



Improving Productivity & Market Success of Ethiopian Farmers

Proposed Program of Work and Budget Year 2 (Period April 2006-March 2007)



Canadian International
Development Agency

Agence canadienne de
développement international



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Federal Democratic Republic of Ethiopia
MINISTRY OF AGRICULTURE AND
RURAL DEVELOPMENT

List of Abbreviations

ACE	Auditor General Capacity Enhancement
AHI	African Highland Initiative
ATVET	Agricultural Technical Vocational Education and Training College
BoARD	Bureau of Agriculture and Rural Development (at regional level)
CA	Contribution Arrangement
CAD	Canadian Dollar
CBAS	Capacity Building Agricultural Sector
CBI	Centre for the Promotion of Imports from Developing Countries
CBO	Community-Based Organizations
CEAA	Canadian Environment Assessment Act
CGIAR	Consultative Groups on International Agricultural Research
CIAT	Centro Internacional de Agricultura Tropical
CIDA	Canadian International Development Agency
CIMMYT	International Maize and Wheat Improvement Centre
CIP	International Potato Centre (Peru)
DA	Development Agent
DDG	Deputy Director General
DG	Director General
DVM	Doctor of Veterinary medicine
EIAR	Ethiopian Institute for Agricultural Research (formerly EARO)
ECCO	Ethiopia-Canada Cooperation Office
EDRI	Ethiopian Development and Research Institute
EEPA	Ethiopian Export Promotion Agency
EPA	Environmental Protection Agency
ESSP	Ethiopian Strategy Support Program
FA	Field Assistant
FTC	Farmer Training Center
GoE	Government of Ethiopia
HIV	Human Immune-Deficiency Virus
IARC	International Agricultural Research Center (not limited to CGIAR)
ICIPE	International Centre of Insect Physiology and Ecology
ICRAF	World Agroforestry Centre
IFPRI	International Food Policy Research Institute
IIDP	Integrated Institution Development Program for Ethiopia
ILRI	International Livestock Research Institute
IPE	International Panel of Experts
IPMS	Improving Productivity and Market Success
ISNAR	International Service for National Agricultural Research
IWMI	International Water Management Institute
KM	Knowledge Management
LoA	Letter of Agreement
M & E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoARD	Ministry of Agriculture and Rural Development (Ethiopia)
MoFED	Ministry of Finance and Economic Development (Ethiopia)
MoU	Memorandum of Understanding
NAIS	National Agricultural Information System
NAIRC	National Agricultural Information Resource Centre
NALC	National Advisory and Learning Committee
NGO	Non-Governmental Organization
PADEP	Peasant Agricultural Development Programme

PADETES	Participatory Demonstration and Training Extension System
PI	Performance Indicators
PIC	Project Implementation Committee
PIP	Project Implementation Plan
PLW	Pilot Learning Woreda (Previously PLS)
PM&E	Participatory Monitoring and Evaluation
PMF	Performance Measurement Framework
PRA	Participatory Rural Appraisal
PSC	Project Steering Committee
R&D	Research and Development
RALC	Regional Advisory and Learning Committees
RARI	Regional Agricultural Research Institute (Ethiopia)
RBM	Result Based Management
RCBP	Rural Capacity Building Project
RDAs	Research and Development Assistants
RDOs	Research and Development Officers
SNNPR	Southern Nation Nationalities and People's Region
SNV	Netherlands Development Organization
T&V	Training and Visit
TOT	Training of Trainers
TVET	Technical and Vocational Education and Training College
TAMSA	Tigray Agricultural Marketing Support Agency
USAID	United States Agency for International Development
WALC	Woreda Advisory and Learning Committee
WHIST	Water Harvesting Institutional Strengthening Tigray
WB	World Bank

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1 Introduction

The limited progress in improving livelihoods of smallholder farmers and pastoralists is challenging the international, sub-regional and national agricultural research community to have greater impact. A technology exhibition and workshop, organized by the Ethiopian Ministry of Agriculture and Rural Development (MoARD) and the International Livestock Research Institute (ILRI) in 2002 concluded that the technologies which have been developed by international, national and sub-regional research organizations were not benefiting the rural population to the extent desired. Based on this, ILRI in collaboration with other research organizations was asked to design a project which would lead to increased uptake and impact of technologies for smallholder farmers and pastoralists. Following the Ethiopian government's newly introduced strategy, the project was to focus on market orientated agricultural development, including private sector involvement. Based on these general directions, the IPMS project was designed as a research for development project, to be implemented in Pilot Learning Woredas (PLW), aimed at assisting the MoARD to develop a more efficient system to give a fillip to market-oriented agricultural development.

This document, in the following sections, proposes the program of work from April 2006 to end of March 2007. The plan was developed on the basis of the Project Implementation Plan (PIP) as well as the lessons learned during the first year of implementation. The plan takes into consideration activities planned by "sister" projects, in particular the newly formulated Rural Capacity Building Project (RCBP).

Project Principles and approach

The project's core principle is that market-led development is essential for agricultural growth. Appropriately designed and adopted, such a strategy is believed to lead to equitable growth which can benefit poor men and women farmers and pastoralists. The Government of Ethiopia also adopted market orientation as a pivotal strategy, in addition to the emphasis on food security and natural resource management.

