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ASSESSMENT OF MALI'S AGRICULTURAL EXTENSION AND ADVISORY SERVICES

A MEAS Rapid Scoping Mission
November 29 - December 3, 2010

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Report on the MEAS Rapid Scoping Mission
November 29 – December 3, 2010

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ACRONYMS

AFD	Agence Française de Développement
AOPP	Association des Organisations Professionnelles Paysannes
APCAM	Assemblée Permanente des Chambres d'Agriculture du Mali
AV	Association Villageoise
BTA	Brevet de Technicien en Agriculture
BTVA	Brevet de Technicien en Vulgarisation Agricole
CAA	Centre d'Apprentissage Agricole
CAPA	Certificat d'Aptitude Professionnel Agricole
CAR	Centre d'Animation Rurale
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CLUSA	Cooperative League USA
CMDT	Compagnie Malienne pour le Développement des Textiles
DCVA	Division Conseil et Vulgarisation Agricole
DEAAR	Division Enseignement Agricole et Animation Rurale
DNA	Direction Nationale de l'Agriculture
DNEF	Direction Nationale des Eaux et Forêts
DNGR	Direction Nationale du Génie Rural
DNPIA	Direction Nationale des Productions et des Industries Animales
DNSV	Direction Nationale des Services Vétérinaire
EAS	Extension and Advisory Services
EPA	Etablissement Public à caractère Administratif
EPIC	Etablissement Public à caractère Industriel et Commercial
FETEMA	Fédération des Télécentres communautaires du Mali
FFS	Farmer Field School
GIPD	Gestion Intégrée de la Production et des Déprédateurs
ICT	Information and Communications Technology
IER	Institut d'Economie Rurale
IPM	Integrated Pest Management
IPR/IFRA	Institut Polytechnique Rural/Institut de Formation et de Recherche Appliquée
LMD	Licence, Master's, Doctorate
MEAS	Modernization of Extension and Advisory Services (a USAID LWA Project)
MBC	Mali Biocarburant
MVA	Maîtrise en Vulgarisation Agricole
NGO	Non-Governmental Organization
ODR	Office du Développement Rural
ODRS	Office du Développement Rural de Sélingué
OHVN	Office de la Haute Vallée du Niger
ON	Office du Niger
OPIB	Office Périmètre Irrigué Baguineda
OPV	Office de Protection des Végétaux
ORM	Office Riz Mopti
ORS	Office Riz Ségou
PNVA	Programme National du Vulgarisation Agricole
PAPAM	Programme d'Accroissement de la Productivité Agricole au Mali

PASAOP	Programme d'Appui aux Services Agricoles et aux Organisations Paysannes
SAFE	Sasakawa Africa Fund for Extension Education
T&V	Training and Visit
URTEL	Union des Radios et Televisions Libres du Mali
ZPA	Chef du Zone de Production Agricole

1. BASIC DESCRIPTION OF MALI'S PLURALISTIC EXTENSION SYSTEM

1.1. Programmatic Overview

Agricultural extension and advisory services (EAS) in Mali can be divided into three primary clusters. The first, and by far the most important because of the number of field staff members, extent of geographic coverage and range of technical areas, are the governmental and parastatal extension services. Second are those non-governmental organizations and projects that provide temporary or occasional EAS. The least developed are the private sector entities that provide limited EAS.

Governmental agricultural EAS can be further divided between the services offered through the operational units of principal ministries -- e.g., *Ministère de l'Agriculture*, *Ministère de l'Élevage et de la Pêche*, *Ministère de l'Environnement et de l'Assainissement*, etc. -- and the various *Offices du développement rural* -- e.g., *Office de la Haute Vallée du Niger* (OHVN), *Office du Niger* (ON), etc.. Though the ministerial *Direction* coordinate and provide national EAS services in their specific technical domains, the various *Offices* are the dominant EAS service providers in their geographic areas of operation. Most of the *Offices* have a crop-specific focus, such as rice (e.g., ON); others provide EAS for multiple crops (e.g., OHVN). A select few -- e.g., *Office de Protection des Végétaux* (OPV) -- provide discrete technical services on a national basis.

The general relationship between ministerial and *Office*-sponsored EAS can be illustrated through the example of the *Direction Nationale de l'Agriculture* (DNA). The DNA provides extension services nationwide for crop-based agriculture in areas of the country that are not covered by one or another of the *Offices*, as well as within areas serviced by the *Office* for crops and issues that the *Office* extension services do not address. The various *Offices*, in turn, work exclusively in well-defined geographic areas on crop(s) and other activities that align with their mission and legal statute.¹

Although separate from governmental EAS services, those offered through non-governmental organizations often work through the governmental field programs, providing additional technical training and operational support to governmental field staff members in targeted geographic areas concerning crops and activities focused on by the project. In other instances, NGOs hire temporary extension field staff members to carry out project tasks, a practice that has garnered criticism for the lack of qualifications of these short-term hires.

The recent history of governmental extension programs in Mali follows the familiar trajectory of adopting and then abandoning the Training and Visit system (T&V) underwritten by the World Bank (*Programme National du Vulgarisation Agricole* -- PNVA). The fairly late introduction of T&V in Mali (signed in 1991, operational in 1992) occurred at roughly the same time as the introduction of Mali's agricultural structural adjustment policy program (*Programme d'Ajustement du Secteur Agricole*, signed in 1990, put into place in 1991). The significant downsizing of governmental and parastatal extension

¹ The *Offices* have a legal statute as either an *Etablissement Public à caractère Industriel et Commercial* (EPIC) or *Etablissement Public à caractère Administratif* (EPA). In principle, EPICs are financially independent and are allowed (and expected) to generate a portion of their operating finances; the EPAs receive the entirety of their operational finances from the government for providing specific administrative services related to their mandates. In practice, the EPICs are highly dependent upon governmental financing as well.

programs under the structural adjustment initiative led to T&V being introduced as part of an efficiency measure accompanied by efforts to transfer greater responsibilities to rural producers through development of *association villageois* (AV), assisted by an unpaid cadre of village *animateurs*, with the target of establishing *Villages Auto-Encadrés* (self-provisioning villages).

Funding of Mali's T&V experience ended in 1999, at which time support for national agricultural extension was transferred to a new World Bank-financed project, the *Programme d'Appui aux Services Agricoles et aux Organisations Paysannes* (PASAOP I and II). Under the PASAOP, there was a period of experimentation with a user-fee approach to advisory service provision and added support in creating *Centres de Gestion* and contractually engaged private EAS providers. The general impression from those involved in implementing the user-fee approach was that it was a failure, with essentially no buy-in by producers, now interpreted as being due to a lack of market integration.² The current major World Bank-funded agricultural program, *Programme d'Accroissement de la Productivité Agricole au Mali* (PAPAM), reportedly does not include any direct financing for extension, nor was any significant core funding for the provision of EAS from other donors identified.

1.2. Key Institutions and Programs With a Mandate to Provide Extension and Advisory Services

The governmental provision of EAS for crop production, livestock production, forestry, fisheries and rural infrastructure development is spread across various ministries and their operational units. Key governmental units with national EAS functions include:

- **Direction Nationale de l'Agriculture.*
- *Direction Nationale du Genie Rural.*
- **Direction Nationale des Productions et des Industries Animales.*
- *Direction Nationale des Services Vétérinaires*³.
- *Direction Nationale des Eaux et Forêts*⁴.

