR pour l'élaboration et la négociation de protocoles d'accord sur le conseil agricole et rural.

Possibilités de contractualiser ou de faire-faire

Malgré les prérogatives statutaires qui offrent à l'ANCAR la responsabilité exclusive du conseil agricole et rural dans tout le pays, l'Agence peut contractualiser avec les structures ayant une capacité avérée en matière de conseil agricole et rural.

La contractualisation avec les autres structures sera régie par quatre principes : l'opportunité, le moindre coût, la capacité effective, la non-duplication des opérations et des financements dans une même zone.

Plan de financement de l'ANCAR

Durant les trois premières années (première phase) les dépenses de fonctionnement de l'Agence seront financées par le Gouvernement. Les crédits alloués à l'ANCAR dans le cadre du PSAOP supporteront les investissements dans les ressources humaines (formation, renforcement des capacités techniques, de méthodes de communication et de conseil agricole), dans les infrastructures⁶⁴ (équipements informatiques, véhicules, réhabilitation de bâtiments) et une partie du fonctionnement lié aux activités de conseil agricole et rural.

A la fin de la première phase, les producteurs (bénéficiaires du conseil agricole et rural) participeront au financement des dépenses de fonctionnement de l'ANCAR. Des négociations seront entreprises entre le Gouvernement et les O.P. pour déterminer les modalités de gestion d'une partie des prélèvements sur les produits agricoles par les O.P. pour financer les activités de l'ANCAR.

A cet effet, une étude sur les mécanismes de financement pérenne de l'ANCAR a été déjà faite en 1999. Cette étude a identifié des possibilités réelles de financement de l'ANCAR à partir des prélèvements sur les produits agricoles au sens large.

3. ITA (Institut de Technologie Alimentaire)

La mission de l'ITA est de contribuer à l'amélioration des performances du Secteur Agro-Alimentaire au Sénégal et dans la sous-région.

Les axes de travail de l'ITA sont :

- la recherche/Développement au Service de la qualité nutritionnelle des aliments ;
- l'adaptation aux normes locales et internationales ;
- la réduction des pertes des unités de production ;
- la formation des techniciens spécialisés ;
- le contrôle de la qualité.

Les atouts sont :

⁶⁴ Les immobilisations du PNA et de la SODEVA seront transférées à l'ANCAR.

- une recherche tournée vers la besoins réels des entreprises du Secteur Agro-Alimentaire ;
- des procédés de transformation et de conservation ;
- la conception d'équipements et de machines ;
- des recettes de fabrication adoptés aux produits et aux marchés locaux ;
- l'incubation des entreprises dans les unités pilotes ;
- une assistance au transfert et à la mise en œuvre des unités de production ;
- une vieille technologie au service de l'innovation.

Les domaines de formation sont :

- conservation et conditionnement de produits horticoles ;
- transformation des fruits et légumes ;
- technique de boulangerie et pâtisserie à bases de farine composés ;
- technologie et contrôle de la qualité du poisson ;
- techniques modernes de boucherie et charcuterie
- initiation à la nutrition et à la technologie des aliments.

D'importants résultats de recherche sont disponibles pour les entreprises Agro-Alimentaires notamment celles dont l'activité est centrée sur les céréales et les légumineuses, les fruits et les légumes, le poisson, et les produits halieutiques, les produits d'élevage.

L'ITA a participé dans une expérience intéressante avec la Société NESTLE pour l'utilisation des farines du mil et du sorgho comme composants des produits de cette grande multinationale de l'Alimentation.

Malheureusement dû à des problèmes de transport entre le Sénégal et la Côte d'Ivoire l'expérience a été transférée entièrement sur ce pays.

Aussi, ITA collabore avec le réseau ROCAFREMI et l'Université de Purdue pour l'amélioration de la qualité des produits dérivés du mil et du sorgho.

II. Information sur les Organisations à caractère régional basé au Sénégal s'intéressant aux O.P.

1. ROPPA (Réseau des Organisations Paysannes et des Producteurs Agricoles de l'Afrique de l'Ouest)

Le ROPPA a été créé en juillet 2000 à Cotonou-Bénin mais c'est lors de la conférence des Chefs d'Etat du CILSS à Praia en 1994 que l'idée d'une « Plate-forme des Organisations paysannes du Sahel » a été lancée.

Aujourd'hui ROPPA c'est un réseau qui regroupe des organisations paysannes et de producteurs agricoles des pays suivants : Bénin, Burkina Faso, Côte d'Ivoire, Guinée; Guinée-Bissau, Gambie, Mali, Niger, Sénégal et Togo.

Les objectives principales sont de :

- promouvoir et défendre les valeurs d'une agriculture paysanne performante et durable au service des exploitants familiales et des producteurs agricoles ;
- encourager et accompagner la concertation et la structuration des organisations paysannes et de producteurs agricoles dans chaque pays ;
- informer et former les membres des organisations paysannes, et de producteurs agricoles à partir de nos expériences et de celles des autres acteurs de développement ;
- promouvoir la solidarité entre les O.P
- assurer la représentation des organisation paysannes et de producteurs agricoles aux niveaux sous régional, régional et international.

Les principes d'action sont :

- Favoriser et soutenir la structuration au niveau national des organisations paysannes et des producteurs agricoles comme un acteur crédible, représentatif et efficace ;
- Considérer le dialogue et le partenariat avec les Etats, les Organisations Intergouvernementales et les autres partenaires de développement comme l'approche la plus pertinente pour la promotion et le développement durable de l'agriculture paysanne et des exploitations familiales.

Organisation

Le ROPPA est composé de :

- une convention composée par 70 personnes élues, 7 par pays ;
- un Comité exécutif composé par 12 personnes dont 1 par pays plus 2 femmes et 1 président élus
- un Coordinateur ;
- une Cellule d'exécution Technique.

Les plate-formes nationales membres du ROPPA :

- Bénin, Fédération des Unions de Producteurs du Bénin (FUPRO) ;
- Burkina, Cadre de Concertation des Organisations du Faso (CCOF) ;
- Côte d'Ivoire, Association Nationale des Organisations Professionnelles Agricoles de Côte d'Ivoire (ANOPACI) ;
- Gambie, Association et Farmers, Educators and Traders (AFET) ;
- Guinée, Conseil National des Organisations Paysannes (CNOP) ;
- Guinée-Bissau, Plate-forme Nationale des organisations Paysannes.
- Mali, Coordination Nationale des Organisations Paysannes du Mali, CNOP ;
- Niger, Coordination des Organisations Paysannes du Niger ;
- Sénégal, Conseil National de concertation et de coopération des ruraux, CNCR ;

- Togo, Conseil National des Organisations Paysannes du Togo, CNOP.

ROPPA a comme programme prioritaire les activités suivantes :

- Renforcer la capacités des plate-formes membres à agir par eux-mêmes et a améliorer leurs conditions de travail ;
- Proposer aux décideurs et aux partenaires des orientations, les priorités, les programmes et les actions qui permettent à l'agriculture ouest-africaine de relever les défis de la sécurité alimentaire durable et d'un avenir décent pour les exploitations familiales agricoles
- Mettre en chantier le Fonds de Renforcement des Capacités des Organisations Paysannes et de Producteurs Agricoles ;
- Elaborer la carte d'identité Rurale comme outil d'information et d'aide à la décision des exploitants familiaux et de leurs organisations ;
- Collaboration des organisations paysannes et des producteurs agricoles dans l'élaboration et amélioration des Politiques Nationales de Développement Rural et la Politique Agricole commune au sein, de la sous-région.

Le ROPPA a été reconnu officiellement par les autorités compétentes (Auniveau Régional par les Organisations sous régionales, au niveau National par les Ministères de Tutelle des O.P.)

Il a son siège Ouagadougou, Burkina Faso et vient de nommer un coordinateur.

ROPPA a négocié avec la BOAD la gestion financière de toutes ces ressources.

Le nombre de paysans couvert par toutes les associations et plate-formes des 10 pays membres ronde les **30 millions**. Selon une estimation de la direction du ROPPA.

Les partenaires du ROPPA sont : La coopération Néerlandaise, la coopération Suisse, la Coopération Luxembourgeoise, la Coopération Française, la FAO, le Club du Sahel, la Coopération Belge, la Coopération Italienne, l'UEMOA, le FIDA, et les ONG AGRITERMS et SOS FAIM.

2. CMA/AOC

<p>CMA/ADC. La conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest et du Centre, a été créé en 1991. Elle regroupe 20 pays.</p> <ul style="list-style-type: none"> • 14 Pays d'Afrique de l'Ouest : Bénin, Burkina Faso, Cap Vert, Côte d'Ivoire, Gambie, Ghana, Guinée, Guinée-Bissau, Mali, Mauritanie, Niger, Nigeria, Sénégal, Togo ; 	<p>Fonctionnement :</p> <p>Le fonctionnement de la CMA/AOC repose sur les structures suivantes :</p> <ul style="list-style-type: none"> • La conférence des Ministres qui regroupe l'ensemble des Ministres de l'Agriculture et/ou de l'Elevage des 20 pays membres. Elle se réunit une fois tous les 2 ans et élit en son sein un Président pour un mandat de 2 ans :
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<ul style="list-style-type: none"> • 6 Pays d'Afrique Centrale : Cameroun, Congo, Gabon, Guinée Equatoriale, République Centrafricaine, Tchad. <p>Objectifs :</p> <p>La CMA/AOC a 3 objectifs majeurs :</p> <ul style="list-style-type: none"> • La promotion des échanges intra-régionaux en vue de créer un véritable marché régional des produits agricoles ; • L'amélioration de la compétitivité à l'exportation des produits d'origine AOC ; • Le développement des capacités dans la formulation, la mise en œuvre et l'évaluation des politiques agricoles. <p>La conférence aura permis d'atteindre un objectif et non des moindres :</p> <ul style="list-style-type: none"> • La constitution, au niveau de la région, d'un réseau d'experts ayant appris à travailler ensemble et conscients de la dimension régionale de l'intégration comme cadre de réflexion, tout en ayant à l'esprit les contraintes du marché mondial. 	<ul style="list-style-type: none"> • Le Bureau qui regroupe les 10 Ministres responsables chacun d'un domaine de coopération se réunit une fois par an ; • La Coordination Générale dont le Secrétariat permanent est basé à Dakar (Sénégal) est chargée d'animer l'ensemble de la Conférence • Le Comité Technique de Suivi (CTS) qui regroupe les 20 Coordonnateurs Nationaux, les Partenaires Techniques et le Coordonnateur Général se réunit 2 fois par an ; • Les 20 Coordinations Nationales (CN) assurent l'animation de la Conférence a au niveau de leurs pays respectifs sous la responsabilité du Ministre chargé de l'Agriculture et/ou de l'Elevage. <p>Domaines de coopération :</p> <ul style="list-style-type: none"> • Promotion du marché des céréales (Mali) • Promotion du marché du bétail et de la viande (Cameroun) • Promotion du marché des oléagineux (Togo) • Développement de la compétitivité des produits d'exportation -- café, cacao, coton (Côte d'Ivoire); • Promotion du marché des fruits et légumes (Guinée) • Promotion du marché des racines et tubercules (RCA) • Recherche Agricole Régionale (Nigeria) • Mesures transversales (Professionnalisation, infrastructures rurales, crédit foncière etc...) Burkina Faso) • Politiques d'Ajustement, Monnaies (Sénégal) - Homologation Interafricaine Phytosanitaire (Bénin)
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La Fondation pour le Renforcement des Capacités en Afrique et la Conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest et du Centre, ont décidé de mettre en œuvre le Projet de Renforcement de l'Interface entre les Etats et les Chambres d'Agriculture en Afrique de l'Ouest dénommé PRIECA/AO. Couvrant les pays suivants : Bénin, Burkina Faso, Côte d'Ivoire, Guinée, Togo et Mali.

La stratégie de mise en œuvre de ce projet consistera :

- mettre en place un dispositif d'information sur les opportunités du marché régional des produits agricoles gère par les chambres d'agriculture pour les besoins de leurs ressortissants ;

- instaurer un cadre de concertation et de dialogue pour la responsables, des chambres d'agriculture pour mieux analyser l'impact des politiques sur le secteur agricole et renforcer la représentation du secteur au processus d'intégration ;
- aider à l'amélioration du dialogue entres les professionnels du secteur agricole et les autorités publiques aux échelons national et régional ;
- renforcer les capacités institutionnelles de la coordination générale de la CMA/AOC pour une meilleure coordination des politiques agricoles des p ays membres et la mise en place d'un système du marché.

Les principes directeurs devant guider la mise en œuvre du projet sont : la régionalité, la subsidiarité, la complémentarité, le partenariat.

Le projet a deux composants : renforcement institutionnel des Chambres d'Agriculture et du Secrétariat de la CMA/AOC sont financés pour une valeur de 1.900.000 US sur 4 ans.

3. FRAO (Fondation Rurale de l'Afrique de l'Ouest)

La FRAO a démarré ses activités en 1990 sous le nom de PRAAP (Programme de Recherche ou d'Appui aux Associations Paysannes). L'idée original est née des rencontres qui se sont tenues sous l'égide de la FONGS (Fédération Nationale des ONG du Sénégal).

Les organisateurs du PRAAP étaient résolus à créer des moyens novateurs pour aider les communautés rurales pauvres, avec l'appui de la Fondation Ford, du Centre de Recherche pour le Développement International (CRDI) et le Développement Innovations and Networks.

Le PRAAP est devenu FRAO en octobre 1993.

Le Mandat de la FRAO est d'aider les communautés rurales a trouvé et à trouver et à suivre le chemin vers l'autosuffisance à travers : une meilleure appréciation par la communauté de la valeur de leurs ressources locales, humaines et naturelles ; une capacité accrue de la communauté à agir efficacement pour apprécier cette valeur.

2. L'organisation

Conseil des gouverneurs { Comité de réflexion scientifique
Cellule Audit et Finance
Cellule Juridique et recrutement

3. Comité Exécutif

Directeur Exécutif { Directeurs de Programmes
Directeur Administratif et Financier

Au niveau des pays il y a des partenaires relais . Les pays membres sont : le Sénégal, le Mali, la Guinée-Bissau, la Gambie, la Guinée-Conakry.