Farmers, the MoARD/Regional Governments and the Ethiopian Institute for Agricultural Research have been the key players in agricultural development in the country. Even though they would continue to play a key role, it appears opportune now to involve the private sector and other actors to become important partners in the agricultural development process. With evolving challenges and changing needs of the time, it might be important for the Government and other public sector actors to join hands with the private sector and exploit the latter's capacities and competencies to address the needs which can be efficiently and effectively addressed by them, leaving the public sector to play a more strategic role.

Casting the net wider to engage a broader set of actors to achieve developmental objectives is an integral part of an Innovation Systems Approach (ISA), which has been adopted by IPMS for its research and development activities. ISA is usually taken to describe the procedures and institutions needed to ensure that scientific results/available formal and informal knowledge are able to contribute to social and economic development. The recourse to this approach was influenced by the fact that:

- It helps identify and understand the web of actors in a system (involved in the creation, diffusion, adaptation and use of all types of knowledge relevant to agricultural development) and how they function both individually and collectively. In looking at the web of actors, it can be seen that
 - a broad framework of actors outside the public domain have an important role
 - the relative importance of actors changes during the innovation process
 - as circumstances change and as actors learn, roles can evolve
 - actors can play multiple roles
- It helps understand how actors interact
 - in the process of generating and sharing information in different ways
 - learning from each other
 - changing their roles and relationships
- It helps understand the critical nature of enabling policy and institutional environment to support
 - pro-poor, equitable and sustainable innovation and development processes
 - enabling multi-directional flows of information and development of feedback loops that can enhance competence building, learning and adaptation

The existing system mostly uses a linear, top-down/non-participatory, transfer of technology (ToT) model in which knowledge generated by the research system is transferred to the farmers through the extension system using a “package approach”. This approach has not brought about the desired results and the need for new operational models is becoming evident. Generally, the right configuration of actors which is needed for innovation to happen is not present, or actors do not interact in a way that supports the process of innovation. Enhancing the capacity of public institutions and private sector including farmers to forge new linkages and to develop and implement new approaches and methods to utilize available knowledge is very essential. The IPMS project therefore, is investing heavily in capacity building. This is expected to pave the way for stimulating and enhancing innovation capacity, to change the habits and practices so that new linkages are formed and productive interactions are fostered.

In Ethiopia, the supply of agricultural inputs and services has been dominated by the public sector (MoARD), which often led to a poor service delivery due to a number of organizational and institutional constraints. IPMS is placing considerable emphasis on developing private sector involvement in input marketing in PLWs. Such development includes capacity building, provision of credit and technical assistance.

Knowledge management for the actors involved in the agricultural sector is a critical factor that would accelerate agricultural development. The objective of IPMS is to improve access to relevant (tacit and codified) knowledge by bringing relevant actors together for exploiting it for social and economic change. It was noted that little or no modern knowledge management is practiced in the MoARD. IPMS is therefore placing considerable emphasis on developing various knowledge management mechanisms and processes in the Pilot Learning Woredas with linkages to regional and federal levels.

All interventions will be studied by project staff and partners through action research and learning, complemented by special studies to define interventions and to determine key factors influencing their adoption and impact.

The ultimate beneficiaries of the research are the smallholder farmers and pastoralists in Ethiopia, and during the project life, smallholders in the PLWs are expected to increase market oriented production and productivity from the project interventions.

The results of this research will be translated into a set of policy recommendations, approaches, methods, analytical tools and training materials. The intended users of the research outputs are government, non-governmental and private sector organizations, as well as donor organizations that are involved in market oriented agricultural development. These actors in turn are expected to use these outputs for scaling out to other Woredas. The lessons learned will also be documented as research outputs for possible use of market orientated agricultural development efforts in relevant contexts outside Ethiopia.

Lessons learned and proposed action

After an inception phase during which the PIP was developed and approved, the IPMS project started implementation in April 2005. The first year of project implementation was officially completed in March 2006.

To increase institutional involvement, two additional Agricultural State Ministries (Marketing and Inputs, and Natural Resource Management) and EIAR were included in the project's management structure.

The project team consulted with the Advisory and Learning Committees at national, regional and Woreda levels and interacted with project research and development stakeholders through participation in national and regional research review meetings and follow up meetings with individual scientists on various occasions during the previous year. The feedback from this, coupled with the experiences in implementing various activities in the PLWs, was used to distill some lessons. These together with some potential IPMS responses are presented below.

(i) IPMS in the past year has established credible networks in the PLWs, valuing different knowledge and providing effective platforms for actor interactions. Several innovative processes and approaches for knowledge management, innovation capacity building, market oriented technology application and input/output marketing have been introduced based on the needs identified in the different PLWs. Lessons from the different PLWs have been shared during the recent NALC workshop held in Mekelle and will be documented. These innovations will be further developed in the PLWs together with new emerging ones. Simultaneously, promising innovations will be expanded to other PLWs. This is reflected in the program of work presented under the different project components.

(ii) It is fair to say that many of these innovations in the initial phase were “driven” by project staff, rather than the public sector partners. This was highlighted during the NALC workshop, which called for increased institutional involvement. However for such institutional involvement to take place, the capacity and willingness to innovate

has to be developed. It has been realized, during the course of the year, that not all the key national actors and stakeholders understand/appreciate/accept the project principles and approaches. This is very critical for IPMS as the project purpose is “to strengthen the effectiveness of the Government’s effort to transform agricultural productivity and production, and rural development in Ethiopia”. The IPMS project has a finite role and life, and looks up to the national institutions and actors for adopting and scaling out the successful approaches, processes, methods and lessons learned through the project. This can only become possible if the government stakeholders adopt a new way of operating, in particular adopting an innovation system perspective as an organizing principle for market oriented agricultural research and development.