Additional key governmental entities and parastatal organizations with geographically or technically limited EAS functions include:

- **Compagnie Malienne pour le Développement des Textiles.*
- *Office du Développement Rural de Sélingué.*
- **Office de la Haute Vallée du Niger.*
- *Office du Niger.*
- *Office Riz Mopti.*
- **Office de Protection des Végétaux.*
- *Office du Périmètre Irrigué de Baguineda.*
- *Office Riz Ségou.*

Key educational institutions with EAS training programs include:

² There is speculation that in the peri-urban areas, with an appropriate targeting of important market crops, a fee-based system might work, although this has not been tested.

³ A last-minute schedule change resulted in the director of the DNSV cancelling the programmed meeting.

⁴ Contacts within the DNEF were ultimately unavailable to meet during the period of this mission.

- *Centre d'Apprentissage Agricole de Samanko.
- *Université de Bamako, Institut Polytechnique Rural/Institut de Formation et de Recherche Appliquée de Katibougou.

Other important structures and organizations with EAS mandates or associations include:

- *Institut d'Economie Rurale.*
- **Assemblée Permanente des Chambres d'Agriculture du Mali.*
- **Association des Organisations Professionnelles Paysannes.*

*Indicates programs visited.

[Note: a number of major NGOs and donor-funded projects provide limited EASs, and some private sector companies are involved in EAS provision. Time limitations and encouragement by the USAID mission to focus on the major governmental programs with headquarters in Bamako did not allow for visits to any of these other service providers. NGO and private sector EAS providers, as well as those governmental programs located elsewhere in the country, will require detailed attention during the in-depth assessment.]

2. ANALYSIS OF THE STRUCTURE, FUNCTIONS, AND SELF-REPORTED CONSTRAINTS/OPPORTUNITIES OF SELECTED INSTITUTIONS

Direction Nationale de l'Agriculture (DNA)

The DNA has the mandate to provide agricultural extension services nationwide. The program has a total reported staff of 1,080. Staff members are organized along Mali's administrative structure, with positions at the national, regional (eight), circle (49) and commune levels (703). On average, each commune has two to three positions for field agents, although many are vacant at this and other organizational levels.⁵ The DNA maintains that it collaborates with the *Institut d'Economie Rurale* (IER) through an annual bottom-up planning process starting at the commune level (*annual plan de commune*), which involves representative farmers. Interviews with the IER, on the other hand, provided a contrary view that extension representatives do not participate in these bottom-up planning sessions, and that the "representative farmers" involved tend to represent their own interests in these sessions.

The principal DNA divisions with EAS functions are the *Division Enseignement Agricole et Animation Rurale* (DEAAR) and the *Division Conseil et Vulgarisation Agricole* (DCVA). The DEAAR has a training staff of 10 based in Bamako, as well as representation at each of the regional *Direction Régionale d'Agriculture* offices. The DEAAR works through four *Centres d'Apprentissage Agricole* (CAA), based at Dioro, M'Pesoba, Samé and Samanko. The CAAs have received past support from USAID in developing their infrastructure and in acquiring didactic materials. USAID also supported creation of a network of *Centre d'Animation Rurale* (CAR), with one CAR located in each of Mali's administrative circles. Currently the CAR system is not functional, though control of these centers has recently been given to the DNA, and a plan has been drafted to refurbish infrastructure and train teachers to provide training for young farmers (DNA, 2010). In addition, the DEAAR also organizes short-, mid- and long-term training opportunities, though admittedly these are irregular at best.

⁵ Comparing reported numbers and desired staffing levels shows the DNA field program is understaffed by 30 to 40 percent.

The other division of the DNA with important EAS functions, the DCVA, serves a critical role at the interface between research and extension.⁶ The DCVA is organized into two sections -- research-extension liaison and extension. The first conducts trials and demonstrations of new technologies with research under farm-level conditions. The second section diffuses tested technologies through a system of demonstration plots using side-by-side comparisons with traditional practices and technologies developed by research (IER) and through a network of unpaid village-level *animateurs*. The elevation of the Farmer Field School approach (developed at the pilot scale by the OPV -- see below) as the new national extension strategy will reportedly be promoted through this program.

Self-reported Constraints/Opportunities: The major constraint identified is the general underinvestment by the state in the EAS programs, which leads to the inability to fill the desired number of field positions and an aging cohort of field agents (the average age of DNA field agents was estimated at 50+). The increasing number of NGO programs wanting to work with and through the DNA not only causes major coordination problems⁷ but also introduces significant continuity problems when their project-based financing terminates. Overall, it was suggested that greater efficiency in providing EAS could be achieved if there was coordination across the ministries in supporting a single extension program rather than separate extension programs organized along ministerial lines. A program of continual in-service training for field agents is badly needed (e.g., the introduction of value chain development concepts and practices). The increased development of irrigation potential is a growing priority, as are both training and working with input supply dealers.

Direction Nationale des Productions et des Industries Animales, DNPIA

The DNPIA has the mandate to develop national policy and programs on animal production and industries. The DNPIA is organized into four divisions: pastoral water management (e.g., development of watering points); animal product *filières* (milk, meat, skins and hides, poultry), animal industries (e.g., abattoir management; monitoring of livestock markets), and training and documentation. Administration of the DNPIA programs follows the national administrative structure of national, regional, circle and communes divisions.

Overall, the DNPIA has a field staff of 445 (20 percent are women) to serve 703 communes. The desired staffing level is 1000. In working with producers, field staff members use a series of training modules on topics such as how to maintain an animal, produce milk, meat, skins, manure management, etc. Many of the field activities are carried out as part of smaller development projects, with a few larger projects (e.g., *Projet de Développement de l'Aviculture au Mali*) focusing specifically or in part on animal production issues. In these cases, field staff members in targeted areas often benefit from additional training, transportation, computers and other field tools. Those staff members not located in project areas receive no additional support. In recent years, very few new field agents have been recruited. Those hired are typically generalists with little or no specific livestock training. Overall, the DNPIA field staff is seen as aging and increasingly less capable.

⁶ Interviews with research (IER) did not confirm this view. The current director of the DVCA is newly appointed and not entirely familiar with the organization's functioning.

⁷ This includes coordination at a technical level. Whereas all technologies promoted through the DNA come from the national research program (IER), the same is not true for NGOs, which bring in technologies from outside that have not passed through the national system of testing and review.

Self-reported Constraints/Opportunities: The greatest challenge that the DNPIA faces is what it views as the overall poor level of organization across the animal production value chains. The DNPIA also perceives a strong bias toward crop production, though 30 percent of the population derives its livelihood from animal production systems.

Office de la Haute Vallée du Niger, OHVN

The OHVN has the mandate to increase cereal production to assure food security within its zone, and to organize rural producers into professional associations so that producers can better pursue their development objectives. The OHVN is organized into 10 administrative *Secteurs*,⁸ each with eight to 10 field agents (86 total). Each of the *Secteur* offices is led by a *Chef* and *Chef Adjoint*, as well as a female gender specialist that provides *Secteur*-wide backstopping to the field agents. None of the extension field agents are women. Each field agent services eight to 12 villages (roughly 800 households; 200 to 400 in areas with irrigation) and is equipped with a basic tool kit consisting of a motorcycle, a GPS unit, a portable phone (personal) and five technical manuals. The five manuals cover agricultural extension (technical sheets), agricultural statistics collection, farmer training, extension visits and interviews, and gender and development. Field agents also manage credit and input supply provisioning; Bamako-based staff members provide literacy training and manage credit repayment. The OHVN has an audio/visual office, but it is unclear what range of communication products it produces or can produce (the examples given were for radio diffusion).