Son premier plan d'action de 1993-1998 a privilégié 3 grands domaines : renforcement institutionnel ; développement participatif de Technologie ; mise en réseau.

Le deuxième plan de 1999/2003 a privilégié 4 grands domaines : Gouvernance Local ; Entreprenariat rural ; intégration régionale ; genre équité et développement.

2. CORAF, Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole

La CORAF/WECARD a été créé en 1987 avec pour mission :

- d'améliorer l'efficacité et la capacité de la recherche agricole en Afrique de l'Ouest et Central contribuant pour la construction et la consolidation des capacités des systèmes nationaux de Recherche Agricole, à travers une coopération entre ses membres, développement de la collaboration au niveau régional et international entre les organisations, les secteurs privés les ONGs et utilisateurs de recherche.
- de consolider la position de l'Afrique de l'Ouest du Centre dans le contexte du développement de la recherche agricole international.

Les objectives sont :

- promouvoir la coopération, consultation et l'échange d'information entre institution membres d'une part et avec les partenaires d'autre part ;
- définir les objectives et priorités de la recherche au niveau régional et régional ;
- Servir comme une entité consultative de recherche conduite par des organisations régionales et internationales fonctionnant au niveau sous-régional ;
- développer des programmes de recherche dans lecture d'améliorer la complémentarité entre la CORAF et ses partenaires ;
- harmoniser les activités de recherche au niveau des réseau et faciliter la création des nouveaux réseaux ou unités de recherches avec caractère régional.
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Organisation

- Assemblée Générale, qui se tient une fois par an composé par les représentant des NARS, OIG, ONG, O.P, secteur privé et invités ;
- Comité Exécutif, composé de 9 membres des NARS qui se rencontrent 3 fois par an;
- Comité scientifique et technique, composé par 8 membres qui se rencontrent 2 fois par an;
- Un Secrétariat Exécutif, composé par 1 secrétaire Exécutif, 5 staff professionnel et de 10 personnels administratif et de support.

La zone couverte par la CORAF est divisée en trois parties. Le Sahel, l'Afrique côtière et l'Afrique centrale.

Le Sahel est composé de 9 pays (qui sont les neuf pays membres du CILSS), Burkina Faso, Cape Vert, Gambie, Guinée-Bissau, Mali, Mauritanie, Niger, Sénégal et Tchad).

L'Afrique de l'Ouest côtière est composée par 8 pays (Guinée-Conakry, Sierra Leone, Côte d'Ivoire, Ghana, Togo, Bénin, Nigeria et Libéria).

L'Afrique Centrale est composée de 5 pays (Cameroun, République Centre Africaine, Gabon, Congo t République Démocratique du Congo).

La zone de ces 22 pays couvrent une surface de 11,5 millions de kilomètres carrés et une population de 260 millions d'habitants.

Le nombre de chercheurs par zone est :

- Sahel, 1015 chercheurs,
- Afrique Ouest côtière, 2.300 chercheurs ;
- Afrique Central, 938 chercheurs.

La CORAF mme s'il a prévu dans son plan stratégique d'impliquer les paysans et organisations professionnels n'a pas réussi jusqu'à ce moment cet objectif.

Seulement dans l'Assemblée Générale de Mars 2003 il est prévu l'intégration de ces structures du secteur privé dans son Comité Exécutif.

Les membres du CORAF :

1. Bénin, Institut national de Recherche Agricoles au Bénin, INRAB ;
2. Burkina Faso, Institut de l'Environnement et de Recherches Agricoles, INERA ;
3. Cameroun, Institut de Recherche Agronomique pour le Développement du Cameroun ;
4. Cap Vert, Instituto Nacional de Investigaçao e Desenvolvimento, INIDA ;
5. Centrafrique, Institut Centrafricain, de Recherche Agronomique, ICRA ;
6. Congo, Délégation Générale à la Recherche Scientifique et Technique, DGRST ;
7. Côte d'Ivoire, Centre National de Recherche agronomique, CNRA ;
8. Gabon, Institut de Recherches Agronomiques et Forestières du Gabon, IRAF ;
9. Gambie, National Agricultural Research Institute, NARI ;
10. Ghana, Council of Scientific and Industrial Research, CSIR ;
11. Guinée, Institut de Recherche agronomique de Guinée, IRAG ;
12. Guinée-Bissau, Instituto Nacional de Pesquisa Agricola, INPA ;
13. Mali, Comité National de Recherche agricole, CNRA et Institut d'Economie Rurale, IER ;

14. Mauritanie, Centre National de Recherche agronomique et de Développement ; Agricole, CNRADA et Centre National d'Elevage et de Recherche Vétérinaires, CNERV ;
15. Niger, Institut National de Recherche Agronomique du Niger, INRAN ;
16. Nigeria, Department of Agriculture Research Sciences, Federal Ministry of Agriculture and Rural Development ;
17. Sénégal, Institut Sénégalais de Recherches Agricoles, ISRA ;
18. Sierra Leone, National Agricultural Research coordinating Council, NARCC ;
19. Tchad, Institut Tchadien de Recherche Agricole pour le Développement ITRAD et Laboratoire de Recherche, Vétérinaire et Zootechnie de Farcha, LRVZ ;
20. Togo, Institut Togolais de Recherche Agronomique, ITRA ;
21. République Démocratique du Congo, Institut National pour les études et la Recherche Agronomique, INERA.

5. INTERFACE : créé en Mai 1997 à Ouagadougou

Les objectifs généraux d'INTERFACE sont :

- renforcer la collaboration entre les entreprises de l'agro-business en vue du développement de leur capacité de management et institutionnelle. promouvoir l'existence d'un environnement des affaires favorables au développement de l'entreprenariat national et régional.

Les objectifs spécifiques sont :

- renforcement institutionnel du réseau régional et des réseaux nationaux
- faciliter l'accès aux financements pour l'organisation membres de INTERFACE
- faciliter l'accès aux marchés nationaux et internationaux
- faciliter l'accès aux innovations technologiques
- faciliter l'accès aux résultats de la recherche
- transformation des produits agricoles
- permettre aux entrepreneurs de mieux maîtriser la gestion de leur affaires
- accompagner l'élaboration et la mise en oeuvre des différents projets
- fortifier le réseau.

L'instance régionale d'Interface est composée d'une Assemblée Générale et d'un Comité Exécutif dans lequel il y a un Président et deux Vice-Présidents. Dans chaque pays INTERFACE a installé un comité national piloté par un comité exécutif de la même composition que le bureau régional.

Les programmes :

- Informations-communication
- Plaidoyer et négociation

- Formation, Assistance Technique, Conseils et Rechercher
- Projet d'intégration régional
- Promouvoir le développement des exportations
- Inventaire

6. REFESA – Réseau des Femmes Sahéliennes est créé à Banjul en Septembre 1997 suite à l'exercice de réflexion Sahel 21 »

- L'objectif de REFESA c'est de servir de cadre de mobilisation, de concertation d'échange d'expériences et d'informations entre les femmes sahéliennes au niveau national et régional.

- Les Membres du REFESA peuvent être toutes les organisations des femmes qu'il s'agisse d'ONG, Associations, Fédérations, groupement, groupes, coopératives, Unions etc.

Les principales missions du REFESA sont :

- Consolider et renforcer les capacités du réseau pour engager des actions de pressions ou de plaidoyer pour faire avancer la cause des femmes ;
- Défendre et promouvoir l'approche Genre et Développement afin que la dimension, homme/femme soit considérée comme principe directeur dans la recherche de solution à toute problématique de développement ;
- Promotion des échanges d'expériences, d'informations et de technologies entre les membres et avec d'autres réseaux nationaux, sous régionaux, régionaux et internationaux ouvrant pour la promotion des femmes.
- Mobiliser les coordinations nationales des femmes sahéliennes pour initier et faire aboutir les actions à mener pour la défense des intérêts des membres du réseau ;
- Organiser et instaurer des concertations permanentes entre les membres pour l'élaboration, la mise en œuvre et le suivi-évaluation des programmes et projets concernant les femmes au Sahel.
- Appuyer et encadrer les coordinations nationales dans la réalisation de leurs programmes ;
- Développer le partenariat avec les organisations nationales de femmes sahéliennes qui ne sont pas membres du réseau.

Les Instances et Organes de Coordination

Le REFESA comprend neuf coordinations par pays au niveau régional il est composé d'une coordination régionale qui comprend les organes suivants :

- Assemblée Générale des représentants des coordinations nationales
- Bureau de Coordination Régional
- Comité Consultatif.

L'Assemblée Générale est l'organe suprême de décision de la coordination régionale. Elle est composée de deux représentants par coordination nationale, ainsi que des membres associés et d'honneur.

Les Ressources viennent du droit d'adhésion et cotisation annuelle des membres ; libéralités et legs ; subvention ; sponsoring.

Quelques positionnements :

- INTERFACE a représenté la plate-forme du Secteur Privé du CILSS dans la réflexion Sahel 21
- Membre fondateur du ACP Business Forum/Bruxelles
- Membre du Comité Exécutif du SPARR (Programme Spécial pour la Recherche Agricole)
- Membre du Groupe ACP/Sciences et Technologies
- Membre du Comité de Concertation de Sécurité Alimentaire/CILSS
- Membre du Comité Exécutif du FARA (Forum de la Recherche Agricole en Afrique Subsaharienne).

III. Entrevue aux leaders des Organisations

1. CNCR :

- Secrétaire Général, Samba Guèye
- Conseiller Technique, Marius Dia

- a) En ce qui concerne la force et la faiblesse du réseau, il a été noté comme forces la possibilité de renforcer la capacité des membres, la participation dans l'élaboration de la politique agricole commune de l'UEMOA, participation dans des réunions au niveau régional, des possibilités des échanges avec des paysans, d'autres pays de la sous-région, une influence sur la considération de l'agriculture familiale comme base dans l'élaboration de la politique agricole commune, influence dans la réduction du coût du crédit agricole qui est passé de 12,5% à 7,5%.

Le CNCR a été une pièce maîtresse dans la création du ROPPA.

- b) Pour l'utilité du réseau le CNCR considère qu'ils peuvent contribuer dans la diffusion des différents programmes d'appui aux Fédérations et du paysan ; possibilité d'interpeller directement les autorités pour des questions importantes comme le Suivi de la Campagne ; participation à plusieurs comités de pilotage des projets et instance d'assistance aux paysans ; la gestion de certains projets ; influence dans la notification de la convention no.141 du BIT qui reconnaît les paysans ,comme travailleurs ruraux ; une assistance aux O.P. dans les négociations des programmes de développement du Secteur agricole.

- c) les avantages d'appartenir à un réseau sont ceux d'améliorer la visibilité ; avoir plus d'écoute au niveau international ; reconnaissances au niveau des organes régionaux UEMOA/CEDEAO/CILSS.
- d) En ce qui concerne le besoin de financement ils souhaitent voir renforcer le fonds de Renforcement de Capacité ; un appui institutionnel, un appui dans la formation en suivi des système d'audit, un plaidoyer pour les fonds de crédits, renforcement de capacités humaines, appui logistique moyen de transport et communication (Internet).
- e) Pour les lacunes ils ont constaté une faiblesse dans la mobilisation sociale et économique propres face aux besoins ; insuffisance de démocratie interne au sein des O.P ; un manque de capacités institutionnelles. Pour combler ses lacunes ils préconisent : une campagne de rénovation des O.P. qui a déjà démarré; une politique d'information et de formation à tous les niveaux pour améliorer la compréhension politique du développement ; et des dialogues avec le pouvoir publique.

Il existe deux organisations spéciales pour les femmes au Sénégal

FNGPF – Fédération Nationale des Groupements féminins, qui interviennent dans tous les domaines comme : appui institutionnel aux organisations de base ; appui dans l'accès aux crédits ; facilité pour la commercialisation des produits, etc regroupant à peu près 1.000.000 de femmes.

DIRFEL, Directoire de Femmes en Elevage, productions laitières ; transformation, embouche ovine, volaille, regroupant 15.000 productrices.

2. ROPPA :

- Président, M. Ndiougou Fall
- Coordonnateur, Mohamodou, I. Magha

Pour les membres voir description ROPPA comme organisation

b. En ce qui concerne les services et bénéfices que les plate-formes reçoivent du réseau elles sont en priorités : la formation (ateliers) ; la capacité de recevoir des informations au niveau régional et mondial ; appui dans la préparation et participation des grandes rencontres au niveau régional et mondial ; accès au Fonds de Renforcement de Capacité qui évalué à plus ou moins 130 millions de FCFA par pays ; équipement informatique de communication (Internet) ; possibilité d'échange avec les organisations d'autres pays.

c. Les activités spécifiques appuyées par, le réseau sont : assistance technique sur l'établissement des mutuelles d'Epargne et crédit ; appui a la participation dans les grandes

réunions mondiale sur, le marché OMC, AGOA ; Séminaires de formation sur l'accès au marché ; appui aux actions dans le domaine de la GRN à travers le projet Italien ; réflexion avec le CILSS sur le foncier et la décentralisation mise en place de la Politique de Sécurité Alimentaire Régionale avec le CILSS.

d. Les besoins en financement sont de divers ordres tels que pour : la consolidation des plateformes nationales ; renforcement de l'organisation des O.P. ; la participation dans des action d'intégration régional, moyen de communication, les pays ne sont pas aux mêmes niveaux ; contribution d'autres partenaires au Fonds de Renforcement de Capacité logé à la BOAD.

En ce qui concerne l'impact de ces financements ils ne sont pas visibles, mais il y a un peu de changement dans la commercialisation privé qui a impliqué une augmentation des revenus au niveau des paysans. Aussi une amélioration du système de production.

Pour les risques, l'incertitude climatique de la région du Sahel, des faiblesses de certaines organisations qui sont très jeunes, les changements politiques dans certains pays et la politique de protection agricole internationale.

Les principales lacunes en information sont la situation difficile de certains pays qui ne sont pas aux mêmes niveaux ; il faut un changement de comportement des partenaires dans l'échange d'information entre le réseau et ses partenaires ; les échanges d'information ne sont pas assez fréquente.

Pour palier à ces difficultés ROPPA va recruter un spécialiste en communication et améliorer le Site Web existant.