The project, therefore, intends to emphasize the strategies to increase the response capacity and the increased involvement of the Ethiopian agricultural research and development stakeholders in the project’s activities in the second year, The public sector actors need to develop capacities to:

- understand the enabling environment required to allow actors (farmer organizations, private sector) to play their role
- provide information/knowledge management system to better inform all actors
- create enabling institutional arrangements to make input supply more privatized, easier and more efficient
- provide support for programs to ensure the quality and safety of products from the poor

The project intends to improve the institutionalization of the project activities by strengthening the Advisory and Learning Committees with staff which have /will receive project sponsored MSc and BSc training in local Universities. This will require commitment from the PLWs and regions to keep such staff posted in the project areas. IPMS will identify change agents and champions at various levels within public sector and work with them to build their capacities. IPMS will also explore the possibilities of developing farmer organizations and/or other community based organizations as champions of change.

(iii) Closely related to the institutionalization is the scaling out issue. The present IPMS way of operation depends on specially recruited project research and development officer. As explained before, the project has a finite life and responsibilities for scaling out should be in the hands of government as well as non government partners. Testing the scaling out of project results to other districts, through different partners, was therefore identified as an appropriate strategy. The project therefore proposed to expand the number of Woredas from 8 to 12 in the coming years, i.e. one additional site in each Region. These new Woredas were proposed to be used to test scaling out of approaches, processes, methods used and lessons learned in the initial 8 Woredas. IPMS proposed that the responsibility for project implementation in these Woredas would lie with the Regional Bureaus of Agriculture and Rural Development, the Regional Agricultural Research Institutes and the OoARD of the selected additional Woredas. The role of the IPMS project in these additional Woredas would be advising and monitoring and the provision of funds for project implementation. In the National Advisory and Learning Committee (NALC) Workshop held in March 2006 in Mekelle, national and regional participants

advised that it may be too early to start scaling out. The development of commodity specific technology and input output marketing is only starting and lessons are still being learned on approaches, processes and tools. Neither are they totally convinced that the innovation system approach is the only alternative; i.e the Pilot Learning Woredas (PLW) will have to provide proof of this concept, demonstrating that a more market oriented development is taking place.

It is critical however to think about scaling out strategies now. The distinction made during the NALC workshop between scaling out commodities/technologies and scaling out approaches, methods and tools (institutional scaling out) is helpful for initiating activities in the new PLWs. It is therefore proposed to develop a conceptual framework for the scaling out process and a corresponding strategy. Based on this framework scaling out activities in the additional Woredas can be initiated in a phased manner. For instance, capacity building of different actors, fostering links between various actors and developing mechanisms for information sharing/knowledge management/ learning are activities/approaches that are pre-requisites for any such effort. It needs to be appreciated that the development of approaches and methods will be an iterative learning process and that they will require context specific adaptations.

(iv) There have also been diverse opinions/notions about whether IPMS is a development or research project, which were voiced at various occasions. It was also realized that the research component of the project was not clearly understood by the stakeholders. The project is trying to clarify the fact that this is a Research for Development project, which combines developmental interventions with appropriate action research and learning to draw lessons, from both successful and less successful experiences, which would be of immense value for approaching similar market-oriented agricultural development efforts in other regions/areas. IPMS in its second year plans to strengthen/re-emphasize its research activities. Since action research and learning will take place under each of the project components i.e. knowledge management, capacity building and technology input/output marketing development, it is proposed to add the word 'test' in each of the objective statements. Changes have also been proposed in the project's work breakdown structure to make a better distinction between the project's research outputs and to highlight the research outputs in the form of development of approaches, methods and tools, which would be of international public good nature. It was furthermore emphasized that attention needs to be paid to promotion/dissemination of the research findings.

2 Proposed plan

2.1 Knowledge management (100 series)

Objective: *to develop and test a gender sensitive agricultural knowledge management system in the offices of agricultural and rural development, that will enable Ethiopian institutions, farmers, pastoralists and private sector to adopt appropriate technologies from research and development institutions based in Ethiopia and elsewhere.*

Knowledge diffusion and its use is an integral part of an innovation systems approach and the project actively seeks to leverage agricultural knowledge from multiple sources to bring about improved livelihoods for Ethiopian farmers. This involves the

identification/assessment of knowledge needs; the collection, synthesis and assembly of knowledge; and the sharing and use of knowledge. In 2006/2007 project year, the focus will include the following endeavors that are hoped to contribute significantly to the goal of a more-informed and responsive agricultural extension and research system.

1. Operationalizing the Ethiopian Agriculture Portal
2. Operationalizing Woreda Knowledge Centers
3. Assembling, capturing and synthesizing of knowledge for use by each PLW.
4. Promoting the adoption of the ENRAEMED meta database
5. Supporting connectivity among the above resources (Capacity building at Woreda, Regional & Federal levels)
6. Operationalizing Communities of Practice (CoP) at each Woreda
7. Technology Exhibitions, and
8. Experience and knowledge sharing study tours

The specific project activities that will address the above are shown below grouped in the specific areas of expected project outputs prepared early in the PIP.