Administratively, the OHVN is organized into four divisions: Extension and Rural Advisory Services (food crops, industrial crops, natural resources, vegetable gardening),⁹ Cash Crop Promotion and Agricultural Credit, Infrastructure and Agricultural Equipment, and Administration and Finance. The current leadership is still very much attracted to the structure and regularity of the T&V program and believes that the T&V model was never fully exploited. Weekly meetings are held in Bamako with all the *Chefs Secteur*, and monthly meetings with the entire extension field staff, also in Bamako, to review statistics and planning. The major share of financing comes from the state for infrastructure construction, maintenance and functionaries' salaries; the OHVN generates resources to cover the salaries of specialist positions from its commercial activities, principally cotton sales, though revenues are declining with the recession in the cotton subsector.

The legacy of the CLUSA¹⁰ program of AV development, funded through earlier cycles of USAID support, is still very important to the OHVN's operations, and in comparison with the experiences with AV development in the other *Offices* (e.g., ON) and CMDT, achieved much greater and enduring impact and warrants close examination.

Self-reported Constraints/Opportunities: OHVN development priorities include rejuvenation of the extension structure and capacity building; irrigation development (40,000 ha of degraded or underdeveloped *bas fond* have been identified)¹¹; and rural road construction. Also mentioned is the need for market system (crop value chain) development.

⁸ The OHVN *secteurs* do not always align with governmental administrative units.

⁹ The OHVN differs somewhat from other large *Offices* in that it does not have a single crop mandate (although cotton is the major cash crop; tobacco and peanuts were eliminated long ago).

¹⁰ CLUSA (Cooperative League USA) is the international development arm of the National Business Cooperative Association.

¹¹ The OHVN has prepared 38 *bas fonds* development plans, with three more under preparation.

Compagnie Malienne pour le Développement des Textiles, CMDT

The CMDT is a private company, with 60 percent ownership by the Malian government. The CMDT underwent a major restructuring in 2002 and was scheduled to be broken into four autonomous units and sold in 2008, but its breakup and sale were halted, and the company still operates as a parastatal entity. In addition to its focus on supporting cotton production within its zone of operation, the CMDT has a history of providing EAS to farmers for crops grown in association with cotton cultivation, as well as a range of additional services such as functional literacy training, rural infrastructure development, *bas fond* irrigation development, women's development program, etc. The recent downsizing in preparing for sale eliminated a majority of the non-cotton activities, including the women's program.

The CMDT is currently organized into four geographically based *filières*: central—based in Bamako, northeast--Koutiala, south—Sikasso and west-Kita. Each is operationally autonomous, with central financial control provided by the Bamako-based CMDT holding company. Before the reorganization, there was a staff of 22 Bamako-based agricultural advisors; now there are three. Operationally, each of the *filières* is subdivided into *secteurs*. There are 31 *secteurs* in the CMDT zone. Activities in each *secteur* are directed by a *Chef Secteur*, supported by a team of village-based *Chef du Zone de Production Agricole* (ZPA). Each ZPA works with approximately 500 to 600 producers¹² through village-level *equipe technique villageoises*. In addition, one diffusion/demonstration plot is located in each *secteur* to showcase new technologies. Farmers access these plots through demonstration visits, paid for and coordinated by the Bamako administration. Each *filière* has two trainers (one only in the west).

Overall, the four *filières* have 555 positions, 460 of which are currently filled. Of these, 436 are ZPA positions, of which 370 are currently filled. Fewer than 10 percent are filled by women field agents. The vacancies are the result of a hiring freeze that was put into place with the recession in cotton prices, which has resulted in a progressive aging of the field staff -- the average age is estimated now at well over 40 years of age. The majority of ZPA are trained at the technician level at IPR/IFRA (see below).

Self-reported Constraints/Opportunities: The principal constraints cited relate to training: training of trainers, field staff members and farmers. Also, the elimination, through the restructuring process, of some non-cotton activities -- especially the functional literacy program -- is beginning to have a negative impact on the overall functioning of the cotton production program.

Office de Protection des Végétaux, OPV

The OPV has a mandate to control major pest infestations, develop and promote integrated pest management (IPM) techniques, collect and disseminate information, and train field staff members from other services. The OPV has a total field staff of 122 agents (all male) -- *agent technique* and *agent d'appui* -- with six to eight per administrative region (the remainder are based in Bamako). Within each region, field staff members are organized into pools on the basis of a regrouping of their former *secteurs*, which was required because of human resource constraints. At the local level, field agents work through *brigades villageoises*, farmer organizations, NGOs and other technical services in carrying out the primary tasks. Field staff members generally have training to the *engineer* level from the IPR/IFRA Katibougou.

As part of its activities, the OPV has been piloting the Farmer Field School (FFS) approach with assistance from the FAO since 1997 (Simpson, 2002). The Netherlands (with FAO technical assistance) is

¹² A 2002 study determined that one ZPA could effectively work with 350 producers -- approximately 10 to 15 villages.

currently funding the *Gestion Intégrée de la Production et des Déprédateurs* (GIPD) Phase II project. On the basis of this history, the OPV has reportedly been given the mandate to scale up the use of the FFS approach to the national level, but it has yet to do so, and it is unclear who will pay for and control this expansion because the DNA also stated that it would be leading the scaling up of the FFS approach.

Self-reported Constraints/Opportunities: The OPV's principal constraints are financial -- overall funding levels and speed of access during acute pest outbreaks -- and inadequate human resources, in both overall numbers and levels of training in specialized domains. The OPV noted that its field staff is aging, and this has posed problems in retraining old staff members on new technical approaches (e.g., FFS methodologies).

Institut Polytechnique Rural / Institut Formation et Recherche Appliquée de Katibougou, IPR/IFRA

Part of the *Université du Bamako*, IPR/IFRA is the principal institution providing university-level education in the agricultural sciences in Mali. The vast majority of specialists and researchers have their first degrees from IPR/IFRA, and most of the upper-level field technicians received their terminal degrees from IPR/IFRA as well. In addition to other degrees, IPR/IFRA offers a four-year degree program in agricultural extension, *Maîtrise en Vulgarisation Agricole* (MVA), and since 2002 it has been a member of the Sasakawa Africa Fund for Extension Education (SAFE) initiative.

Since joining the SAFE initiative, the four-year MVA program has graduated 109, and 73 students are currently enrolled. Class sizes have averaged around 20. Classes were purposely kept small while the program developed, though this year only three new students were enrolled because of a concern by sponsoring ministries over which civil service corps graduates would fit into (graduates have the same training as other technical *engineers* but are not specifically included in the definition of the employment codes governing civil service corps).

The majority of students (+50 percent) come from the *Ministère de l'Agriculture* (DNA); others, from the *Ministères de l'Élevage et de la Pêche* and *Environnement et Assainissement*, with the remainder from the various *offices*. The program has had eight to 10 students from NGOs¹³, and to date it has not accepted any students from outside Mali, although beginning this year, non-Malian applicants will be considered.¹⁴ A total of 35 instructors provide inputs into the program (21 have doctoral degrees, most from the Université du Bamako). One weakness noted by external observers is that the program lacks a core staff with degree training in agricultural extension education.

Similar to educational systems in other Francophone countries, IPR/IFRA is reorganizing its degrees to fit the LMD model,¹⁵ which will result in a *License en Vulgarisation Agricole* (Bac+3) and *Masters en Vulgarisation Agricole* (Lic.+2). IPR/IFRA is also updating the technical content of its program from a traditional production focus to one including postharvest and value chain development content (a value chain development course is being introduced this year). Because most of the relevant EAS documentation is in English, an English language training component is being added to the curriculum.

¹³ NGOs are reportedly hesitant to lose the services of field staff members for four years and are concerned about those trained taking other positions after they graduate.

¹⁴ As part of the conditions of the SAFE program, IPR cannot accept students from another country with a SAFE program (e.g., Benin, Burkina Faso, Ghana).