3. INTERFACE

a). Membres d'INTERFACE

Pays	Coordonnateurs Nationaux
Bénin	M. Athanose AKPO/ C.B.C.
Burkina Faso	Mme. Simone Zomdi/SODEPAL
Cap Vert	M. José Luis Barbosa/FENACCOOP
Côte d'Ivoire	Mme Cecile Kouassi
Gambie	M.Ibou JOBE/Gandial Fisheries Enterprise
Ghana	Mme Esther OCLOO/SEMVF
Guinée-Conakry	M.Famousse KABA/APMODEF
MALI	M.Hamidou DOUCOURE/SENAGRI
Mauritanie	M. Hadya Kaou DIAFANA/AMIFOOD Industrie
Niger	Mme Zeinabou DJIBRINE/NIGER LAIT S.A.

Nigéria	M.Boma ANG A/GOLDCMANS INTERNAITONAL LTD
Sénégal	Mme Bineta COULIBALY/LA VIVRIERE
Togo	M.Edouard KELEOU/INTRAE

Bureau Exécutif

- Président, Mme Gisèle d'Almeida, (Sénégal)
- Vice-Président, M.Jean-Claude Gouthon (Bénin)
- Vice-Président, M.Baï Malleh Wadda (Gambie)
- Président d'Honneur, Mme Esther A.OCLOO.

b. En ce qui concerne les bénéfices ou services que les membres reçoivent du réseau ont peut citer :

Aide pour l'organisation du bureau national ;
 Aide dans la création du mutuel d'épargne et crédit pour les petits fonds
 Promotion en management
 Aide dans l'organisation des transports pour l'évacuation des produits du marché à l'intérieur et à l'extérieur du pays
 Recherche de partenariat
 Etablissement de la liaison entre la recherche et les réseaux locaux
 Formation dans la technique de transformation des produits
 Facilitation dans la participation aux Foires.

c. les activités spécifiques sont :

Programme d'information et communication sur les grands accords au niveau régional et international
 Réalisation d'une enquête au niveau national sur les possibilités de chaque pays dans les domaines de normes, qualités
 Sensibilisation pour la vulgarisation des informations.

d. Quel type de financement souhaité :

Renforcement institutionnel du réseau régional et national (Formation, Planification, équipement etc)
 Création d'un centre de services au niveau de chaque pays (Agro-Business Center)
 Formation spécifique par rapport au réseau
 Appui pour la création d'une mutuelle d'épargne et de crédit au PME/P/TU au niveau des pays
 Appui pour la création d'un journal magazine pour diffuser les informations
 Appuyer la participation du réseau aux grands Forums de la recherche et du marché.

Les facteurs de risques sont :

- Une trop grande disparité entre les membres, par suite d'une différence de background des entrepreneurs, des entreprises ou des pays, pourrait empêcher une participation équilibrée des sociétaires
- Une domination du réseau par un (ou des) groupes un (ou des) organisations, ou quelconque facteur de division, pourrait entraîner une position antagoniste.
- Une trop grande centralisation par les organes de gestion d'INTERFACE, probablement accompagné d'une domination, pourrait détourner le réseau de ses objectifs
- Un manque de ressources pourrait transformer INTERFACE sous le contrôle de bailleurs de fonds pourrait transformer le réseau en agence d'exécution des tâches, au détriment des objectifs des membres.

4. REFESA (Réseau des Femmes Sahéliennes)

REFESA c'est une organisation des femmes sahéliennes qui a été créé suite à l'exercice de Sahel 21. Elle a une coordination Régionale dont le Président est actuellement le Sénégal pour 2 ans.

Dans chaque pays du CILSS il existe un réseau national des femmes sahéliennes qui s'appelle « Cadre de concertation du Comité National REFESA » coordonné par une Secrétaire Exécutif.

- a. Les services ou bénéfices dont les réseaux nationaux bénéficient sont : appui technique ; élaboration de documents de projets ; renforcement de capacités, plaidoyer au niveau des partenaires ; formation ; circulation de l'information, facilitation dans les échanges avec d'autres organisations
- b. en ce qui concerne les activités spécifiques elles sont divisées dans les domaines de : santé, environnement, énergie renouvelable, transformation de produits horticoles et agricoles ; renforcement de la productivité agricole à travers le transfert de nouvelles Technologie, promotion de l'entrepreneuriat féminin.
- c. le REFESA souhaiterait avoir des appuis dans les activités générales génératrices de revenus pour les femmes ; dans le renforcement de capacité de ses membres : dans la diffusion de l'information inter réseau et avec l'extérieur à travers Internet ; fourniture d'équipement informatique dans la mise en place d'une Fondation pour l'appui aux activités des femmes ; dans la participation aux grandes rencontres régionales et internationales ; pour l'organisation de séminaires aux niveaux nationaux.

Les impacts prévus avec l'augmentation des revenus seront visibles dans l'amélioration des conditions de santé et du niveau de vie en général. Avec le renforcement des capacités les femmes vont pouvoir se communiquer avec des femmes d'autres régions et augmenter leurs

connaissance en entrepreneuriat. La visibilité de ces associations augmente avec la circulation des informations.

Il y a une grande lacune dans le réseau de REFESA en ce qui concerne la conception des programmes d'activités et aussi dans la formation pour le renforcement des capacités surtout en management et d'utilisation des nouveaux moyens de communication.

LISTE DES PERSONNES RENCONTREES AU SENEGAL

1. Mr. OUSMANE N'DIAYE, Coordonnateur ASPBODEP
2. Mr. MARIUS DIA, Coordonnateur Cellule Technique, CNCR
3. Mr. SAMBA GUEYE, Secrétaire Général CNCR
4. Mme KHADY M'DAM, Trésorière du CNCR
5. Mr. SARRIOU SARR, Premier Vice-Président de l'ASPBODEP
6. Mme AWA DIALLO, Secrétaire Général de l'ASPBODEP
7. Mr. NDIAGA BAYE, Secrétaire Exécutif du CORAF
8. Mr. MARCEL NWALOZIE, Coordonnateur Scientifique CORAF
9. Mr. FADEL DIAME, Fondation Rurale de l'Afrique de l'Ouest, FRAO
10. Mr. EMMANUEL SENE, Agence Nationale de Conseil Agricole et Rural (ANCAR)
11. Mr. MOUR GUEYE, Agence Nationale de Conseil Agricole et Recherche (ANCAR)
12. Mr. CHEIKH NDIONE, Institut de Recherche Agricole
13. Mr. BABA DIOUM, Coordonnateur Général de la Conférence des Ministres de l'Agriculture de l'Afrique de l'Ouest CMA/AOC
14. Mr. NDIIOUGOU FALL, Président du Réseau Ouest Africain des Paysans et Producteurs Agricoles (ROPPA)
15. Mr. Mohamadou I. MAGHA, Coordonnateur ROPPA
16. Mr. PETER C. TRENCHARD, Conseiller en Agriculture et Ressources Naturelles USAID/Sénégal
17. Mr. ROBERT T. WINTERBOTTOM, Projet Agriculture et Gestion des Ressources Naturelles, Tambacounda (USAID), Sénégal
18. Mr. CKECIKH TIDJANE, Projet Agriculture et Gestion des Ressources Naturelles, Tambacounda (USAID), Sénégal
19. Mme NANCY ESTES, Chargée d'Aide Alimentaire Food for Peace, USAID/Sénégal

20. Mme GISELE L. ALMEIDA, Président du Réseau des Professionnels de l'Agro-Industrie de l'Afrique, INTERFACE
21. Mr. PAPE CABEL DIENG, Conseiller INTERFACE
22. Mr. N'DIAYE LAOBE SECK, Présidente du Réseau des Femmes Sahéliennes REFESA
23. Mr. N'DOYE ABABACAR, Directeur Technique de l'Institut de Technologie Alimentaire, ITA
24. Mr. OMAR LO, Directeur Relation Extérieur, ITA

LISTE DES DOCUMENTS CONSULTES AU SENEGAL

1. « Vers une Charte Africaine pour une Gouvernance Légitime », FRAO/WARF, Sénégal
2. « Faciliter le processus de développement participatif de technologie en milieu rural », FRAO/WARF, Sénégal
3. Brochure de la Fondation Rurale de l'Afrique de l'Ouest (FRAO)
4. Rapport Annuel FRAO, 1996/1997
5. Réserve Exécutif Etude pour l'Identification des Acteurs d'INTERFACE, INTERFACE, Août 1999
6. Etude de cas : le Sénégal Structuration du Dialogue – Secteur Privé – Secteur Publique – INTERFACE, 2002
7. Identification des Objectifs, INTEFACE janvier/2003
8. STATUS of CORAF/WECARD
9. Plan Stratégique du CORAF
10. Brochure – Agence Nationale de Conseil Agricole et Rural (ANCAR)
11. Présentation de l'Agence Nationale de Conseil Agricole et Rural - ANCAR, Août 2001
12. La Nouvelle Approche du Conseil Agricole et Rural au Sénégal – ANCAR, Août 2001
13. Projet de Services Agricoles et Organisations de Producteurs du Sénégal, PSAOP, Banque Mondiale, avril 1999
14. Brochure – CNCR (Conseil National de Concertation et de Coopération des Ruraux) au Sénégal
15. « Une expérience de renforcement des capacités au service du mouvement paysan sénégalais » – CNCR, décembre 2002
16. PSAOP, Composante « Appui aux Organisations des Producteurs Ruraux », Ministère de l'Agriculture et de l'Elevage, juin 2001
17. « Canal Rural » – Revue du CNCR

18. « Projet de Renforcement de l'Interface entre les Etats et les Chambres d'Agriculture en Afrique de l'Ouest » – CMA/AOC
19. Les Négociations Commerciales Internationales – Enjeux pour la Sécurité Alimentaire des Pays en Développement – CMA/AOC
20. Politique de Financement de l'Agriculture Paysanne en Afrique de l'Ouest « Réflexion pour la recherche d'une nouvelle cohérence » - CMA/AOC
21. Réflexion sur un cadre de stratégie pour une politique agricole commune en Afrique de l'Ouest, CMA/AOC
22. la Recherche au Service de l'Agro-Alimentaire, ITA – Sénégal
23. Prestation de Services offerts par l'ITA

RAPPORT DU BURKINA FASO

- I. Informations sur les grandes structures s'occupant des organisations paysannes au niveau du pays**
 1. SNVA (Système National de Vulgarisation Agricoles)
 2. PA/OPA (Plan d'Action pour l'émergence des Organisations professionnelles agricoles)

- II. Information sur les organisations à caractère régional basé au Burkina Faso s'intéressant aux O.P.**
 1. CILSS
 2. ROPPA
 3. UEMOA

- III. Entrevue avec les Leaders des O.P. nationales**
 1. CPF (Confédération Paysanne du Faso)
 2. UNJPA/B (Union Nationale des Jeunes Producteurs Agricoles au Burkina)
 3. FENAFER/B (Fédération Nationale des Femmes Rurales du Burkina)
 4. FENOP (Fédération Nationale des Organisations Paysannes)

- IV. Liste des personnes contactées**

- V. Liste des documents consultés**

I. Informations sur les structures s'occupant des organisations paysannes au niveau du Pays

1. SNVA - Système National de Vulgarisation Agricole

Au Burkina Faso le Système National de Vulgarisation Agricole (SNVA) est mis en œuvre par trois départements Ministériels : Agriculture Ressources Hydrauliques et Halieutiques, Ressources Animales et Enseignement Secondaire, Supérieur et Recherche Scientifique.

Ce système national de vulgarisation est issu de la prise en compte des approches communautaire et associative pour la participation des producteurs, du « Training and Visit » pour la rigueur de l'organisation du travail des agents et des méthodes de recherche développement pour le diagnostic et l'expérimentation fondant sur le principe de : l'organisation articulée du réseau d'encadrement, la programmation régulière des activités de vulgarisation ; la formation continue des producteurs et des agents.

Le dispositif est organisé depuis la Direction de Vulgarisation au niveau national jusqu'au niveau des Régions, Province, département qui est l'unité opérationnelle de base de la vulgarisation.

Toutes ces actions ont été appuyées par les Programmes d'Ajustement structurel du Secteur Agricole (PASA) de la Banque Mondiale depuis 1992.

A partir de 1998 à travers un document d'orientation stratégique l'Etat fixe les nouvelles orientations politiques assignées aux Secteurs agriculture et élevage en :

- favoriser le développement de l'économie de marché en milieu rural ;
- moderniser les exploitations agricoles et d'élevage ;
- favoriser la professionnalisation des différents acteurs et renforcer leur rôle ;
- assurer une gestion durable des ressources naturelles ;
- accroître la sécurité alimentaire ;
- améliorer sensiblement le statut économique de la femme rurale ;
- recentrer le rôle de l'Etat et favoriser l'initiative privée dans les secteurs de l'agriculture et de l'élevage.

Dans ce dernier point il a été décrété par loi un cadre juridique de promotion et d'action des organisations professionnelles agricoles.

Cette disposition a permis de renforcer le mouvement paysan qui comprend aujourd'hui des groupements, des unions et des organisations faitières tant au niveau régional que national. Aussi, de 1995 à aujourd'hui plusieurs organisations faitières nationales sont constituées : la Fédération des Professionnelles Agricoles du Burkina (FEPA-B), la Fédération Nationale des Organisations Paysannes (FENOP), l'Union Nationale des Jeunes Producteurs Agricoles du Burkina (U.N.J.P.A.-B), l'Union Nationale des Producteurs de coton du Burkina (U.N.P.C.-B), la Fédération des Eleveurs du Burkina (FEB), la Fédération Nationale des Femmes Rurales du Burkina (FENAFER-B), la Fédération Nationale des Pêcheurs.

Le deuxième fait marquant lié aux réformes socio-politiques et économiques c'est la promotion de la Gouvernance Locale à travers la décentralisation des pouvoirs, tenant compte de tous ces changements les services nationaux de vulgarisation, après une analyse des forces et faiblesses ont décidé un changement d'approche dans leurs actions qui se basent sur les principes suivants :

- la responsabilisation des communautés à la base avec la notion d'offre guidée par la demande', de même que la décentralisation du dispositif de sélection/validation des projets et des fonds destinés à leur mise en œuvre.
- Le recentrage du rôle de l'Etat avec une implication plus marquée du privé et de la société civile dans la fourniture des services agricoles aux producteurs.
- La contractualisation de la fourniture de l'offre de manière à rendre tous les prestataires (l'Etat , Privé, ONG) comptables de résultats envers les producteurs.
- La participation des producteurs à la prise en charge des activités de vulgarisation.