2.1.1 Assessing current state of knowledge – 110

Knowledge requirements will be identified throughout the year and be based on demands from farmers and other stakeholders.

2.1.2 Assembling, capturing and synthesizing knowledge for use by each PLW - 120

IPMS will continue to assemble, capture and synthesize knowledge from project activities being carried out in each Pilot Learning Woreda (PLW) and bring new information/knowledge that may be of relevance to each PLW. Analysis and prognosis gained from the baseline surveys conducted at the start of the project will be made available through various means – including the project website. The national agriculture portal (see 140) will be used extensively to document and make available information/knowledge on the agricultural commodities promoted in each PLW. The content manager group (see 135) will actively contribute to this effort.

2.1.3 Developing processes and mechanisms for enhanced knowledge sharing - 130

Enabling processes and mechanisms are critical for better knowledge dissemination and use. Institutionalization of processes and mechanisms that have proved useful in test scenarios will be one area where the project will devote its resources. Below are some such examples:

Facilitate technology exhibitions - 131

The Tigray technology exhibition/workshop held in March 2006 was received with great enthusiasm by the regional authorities and indications are that such exhibitions may be repeated at District (Woreda) level. In particular the involvement of farmers and private sector in the exhibition as well as additional funding mechanisms that augmented the support from IPMS show the commitment of the region to partner with IPMS to bring about shared outcomes. The project will monitor/document the process and impact of the Tigray technology exhibitions as part of its research activities (see

400 series). In addition, IPMS will facilitate a similar technology exhibition/workshop in the other 3 Regions.

Operationalising Woreda Knowledge Centers (WKC) -132

During the first year, the project initiated the establishment of Woreda Knowledge Centers (WKC) in the OoARD. These centers will have both electronic and print publications to support the knowledge/information needs of Woreda experts in each PLW. They will also be promoted as venues for face-to-face discussion (knowledge sharing) among practitioners in each Woreda. To further facilitate knowledge dissemination in these venues, the project will complement existing information resources in WKC with additional training materials as well as TVs and DVD players where various training resources will be screened. The centers will also be available for use by other partners for similar endeavors. For example, market information systems are planned by government and quasi-government market-promotion agencies in Tigray and the South and both periodic as well as general reports from these entities will be available in the WKC. The PLWs will be encouraged to broaden the utility of these centers to meet the needs of the Woreda agriculture stakeholders. The project will also provide some assistance in maintenance and repair of the designated buildings to bring these to a condition conducive for the intended use. Training will be provided to the staff of these centers in basic ICT tools and basic library/information center operations. The centers are scheduled to become operational by the third quarter. Four centers will be established in the newly selected Woredas in the first quarter of 2007.

IPMS will monitor/document the process and impact of the WKC as part of its research activities (see 400 series).

Facilitation of FTCs as knowledge centers - 133

In the coming year, most FTCs are expected to become operational in all PLWs. The project will facilitate the use of as many of these centers as possible for disseminating knowledge on HIV/AIDS, market information and technologies. This may be done by providing posters, demonstration materials, or screening of training materials via portable TVs and DVD players. This will be coordinated with other stakeholders in this field, in particular marketing agencies, NGOs and HAPCO.

IPMS will monitor/document the process and impact of the FTCs as knowledge centers as part of its research activities (see 400 series).

Facilitate establishment and operation of Community of Practices (CoP)-134

In the first year, the project introduced the concept of CoP for staff of the agricultural offices at the Woreda level in two PLWs. This concept will be introduced in the other 6 PLW.

The CoPs are intended to help develop a culture of knowledge sharing and collaborative problem solving among Ethiopian agricultural stakeholders. The project focus in 2006/07 will be to promote and support the development of CoPs among the Woreda office of agriculture staff – including DAs. Based on the lessons we learn from these endeavors, similar concepts will be promoted at regional and federal levels.

IPMS will monitor/document the process and impact of the CoP as part of its research activities (see 400 series).

Facilitate establishment of a content managers group - 135

In the past year, the project developed an agricultural portal for the Ministry of Agriculture and Rural Development (MoARD) in which relevant information for a market-oriented agricultural development can be entered. To a large extent, the success of this portal will depend on an active and sustainable participation of the staff of MoARD (especially experts in various commodity areas) in making sure the portal will always have current, relevant, and actionable information and knowledge assets. This requires the establishment of “content managers group” from the MoARD and a clearly defined set of processes that foster continuous upkeep and improvement of the agriculture portal. Appropriate sensitization and training will be provided to the content managers group. It is important to note that the demand for market information is considered to be of great importance. Inclusion of staff from the market information division (to be established in the near future) in the content manager group is therefore essential.

IPMS will monitor/document the process and impact, including the portal upgrading by the content managers group as part of its research activities (see 400 series).

Facilitate experience and/or knowledge sharing “study tours” for potential change agents in the government extension, research, and education sector - 136

The feedback the project got from study tours conducted during the past year was very positive and it is felt that such tours bring about much needed insight and “new” reference frameworks for participants and indirectly to a broader audience when the lessons of the tours are shared effectively. The project will facilitate targeted study tours as one more means of experience and knowledge sharing during this year.

Forums will be organized with discussants invited from countries with relevant experience, to share experience, progress and plan actions in a two-way flow. IPMS will explore possibilities of inviting some key people from other countries to look at IPMS from their perspective and give some external “review” ideas.