¹⁵ License/Bachelor, Master's, Doctorate.

Self-reported Constraints/Opportunities: The major constraint is the financing (staff time and per diem) and organizational demands (especially transportation) of the *stage pratique* and supervised enterprise development project components of the program. Currently, only one of the *Direction Nationale* contributes funds in support of these extracurricular activities; in the past, funding was provided through the PASAOP. Also, IPR/IFRA currently does not have a system to track graduates. This lack weakens its ability to refine the program in response to participant and employer feedback. It hopes to introduce such a tracking system in the future, along with a needs assessment targeting NGOs to identify the types of distance studies and other training opportunities that might be more attractive, with the added hopes that this might also boost the number of women students enrolled.

Centre d'Apprentissage Agricole, CAA, Samanko.

The CAA/Samanko is one of four vocational agricultural training centers in Mali.¹⁶ The center provides both theoretical and practical training, and it issues two-year *Certificat d'Aptitude Professionnel Agricole* (CAPA) and two-year *Brevet de Technicien en Agriculture* (BTA) degrees. The center has about 75 students in the CAPA and BTA programs, and 17 instructors. Students entering the CAPA program are drawn from a national *concours* of applicants and distributed across the four CAA centers. The best (approximately 13 per year) graduates from the CAPA program and professional field staff members entering directly from the various governmental services are accepted into the BTA program. The gender balance in these programs is approximately 60:40 men to women.

In addition to the CAPA and BTA programs, the CAA/Samanko also offers a two-year *Brevet de Technicien en Vulgarisation Agricole* (BTVA) degree. Like the IPR/IFRA MVA degree program, the CAA/Samanko BTVA participates in the SAFE initiative,¹⁷ and it has the distinction of being the first non-university member in that program. Students are selected by direct application and must have a minimum of two years of field experience. The center currently has 52 students enrolled in the BTVA program, with a gender balance of 50:50. Of the nine instructors in the BTVA program, all but one are male. The curriculum includes a series of core courses and a wide range of specialization options. The center currently has no computer applications course but hopes to add one shortly. In 2011, the center plans to start another specialized two-year program, *Brevet de Technicien en Genie Rurale*.

Self-reported Constraints/Opportunities: The major constraints include infrastructure and lack of teaching materials. Lack of space means up to 50 students in a classroom without sufficient tables for writing. There is lodging at the center but only for first-year students coming from locations far removed from Bamako who do not have relatives or local contacts where they can find accommodations.¹⁸ Even then, 14 to 15 students are housed in a room designed for 10. Didactic materials are scarce and dated, and the center has no audiovisual resources. Though it has the opportunity to conduct a number of types of workshops, it does not have a conference room to host them. Because of the lack of fencing, the center's 1100 ha of land are being encroached upon, and the lack of mechanized equipment prevents the center from cultivating more than the 10 ha that are currently under production.

¹⁶ The other CAAs are located in Dioro, M'Pesoba and Samé.

¹⁷ Only the CAA /Samanko participates in the SAFE program.

¹⁸ The center is located 20 km outside of Bamako.

Institut d'Economie Rurale, IER

The IER, created in 1960, is the principal agricultural research institution in Mali. Although the IER does not have a direct EAS function, it is the direct or indirect (i.e., through verification) source of all agricultural technologies promoted through governmental EAS programs. The institute has a research staff of 255 supported by 547 assistants, administrators and others. In total, women comprise 12 percent of IER's staff. The research agenda is organized into 17 research programs grouped into five domains: rain-fed crops; irrigated crops; animal production; forestry, wildlife and fisheries; and production systems, natural resource management, economics and agricultural equipment. The research program is supported by four major laboratories -- food science; soil, water, plant; animal nutrition; and genetic resources -- and implemented through a system of six regional research centers, nine stations and 13 substations.

During the late 1990s, when the T&V approach (PNVA) was being utilized, researchers felt they had a clear and positive relationship with extension. The research program was built upon the findings of an annual participatory, diagnostic assessment. Representatives of the research and extension systems met monthly to review progress on the research agenda, attended joint bi-weekly planning meetings and conducted joint field trials under farmers' conditions. Successful research results were written up, reviewed by extension and transformed in extension *fiche technique*. With the introduction of the *conseil rural* approach under the World Bank project PASAOP I and II, which followed the PNVA, private operators were contracted to provide advisory services. The relationship between research and governmental extension essentially broke down. Research had no mandate or contract to work with the private sector, so there was no clear pathway for new technologies to get into farmers' hands. When the project ended, the private EAS providers shut-down their service delivery programs.

Since then, efforts have been made to utilize a process of *conseil regional recherche et vulgarisation* to support collaboration between research, extension and farmers. Reportedly, however, the governmental extension services do not participate, leading to the observation that there has been a fundamental rupture in the research-extension relations. The causes and results are many, but a dominating influence is the way in which research and extension programs are now funded -- extensive collaboration between the two groups is neither funded nor required. One result is that those in research have no idea what is currently being extended by the governmental EAS programs. This is a very troubling state of affairs that IER would like to see studied in detail and resolved.

IER convenes an annual regional *comité des utilisateurs des résultats de recherche* to discuss and determine the research priorities for the coming year. A panel made up of 20 representatives of various interest groups reviews constraints, identifies those that are researchable, and reviews completed research results that are ready for preparation of a research *fiche technique*, research that is still on-going and new research topics that will be started. One observation on this process is that it is a poor vehicle for gaining farmer input. Producer organization representatives may be suited for higher level policy discussions but are ill prepared for communicating researchable production constraints faced by their diverse members.¹⁹ But research has no other means of gaining a broad assessment of farm-level problems.

Self-reported Constraints/Opportunities: Communication problems at the research-extension-farmer interfaces need to be studied and resolved. Better farmer representation, especially of regional

¹⁹ They are reported to speak only about their own production problems, which are often not representative of the farming communities where they are located.

problems, is needed, as are serious analysis of producers' constraints and a means of validating the efficacy of research's response to those constraints, including a means of reporting back to and getting feedback from technology end users.

Assemblée Permanente des Chambres d'Agriculture du Mali, APCAM

APCAM is the apex representative body of the nine regional *Chambres d'Agriculture*, each of which functions as an independent entity. The current revised *Chambres d'Agriculture* emerged out of the political reform process of the *états généraux du monde rural* (1992) as an effort to adapt to the new political context of democratization, increased decentralization and disengagement of the state, and greater civil society empowerment. APCAM's stated mission is to: represent farmers and serve as the interface between the government and the rural population, so that decision makers better understand the problems and interests of the rural population and can draft policies responsive to the realities of rural life; undertake interventions that provide the necessary support for producers and agricultural professional organizations to pursue their development agendas through greater participation in the political process and negotiations, and expanded involvement in the market economy; and disseminate relevant information. APCAM has a staff of 12 in Bamako and one *conseil technique* in each region.

Though APCAM serves primarily a coordinating role with the regional *Chambres d'Agriculture*, it also provides some direct training and organization development support through the regional *Chambre d'Agriculture* and participates in various development projects. Currently, five training modules target young elected members of the regional *Chambre d'Agriculture*: field management, activity planning and budgeting, managing relations with governmental structures, meeting management skills and *animation* (the latter two are optional). In 2005, APCAM and CIRAD conducted a study on the strengths and weaknesses of technical advisory services in Mali, Burkina Faso and Benin.²⁰ On the basis of this study, a pilot project was started that involved 400 to 600 farmers in 2006 in testing an extension approach called *conseil d'exploitant familiale*. The approach is intended to address two primary challenges: how farmers can contribute to the advisory process and how research can better work with rural advisors. Phase II of this effort is programmed to start in 2011, with French (AFD) financing, in the CMDT and OHVN zones. Presentations on the approach have been made to IPR/IFRA and DNA.