Cette nouvelle approche a été mise en expérience en 2002 simultanément avec l'ancienne structure qui se charge au fur et à mesure que des résultats au contraire du Sénégal qui a remplacé carrément l'ancienne structure de vulgarisation par une Agence Nationale d'Appui et Conseil ou Ruraux.

2. PA-OPA – (Plan d'Action pour l'émergence des Organisations Professionnelles Agricoles) - structure autonome rattachée au Ministère de l'Agriculture, de l'Hydraulique et des ressources Halieutiques.

L'objectif global du PA-OPA est de renforcer les Organisations Professionnelles Agricoles (OPA) existants et soutenir le processus d'émergence d'autres OPA afin de leur permettre de :

- Rendre à leurs membres des services relatifs à la pratique de leur profession en particulier l'accès aux facteurs de production et aux crédits, l'information sur les marchés etc ;
- Développer la professionnalisation agricole, grâce, à une plus grande compétence technique organisationnelle et fonctionnelle.
- Représenter leurs membres auprès de l'Etat et autres organisations professionnelles pour la formulation et la mise en œuvre des politiques sectorielles et la défense de leurs intérêts – d'atteindre une autonomie financière permettant une réelle auto-promotion des OPA.

Les principales actions (activités) sont :

- a. Information – communication comme cadre d'échange et de diffusion de données inter et intra OPA pour faciliter leur autonomisation, financière et technique, renforcement des rapports classiques de diffusion à travers la radio, presse écrite, diffusion de fiches, télévision, création et mise en œuvre d'une banque de données rassemblant les principales nécessaires pour accéder progressivement à la professionnalisation,
- b. Renforcement de la formation des capacités internes (assistants, conseillers, paysans, chercheurs), alphabétisation,
- c. Appui institutionnel et organisationnel pour la définition, d'un cadre juridique approprié et une nouvelle législation coopérative,
- d. Fonds d'appui aux initiatives (financement d'équipement productifs et d'activités génératrices de revenus,
- e. Promotion d'activités auto-financées,
- f. Mise en place et fonctionnement de structures de gestion,
- g. Audits, évaluation divers.

Les structures de gestion du PA/OPA

Comité de pilotage – chargé du suivi-évaluation-contrôle du Plan d'Action

- Comité National de Supervision – au niveau National
- Comités Régionaux de Supervision - au niveau de 5 régions du pays
- Comités provinciaux de concertation – au niveau de 45 provinces d'échange
- Le Bureau Exécutif National - l'organe chargé de l'exécution du Plan d'Actions
- Les Organisations Paysannes – constituant les bénéficiaires.

Le Financement – le budget estimatif pour la première phase de 5 ans du Plan d'Actions est d'environ 10 milliards de FCFA en provenance des partenaires suivants : Union Européenne, France, Pays Bas, Danemark, Belgique./

Il est prévu que l'Etat Burkinabé puisse contribuer à ce fond à travers le prélèvement sur les taxes douanières et de la T/VA.

Selon les estimations de 2002 le PA/OPA couvrent à peu près 25.000 à 30.000 O.P.A dans tous les pays correspondants à environ 1.000.000 de paysans.

II. Information sur les Organisations à caractère régional s'intéressant aux O.P. basées au Burkina Faso

1. CILSS (Comité Permanent Inter-Etats de Lutte contre la Sécheresse au Sahel)

Le CILSS peut être considéré comme le moteur de déclenchement du mouvement des O.P. au niveau régional.

Ainsi en 1994 avec la collaboration du club du Sahel, il organise à Praia (Cap Vert) la 1^{ère} Conférence régionale sur la problématique foncière et la décentralisation au Sahel ».

Soutenu par l'USAID à travers le PADLOS (Unité opérationnelle du Programme Majeur GRN), la conférence a produit une déclaration invitant les Etats membres du CILSS et leurs partenaires à mettre en œuvre les orientations suivantes :

- l'élaboration par les Etats sahéliens de législations cadre en matière foncière et de ressources naturelles, fixant les principes fondamentaux tout en laissant la définition des mesures d'application au niveau local ;
- la nécessité de promouvoir une approche décentralisée de gestion foncière à travers la reconnaissance de la légitimité des communautés de base et la dévolution de pouvoirs et compétences en matière de gestion des ressources naturelles,
- la nécessité de prendre en considération les droits et intérêts légitimes de l'ensemble des acteurs notamment ceux exclus du foncier tels que les femmes et les pasteurs,
- la nécessité d'accorder une attention particulière à la prévention et à la gestion des conflits fonciers,
- la nécessité de prendre en considération la dimension environnementale dans la problématique de la gestion foncière.

Plus tard en 1996 il a été constitué une « Charte de la Plate-forme Paysanne Sahélienne sous régionale » et des plate-formes nationales.

Cette plate-forme sous régionale avec siège au Burkina Faso devrait prendre en compte toutes les couches socio-professionnelles, clarifier ses relations avec le CILSS/PADLOS et s'affirmer comme une organisation indépendante qui tire de ses moyens de cotisations des membres, de dons, de legs et de l'appui des différents partenaires.

Un atelier régional sur la plate-forme paysanne a été réalisé en mars 2000 pour faire le bilan et les perspectives pour le 3^{ème} millénaire.

L'Atelier a constaté que :

Dans tous les pays ont été notés l'existence d'une structure répondant de la Plate-forme Paysanne Sahélienne sous régionale avec cependant de grandes disparités relatives à leur envergure géographique, leur ancrage dans le tissu associatif paysan, leurs capacités stratégique et opérationnelles.

Cette différence entre les coordinations nationales des pays résulte entre autres de l'approche utilisée pour leur mise en place, leur composition et leur statut juridique.

La situation était la suivante :

- Les Plate-formes Paysannes Sahéliennes comme des réseaux d'association des O.P. déjà structurés (Sénégal, Burkina Faso)

- Des Plate-formes Paysannes conçues comme une association d'O.P. ce qui a exigé dans le cas une animation dans le but de leur une stratégie locale et une structure nationale (Tchad, Niger, Gambie),
- Des Plate-formes Paysannes Sahéliennes comme structure exogène aux O.P. qui doivent travailler pour la communauté paysanne.

En ce qui concerne la coordination il y avait ce qui regroupaient seulement des éléments des exploitations familiales, ceux qui regroupaient des producteurs issus des exploitations familiales et de l'agro-business, et qui regroupaient des producteurs paysans et des représentants de l'administration.

Seulement, la coordination des Plate-formes du Niger et du Sénégal avaient une personnalité juridique 2000.

Les principales difficultés/insuffisances rencontrées par les coordinations Nationales étaient :

- Le faible niveau de formation et de capacité des O.P. et des leaders paysans ;
- Un déficit de communication au sein des O.P. et entre les O. P et leurs partenaires ;
- Faible niveau de capacités institutionnelles (siège, logistique) ;
- Insuffisance, voir manque de ressources techniques et financières ;
- La divergence des intérêts des O.P. membres de la coordination,
- Le disfonctionnement de la Plate-forme Paysanne Sahélienne sous régionale (non respect des clauses statutaires, faiblesse dans l'application des décisions) qui influent sur les coordinations nationales,
- Faibles implications des femmes tant au niveau national que sous-régional.

La dynamique de la Plate-forme paysanne sahélienne a inspiré la naissance d'un mouvement paysan Ouest Africain qui vient dans cette espace géographique compléter les dynamiques soutenues par la Plate-forme paysanne et les réseaux des chambres d'agriculture.

C'est ainsi que le ROPPA (Réseau des Organisations Paysannes et Producteurs de l'Afrique de l'Ouest) est née en Juin 2000 à Cotonou, Bénin lors d'une rencontre avec la participation de plus de 200 paysans et paysannes représentant 10 Etats de l'Afrique de l'Ouest.

Toutefois jusqu'à aujourd'hui il existe des différentes adaptations dans l'évolution des Plate-formes vers une entité de concertation nationale et leur appartenance au ROPPA.

2. ROPPA – Réseau des organisations Paysannes et de Producteurs de l'Afrique de l'Ouest.

Le siège du ROPPA a été installé officiellement à Ouagadougou depuis 2 mois avec la nomination du Coordonnateur de la cellule d'exécution technique M.Mohamadou Issaka Magha.

Les informations sur le ROPPA figurent dans le rapport du Sénégal où une interview a été faite au Président Mr. Ndiougou Fall.

3. UEMOA – Union Economique et Monétaire Ouest Africaine regroupe huit (8) pays

de l’Afrique de l’Ouest (le Bénin, le Burkina Faso, la Côte d’Ivoire, la Guinée-Bissau, le Mali, le Niger, le Sénégal et le Togo).

Les objectifs :

- Renforcer la compétitivité des activités économiques et financières des Etats Membres, dans le cadre d’un marché ouvert et concurrentiel et d’un environnement juridique rationalisé et harmonisé ;
- Assurer la convergence des performances et des politiques économiques des Etats membres par l’institution d’une procédure de surveillance multilatérale ;
- Créer, entre les Etats membres, un marché commun basé sur la libre circulation des personnes, des biens des services, des capitaux et le droit d’établissement des personnes exerçant une activité indépendante ou salariée, ainsi que sur le tarif extérieur commun et une politique commerciale commune ;
- Instituer une coordination des politiques sectorielles nationales pour la mise en œuvre d’actions communes et éventuellement, de politiques communes notamment dans les domaines suivants : aménagement du territoire communautaire, agriculture, environnement, transport, infrastructure, télécommunications, ressources humaines, énergie, industrie mines et artisanat.
- Harmoniser, dans la mesure nécessaire au bon fonctionnement du marché commun, les législatives des Etats membres et particulièrement le régime de fiscalité.

Organisation

- Conférence de Chefs d’Etat (1 fois par an)
- Conseil des Ministres (2 fois par an)
- Commission (8 commissaires)
- Comité Interparlementaire
- Cour de Justice
- Cour des Comptes

Institutions spécialisées

{ Banque centrale de l’Afrique de l’Ouest BCEAO
Banque Ouest Africain de Développement BOAD

Chambres consulaires

{ Regroupant les chambres consulaires nationales,
les associations professionnelles et les organisations
patronales des Etats membres.

Les rapports de l'UEMOA avec les organisations paysannes se fait à travers la commission pour le développement, département de développement rural et de l'environnement.

Dans le passé récent l'UEMOA a financé la participation de ROPPA dans l'élaboration de la Politique Agricole commune pour un montant à peu près de 100 millions de FCFA pour la réalisation des ateliers nationaux et régionaux.

Aussi, ils ont financé une étude sur l'exportation des fruits et légumes liés aux problèmes des exportateurs.

Pour le futur il est prévu le financement de la mise en place de la Politique Agricole Commune et pour le développement des filières (coton, riz, céréales etc) ; la mise en place des fonds pour faciliter la participation des O.P. dans la discussion des Accords Internationaux du Commerce et marché au niveau national et régional.

III. Informations et Interviews avec les O.P. du Burkina Faso

1. C.P.F. Confédération Paysanne du Faso

- a. Au Burkina Faso la Constitution de cette Confédération a passé pour différentes phases, de discussions entre les organisations faitières existantes.

Après plusieurs tractations la Confédération a été créée en novembre 2002 avec la défection de la FENOP qui n'était pas d'accord avec les principes et la philosophie de la CPF.

Les cinq organisations faitières qui font partie intégrante de la CPLF sont :

- FEPA/B – Fédération des Professionnels Agricoles au Burkina
- l'UNJPA/B – Union Nationale des Jeunes Producteurs Agricoles du Burkina
- l'UMPC/B – Union Nationale des Producteurs de Coton du Burkina
- FENAFER/B – Fédération Nationale des Femmes Rurales au Burkina
- FEB – Fédération des Eleveurs du Burkina

Organisation

- Assemblée général
- Conseil de gestion : 15 membres
- Conseil d'administration 5 délégués par faitières.

Normalement c'est cette structure qui sera le répondant du ROPPA au niveau du Burkina Faso, après une notification officielle.

- b. Les principales Services au bénéfice que la CPF reçoive du réseau régional sont : l'appui pour leur participation aux grandes rencontres internationales, appui à la contribution du CPF dans l'élaboration de la politique Agricole Commune de l'UEMOA, appui à la participation dans les discussions pour la mise en œuvre du projet italien de renforcement de capacité des O.P.

Il a été difficile d'obtenir plus d'information tenant compte de la création récente de cette organisation dans cette phase définitive.

- c. En ce qui concerne les activités spécifiques appuyées par le réseau ils ont cité des étude de cas sur le marché d'approvisionnement au niveau des O.P., étude sur les chambres d'agriculture dans le sens d'avoir un carte d'identité fourni par les chambres d'agriculteurs régionales, participation aux Foires.
- d. Pour les besoins de financement il a été cité : la formation des faïtières en gestion de Fédérations et Unions ; fourniture d'équipement (matériel roulant) et infrastructure ; appui par la participation aux voyages d'études dans d'autres pays ; appui par la confection d'un journal de l'organisation ; appui pour une étude sur l'agriculture familiale, investir dans la maîtrise de l'eau.

En ce qui concerne les impacts de ce financement ils pensent qu'avec l'amélioration des connaissances des membres des associations et des O.P. une meilleure productivité sera répercutée dans leurs travaux agricoles. Aussi la maîtrise de l'eau peut permettre de sécuriser la production agricole.

Pour les lacunes en information ils ont mentionné le manque d'équipements informatiques et d'accès à l'Internet de la plus part des faïtières. Pour ceux c'est difficile d'avoir une stratégie d'investissement sans connaissances de l'environnement national et international.

Le CPF couvre à peu près 60% des organisations de producteurs du Burkina et environ 45% des producteurs individuels.

2. UNJPA/B (Union Nationale des Jeunes Producteurs Agricoles du Burkina)

- a. Les avantages d'appartenir à un réseau, sont la possibilité de faciliter la participation des membres aux négociations de marché et de crédit au niveau national, aussi dans les négociations avec des partenaires financiers.
- b. les jeunes ont besoin de beaucoup de formation et appui dans l'organisation de leurs activité technique et le rôle du réseau est très important dans la recherche d'appui. Aussi les domaines de management est très sollicité. Il y a une forte demande d'éclaircissement de problèmes foncier dont le réseau est en train de préparer des informations.