2.1.4 Establishing a National Information Resource centre – 140 series

Upgrade of the MoARD data center - 141.

A portion of the equipment and hardware needed for upgrade of the data center is currently under procurement. The upgrade is expected to be operational in July 2006. Relevant application, productivity, database, and web software tools will be made available throughout the year.

Facilitate the use of NAIRC infrastructure for improving MoARD internal communication - 142

Effective internal and external communication is one of the key enablers that increase the effectiveness and efficiency of MoARD to respond to its own needs and the needs of its “clients”. Effective communication includes a range of interrelated factors including people, processes, technology, and organizational setup. IPMS project will

facilitate some of this by leveraging the upgraded data center infrastructure to introduce better e-mail, intranet, and internet connectivity to the Ministry. Some of these tools are expected to be operational by September 2006 – including training of appropriate staff that will be charged with supporting the established system.

Facilitate populating the agricultural portal in the MoARD - 143

The portal which was developed during year one (see 136) is expected to be maintained with current, relevant, and actionable information and knowledge assets by the content managers in the MoARD. IPMS will upload selected documents to the portal to test operational efficiency and serve as examples (guidelines) for more extensive content uploads. This test phase is expected to be completed by July 2006. Upon completion of the data center upgrade at the MoARD, the portal and all associated hardware and software will be moved to the ministry and data center. The portal is meant to be accessed by all stakeholders with an Internet connection. It can be updated and maintained remotely (with proper authentication) using any Internet-connected web browser. The content managers group will be responsible for maintaining the portal is the content managers group. IPMS will facilitate this process by providing technical assistance and contributing relevant information and knowledge assets from its PLW research and development activities.

It has been noted by IPMS that within the MoARD, the development of a content structure has been in progress for some time. However no structure is operational at this point in time. The portal can be adapted/used to include any other information considered essential for the development of the agricultural sector in Ethiopia. As mentioned earlier the portal can/should also be used to link up with any market information linkages developed in the MoARD and elsewhere.

Populating the ENRAEMED meta database - 144

The ENRAEMED meta database is developed by Ethiopian Ministry of Water Resources can be used to document the metadata on all spatial and non-spatial information resources (both printed and electronic) in easily searchable formats. This tool can go a long way in giving visibility to the information resources available at various organizational units of the MoARD and the IPMS project plans to promote the adoption of this tool by all organizational units under the MoARD, BoARD in the project regions, and relevant Woreda-level entities.

Facilitate linkages and use of NAIRC by regional institutions -145

Training will be provided to regional staff from the BoARDS and RARIs to access the agricultural portal and ENRAEMED meta database. Possibilities for engaging Regional content managers will be explored/operationalized in the last quarter of 2006. Provision of CDs and regular updates of the agricultural portal (on CDs) will take place during the year (until fast access is possible).

2.1.5 Establishing and using ICT networks and infrastructure - 150

Provision of ICT tools for Woreda offices - 151

During the past year, computers and printers have been provided for 8 PLWs. Appropriate computer training is being provided for several staff members in each Woreda to enable them to take full advantage of the tools provided. While one computer has been placed in each Woreda Knowledge Center (WKC), more may be

provided if initial monitoring and evaluations reveal the demand and a favorable return on investment.

In the first quarter of 2007, additional four PLWs are expected to be provided with similar ICT tools as part of the test in the scaling up process.

It has been noted by IPMS that the “Capacity Building for the Agricultural Sector Project” (CBAS) now known as “Rural Capacity Building Project” (RCBP) has proposed an ICT strengthening component, which is intended to be tested in 100 Woredas. It is expected that the experience gained in the IPMS sites will be of direct benefit to this RCBP project.

Facilitate linkages and use of ICT by Woreda offices with NAIRC and internet -152

IPMS will provide technical assistance to facilitate internet access through WoredaNet and/or land lines and budgetary support (limited to a fixed number of hours each month until the next GoE budget year). Contents of the agriculture portal may be provided on CDs, DVDs, and/or external hard drives to facilitate access to the portal content until direct online access to the portal becomes feasible.

2.2 Developing innovation capacity (200 series)

Objective: *To build, test and strengthen gender balanced capacity of existing public and private organizations and individuals (farmers, pastoralist, traders) engaged in the agricultural sector to foster institutional learning and change so that new collaborative arrangements across sectors and levels are developed to better support the dissemination, use and impact of market oriented agricultural technologies and information.*

The project will continue to develop and influence the skills, behavior and attitude of the actors in the agricultural innovation system to enable them to innovate/invent, link/partner/network and learn with each other. In the PIP, building this capacity of the public sector and private sector partners and the farmers was split into two objectives i.e. 200 and 300. During the first year of implementation, it was realized by the project partners¹ that conceptually it was better to consider the capacity development of the different actors in one objective (the 200 series) since a major aim is to learn from and link with each other. This change, which will not affect the project’s activities, outputs and outcomes, has therefore been introduced in the definition of this objective (see above).

During the first year (spontaneous) innovations took place in the capacity building activities itself by way of introducing/using different approaches, tools and methods² (as compared to the traditional ways of capacity building). The project will document the outcomes and scaling out of some of these innovations (including the processes involved from introduction to the actual adoption) as one of its research activities (see

¹ This realization came about as a result of interactions between project staff and during the innovation system discussion which took place during the National Advisory and Learning Committee.