Association des Organisations Professionnelles Paysannes, AOPP

The AOPP is a national representative body of producer organizations. The association was created in 1995 to identify farmers' problems, defend their interests, collect and exchange information, and speak on farmers' behalf in improving their welfare. Current membership includes more than 200 organizations, from single organizations with 30 to 40 members to those comprising more than 100 cooperatives. Functionally the AOPP is organized around seven thematic *commissions* -- four are technically based (cotton; cereals; livestock; fruits/vegetables), and three are service-based (monitoring, evaluation and training; political advocacy; household capacity building). Training is the oldest and most important of the AOPP's operational areas. In 2009, the AOPP completed a strategic planning process and proposed a reorganization of its activities around five core themes: modernizing the family farm (including market access and value chain development), improving productivity, policy advocacy, developing autonomous producer associations and adapting to climate change.

Most of the AOPP's activities are financed through donor-funded projects. The AOPP does not have an internal cadre of dedicated EAS staff members. Rather, in response to specific project needs, the

²⁰ Note: the electronic copy of this file was infected with a virus and could not be opened.

AOPP directly hires or pays for specific extension services from governmental structures or NGOs, or hires technical experts to conduct training-of-trainer events. The payment for training events is typically split between project funds and the producer association receiving the training (the latter paying most often in-kind). Every AOPP member organization has an internal group that manages training events on behalf of the organization. This internal group is trained in the evaluation of training programs and carries out negotiations with the trainers to ensure that they deliver what the organization members need.

Self-reported Constraints/Opportunities: The AOPP identified two major constraints. First, through donor support, it has become truly national in scope with a concurrent elevation in expectations among its members. Financing, however, is not sufficient to deliver on all of the demands that are now being made. Second, as the association has grown, so has its need for a larger, more technically competent staff. Currently, a growing number of tasks are being contracted out, tasks that, in the future, it would like to be able to manage internally. The greatest opportunities lie in transitioning to the new organizational structure developed through its internal strategic planning process.

3. CROSS-CUTTING ISSUES IN THE PROVISION OF EXTENSION AND ADVISORY SERVICES

Gender

The gender balance of field staff members varies from program to program. Of those programs visited and able to report on the gender profile of their staffs, the number of women extension agents is generally low (CMDT, less than 10 percent; DNA, less than 10 percent; DNPIA, 20 percent; OHVN, 11 percent; OPV, zero). No indication of the gender balance within the management ranks was given, though this can be assumed to be low to non-existent. In general, this situation mirrors the gender balance of the IPR/IFRA four-year extension degree program (12 percent), whose participants come from the major governmental EAS programs. More promising is the reported gender ratio among the participants in the CAA/Samanko programs. The Samanko program, which trains most of the lower level field staff members, enrolls 40 percent women in its certificate program and 50 percent in the two-year technician program. The vast majority of teaching staff members in the Samanko and IPR/IFRA programs are male.

Operationally, each of the major extension programs reported using a somewhat different approach to bringing a gender dimension into its field programs. The details of the programmatic approaches and objectives will require greater attention during the in-depth assessment.

ICT Technologies

Mali has a history of experimentation with various media in reaching farmers (e.g., farmer radio) stretching back to the early 1990s (Simpson, 1999), with renewed interest under USAID and other donor financing in the 2000s.²¹ In general, however, use of multimedia resources and advanced

²¹ USAID supported the formation of a national FM radio station union (URTEL) with 220 member stations. Over 80 percent of the Malian population is reported to be within range of a FM station. USAID also supported the development, with other donors, of 31 *Télécentres Communautaires* (CLICKS), organized under FETEMA. The early CLICKS in particular were sited in larger towns and have since

communication and information access/dissemination tools in EAS programs is weak to non-existent. Although most field agents now have personal mobile phones, as well as access to the fixed radios still used for communication between Bamako and the field offices, the major extension programs continue to rely on printed *fiche technique* and demonstration plots as their principal tools in providing information for field agents and in reaching farmers. Through its involvement with the FAO integrated plant and pest management project (GIPD), the OPV has developed brochures, posters and other media (in French and local language) as part of its extension strategy. Both the OHVN and APCAM reported use of radio broadcasts as part of their communication strategies. The private sector uses printed materials, roadside signs and billboards, radio and even television in promoting its products. For example, one company, Malibiocarburant, has produced a television advertisement promoting *Jatropha* cultivation for biofuels broadcast in local language. On the whole, however, and particularly in the case of EAS support to field staff members, the field use of ICT appears virtually non-existent. Further attention will need to be paid to this issue during the in-depth assessment with contact made with the *Centre de Services de Production Audiovisuelle*, among others.

4. SUMMARY OF CRITICAL ISSUES IN THE PROVISION OF EXTENSION AND ADVISORY SERVICES

In addition to the observations made in the preceding section on specific issues that require attention during the in-depth study (see Annex D for the draft SOW), the rapid assessment also identified several general trends that the in-depth study team will need to focus on, areas where well-targeted investment could leverage transformative impacts.

Discussions with representatives of nearly all the key governmental organizations underscored the pervasive **human resource crisis** that their programs are facing – they are caught between the pincers of current levels of understaffing and an aging cohort of active field agents. Rough estimates provided during visits to the OHVN and CMDT and others put the average age of field staff members at around 50 years old. Within the ranks of the current field staff, a great disparity in technical knowledge and skills exists. It is related primarily to the legacy of buy-in of donor projects directly or through NGO intermediaries, which has resulted in governmental field agents in targeted project areas receiving an uneven range of additional methodological and technical training, and those outside project areas receiving none.

- A detailed review of existing human resources and human resource development plans should be completed for the major governmental programs providing EASs, with special attention to age, gender and educational profiles. A cross-sectional review of the NGO and private sector EAS human resources is also warranted.
- A detailed review should be completed of the methodological approaches used across the various governmental EAS programs and major NGO and donor projects, and by private sector companies involved in EAS.
- A careful review of the curricular content and teaching methods at IPR/IFRA and CAA/Samanko SAFE programs should be conducted, with a special emphasis on assessing

reportedly been replaced by private cyber café [plural?], though this warrants investigation (Traoré per. comm.).

the goodness-of-fit between the training content and job skills needed by major pluralistic EAS employment opportunities. Both institutions have recently completed strategic plans, and two external evaluations of IPR/IFRA have been conducted, which should be consulted in this review.

- A review of IPR/IFRA and CAA teaching staff members -- numbers, specializations, levels of training, ages and genders -- is also warranted. The possibilities of engaging some of the older, highly experienced field staff members from the ministerial and ODR extension programs as additional teaching resources and mentors in the IPR/IFRA and CAA training programs should be examined.
- As suggested by the IPR/IFRA staff, an investigation into the various types of in-service training that would be attractive to NGO and project-based EAS programs would be valuable in enhancing the responsiveness of the main training programs to a pluralistic clientele base.

Related to human resource development constraints are some specific policy and organizational issues that need to be addressed. The fact that this year the IFRA/IPR SAFE program had only three students enrolled -- reportedly because the sponsoring organizations (primarily governmental) have determined that there is not an appropriate civil employment code under which bachelor-level extension personnel can be placed -- is a serious blockage to long-term EAS capacity building. Tangentially related, one of the experiences of the *Centres de Gestion* initiative in the CMDT zone was that contractually hired field staff members in the program did not receive any social or retirement benefits as part of their compensation package, and so they tended to use their employment within the program as a holding position until another opportunity that included these benefits became available. These sorts of disincentives to investing in training and retaining qualified field staff members will need to be resolved before EAS programs can address their human resources constraints.