- c. Pour les membres du réseau ils pensent qu'il y a plus d'avantages que d'inconvénient d'appartenir à un réseau. Le réseau pourra défendre les intérêts des jeunes auprès des instances de l'Etat et des partenaires dans la recherche de financement.

En ce qui concerne les associations de jeunes filles, il existe une organisation « Jeunes Filles formées » qui travaillent dans la transformation des produits, artisanat et couture.

3. FENAFER/B (Fédération Nationale des Femmes Rurales du Burkina)

- a. Cette fédération a été créée en 2001 et elle est représentée au niveau des Provinces et Départements. Il existe 158 Unions au niveau départemental et 4 Unions au niveau Provincial.

La Fédération peut avoir à peu près 37. 000 associés dans tous les pays.

Les principales filières d'activités sont :

- Elevage – lait, petit élevage,
 - Fruits et légumes,
 - Transformation,
 - Céréales
 - Karité.
- b. La Fédération reçoit du réseau la possibilité de participer dans les rencontres régionales et internationales ; la résolution de certains problèmes liés à l'information sur les marchés internes et régionaux ; appui dans les discussions avec les bailleurs de fonds,
 - c. Le réseau donne des appuis dans le domaine, de recherche de fourniture d'intrants pour les cultures, facilités d'accès au crédit, information sur le problème du foncier, accès à la terre pour les femmes qui est très difficile dans le pays.

4. FENOP (Fédération Nationale des Organisations Paysannes)

La FENOP a été créée en 1996 suite à une réflexion conjointe des organisations paysannes du Burkina en 1994. La FENOP est une organisation faitière, un cadre de représentation et de défense des intérêts des organisations paysannes et de construction d'une vision paysanne.

Elle constitue un réseau rassemblant les O.P. de toute typologie, intervenant dans des domaines et à des échelles divers (groupements villageois, coopératives, unions de groupement etc) et qui partagent continuellement leurs expériences, qui cherchent des complémentarités et des synergies dans leurs actions.

Elle est aussi un forum pour des discussions et des échanges d'idées sur leurs préoccupations

et réflexion sur les stratégies, offrant un appui conseil, mobilisant l'expertise locale, nationale, et internationale.

Ses objectifs sont :

- Développer des actions visant surtout au renforcement des capacités stratégiques et opérationnelles des O.P. dans les domaines de la production, de l'environnement du social etc ;
- Contribuer à l'émergence d'un cadre institutionnel favorable à l'évolution des organisations Paysannes et garant de la réussite de leurs actions opérationnelles ;
- Favoriser un échange inter-association, une interconnexion entre les O.P et un dialogue entre celles-ci et les autres groupes d'acteurs de développement (institutions, organismes, etc...).

Son mandat s'appuie essentiellement en 6 domaines d'actions :

1. Communication/Information - Il s'agit de donner régulièrement aux O.P. à travers les médias (écrits et audiovisuels) des informations utilitaires, des éléments de décision.
2. Formation - Portant surtout sur le renforcement des capacités des leaders des O.P. dans les domaines du management de négociation, techniques de production, gestion économique, gestion des ressources naturelles.
3. Echanges - Permettant que les paysans puissent échanger de connaissance entre eux et avec d'autres organisations.
4. Contrôle de qualité – Assistance Juridique - Visant à renforcer la capacité de négociation des paysans avec leurs partenaires commerciaux en leur recherchant les appuis nécessaires pour un contrôle de qualité de produits achetés et en leur fournissant une assistance juridique pour la gestion des contrats.
5. Expérimentation - En diffusant et accompagnant l'expérimentation d'innovations techniques ou paysannes dans les domaines de la production, de la conservation etc.
6. Intermédiation - La FENOP appuie ses membres dans la recherche de financement de leurs programmes.

Les principes guides sont :

- la décentralisation des actions,
- une implication réelle des femmes,
- un partenariat avec les autres acteurs de développement,
- le développement et la valorisation de l'expertise paysanne.

Organisation

La FENOP est organisé fonctionnellement en :

- une Assemblée Générale
- un Conseil d'Administration (71 membres)

- un Bureau Exécutif (18 membres)
- un Secrétaire Général
- six (6) conseils régionaux
- des Unions ou Coordinations Provinciales et Départementales.

La FENOP englobe à peu près 200 Unions ou O.P. couvrant environ 500.000 paysans.

Entrevue FENOP

La FENOP était membre de la CCOF (Cadre de Concertation des Organisations Paysannes) mais s'est exclu de la Confédération des Paysans du Faso récemment créée.

- a. Pour la question sur les forces et les faiblesses du réseau elle pense qu'il y a une grand avantage de constituer une force commune pour défendre les intérêts des paysans au niveau régional, possibilité d'obtenir un appui à travers le réseau pour le renforcement de capacité ; possibilité des échanges entre les O.P. dans les rencontres régionales ; améliorer leurs capacités de négociation ;

Par contre elle ne trouve pas de faiblesse pour le moment.

- b. En ce qui concerne l'utilité la FENOP pense que le réseau régional peut représenter les O.P. dans les Forums et rencontres à certains niveaux ou elle ne peut pas participer ; possibilité de discuter les problèmes régionaux à travers le réseau ; accroître la visibilité des fédérations.
- c. Pour le moment, dû à la récente création des réseaux elle ne voit pas d'inconvénients.

Mais un cas spécifique pour le Burkina, la création de la nouvelle Confédération des O.P. avec le patronage de l'Etat a fait apparaître certaines contradictions avec la philosophie de la FENOP, par exemple la Confédération propose l'approche de l'agriculture spécialisée par filière en tant que la FENOP utilise l'approche agriculture familiale, la mise en place de la Confédération elle même est contradictoire avec les idéaux de la FENOP, qui après tous ces évènements est devenue une ONG.

- d. Pour les appuis la FENOP demande la réorganisation du système de crédit en intrants qui a été démantelé avec la privatisation, renforcement de capacité avec des formations dans les domaines techniques et gestion/management ; amélioration de la circulation d' l'information (journaux, programme radio, intérêt etc), possibilités d'utiliser des personnes ressources pour l'élaboration des documents de projets, appui dans institutionnel dans le domaine des infrastructures.
- e. en ce qui concerne les besoins en financement elles ont cité :

- appui institutionnel
- appui pour la consolidation des organisations à la base
- formation, alphabétisation,
- formation spécifique pour filière,
- appui pour la recherche des solutions pour l'autofinancement de la Fédération à travers des caisses paysannes ou même une Banque paysanne (le crédit bancaire est trop cher),
- appui dans le domaine de santé maternelle-infantile et le combat du VIH/SIDA.

LISTE DES PERSONNES CONTACTEES AU BURKINA FASO

1. Mme, MGOMOU HAOUA, Directrice du Service de Vulgarisation et appui aux O.P. (Ministère des Ressources Animales)
2. Mr. SERME TIEMOKO REMY, Service Vulgarisation et Appui aux O.P., Ministère des Ressources Animales
3. Mr. SAWADOGO TOMAS, Service de Vulgarisation et Appui aux O.P., Ministère des Ressources Animales,
4. Dr. JEAN ZOUNDI, INERA (Institut d'Environnement et de Recherches Agricoles)
5. Mr. MAHAMANE TOURE, CILSS, Programme Majeur Gestion des Ressources Naturelles
6. Mr. YAMAR M'BODJ, CILSS, Conseiller Sécurité Alimentaire
7. Mr. MUSA M'BENGA, CILSS, Secrétaire Exécutif
8. Mr. IVES ROCHA, CILSS, Programme Majeur Gestion des Ressources Naturelles
9. Mr. KABORE EMMANUEL , FENOP, Fédération Nationale des Organisations Paysannes
10. Mr. SANOU ISSOUF, FENOP (Fédération Nationale des Organisations Paysannes)
11. Mr. DAGONO JOSEPH, FENOP (Fédération Nationale des Organisations Paysannes)
12. Mr. GANSOME SANOUSSI, FENOP (Fédération Nationale des Organisations Paysannes)
13. Mr. ROGER BILA KABORE, UEMOA, Chargé de l'agriculture au Département du Développement Rural et Environnement
14. Mr. RENE BOUGOUSARE, Directeur de la Vulgarisation Recherche développement (Ministère de l'Agriculture, de l'Hydraulique et Ressources Halieutiques)
15. Mr. SON BAKIEME, Responsable Nationale du PA/AOP, Plan d'Action Nationale pour l'émergence de l'Organisations Professionnelles Agricoles
16. Mr. KABORE EMMANUEL, Vice Président de la CPF (Confédération des Producteurs du Faso) et Président de l'UNJPA/B

17. Mme BANGRE FRANCOISE, Présidente FENAFOR/B, Fédération Nationale des Femmes Rurales du Burkina.

LISTE DOCUMENTS CONSULTES AU BURKINA FASO

1. Réflexion pour une nouvelle approche de Vulgarisation en Elevage au Burkina Faso (Ministère des Ressources Animales), février 2002
2. Système National de Vulgarisation et d'Appui Conseil à la demande (Ministère de l'Agriculture de l'Hydraulique et des Ressources Halieutiques), mars 2002
3. Attribution des Services de la Direction de la Vulgarisation et de l'Appui aux O.P. (Ministères des Ressources Animales)
4. Manuel de procédures pour l'élaboration, le financement et l'exécution des programmes d'Appui/Conseil et de promotion commerciale des produits Agro-pastoraux dans le cadre du PNDSA (Programme National de Développement du Secteur Agricole), Ministère de l'Agriculture
5. Brochure « Le Développement du Sahel exige l'équité entre les genres » REFESA
6. Brochure « Une Aire Nouvelle pour une Nouvelle Ere » UEMOA
7. Brochure - l'UEMOA – Objectifs, Organes et Fonctionnement
8. Note sur la Dynamisation de la Plate-forme Paysanne Sahélienne – CILSS PM/GRN, Unité de Développement Local - octobre/2002
9. Compte Rendu de la réunion de concertation ROPPA/Plate-forme Paysanne du Sahel – ROPPA, mai 2002
10. Foncier Rural et Développement Durable au Sahel et en Afrique de l'Ouest, CILSS – Janvier 2003
11. Atelier Régional sur la Plate-forme Paysanne, Bilan et Perspective à l'Aube du 3^{ème} Millénaire – Rapport Général de Synthèse – CILSS, Mars 2000
12. Note sur la constitution de la CPF (Confédération des Producteurs du Faso)
13. Résumé du Plan d'Action pour l'Emergence d'Organisations Professionnelles Agricoles PA/AOP
14. Brochure FENOP – Fédération Nationale des Organisations Paysannes
15. Document de politique Nationale de promotion coopérative au Burkina Faso
16. Loi no.14/99/AN – Portant réglementations des Sociétés Coopératives et Groupements au Burkina Faso

Nigeria Trip Report

Report to USAID's West Africa Regional Program on a trip to Nigeria, 18th – 28th January 2003

Andy D. Cook⁶⁵

In preparation for drafting its proposal for funding under the *Initiative to end hunger in Africa* (IEHA), USAID's West Africa Regional Program sent the consultant to Nigeria:

1. to gather and synthesise information on Nigeria's market information systems (MISs) for agricultural commodities and options for linking them to others in West Africa via the regional MIS network proposed for IEHA funding
2. provide a brief overview on readily available information on:
 - producers' associations
 - cross-border trade
 - biotechnology.

Background to Nigeria

With a population of approximately 130 million and rich resources of oil, Nigeria accounts for almost half West Africa's economic activity. Yet it suffers from political instability, corruption, weak institutions and poor macroeconomic management. That no civilian administration has ever handed over power to another and that the military has ruled for 28 years of the 42 since independence characterise the political instability. The military have led the way in plundering the enormous proceeds of oil exploitation, creating a culture of corruption and fraud, simultaneously undermining national institutions and disregarding the effects of disequilibria in the national economy.

Political instability

In 1999, after 15 years of military rule, Nigerians democratically elected President Obasanjo and a federal legislature. The governance system is still badly broken and largely unaccountable to the public. Since the rebirth of democracy, the country has witnessed increased inter-ethnic violence, the advent of *sharia* law in several northern states, and a continuing high level of crime and corruption. After decades of neglect by their leaders, most citizens do not expect much of politicians or government. The elections of 2003 will test the thickness of the veneer of democracy.

The giant of West Africa, Nigeria accounted for 45 percent of the regional population, but only 32 percent of regional GDP, in 2000 (IFPRI 2002:tables 2 & 5). Table 1 shows that GDP per capita in real terms has fallen short of the West African mean for the entire post-

⁶⁵ Consultant, Abt Associates Inc. andy@c-o-o-k.demon.co.uk

independence era and that after initial growth in the 1960s that took Nigerian GDP per capita from US\$ 238 in 1961 to US\$327 in 1971, there have followed three decades of stagnation. However, other data assembled by IFPRI suggest that mean incomes in agriculture have risen (in 1995 US dollars) from 331 to 466.⁶⁶

Table 1
Real GDP per capita (1995 US\$)

	1961	1971	1981	1991	2000
West Africa	302	388	400	389	390
Nigeria	238	327	293	294	283

Source: IFPRI (2002: table 4 – from *World development indicators 2002* and *FAOSTAT 2002*)

Agricultural GDP has fallen as a share of total GDP from 62 to 30 percent from 1961 to 2000. The figure for 2000 equates approximately to that for West Africa as a whole but the fall has been more severe for Nigeria because, in 1961, agriculture accounted for a significantly higher proportion of GDP than the region as a whole.

In 2000, according to data from FAOSTAT 2002 cited by IFPRI (2002: tables 10 & 11), Nigeria accounted for 54 percent of West Africa’s crop production though for only 36 percent of the region’s livestock production. Within Nigeria, the value of crop production exceeded that of livestock production by a factor greater than seven.

An analysis of land and labour productivity in agriculture from 1961 to 2000 suggests that Nigeria has enjoyed higher values of both over the entire period and that for both measures of productivity, Nigeria’s levels of the early 1960s surpassed those of the rest of West Africa in all of the 40 years considered (IFPRI 2002: figure1). This seems unlikely: Nigerians consulted discounted hypotheses of significantly higher capital-intensity or energy-intensity for Nigerian agriculture over agriculture elsewhere in the region.