² These new approaches were introduced by project staff and partners based on experiences elsewhere and sometimes modified through discussions with local partners (including farmers)

400 series) and also initiate some experimentation based on some promising approaches/methods emerging from the first year's experiences (also see 400 series).

2.2.1 Capacity development of agricultural training and educational organizations 210

To embed the innovation systems perspective into the agricultural sector, IPMS planned to focus some of its activities on the educational organizations responsible for developing the capacity of public sector staff.

A choice was made during the project planning phase to focus on the Technical Vocational and Education Training (TVET) Colleges since they are responsible for providing a 3-year training to Development Agents (DA). It is noted that the RCBP is also supporting the TVETs. IPMS is already closely working with the CIDA funded gender component of the TVETs and will also liaise closely with the RCBP once the project becomes operational.

During this year, IPMS has become increasingly aware of the need for strengthening the capacity of higher education institutions, especially to introduce new knowledge on subjects, research approaches and tools. The project will explore the possibilities for strengthening the support to these organizations with the help of IFPRI/ISNAR.

In-service training and curriculum development support to TVET - 211

To increase the TVETs capacity to support market oriented development using innovative extension methods, IPMS will provide in-service courses for TVET instructors in the following topics:

- innovative extension
- agricultural marketing
- environment
- gender and HIV (in collaboration with the CIDA gender expert)

Courses will be around one week each and be attended by participants from the Regional and Federal TVETs (25 in total).

In addition, efforts will be made to integrate the gender and HIV issues (in collaboration with the CIDA gender expert) and, innovative market-oriented extension approaches into the TVET curriculum. Once this is accomplished, the delivery of these new aspects of the curriculum will be tested in one or two TVETs.

MSc/BSc training TVET- 212

As indicated above, the TVETs were created to train Development Agents to fill the diagnosed deficit in skilled manpower at the village level³ (Peasant Association – (PA). This training of additional staff will be completed in 2 years time, after which the role of the TVETs will be modified. The present thinking is to use the TVETs in future for:

- Training of Development Agents (to replace the ones leaving the system)
- Training of non-government staff in various agricultural subjects in 1, 2 or 3 year programs (trainees to be self employed or employed in the private sector)

³ Some TVETs were created to provide specialist training in cooperatives, animal health, others.

Only one TVET – Alage, has been selected to continue with training of “replacement” DAs. The project will therefore focus its support for MSc training for this Federal level TVET. A total of 5 candidates will be sponsored in the following “IPMS” fields: extension, agricultural marketing/ economics, gender, environmental assessment and knowledge management/IT.

Involvement of TVET students, instructors in PLW activities - 213

During the year, TVET students and instructors will be attached to PLWs for specific short term research and development tasks as required.

Linking TVETs to the NAIRC and agricultural portal - 214

During the last quarter of the year, regional and federal level TVETs will be linked to the NAIRC through an introductory workshop. Possibilities for linking specific TVETs for content management will be explored during that workshop.

Strengthening Agricultural Universities in innovation systems and market chain analysis 215

So far no formal program for introducing new concepts and tools has been initiated with the Universities. In the past year, project staff did however interact intensively with University staff through joint supervision of project sponsored MSc thesis research. This is expected to intensify through the development and supervision of thesis research on innovative extension and market chain analysis (starting upon completion of the second semester MSc course – October 2006).

Possibilities for providing “formal” support to strengthen the University’s capacity will be explored in close collaboration with IFPRI/ISNAR, which has started some joint activities on innovation system approaches as well as agricultural marketing training with Alemaya University.

2.2.2 Building public sector staff capacity - 220

MSc/BSc training - 221

In 2005, a total of 48 MSc positions were offered to staff members of the four Regional BoARD and eight Woreda Offices of Agriculture and Rural Development where the project operates. After final selection, 29 students got acceptance and enrolled at Alemaya, Debub, Mekelle, and Jimma Universities. Out of these 16 students (2 female) are enrolled for MSc program and 13 students (8 female) are enrolled for BSc program. The MSc program students will continue with their course work in summer of 2006 and will commence their research project in September 2006. In addition, 8 students (2 female) were offered support to undertake their MSc thesis research in priority areas of the project. Moreover, 8 other students (5 female) enrolled for BSc studies were offered short term research opportunity.

For 2006, the project proposes⁴ to operationalize 4 additional PLW, one in each Regional State (also see 300). A total (including the 2005 candidates) of 6 positions shall be offered to each PLW, totaling 72 fellowships. Each Regional BoARD will be

⁴ Since this is a departure from the original proposal, approval needs to be obtained from the governing board and CIDA

offered four fellowships, totaling 16, while 5 positions are made available at the federal level for extension, agricultural marketing/economics, gender, environment, knowledge management/IT. This will bring the total number of MSc fellowships offered in 2005/06 to 98 (including the 5 TVET fellowships). The percentage distribution shall be 73.5% to PLWs, 16.3% to Regional BoARD and 10.2% to Federal BoARD and one ATVET.

While the training will build the skills of the staff as individuals, it is also expected that they become members of the change teams assisting the WALCs and RALCs in facilitating and implementing the change processes (also see 413).

In-service awareness training on main project concepts - 222

During the first year, building the capacity of public sector research and development partners, involved joint (all levels) awareness training/creation in innovative extension, agro business/seed enterprise development, HIV/AIDS and gender.