- An investigation into the employment policies related to governmental EAS staff training at IPR/IFRA is urgently needed.
- In the case of the IPR/IFRA SAFE program, the logic of setting the admissions requirement at 45+ years of age needs to be examined if serious future progress is to be made in rejuvenating the EAS human resource pool.
- Changes to the current approach used by the IFRA/IPR SAFE program in accepting candidates from the various ministries will need to be examined if an improved gender balance is to be achieved.
- A rapid survey of EAS field staff members in various types of organizations (public, private, non-profit) would offer valuable insights into the positive and negative factors affecting retention and motivation of qualified staff members.

The dominant approach used in governmental EAS is based on an evolving extension model that has been followed more or less continually for decades (Bingen et al., 1993; Bingen and Dembele, 2004; Simpson, 1999). This model follows a general cascade structure of governmental extension agents working through local unpaid village contacts, using *fiche techniques*, demonstration plots, field days and representative farmers as the primary outreach approach. On the positive side, through this long-standing EAS approach, considerable energy has been invested over the past 20 years in the creation and strengthening of village associations and crop-specific producer cooperatives (e.g., cotton and rice) (Simpson and Dembele, 2007). On the downside, with a few notable exceptions (e.g., the highly successful OHVN CLUSA experience), few of these efforts focused on the development of farmers' business skills in identifying and pursuing diversified agricultural activities. This, combined with continual turnover in leadership and structural changes, has left most of the co-ops as fairly weak organizations.

- As part of the in-depth assessment, a detailed review of the experiences of the various approaches to EAS in Mali should be undertaken to avoid repeating mistakes of the past and capture lessons of success that can be built upon in the future.
- A review of the current status of relations between various types of farmers' organizations, EAS programs and research is critical. Particularly important are the linkages between EAS providers and research, and producer groups' linkages with specific markets. A *lessons learned* case study of CLUSA's positive experience in AV development in the OHVN should be developed as part of the in-depth assessment.

Two notable exceptions to the general trends in EAS provision outlined above are the efforts of the OPV, which has been driving the promotion of the Farmer Field School (FFS) approach through a series of FFS pilot activities, and the experiments with private contractually engaged EAS providers, and the user-payment scheme tested under the World Bank-funded PASAOP I and II. An evaluation of these experiences will be particularly valuable in considering future options for EAS investments.

- The performance -- organization, functioning and effectiveness -- of the FFS program warrants study before investments are made in scaling up the FFS approach to the national level. A number of other questions related to the scaling up will need to be investigated, such as how the expansion will be funded and integrated into existing EAS programs, and what form the FFS program will take -- i.e., will it address just IPM practices, or will it include other management themes such as soil or water management that the OPV is not positioned to support?
- The in-depth assessment should investigate the results of the PASAOP experience with privatization of EAS, especially from the perspectives of the service users and private sector providers.

ANNEX A TERMS OF REFERENCE FOR THIS INITIAL SCOPING MISSION

In response to a request by the USAID/Mali mission, MEAS Deputy Project Director, Dr. Brent Simpson (MSU), assisted by a local consultant, will undertake a rapid one-week initial scoping mission of the principal agricultural extension and advisory service providers, and associated educational programs and outreach efforts in Mali. USAID/Mali program officers Gaoussou Traore, Baou Diane and Yacouba Santara, will advise, participate in and assist with all facets of the mission.

Prior to arrival, the team shall have identified specific organizations to be contacted and shall have appointments set.

The primary objective of the mission will be to develop an institutional/programmatic overview on the organization, relationships, and major activities and services being provided by key extension and advisory service entities. Specifically, the mission will:

- Identify, and to the extent possible, visit with representatives of key institutions, organizations, programs, projects and private sector actors implementing significant extension and advisory service efforts, including, but not limited to: CMDT, OHVN, ON; IER, PASAOP II; IPR/IFRA; CLICKS; NGOs; AOPP, POs; Private Sector service providers, and others to be identified in collaboration with the USAID/Mali and local consultant;
- Identify and briefly describe the strategies, structure, resources, approaches, and relationships between those governmental extension, research and educational programs, POs, NGOs, private sector entities visited, and their client groups;
- Collect background documentation from the organizations visited;
- Identify a first set of critical issues, questions, success/failures and opportunities that the full MEAS in-depth assessment team will need to explore in detail;
- An analysis of gender issues shall be a component of the final paper, integrating questions, observations, and additional considerations. The intent is to ensure that planning would ensure that gender is not an “add-on” to extension and advisory services programs, but rather integrated into the programs and institutions from the start.
- Identify also new technologies to help move the extension reform process ahead further and faster.
- Brief USAID/Mali Mission on initial observations and findings.

No more two weeks following the return to the US (currently planned for 8 December), Dr. Simpson will deliver a summary trip report outlining the general organization and functioning of extension and advisory services within the country, with special attention to the initial identification of areas of potential investment leading to transformative impact, and including guidance notes on issues and questions that may require further attention during an in-depth assessment.

ANNEX B REFERENCES AND COLLECTED DOCUMENTATION

- Association des Organisations Professionnelles Paysannes. n.d. "1995-2005 l'AOPP a Dix Ans."
- Bingen, R.J., B.M. Simpson and A. Berthé. 1993. "Analysis of the Service Delivery Systems to Farmers and Village Associations in the *Office de la Haute Vallée du Niger*, Mali." Development Alternatives Inc./USAID, and Department of Resource Development Occasional Report, Michigan State University.
- Bingen, R.J., and E. Dembélé. 2004. "Mali: The business of extension reform – cotton in Mali." In W. Rivera and G. Alex (eds.), *Volume 2. Privatization of Extension Systems: Case studies of international initiatives*. Agricultural and Rural Development Discussion Paper 9. The World Bank, Washington, D.C.
- Direction Nationale de l'Agriculture. n.d. "Organigramme de la Direction Nationale de l'Agriculture."
- Direction Nationale des Productions et des Industries Animales. n.d. " 1. Administration et Finance."
- Institut d'Economie Rurale. n.d. (brochure).
- Koné, M. 2007. "Programme de Maîtrise en Vulgarisation Agricole de l'IPR/IFRA de Katibougou."
- Koné, M. 2005. "Rapport d'Evaluation Externe du Projet de renforcement des Filieres Courtes Professionalisees de l'IPR/IFRA de Katibougou au Mali."
- Levasseur, V. 2010. "Evaluation du Programme de Maîtrise en Vulgarisation Agricole. Insitut Polytechnique Rural de Formation et de Recherche Appliqué Katibougou, Mali."
- Min. de l'Agriculture. Direction Nationale de l'Agriculture. "Plan de Campagne Agricole 2010-2011."
- Min. de l'Agriculture. Direction Nationale de l'Agriculture. "Synthèse des Concertations sur le Réstructuration des Centres d'Animation Rurales (CAR)."
- Min. de l'Agriculture. Office de la Haute Vallée du Niger. "Fixant les Details de l'Organisation et les Modalites de Fonctionnement de l'Office de la Haute Vallée du Niger (OHVN)."
- Min. de l'Agriculture. Office de Protection des Vegetaux. 2010. "Presentation de l'Office des Vegetaux (OPV)."
- Min. de l'Agriculture. Office de Protection des Vegetaux. n.d. "Fiche d'Analyse (GIPD/GEF)."
- OHVN. 2010. "Calendrier Systematique 2010."
- Simpson, B.M., and E. Dembélé. 2007. "Assessment of Mali Cotton Producer Associations." Prepared for the USAID West Africa Cotton Improvement Program (WACIP).
- Simpson, B.M. 2002. "IPPM Farmer Field Schools and Local Institutional Development: Case studies of Ghana and Mali." FAO Global IPM Facility Mid-Term Review. FAO, Rome.
- Simpson, B.M. 1999. *The Roots of Change: Human behaviour and agricultural evolution in Mali*. Intermediate Technology Publications, London.