Nigeria’s HIV/AIDS rate of 5.8 percent falls towards the lower end of the range, when compared to low rates of countries such as Mali (2 percent) and the higher rates of countries in other parts of Africa (11 percent in Rwanda, over 20 percent in some countries in southern Africa). However, applying this percentage to its large population suggests that there are 3.5 million seropositive Nigerians.

⁶⁶ The table below shows the basis of the conclusion of rising mean incomes in agriculture for 1980-2000:

Nigeria	1980	1990	2000	Source
Ag GDP (million 1995 US\$)	11230	16252	17223	table 6, IFPRI data
population (millions)	64	89	111	table 2, IFPRI data
share of agricultural labour in total labour	53	42	33	table 8, IFPRI data
estimated agricultural population (millions)	34	37	37	from tables 2 & 8
Ag GDP/capita	331	437	466	from table 6 and previous line
% growth		32%	7%	

Comparative advantage – priority crops

The Federal Ministry of Agriculture and Rural Development (FMARD 2001c: annex 2: 24) believes Nigeria has a comparative advantage in cocoa, palm produce, rubber, ginger, spices, fruits and vegetables, flowers, shrimp and ornamental fish, cassava products, hides and skins, cashew nuts, gum Arabic, groundnuts and cotton products. In 2002, Chemonics International Inc. (2002a, 2002b, 2002c) performed a series of studies in the export potential of shrimp and prawn, skins and hides, cashew and sesame, under funding from USAID/Nigeria. However, it appears that, since a multi-commodity report done for the World Bank by Associates for International Resources and Development in 1988, no one has quantified the country's comparative advantage in these, or other, agricultural commodities.

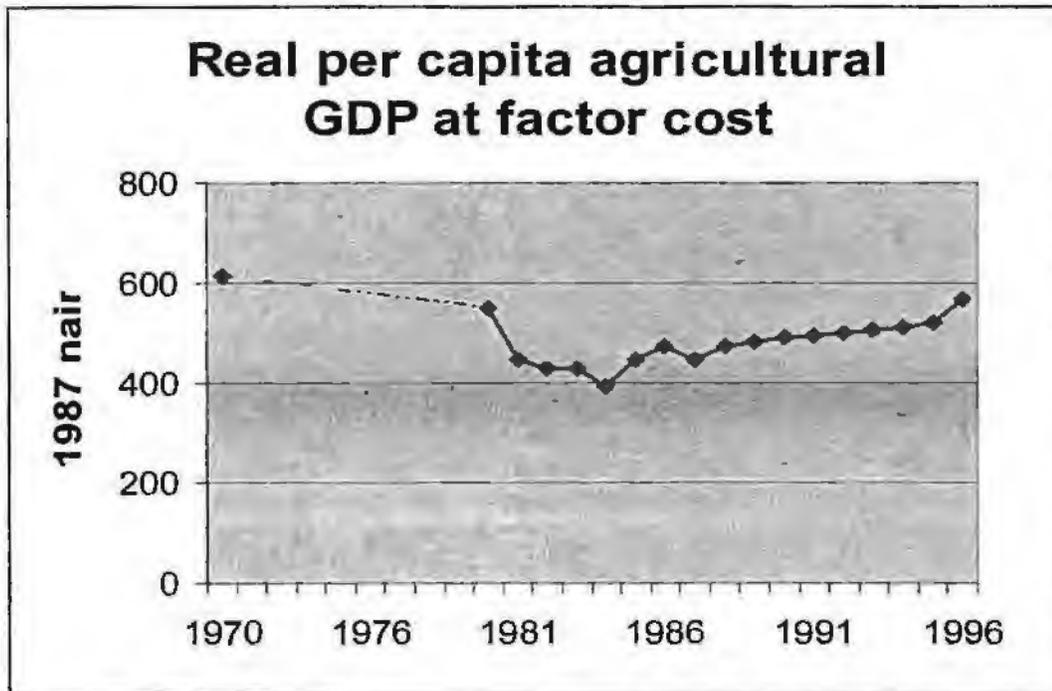
Food security

Given that Nigeria's economy accounts for almost a third that of the ECOWAS countries, that 70 percent of the population remains rural, that rural poverty exceeds that of urban areas, and that poverty is the major determinant of hunger, it seems important to consider some of the details of Nigeria's rural poverty.

A 1999 report on poverty in rural areas written by a World Bank staff member and staff of the Federal Office of Statistics draws (FOS) on data from the 1980s and 1990s (Federal Office of Statistics 1999). The report shows associations between various socio-economic variables and rural poverty but note that data limitations did not allow the researchers to draw conclusions on causality.

Graph 1 shows that the value of the output of Nigerian farming per person fell in real terms from 613 naira in 1970 to 392 naira in 1984. The 1984 nadir corresponds to a drought but the 1970-1984 trend corresponds to the corrosive Dutch disease effect of the oil sector on agriculture, combined with a poor policy framework for agriculture and overall mismanagement and corruption. Although output per capita generally rose in the decade after 1984, by 1996 it had not yet regained its real value of 1970.

Graph 1



Source: Federal Office of Statistics (1999: 7)

From 1980 to 1996, the proportion of the population in poverty rose from 18 percent in 1980 to 34 percent in 1985, 39 percent in 1992 and 67 percent in 1996. Table 1 shows the urban-rural breakdown of the incidence of poverty by degree of poverty over this period. Note that urban dwellers endure less moderate and core poverty than rural dwellers in all years. Note also the upward trend in rural poverty, despite a drop between 1985 and 1992. By 1996, 32 percent of the rural population were categorised as “core poor”, compared to 6 percent in 1980. It is not clear why core rural poverty continued to rise between 1985 and 1996, or why moderate rural poverty rose from 1992 to 1996 while real agricultural output per capita rose over these periods.

Table 1
Urban-rural poverty incidence (1980 – 1996)
(percent)

Year	Urban			Rural		
	Non-poor	Moderately poor	Core poor	Non-poor	Moderately poor	Core poor
1980	83	14	3	72	22	6
1985	62	30	8	49	37	15
1992	62	27	11	54	30	16
1996	42	33	25	31	38	32

Source: Federal Office of Statistics (1999: 13)

Apparently contradicting this evidence, IFPRI (2002: table 2) reports that, as the population of Nigeria has roughly doubled to 130 million from 1980 to 2000, the number of undernourished adults has dropped from 25 to 7 million.⁶⁷

The authors of the FOS report found household size the major determinant of the poverty level. Poverty levels measured about 12 percent for one-person households but about 90 percent for those with ten or more members. As male-headed households were larger than female-headed households, they were also poorer.

Educational attainment of the head of household correlates negatively with the poverty level. See table 2. Although the data given are for both agricultural and non-agricultural households, the report makes clear elsewhere that the pattern that table 2 illustrates holds equally well for both. Table 2 summarises data from the national consumption studies for 1980, 1985, 1992 and 1996.

Table 2
Poverty incidence and education level of the head of household
(percent)

	Educational level of household head			
	None	Primary	Secondary	Tertiary
Poverty incidence	71	59	54	48

Source: Federal Office of Statistics (1999: 14)

For 1980-1996, the states in the far north of Nigeria had the highest levels of agricultural poverty; those in the south had the lowest levels.

Those who owned land (53 percent) or had access to family land (46 percent) were more likely to be extremely poor than those who squatted (38 percent) or rented land (34 percent). Farmers who grew tree crops with food crops (35 percent), cash crops (27 percent) or both (27 percent), were less likely to be extremely poor than those who grew food crops (45 percent), cash crops (45 percent) or both (54 percent).

Only a small proportion of farmers used modern inputs. Thirty-eight percent of farmers using improved seeds, 44 percent of those using pesticides and 50 percent of those using fertiliser were classified as "extremely poor". One would have expected the use of inputs to have significantly raised their incomes. It is not clear whether the farmers using these inputs do not use them well or have other binding constraints to production and marketing. Nor is it clear how much greater poverty they would have endured without these inputs.

The use of credit reduces poverty. 49 percent of farmers with no access to credit were "extremely poor" but that percentage dropped for those with access from various sources: community and people's banks (45), local lenders (43), agricultural credit banks (41), friends

⁶⁷ More precisely, drawing on FAO's *The state of food insecurity in the world 2002*, the IFPRI report gives a total Nigerian population in 1979-81 of 64.3 and in 1998-00 of 110.9. For the same groups of years, the report cites the number of undernourished adults as falling from 25.2 to 7.3. (In all cases, the units inferred are millions.) The rate of reduction of the under-nourished adult population thus equals 6.5 percent annually.

and relations (38), commercial banks (36), traditional contributions (35) and cooperative societies (29).

In the context of this profile of poverty in the agricultural economy, what specific issues do those involved in monitoring it find most pressing? In January 2003, PCU hosted a USAID-financed one-week workshop in Lokoja, Kogi State, on food security for the heads of Monitoring & Evaluation at the ADPs in each state. Over the course of the week, the participants would establish what they considered to be important food-security problems in their state, establish a general framework for measuring and interpreting food security on a national level, and devise indicators and a reporting system for monitoring. 24 (of 36) M&E heads and several PCU staff members identified a wide range of problems to food security that suggest that the constraints to West African agriculture all apply to this diverse economy but that Nigeria has a few others that are unique. In the summary of these problems below, the numbers in parentheses correspond to the number of individuals raising a given concern:

1. *environmental shocks* (4): unpredictable rainfall and flooding
2. *natural resource management* (9): desertification and gulley erosion; land clearing; the under-use of natural resources in some parts of the country; a lack of available land in other parts (4), resulting in farmer-herder conflict and interstate migration to find land; a need for the provision of potable water to avoid diseases
3. *extension*: unproductive traditional agriculture (2); farmers not adopting new technologies (2); a need for extension for group formation for technology dissemination and to attract young folk to agriculture; a need to ensure that women benefit from new programmes
4. *credit*: poor farmers unable to invest in agriculture (4), e.g. livestock production and mechanised cassava production
5. *inputs*: insufficient access (12), especially to fertiliser, and untimely availability (3); high cost (2), especially of agricultural machinery; political interference limiting the inputs that reach farmers, or raises the prices charged
6. *need for post-harvest technologies*: processing (9); storage (8); feeder roads (2)
7. *marketing*: general inefficiencies (4); unpredictable prices; exploitation by middlemen
8. *government policy*: a lack of political will to support food-security programmes and a lack of stability of government funding and policies for agriculture (4); inappropriate bias towards mechanisation for large farmers (2); poor government capacity to collect and analyse food-security data (5)
9. *insufficient government funding*: for livestock (5), fisheries (3), irrigation (2), mechanised cultivation of cassava, nutritional education
10. *government management*: poor market monitoring; difficulties with incentives for monitoring and evaluation

None of those participating mentioned HIV/AIDS as a food-security problem for Nigerian food security. HIV/AIDS remains a taboo subject despite relatively elevated seropositivity. Neither government nor civil society has highlighted its impacts on agriculture and other aspects of food security.

Government policy

The government was to have published a *Poverty reduction strategy paper* in January 2003. This document seems not to have appeared by that deadline.

2001 saw the publication of three policy documents, covering:

1. agricultural policy (Federal Ministry of Agriculture and Rural Development 2001a)
2. integrated rural development policy (Federal Ministry of Agriculture and Rural Development 2001b)
3. rural development sector strategy (Federal Ministry of Agriculture and Rural Development 2001c).

The agricultural policy document revises the 1988 version and has most relevance for MIS. It observes that the role of agriculture should “transcend self-sufficiency to cover food security... which has access, income and nutritional dimensions”. (FMARD 2001c, annex 1:

1) With respect to the 1988 pricing policy, which aimed for:

- i. remunerative prices and income for farmers
- ii. stable prices and income for farmers
- iii. competitiveness of Nigerian agricultural commodities in the world market
- iv. agricultural imports not to enjoy undue comparative price advantage over local substitutes
- v. parity in agricultural prices compared to non-agricultural prices,

the 2001 agricultural policy document notes that: “Pricing policy has been generally inoperative [and] global economic trends and efforts at macroeconomic management make it imperative to implement this policy.” and instead aims for “market information, expansion and access with emphasis on sub-regional and regional market and the markets of major trading partners. (FMARD 2001c, annex 1: 3)

“The marketing system through its pricing mechanism is paramount in sustaining production. The desire to satisfy the demand of the market should be the driving force for production. The development of an efficient agricultural marketing system is being promoted through the provision of adequate market information.” (FMARD 2001c, annex 2: 20)

The agricultural policy document notes that its predecessor’s aim of promoting (a) agricultural exports and (b) local production to discourage imports was poorly implemented because “[p]olitical will to reduce... import[s] has not been strong. Powerful groups tend to subvert the policy through round tripping and import waiver concessions. Nigeria’s membership of WTO demands that the policy accommodates our commitments in the Organization.” Therefore, it continues, government policy aims to integrate “WTO issues in the trade policy to take advantage of available caveats such as those within market access (tariff ceiling bindings, tariffication, tariff rate quotas, and tariff commitments) domestic support (subsidy of resource-poor or low-income producers, and green box measures) and export competition (capped export subsidies and export restriction on importing member’s food security”.

None of the documents makes specific mention of cross-border trade but the *National policy on integrated development* notes that border areas “are more exposed to danger from neighbouring countries” but also “provide windows of opportunity for beneficial contact... with neighbouring countries....” The section concludes: “Full advantage will be taken of

[the strategic location of border areas] to create and develop centres of trade and industry in the promotion of economic cooperation and collective self-reliance among African nations.” (Federal Ministry of Agriculture and Rural Development 2001b: 29)

None of the three documents says much about cooperatives of any sort.

The agricultural policy document states that the dissemination of the results of “research including biotechnology” will take place via states and local governments. It is presumed that the Nigerian has more to say on biotechnology in other documents that the consultant did not find.

USAID/Nigeria -- Agricultural activities under SO6

USAID/Nigeria is the largest bilateral donor in Nigeria. From FY 2004 to 2007, the mission plans to work in the areas of democracy and governance, economic management and agriculture, reproductive health, child survival (including malaria), education, and HIV/AIDS and tuberculosis.