This training will be followed up in year 2 with innovation system awareness workshops and workshops on knowledge management and IT. These will be scheduled during 2 and 4 quarters of the reporting year.

In two PLWs, the project organized stakeholder awareness and planning workshops on HIV/AIDS and gender, based on PLW-specific findings from the gender and HIV studies. This resulted in an action plan for addressing these issues in the IPMS project in particular and in the woredas in general, identifying appropriate partnerships to accomplish this. Similar workshops will be completed by the second quarter of 2006 in the remaining six PLWs. An experience sharing workshop, bringing together relevant stakeholders from all PLWs, will be organized in the last quarter.

Federal, regional, zonal level skills training of public sector staff - 223

The project is planning to provide a 3 day skills training on innovation system concepts and principles, tools for understanding, monitoring and documentation of innovation processes for staff from the national and regional agricultural research institutions and project staff.

The project is also planning a 2 day skills training on environmental assessment for project staff and natural resource management staff from the federal, regional and PLW level. The training will also include staff from the Environmental Protection Agency (EPA), which is the regulatory authority for environmental issues in Ethiopia.

Several market chain studies have been initiated in the past year by project staff, international partners and MSc students. In the coming year, additional studies are planned (see 400) in close collaboration with national and regional research and marketing agency staff. To prepare these stakeholders, a skills training combined with on the job training on market chain analysis will be provided.

To develop and implement a market oriented R&D program in PLWs, IPMS has been using GIS as a tool for planning. To scale out the planning function, the use of GIS tools should be mainstreamed in Ethiopian institutions. Most of the GIS work at present is undertaken by the regional (agricultural) planning departments, while little or no GIS capacity is available in the research organizations. It is therefore proposed to institutionalize the IPMS GIS functions in those Regional/Zonal Bureaus of

Agriculture and Rural Development, where GIS capacity exists. Skills training for the use of the planning tools will be provided for selected staff of those institutions.

Skills development of Woreda public sector staff - 224

In the past year, the project has supported some in service training of Woreda Subject Matter Specialists (SMS) and DAs. In Alaba this training focused on innovative extension (based on the awareness workshop – see 223) and agricultural supervision. Such training will also be facilitated in the remaining PLWs in the second and third quarters of 2006. Extension agents have been trained in computer skills in Mieso.

During this year, the project intends to start supporting one PA/Farming system in the eight woredas (16 PAs/FTCs) to build capacities to implement innovative extension approaches. The DAs and supervisors in these PAs will be trained in Participatory and market-oriented Extension approaches, in an action learning mode spanning a cycle of about 18 - 24 months. This will also allow testing of various models of capacity building and M&E. These DAs and Supervisors are expected to be trainers of other DAs in the woreda after this. As a part of this capacity building activity, linkages would be created with local Research Institutes for creating a pipeline of knowledge and technologies to the extension system and; with agencies like TAMPA in Tigray, Agricultural Marketing Agency in SNNPR, Oromiya Agricultural Marketing Agency for enabling access of extension services to market information. There will also be series of computer training for Woreda staff in all the PLWs.

To develop the technical skills of the public sector staff in the PLWs, IPMS used two approaches i.e.

- Staff training (SMS and DAs) on topics in which a gap in knowledge was identified. This will be continued in the next year. Specific attention will be paid on water harvesting and management based on a manual which is under preparation by IWMI as well as NRM tools developed by the African Highland Initiative (AHI). Efforts will be made to facilitate the dissemination of such knowledge and understand the diffusion and adoption patterns.
- Joint training of DAs and lead farmers from different PAs on a topic of interest. Such training also included field visits and study tours. This model will continue to be used in the coming year (see 231).

Provision of demonstration and training materials to Woredas and FTCs - 225

During this year, the project will identify demonstration and training materials needed for various FTCs and woredas, on a need/demand basis and will continue to source/develop and supply them.

The project will explore the possibility of creating some specialized FTCs like one for Apiculture in Atsbi, which could serve as a training center for the woreda and beyond.

2.2.3 Farmer and private sector partner capacity development - 230

Farmer capacity development - 231

The project's approach to development of the capacity of farmers was based on a joint DA and lead farmer training (see 225). This will be continued in the coming year and be monitored (see 400 series).

Various models of training (demand-driven vs pre-decided, couple training vs men training, different training providers) will be employed during this year based on context and relevance, and these will be assessed for outcomes in due course. Various methods of knowledge sharing – for example through contact/model farmers, social/church gatherings, demonstrations, focus groups, Farmer Field Schools and Community Conversations will be tried and lessons learnt will be documented (see 400 series)

Private sector capacity development 232

In the first project year the project initiated such training for small scale entrepreneurs and farmers on agro processing and sale of agricultural produce (Fogera and Atsbi), privatized onion seed supply (Fogera), private fruit tree nurseries (Dale) and, agricultural processing and marketing for women (Atsbi).

In the coming year, increased attention will be paid to capacity development of private input suppliers (including village shops, farm equipment producers and maintenance, animal health service providers, genetic services etc) in support of potential interventions in the PLW (see 320)

2.2.4 Development of partner linking and learning mechanisms and processes -240

NALC, RALCs, WALCs - 241

A major objective of the innovation system approach is to link different partners in order to learn and have greater impact. In the first year IPMS therefore established NALC, RALCs and WALCs as Learning platforms, which would enable scaling up successful approaches. IPMS will try to structure and strengthen the learning processes through these bodies. These bodies will be facilitated to develop into potential “change teams” at various regional levels, who would drive the institutional learning and change processes. The MSc and BSc trainees from the PLWs and Regions (see 221) are expected to become members of these teams.