USAID. 2007. "Télécentres Communitaires au Mali."

Wall, D. 2010. "Renforcement de Capacité de la Institut Polytechnique Rural de Formation et de Recherche Appliqué Katibougou (IPR/IFRA) de Katibougou : Besoins de soutien exprimés par les membres des départements et de l'Annexe de l'IPR/IFRA."

ANNEX C PROGRAM OF VISITS

Sunday 28/11/2010

- Simpson arrival -- evening
- Vehicle rental
- Meeting Simpson-Dembele

Monday 29/11/2010

- *Direction Nationale de l'Agriculture*
- *Division Enseignement Agricole et Animation Rurale* (protocol visit)
- *Division Conseil et Vulgarisation Agricole* (protocol visit)
- *Office de Protection des Végétaux* (protocol visit)
- USAID

Tuesday 30/11/2010

- *Office de la Haute Vallée du Niger*
- *Association des Organisations Professionnelles Paysannes* (protocol visit)
- *Compagnie Malienne pour le Développement des Textiles* (protocol visit)
- *Assemblée Permanente des Chambres d'Agriculture du Mali* (protocol visit)
- *Institut d'Economie Rurale* (protocol visit)
- *Direction Nationale des Productions et des Industries Animales* (protocol visit)
- Institut Polytechnique Rural/Institut de Formation et de Recherche Appliquée

Wednesday 1/12/2010

- *Direction Nationale du Génie Rural* (visit protocol)
- *Office de Protection des Végétaux*
- *Gestion Intégrée de la Production et des Déprédateurs*
- *Centre d'Apprentissage Agricole de Samanko*
- *Assemblée Permanente des Chambres d'Agriculture du Mali*
- *Direction Nationale des Productions et des Industries Animales*
- *Mali Biocarburant* (Simpson only)

Thursday 2/12/2010

- *Division Enseignement Agricole et Animation Rurale*
- *Division Conseil et Vulgarisation Agricole*
- *Institut d'Economie Rurale*
- *Compagnie Malienne pour le Développement des Textiles*
- *Direction Nationale des Eaux et Forêts* (visit protocol)
- *Direction Nationale des Services Vétérinaires* (visit protocol)

Friday 3/12/2010

- *Direction Nationale des Services Vétérinaires*
- *Association des Organisations Professionnelles Paysannes*
- Simpson Airport – mid-day

ANNEX D1 SCOPE OF WORK FOR THE PROSPECTIVE MEAS COMPREHENSIVE ASSESSMENT OF EXTENSION SERVICES (CEAS) IN MALI AND CEAS TEAM MEMBER ROLES AND RESPONSIBILITIES

Country and institutional situations differ, and analytical and design work have to respond to such different conditions, including the funding limitations that may prevail. The following reflects a tentative integrated and comprehensive plan for design and reform work for extension and advisory systems in Mali.

The proposed composition of the team to carry out the CEAS in Mali is based upon the findings of the rapid scoping mission and recommendations of the USAID Mission, and in all cases, considers individual candidates' breadth of professional expertise, language skills and previous experience in Mali. One of the team members, in addition to his/her core technical specialization, will also possess substantial experience and expertise in working with producer associations. The CEAS team will conduct an assessment of the strengths and weaknesses of the overall pluralistic extension system in Mali, with the objective of developing a preliminary MEAS investment plan for Mali and identifying one or more pilot activities that would test key recommendations.

Extension Policy and Institutional Assessment (EPIA)

The EPIA specialist will work closely with all team members in determining the following potential constraints/issues and opportunities:

- Identify, collect background documentation and, to the extent possible, visit with representatives of key institutions, organizations, programs, projects and private sector actors implementing significant extension and advisory service efforts, including: public sector service providers; NGOs; and private sector service providers; farmer organizations and others to be identified in collaboration with the USAID/Mali. Special attention will be given to those organizations not visited during the rapid scoping mission (e.g., private sector, farmer organizations, ODRs outside of Bamako, NGOs and projects).
- Identify and briefly describe the strategies, structure, resources, approaches and relationships between those governmental extension, research and educational programs, POs, NGOs and private sector entities visited, and their client groups. Special emphasis will be put on determining which service providers (e.g., public, private and NGOs) have a comparative advantage in providing specific extension and advisory services (EAS) to limited-resource farmers, especially women, and generally how EAS provided by NGOs and the private sector can be supported and strengthened, and how EAS users can be transformed from passive recipients to active demanders of new technologies and information.
- Identify serious policy, institutional, management, human and physical resource constraints that limit the effectiveness of each EAS provider in Mali and how they might be eliminated to increase the overall effectiveness and impact of each organization.
- Assess the technical focus, geographical scope, process skills and capacities of each EAS service provider, with special attention to the source and stability of its funding base.
- Assess each organization's management structure to determine what changes, if any, might be needed; for example, transforming a top-down management structure into a more farmer-driven extension system, including *bottom-up* advisory committees with farmer representation and reduced gender bias.

- Assess extension's linkages with research, universities, private sector firms, farmer organizations, NGOs, ODRs, etc., to determine how these linkages could be strengthened. Special emphasis will be placed on evaluating the relationships between education, research and extension organizations, the roles each plays and capacity development needs.

Extension Crop/Livestock/Farming Systems (ECLFS)

The ECLFS specialists will:

- Closely review the recently revised Agricultural Sector Assessment study for significant trends and changing demand for agricultural products within the country (and for export), which may require significant changes in farming practices, especially for limited-resource farmers, and the impacts this will likely have on EAS.
- Analyze farming systems within each major agro-ecological zone of the country as well as natural resource management issues, particularly in terms of current production constraints, and how climate change will likely affect the various areas and the demands that these changes will place on EAS.
- Assess the number/type of producer groups and their integration into various value chains and their relations with various EAS providers (e.g., extension can help expand the number of producer groups/cooperatives and link them to markets for various high-value crops, livestock and other products).
- Describe gender roles in crop and livestock systems and determine that these are or are not being addressed through EAS providers (in conjunction with GES).
- Focus on the major staple crops that the Government of Mali (GoM) has targeted through its programs and those supported by donors (in response to GoM requests). Explore how income generated through high-value crops and livestock products may enhance the production of staple crops by providing households with cash flow for purchasing inputs, storage facilities, etc.

Agricultural Education and Extension Training (AEET)

The AEET specialists will work with the EPIA, ECLFS and GES to:

- Assess the current skills and knowledge of field staff (both technical and process skills), as well as the technical expertise of the subject matter specialists (SMSs) and in-house trainers, and the management skills of extension officials (e.g., are they top-down or more participatory in decision making) in the major EAS programs (public, NGO and private).
- Visit the key universities and agricultural training programs (e.g., CAA) to assess their curricula and capacities (e.g., faculty specializations, level of education, age profile, gender balance) to provide both initial and in-service training as needed for the current AES staff; visit and assess the key farmer training programs and organizations providing farmer training (e.g., CAR, AOPP, NGO, ODR programs) to assess their curricula and capacities in preparing producers to successfully integrate into important agricultural value chains.
- Assess the technical knowledge and process skills needed by field staff to work in current and future anticipated EAS programs (public, NGO and private); assess how students are currently being trained and/or should be trained for various positions within the EAS system (public, private, NGO), including the use of mentoring experiences and involvement of experienced field personnel in the training programs.