Approved in 1999 as part of the transition strategy at the start of USAID’s re-engagement in Nigeria, USAID/Nigeria’s SO2 for economic growth and agriculture, focuses on activities designed to improve farmers’ access to inputs, technology and markets, with emphases on northern Nigeria and the Niger Delta. The transition strategy ends in December 2003. In the subsequent strategy, SO6 (Sustainable Agricultural and Diversified Economic Growth) follows on from SO2.

Most effort under SO6 will go to a combination of agricultural productivity, agricultural marketing and environmental sustainability. USAID/Nigeria will increase agricultural productivity through improved access to fertiliser, seeds and agrochemicals; co-ordinating research, government extension, farmer associations to diffuse improved technologies; capacity-building of Nigeria’s scientific institutes, especially those in biotechnology, to conduct research that can help improve agricultural yields. In marketing, it will support increased access to domestic and export market opportunities, adding value to agricultural products, and decreasing post-harvest losses. To mitigate the environmental impact of its activities, the mission will undertake activities such as promotion of tree-crop production, education of farmers on crop-rotation techniques, and developing sustainable forestry.

The litmus test for full commitment to these investments is the conduct of elections in 2003. Successful elections, along with continued efforts to stabilise democracy, to improve government transparency and accountability, and to foster greater public participation, will result in full commitment to carry out the mission’s planned programme. Elections that lead to another civilian regime but that are marred by violence would intensify mission commitment to investments in democracy and governance, possibly without a full commitment to other SOs. A major breakdown of law and order leading to the end of elected government would result in a significant scaling back of mission activities and a renewed emphasis on a civil-society-based approach (similar to that obtaining during the 1993-1999 period). (USAID/ Nigeria c2002c)

Producers' associations

Nigerian small-farmers generally harbour low expectations of help from government but when they organise themselves into producers' associations at the local level it is more to lobby government for resources than as an institutional basis for collective self-help. Relatively few non-governmental organisations function in Nigeria to train members of associations in co-operative principles, obtaining access to more and better inputs, post-harvest techniques, business management, or writing credit applications, so that the association and its individual members may enjoy the benefits of increased profits in marketing their commodities and economies of scale. Nor are agricultural extension systems at the state and federal levels equipped to provide significant training or incentives to profitable co-operative activity.

Nigerian associations and cooperatives form locally around either a commodity or, in some cases, a production site (notably, in northern Nigeria, a *fadama*, or valley bottom, with rich soils that remain moist, or can be irrigated, for a second annual crop). They generally have links to higher-level co-operative organisations, right up to the national level.

Nigerians use the terms "primary", "secondary" and "apex" co-operative societies for associations and co-operatives. "Primary" co-operatives are grassroots associations at the village level or the level of the Local Government Area. "Secondary" co-operatives generally operate at the state level. Primary and secondary co-operatives register with the state government's Department of Co-operative Societies. "Apex" co-operatives have national coverage. FMARD has a Department of Co-operatives, which acts as a regulatory agency, mostly at the apex level, and as a link to international co-operative bodies. It has few direct links with grassroots organisations.

At all three levels, most associations and co-operatives are dysfunctional because individuals or cliques form or co-opt them for political gains. Thus primary co-operatives may have few activities on the ground. Similarly, apex organisations often do not have the national authority that their names may suggest. Some have little more than local links, do not articulate coherent plans for adding value to their commodity, and lack statistics on national production, processing and marketing. Alternatively, some commodities have more than one "national" organisation: this is the case for cocoa, where two rival apex organisations claim this status.

There currently exist two national associations of apex organisations, the All-farmers' Apex Association of Nigeria and the National Farmers' Association of Nigeria. Together they group 47 national commodity-based associations. Rumour has it that these two associations may merge.

The apex organisations often act similarly to most Nigerian businesses with links to federal government, using connections to obtain access to funds and then siphoning them off for their personal gain. On 26th January 2003, the *Sunday times* newspaper reported fraud of 1.6 billion naira at the National Co-operative Insurance Society, an insurance agency for co-

operatives. The newspaper names the FMARD Director of Co-operatives, “the official policeman of the nation’s cooperative movement”, as having been “overwhelmed by the stifling miasma of fraud and corruption” of this affair. (Ipinmisho: 2003)

On the other hand, observers note that some apex-level commodity associations work well, or have the potential to do so. These include the associations for cotton, rice and cassava, which have a more commercial, less political orientation. Additionally, a minority of primary co-operatives work democratically and effectively for their members. It is possible to identify these by examining the annual audits that each co-operative must submit to either the state or the federal Department of Cooperatives. Any IEHA-funded West African regional work linking Nigerian associations or co-operatives with others should first identify the range of functional cooperatives with which they might work.

Through its Department of Rural Development, (FMARD) supports 75 “enclave projects” spread across Nigeria that it inherited from the former National Agricultural Land Development Agency. The government ensures that farmers work the project land cooperatively, providing land, inputs, land preparation, water and feeder roads. It suggests profitable crops in each agro-ecological zone (e.g. cashew or oil palm) and ensures that the harvest reaches industrial nodes for processing. The programme includes foci on nutrition and HIV/AIDS. Government intends these pampered co-operatives to be showcases and they predictably attract more than their share of retired high-ranking civil servants and other privileged members of society. FMARD might suggest that any IEHA-funded producer-association activities at the regional level focus on, or include, some of these co-operatives. These co-ops may have some lessons for those in other countries but their lack of representativity may limit the general applicability of these lessons.

Market Information Systems

Nigeria has a range of market information systems for the agricultural sector. The first set lies within the Federal Ministry of Agriculture and Rural Development (FMARD) and numbers three. The Central Bank of Nigeria and the Federal Office of Statistics take responsibility for a fourth. USAID finances two further systems through project – RUSEP and DAIMINA – both with links to FMARD. Table 3 summarises the situation. In the past, FMARD systems have mostly collected retail-level data on crop and livestock commodities for administrative record and occasional policy-making. FOS and CBN have usually relied on FMARD systems for their agricultural data though FOS has collected, though not diffused separately, its own retail-level data in order to compile the consumer price index. These two government agencies are now combining their efforts to design a producer-price information system based on transactions of the imminent Nigerian commodity exchange. RUSEP and DAIMINA work mainly in crops and inputs respectively, collecting market information, organising its diffusion by radio and in print media, and posting it on web sites.

Table 3
Nigerian market information systems for agricultural commodities

	Market-chain level	Commodities	Diffusion
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		retail	wholesale	inputs	crops	livestock	admin.	media	internet
FMARD	FPMU	x			x	(x)	x		
	PCU	x			x	x	x	(x)	
	SGRD		(x)			x	x		
FOS & CBN			x		x				x
USAID-funded	RUSEP	x	x	(x)	x			x	x
	DAIMINA	x	x	x	(x)			x	x

Notes:

1. Parentheses indicate less than full coverage in space or time
2. "admin." = "for administrative use"
3. Maximum lag in availability: admin. – 1 year; media – 1 week, internet – 1 day.

In addition, IFDC has started work on two regional market information networks, both with funding from the Dutch government: Marketing Inputs Regionally (MIR) and the African Agricultural Market Information Network (AFRMIN). ECOWAS has agreed that FAO will help it to build a third.

National market information systems

1. FMARD-run: PCU, FPMU and SGRD

Nigeria has a series of "market information systems" in the 20th century sense of government-run data-collection systems for agriculture-sector prices that mostly end up in reports long after collection, some small part of which may be diffused by radio.

For the last 20 years, the Federal Ministry of Agriculture and Rural Development (FMARD) has had a system in which agents of the Agricultural Projects Department (APD) in each state collect data in a sample of the state's markets. They transfer copies to the (federal) Projects Coordinating Unit (PCU) in Abuja for national collation. For example, Kogi State's APD agents collect data in 10 markets fortnightly for 23 commodities, computerise these, and send them to PCU. This is the best-known MIS for Nigerian agriculture.

APDs have a variety of data-collection responsibilities in addition to those for market prices, concerning: large-scale reconnaissance surveys (including sample-frame data collection), crop-area yield surveys, collection of meteorological data, crop enterprise budgets, adoption-rate and impact studies (for new technologies). At certain times of the year, these other duties compete for their time with price collection. Though they report prices to PCU in a standardised format, they have a fair latitude in choosing which data to collect. For instance, APDs in some states some ignore livestock prices. This limits the national coverage of prices that the PCU receives.

PCU has tried to link up its state offices with an intranet for fast data transmission but technical and funding problems have thwarted this initiative. Ultimately, as PCU does not have a mandate to use the data for any urgent purpose, such as immediate analysis or radio

diffusion⁶⁸, it has no need to pursue fast their efficient transmission. PCU publishes its *Annual market prices report for selected agricultural commodities*, based on these data (e.g. Federal Ministry of Agriculture and Rural Development, Projects Coordinating Unit: 2001a). The system mostly supplies collated data to government and donors. National radio stations have broadcast some of these data, under World Bank funding. However, PCU has not tailored these broadcasts to specific private-sector needs.⁶⁹

In parallel, the Field Project Monitoring Unit in each state reports to the Minister of Agriculture through FMARD's Department of Planning, Research and Statistics (DPRS). DPRS has the official mandate for statistical reporting on agriculture, but few funds to fulfil its duties. It produces the *Digest of agricultural statistics*. PCU and DPRS have operated parallel systems since at least the late 1980s. In the early 1990s, FMA attempted to rationalise these different data-collection systems, but this evidently did not succeed.

The federal government set up the Strategic Grains Reserve (SGR) in 1992 to provide a strategic reserve of staple foodstuffs at silos in each state and to stabilise market prices. The Strategic Grains Reserve Department of FMARD runs SGR. It started operations in 1998 and, with silos completed in several states, now has an 86,000 tonne capacity. Its mandate mostly covers grain storage but, recognising the diversity of food preferences within the country, in some states it also stores cowpeas, soya beans, and powder and chips made from gari (processed cassava). It now also collects price data on staple foodstuffs in nine states where it has agents. In addition, it receives some data from the USAID-funded, IFDC-run DAIMINA in Kano state. However, it receives data with a weekly frequency, at best.

SGRD believes it needs a better MIS to efficiently run its purchases and sales of the commodities it stores. Existing MISs do not meet its needs. In 2001, the department approached the US Department of Agriculture (USDA) for help in obtaining improved market data. With the United States-Nigeria Development Institute (USNDI), USDA designed an MIS project with a pilot phase in three contiguous states in the centre and north of the country: Kano, Kaduna and Nassarawa. As designed, the project would collect retail and wholesale data, for both crops and livestock, send them to headquarters and then diffuse them by radio and by posting them in markets.

The consultant contacted USNDI, USAID and USDA for a copy of a document entitled "Nigerian MIS implementation training trip, February 2003", seen at USNDI, but ultimately did not receive a copy. A USDA staff member confirmed by e-mail that USAID and USDA would collaborate with FMARD to conduct training seminars for lead market reporters at state and local levels in the states listed above, as well as in the Federal Capital Territory. Foreseen for the first half of February 2003, the training would cover data-gathering techniques, market data analysis and preparation of market news reports, and work with FMARD to produce a market information manual for dissemination throughout Nigeria.

⁶⁸ FRMARD officials knew of radio broadcasts of up-to-date price data in Lagos State but speculated that the radio stations collected their own data, rather than tapping into a government system.

⁶⁹ The PCU director, with a PhD in agricultural marketing from Michigan State University, was aware of PASIDMA's ongoing USAID-financed, Bamako-based initiative to build a regional network.

All FMARD officials interviewed agreed that the current system does not function well. Only the USAID-financed project initiatives seem to offer any remedy to this situation.

State governments' Ministries of Agriculture also have Monitoring & Evaluation Departments that also collect market prices but, less well funded than their federal counterparts, they appear to do a less efficient job. They generally share these data with APD agents.

2. FOS/CBN/CEM

The Federal Office of Statistics (FOS) and the Central Bank of Nigeria (CBN) often work together to gather statistics on the national economy. They gather wholesale prices for the national accounts on a quarterly basis but do not diffuse this information quickly. Among the most recent FOS publications available to the public, the *Annual abstract of statistics* of 1999 contains wholesale agricultural price data for as recently as 1997 and the *Review of the Nigerian economy* contains such data for 1998. Sources given include the Federal Ministry of Agriculture. Similarly, FOS gathers retail price data in each state for the consumer price index, including the prices of a variety of agricultural commodities. Until recently, the CPI appeared with a 6–12 month lag; the prices of the component prices do not generally appear in FOS publications.

In March 2002, CBN made available 500 million naira for FOS' improved collection and use of a variety of data on agricultural commodities. CBN had found itself collecting the components of the consumer price index to reduce the lag in its availability and decided that enhanced data collection would be more efficient. Moreover, in anticipation of the imminent arrival of the Commodity Exchange Market (CEM), which will operate simultaneously in Lagos and Abuja, CBN decided that commodity traders would need better data on production levels for many commodities.

When CEM opens, probably later in 2003, it will generate real-time data on quantities traded and the associated wholesale prices, which should be available electronically. Commodities will include: grains, cowpeas & beans, cassava products, and tree-crop products. If the exchange spawns sufficient business, it will become the wholesale reference market for Nigeria and probably for its neighbouring countries.

3. USAID projects

3.1 RUSEP

In December 2002, in response to the perceived weaknesses of the PCU system, the Rural Sector Enhancement Program (RUSEP)⁷⁰ launched its MIS. RUSEP identified three groups of users: farmers, traders & processors, and policy makers, and then did an assessment to establish each group's needs. Using methods, techniques and staff borrowed from the

⁷⁰ USAID/Nigeria finances RUSEP; the International Institute for Tropical Agriculture (IITA) and Winrock International manage it. IITA houses RUSEP on its Ibadan campus. (IITA also manages the FOODNET system mentioned in the body of the text.)

USAID-funded, Uganda-based FOODNET, RUSEP trained data-collection staff, data-entry clerks, and radio scriptwriters.

Data for weekly broadcasts of retail prices from three markets in each of four states flow in by mobile phone, e-mail and fax. PCU and the ADP office in each state each have recording studios that they have hitherto used only for recording radio programmes of agronomic advice for farmers. Now RUSEP uses them to record MIS programmes for radio diffusion. The broadcasts take place in the major language of that state by the most expeditious radio station. Table 4 summarises the broadcasts.

Table 4
Details of initial radio broadcasts of agricultural commodity prices under RUSEP

State	Location	Language	Radio station
Abia	Southeast	Ibo	Radio Nigeria
Oyo	southwest	Yoruba	Radio Nigeria
Katsina	North	Hausa	local FM radio
Adamawa	Northeast	Hausa	Radio Nigeria

RUSEP plans to work with FMARD to build capacity in PCU to allow the unit to oversee this process itself, and will provide PCU and the ADPs with computers and cellphones. Simultaneously, the programme is negotiating with a major newspaper, *The monitor*, for a column on agricultural market information that journalists will write based on PCU data; it also plans to promote the posting of agricultural prices in marketplaces. RUSEP maintains a web site with Nigerian MIS data. Among its other goals are: to expand activities to more states and to include daily wholesale prices in what it offers the market. The challenge is to do all this while maintaining both data quality and speed of transmission.

RUSEP intends not only that PCU should take over the running of its MIS but also that the demand for data from the private sector – professional associations and traders – should drive it. As noted above, apex cooperatives in Nigeria are highly politicised: they do not promise to be good business partners. However, RUSEP has identified genuine secondary co-operatives of traders and processors with which to work in different parts of the country (focussed around, e.g., cassava, oilseeds and maize). The programme intends that these associations will become constituencies for its MIS through their demands for data and that they will eventually pay for them. In addition, it has courted large agribusinesses (Guinness, Unilever and UAC), which have used its services to target purchases and which have agreed to evaluate in about a year's time whether to pay for a subscription to such a service. RUSEP has a management committee with wide representativity and the head of PCU as its chair.

Thus it seems that RUSEP follows most of the steps that made OMA a success in Mali. However, one notable difference is that the programme intends to build the national MIS within government: it sees the advantages of building it at arm's length from government but believes that doing so would create much more work and major additional costs. Perhaps it is for government to debate the transfer of certain PCU functions into a different institutional setting where they become more independent of government. On the other hand, this may

seem perverse in Nigeria, where the private sector fights to remain close to government. Unfortunately, USAID funding should end at the end of September 2003, though it appears that an extension may prolong this for another six months. However, in either case, there will not be enough time to fully institutionalise the system. Similarly, under current funding, it seems very unlikely to have the time to integrate its MIS into a West African MIS network, though it expresses an interest in doing so as a logical extension of its current work.

3.2 DAIMINA

Developing Agricultural Input Markets in Nigeria (DAIMINA), a USAID/Nigeria-financed project run by IFDC, principally attempts to redynamise the fertiliser market, which slumped in the mid 1990s, due to poor policy, as well as technical and financial problems. Nigeria would appear to have a comparative advantage in fertiliser due to its rich resources in natural gas. National fertiliser production capacity equals 2.2 million tonnes annually and the annual capacity of fertiliser blending plants equals 1.3 million tonnes. From 1990 to 1996, annual production held steady at about 900,000 tonnes. However, since 1997, production has ceased and Nigeria relies on imports. Fertiliser use in 1999-2000 totalled 173,000 tonnes. Nigeria would have exported fertiliser to surrounding countries without the subsidies that government has historically given. The subsidies boosted incentives for these exports, which averaged approximately 100,000 tonnes annually between 1989-90 and 1994-95. (Singh and Ajadi 2002)

With DAIMINA support, government is reforming policy, starting to privatise a big fertiliser factory, and developing a trading network for this input. Although the politically sensitive issue of privatisation will have to wait until after the 2003 elections, these efforts should result in a major regional source of competitively-priced fertiliser.

To complement this, DAIMINA is working to integrate the prices of fertiliser and other inputs into an improved MIS that will link to regional networks. Throughout Nigeria, DAIMINA uses ADP enumerators to gather weekly wholesale and retail prices of agricultural inputs and, in the states where it has formed trade associations for inputs to agriculture (Bauchi, Kano and Oyo), it also gathers prices of agricultural commodities. Trade associations that DAIMINA has set up also contribute data. This currently results in up-to-date monthly data on input and crop prices. From March 2003, PCU and the ADPs should be organising radio broadcasts of these data.

Crop-chemical companies, consumer groups, seed companies and food-processing companies have all started contacting the project for details of input markets. In addition, it has established links for cotton growers with their counterparts in Kenya in order to help them obtain improved seed. The project aims eventually to have access to the previous day's market data. DAIMINA launches its web site in February 2003 and its data should then appear on the site.

DAIMINA collaborates with PCU in these MIS activities and co-ordinates with RUSEP. It concedes there exists some duplication of functions between the two projects. For its part, RUSEP notes that it works with the seed component of DAIMINA but does not know what

DAIMINA is doing in MIS. Under current proposed funding, DAIMINA will continue until 2009, in contrast to RUSEP's proposed end in September 2003, with a possible extension until March 2004.

Regional market information networks

Since October 2000, IFDC has run the African Agricultural Market Information Network (AFAMIN), financed by the Dutch government and based at IFDC's Africa headquarters in Lomé, Togo. AFAMIN's web site provides links to country-specific sites in Burkina Faso, Ghana, Mali, Nigeria and Togo, as well as providing information on agricultural policies and regulations; fertilisers, pesticides, seeds, crops and livestock; and an interactive buy-and-sell section. It aims to link farmers' organisations, agri-input companies, financial institutions, government agencies and donor agencies. AFAMIN intends to add Benin, Senegal and Côte d'Ivoire to its system. It is not clear how much further than the web site AFAMIN's activities extend.

Complementing AFAMIN, the Marketing Inputs Regionally (MIR) project will network countries with the aim of developing trade in inputs. The Dutch government will finance this IFDC-run project for seven years from January 2003. Based at ECOWAS headquarters in Abuja, MIR's first phase will electronically link MISs for Ghana, Mali, Nigeria and Togo. A second phase will include Burkina Faso.

Separately, ECOWAS has just signed an agreement with FAO for a Technical Cooperation Project (TCP) that for "Strengthening and Coordination of Information Systems on Food Insecurity, Vulnerability and Food Trade in the ECOWAS Countries". The two partners have designed the TCP "to lay the foundations to assist the implementation of a regional food security information system (RFSIS) covering all the ECOWAS countries, based on the existing information systems" (FAO and ECOWAS 2001). As such, this regional network will link together classic food-security-oriented MISs, such as those that exist at AGRHYMET, USAID/FEWS, FAO/GIEWS, WFP/VAM and EC/RESAL, focussing on the provision of information on "geographical zones and populations that are particularly vulnerable to food crises".

In implementing RFSIS, the TCP will support the setting up of an agricultural data bank at the sub-regional level and the monitoring of agricultural product prices and stocks and the sub-regional trade in food, livestock, fresh and processed fish, etc. RFSIS will thus contribute to identifying obstacles to sub-regional trade. It will also provide an early-warning and forecasting function for regional decision-making. The project document emphasises the harmonisation of approaches and tools in food-security information management and in avoiding duplication of other institutions' information systems. (FAO and ECOWAS 2001)

Cross-border trade

Even without an effective public-sector market information system, Nigerian traders already trade widely in the eastern half of West Africa. As noted above, Nigeria is a net importer of

agricultural commodities, so Nigerian traders have an incentive to seek agricultural produce in neighbouring countries. Examples given include:

- livestock from Niger, Cameroon and Chad, and – depending on prices – from Mali and Burkina Faso.
- gum Arabic and cow peas from Niger and Chad.

Nigeria has historically maintained subsidised prices for its petroleum products and fertiliser. These commodities flow across porous borders with its neighbours and subsidise their economies.

Successive Nigerian governments have maintained high, idiosyncratic and erratically-applied tariffs and administrative barriers to trade. A recent report by the Nigerian Institute of Social and Economic Research tabulates in detail the changes in tariffs, import duties, excise duties and other regulations from 1980 to 2000 (Nigerian Institute of Social and Economic Research, Agriculture and Rural Development Department 2001: 116-125). Superimposed on this formal regulatory framework for trade are phytosanitary rules, as well as marketing regulation by individual states. This complex and arbitrary milieu has created rich pickings for corrupt officials.

Traders adapt their strategies to discount the need to pay off these agents, not only at the border posts, but also at state-border crossings and at roadside tête-à-têtes with officials who stop them. Trade continues, informal taxation flourishes, costs increase.

So normal has this corruption become that, when Nigerians hear about efforts in other parts of West Africa to systematically document delays, bribes and other informal costs of trade and marketing, in order to measure their total additional cost to trade, they find such an investment of effort incomprehensible, laughable or both. It seems that no such work has been done in Nigeria.

L'éc(h)o des frontières, a quarterly “regional bulletin of cross-border monitoring” published in Cotonou and financed by the *Coopération française*, available in English (though probably with some delay), describes and documents Nigeria’s trade with its neighbours. Four pages of the 14-page issue for the 2nd quarter of 2002 dealt with trade in agricultural commodities and livestock. Other topics covered included: trade and monetary policy by country, trade in manufactured products, the oil market, a special feature on the regional market for second-hand vehicles, the severity of the hungry season (as measured by price indices for staples), and prospects for cross-border trade. Staff of government departments and universities from Benin, Cameroon, Chad, Nigeria and Niger contribute. The analysis is relatively sophisticated, with graphs and tables of data. Web site: www.refer.org/benin/eco/lares

Biotechnology

The consultant did not visit IITA’s USAID-funded biotechnology laboratories in Ibadan, the best in Nigeria. However, conversations with USAID/Abuja’s Agricultural Development Officer (ADO) suggest that WARP funding of biotechnology might best be used to create regional centres of excellence in Ibadan and Bamako. The Ibadan investment would target

ITA's strength in root crops; the Bamako investment would target WARDA's strength in rice and ICRISAT's strengths in cereals. This would create one Anglophone centre and one Francophone centre. It would be important to ensure strong links between the two centres. In addition to investments in technical expertise, the funding would also cover consultative, legislative, regulatory support. The Abuja-based ADO has more specific details, which he may be including in a memo. WARP should contact him for further information.

Bibliography

- Alkaleri, U. and H. Singh c2002. *DAIMINA strategy of trade association development* IFDC-Nigeria DAIMINA project
- Central Bank of Nigeria 2002. *Annual report and statement of accounts for the year ended 31st December 2001*
- Chemonics International Inc. 2002a. *Agribusiness development assistance project in Nigeria – export opportunities for sesame and cashew in Nigeria* CHEMONICS/USAID project RAISE PCE-I-00-99-00003-00 18th November
- Chemonics International Inc. 2002b. *Agribusiness development assistance project in Nigeria – export opportunities for hides and skins in Nigeria* CHEMONICS/USAID project RAISE PCE-I-00-99-00003-00 28th November
- Chemonics International Inc. 2002c. *Agribusiness development assistance project in Nigeria – export opportunities for prawn and shrimp in Nigeria* CHEMONICS/USAID project RAISE PCE-I-00-99-00003-00 28th November
- FAO and ECOWAS 2001. *Strengthening and coordination of information systems on food insecurity, vulnerability and food trade in the ECOWAS countries* Project document TCP/RAF/0179(A), November
- Federal Ministry of Agriculture and Rural Development 2001a. *New agricultural policy 2001* Abuja,
- Federal Ministry of Agriculture and Rural Development 2001b. *National policy on integrated rural development* Abuja, October
- Federal Ministry of Agriculture and Rural Development 2001c. *Nigeria: rural development sector strategy – main report* Abuja, October
- Federal Ministry of Agriculture and Rural Development, Department of Planning, Research and Statistics 1997a. *Annual agricultural summary performance report* Abuja, June
- Federal Federal Ministry of Agriculture and Rural Development, Department of Planning, Research and Statistics 1997b. *Agricultural outlook: 1997 and 1998* Abuja, November
- Federal Ministry of Agriculture and Rural Development, Projects Coordinating Unit 2001a. *Annual market prices report for selected agricultural commodities – 2000* Sheda – Abuja
- Federal Ministry of Agriculture and Rural Development, Projects Coordinating Unit 2001b. *First quarter 2001 progress report on ADPs* Sheda – Abuja, June

- Federal Office of Statistics 1999. *Poverty and agricultural sector in Nigeria: poverty incidence of farmers by region* Abuja, October
- IFDC c2002. *IFDC-DAIMINA (Developing agri input markets in Nigeria) launches AFAMIN Nigeria website* Abuja
- IFDC DAIMINA Project 2002. *Agribusiness newsletter* various issues
- IFDC, IITA and WARDA 2001. *Agricultural input markets in Nigeria: an assessment and a strategy for development* sponsored by Federal Government of Nigeria, Sasakawa Global 2000 and USAID, paper series IFDC-P-23, Muscle Shoals, August
- IFPRI 2002. *IFPRI annexes for IEHA action plans: Nigeria* Washington, December
- Ipinmisho, T. 2003. "N1.6bn scam rocks coop movement – top officials, police indicted" *Sunday times* Lagos, 26th January, pp 1-2, 14-15
- LARES 2002. *L'ec(h)o des frontières : regional bulletin of cross-border trade monitoring* Cotonou, April – June
- Levin, A. 2002. *Nigeria agriculture program* Presentation to WARP IEHA Workshop, 17th December
- Singh, H. and B. Ajadi 2002. *Fertilizer production and marketing in Nigeria* IFDC: Developing agri-input markets in Nigeria, Abuja, October
- USAID/Nigeria c2002a. *Trade policy program: summary of activities and outputs* mimeograph
- USAID/Nigeria c2002b. *Economic reform and infrastructure* 6th November
- USAID/Nigeria c2002c. *USAID Nigeria concept paper*
- Nigerian Institute of Social and Economic Research, Agriculture and Rural Development Department 2001. *Price and trade incentives in Nigerian crop, livestock, fisheries and forestry production* submitted to The Department of Rural Development of the Federal Ministry of Agriculture & Rural Development and The World Bank, March
- World Bank 2002a. *An assessment of the private sector in Nigeria – draft Regional Program on Enterprise Development*, Africa Private Sector Development Department, Small and Medium Enterprise Department, 31st May
- World Bank 2002b. *Nigeria private sector assessment -- draft Regional Program on Enterprise Development*, Africa Private Sector Development Department, Small and Medium Enterprise Department, 31st May

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