Extension Information and Communication Technology (EICT)

The EICT specialist will:

- Assess the current ICT capacity within the country and among EAS providers. For example: what types and forms of technical and market information are currently available to the field extension staff, and are these what are needed; can two-way communications and remote information links be easily and inexpensively established using suitable ICT technology; what types of technologies will the existing "backbone" of telecommunications within the country support (e.g., would a smart phone work best or could an advanced learning tablet be pilot tested)?
- Assess the current knowledge creation and sharing practices within each EAS provider and between extension and its key information partners (universities, agricultural research institutions, NGOs, private sector firms, wholesale markets, etc.); assess the depth, breadth and maintenance of existing agricultural knowledge databases (e.g., those initiated by INSAH, CORAF, FARA).
- Identify how new ICT technologies could help move the extension reform process ahead further and faster.
- Consider ways of making market information more readily available to small-scale farmers and in a manner that can be financially sustained.

Nutrition Extension

The NE specialist will:

- Assess how on-farm agricultural production is related to household and community nutritional and food security.
- Study how the food that has been produced is stored, distributed, sold and shared, and determine the knowledge gaps? What are the opinions of farmers on whether their agricultural production can meet the nutritional needs of their families and communities? Objectively, what might be the nutritional needs to supplement agricultural production in the community?
- Analyze in particular what the opportunities and constraints might be to empower the community health workers to become nutrition extension agents, and how the agricultural extension program and the community health worker program might be linked to improve the livelihood of Malian families in rural areas.
- Assess the current nutrition capacity needs and nutrition training needs for community health workers, their supervisors and other potential agents in a future nutrition extension system; assess the potentials and needs for including nutritional training content into the existing agricultural extension degree programs.

Gender and Extension

Gender Extension Specialist (GES) will work with other team members, especially the EPIA, ECLFS and AEET, to:

- Look at opportunities to engage and enhance the role of limited-resource women farmers (especially those with limited access to land) in increasing farm household production and income; assess the integration of women into current EAS efforts, including the farmer field school pilot activities and the *Conseil exploitant familial*, among others.
- Assess the past efforts, current level and future prospects for developing groups of farm women and then building gender-led producer associations and other women's organizations.
- Assess the extent to which micro-credit facilities are available and being utilized by women farmers and landless rural women.

- Assess the inherent gender bias in EAS programming and EAS management structures, and identify disincentives to young women selecting agricultural EAS as career options and barriers that may exist for women EAS professionals.
- Outline specific procedures to increase extension and advisory services to women farmers and landless rural women.

A critical role of the GES will be to ensure that planning engages gender issues, not as an add-on to current extension and advisory services programs but as a fully integrated part of program and institutional reforms from the outset.

Additional/Special Studies

As part of the CEAS, a *Lessons Learned* case study will be prepared on the investments made by USAID in farmer organization development through the OHVN/CLUSA experience, related follow-on activities and the evolution of impacts of these investments. An evaluation will also be conducted on the Farmer Field School (FFS) pilot activities that have been undertaken through the OPV/GIPD in preparation for the GoM's expected expansion of the FFS approach to the national level, and the user-pay system that was experimented with under PASAOP (I&II).

Planning and Backstopping Support

Before arriving in Mali, the team shall have collected and reviewed as much background information as possible, identified specific institutions and individuals to be contacted, and set up appointments.

Support staff will:

- Help collect background information on extension and advisory services in Mali. USAID/Mali is committed to providing the team with studies, documentation and information from key projects involving agricultural extension in Mali conducted in recent years.
- Help identify and map institutions, organizations and individuals to meet with on the basis of the rapid scoping mission report.
- Set up the travel itinerary for the team members.
- Arrange accommodations and local transportation, and make other arrangements as needed.

During the team's stay in Mali, support staff will:

- Confirm visits, accommodations and transportation, and make adjustments as needed.
- Assist with communication (phone, cell phone, Internet access).
- Assist with emergencies -- e.g., medical -- should any arise.
- Share their insights on assessing the various aspects of EAS as warranted and in that sense contribute meaningfully to the mission of this CEAS.

Briefing/ in-country validation workshop on initial observations and findings: Before departing Mali, the CEAS team will assist in debriefing the USAID Mission staff, representatives from the GoM and other partners as deemed relevant on the initial observations and findings of the assessment. A refined outline of the report, following the proposed outline below, will be presented to USAID, discussed and agreed upon before departure.

Preliminary report: Contributions from the entire team will be submitted to the team leader no more than two weeks following the return to the United States. The team leader will respond with comments and questions, and each team member will revise his/her findings and recommendations and forward them to the team leader, who will then prepare and deliver a summary trip report, which will outline the general organization and functioning of extension and advisory services within Mali, with

special attention to identifying the specific areas needing investment that will lead to transformative impact on the extension system in Mali, including guidance notes on any issues and questions that may require further attention. The recommendations will be prepared and budgeted in a comprehensive implementation plan, which will also identify potential pilot activities to test key ideas.

Follow-up visit: At USAID request, the team leader will conduct a follow-up visit to further discuss the final CEAS report and potential follow-on activities. Upon arrival, an initial debriefing session will be held with key stakeholders to fine-tune the recommendations. The findings of the assessment study will then be presented in a validation workshop involving all major stakeholders and then discussed in detail, along with the draft MEAS investment plan, with the agricultural team at USAID/Mali and key government officials and other extension service providers who might be engaged in future project implementation.

It is critical that key stakeholders -- which often include national, provincial and local levels of government -- be engaged in the review and vetting of recommendations and stand fully behind them. Identified EAS partner organizations will be asked to make feasible investments and take ownership in helping implement the proposed plan. Establishing a sense of ownership by the target organizations is critical to increasing the prospects of successful implementation within the target country, and it will enhance the likelihood that the new extension practices can be scaled up to the national level in subsequent years and sustained through additional government and donor support.

It must be clear to those participating that the overall goal is to develop a sustainable, pluralistic extension system that will continue to function effectively after donor financing has ended.

Final report: The preliminary report will be revised on the basis of the outcomes of the validation workshop and submitted to USAID/Mali for further action by the mission. The entire team will assist the team leader in the revision and submission of the final report.

ANNEX D2 PROPOSED/STANDARD REPORT OUTLINE FOR THE MEAS COMPREHENSIVE ASSESSMENT OF EXTENSION SERVICES IN MALI

- Executive Summary
- Description of Current Extension System Participants, Organization and Capacity
 - Government
 - NGOs
 - Private sector
 - Others
- Funding for Current Extension
 - Arrangements (who funds)
 - Adequacy
- Rural Extension, Information and Advisory Service Needs
 - Key objective for extension (as relate to major MEAS client, but should note different objectives for different clients and funding entities/stakeholders)
 - Agricultural productivity (by farming systems)
 - Social capital (producer groups)
 - Marketing (market information, linkages, quality certification, etc.)
 - NRM/ conservation/environmental
 - Other – nutrition, food safety, processing/value added, etc.
- Extension Support Services
 - Training – pre- and in-service
 - Specialist backstopping (research, AET system, SMS, ICT, other)
 - M&E
 - Communications support and mass media
 - Methods (demonstrations, FFSs, youth programs, gender-based, etc.)
- Application and Relevance of Different Extension Reform Strategies
 - Pluralism in service provision – public/private partnerships, support to intermediaries, private service delivery
 - Market orientation
 - Decentralization
 - Demand-driven, responsiveness to clients
 - Cost sharing
 - Participation in planning and implementation
 - Use of ICTs/mass media
 - Gender equity
- Findings and Conclusions
- Recommendations