Commodity platforms - 242

In the second year of the project, IPMS will focus on developing some commodity platforms in the PLWs. This will enable fast tracking market-oriented development of selected commodities by engaging all the relevant actors and capitalizing on the variety of capacities and capabilities for synergy. The conditions and constraints that necessitate the need for platforms will be defined before we get on with the formation.

The processes of platform formation, functioning and outcomes will be monitored and documented to draw out best practices and principles, for various priority commodities in PLWs (see 400 series).

IPMS linkages and learning with other stakeholders 243

In the past year, several other stakeholders and networks have emerged, in particular at the regional and federal level and IPMS is participating in some of these formal and

informal networks. Examples are the recently started networks by Land O Lake's Ethiopian Dairy Development Project and the Texas A&M University Ethiopian Meat Marketing project and SNV's platforms on dairy, pineapple, oil crops and honey/wax. IPMS will continue participating in these partnerships and in any emerging ones during the coming year to learn and promote ideas.

Other learning and linking mechanisms 244

Some knowledge oriented linking and learning mechanisms have already been included in the knowledge management section.

2.3 Technology and input/output marketing development, approaches and processes - 300

Objective: *To introduce, test and strengthen gender sensitive processes, approaches and methods to facilitate the introduction and adoption/adaptation of technologies and, innovative input/output marketing arrangements and small scale agri business financing in PLWs in support of market oriented development.*

As explained in the previous section, building the innovation capacity of farmers and private sector partners has been merged into the 200 series because of the innovation systems perspective of the project. In this project component emphasis is placed on the development of approaches and processes for market oriented agricultural development and the development of commodity based technology, input output marketing and finance innovations. This is reflected in the revised objective statement presented above.

2.3.1 Establishing PLWs which are strategically linked to the priorities of the Regional Development Plans (310)

IPMS proposes to start the process of scaling out the lessons learned through the existing public research and development organizations in 4 additional Woredas (one in each of the 4 Regions). This is a change from the earlier plan, in which a total of 10 PLWs would be used to develop approaches, processes and methods.

To develop these programs, use will be made of the approaches, tools and methods applied to the initial 8 PLWs. New tools/methods developed in the past year, including rapid assessment for HIV/AIDS, gender and environmental assessment methods as well as commodity identification will be integrated in the approach (also see 423).

The issue of scaling out to additional PLWs through existing government and/or non governmental institutions was discussed at length during the recent NALC workshop, the steering committee meeting and informal discussions with other stakeholders. In general the scaling out idea is supported, but there are certain apprehensions about the readiness of the project and the stakeholders to do this. It is therefore proposed to develop a conceptual framework for the scaling out process and a corresponding strategy. Based on this scaling out activities in the additional Woredas will be initiated in a phased manner.

2.3.2 Market led development programs on priority commodities in PLWs (320)

In the past year, IPMS has facilitated the introduction of interventions of technology and input output marketing arrangements for priority commodities. Most of these interventions were in response to diagnosed problems and potentials and were facilitated through training, support for demonstration including value adding, on-farm experimentation facilitation of group formation and market linkages. In 2006/07, these interventions will be continued and be monitored by the project through action learning (see 400 series).

Promising interventions will be introduced into the other PLWs and at the same time the project will actively pursue the introduction of interventions resulting from ideas generated from focus studies and/or experiences gained elsewhere.

During 2006/07, the project will be able to facilitate these interventions further by introducing a credit, loan guarantee and insurance component. The proposal is attached as Annex 1. The Steering Committee discussed the proposal and emphasized that the project should only use credit institutions, which have a good track record. It also indicated that the Development Bank of Ethiopia developed an insurance scheme for livestock loans in the past; however this had not been very successful. It was agreed that attachment of the insurance scheme to the local lending institutions and/or cooperatives would enhance possibilities for local monitoring of claims, thus enhancing the viability of the insurance scheme. It should also be understood that insurance schemes may not be introduced in all PLWs. IPMS will also attempt to understand how critical insurance schemes are and test different approaches for insurance. Finally it was stressed that the use of the funds by the end of the project could be targeted at community and/or public good investments in the PLWs after discussion and agreement with the major stakeholders of the project.

Development of community based programs (321)

The Woreda platforms (see 441) in collaboration with the WALCs will develop and monitor plans for the different commodities as well as the overall development of a market oriented development.

Technology/finance interventions - 322

The IPMS project facilitates the introduction of new varieties and production, natural resource management technologies and sustainable veterinary service delivery for the control of trypanosomiasis in support of the priority commodities. Some of these introductions are experimental in that they are in the early stages of adoption and the project therefore facilitated such introductions through demonstration plots in which agronomic observations were made. Other interventions are ready for wider adoption and the project has facilitated such interventions through capacity building.

The interventions facilitated in 2005/06 will continue to be facilitated in 2006/07 including new crop varieties of chickpeas, rice, banana, papaya, sesame, peanuts, fruits, vernonia, paprika, hot pepper, coffee and vegetables. Promising varieties will be expanded to other PLWs, based on identified priority commodities and market demand. Besides crop varieties, the project facilitated the introduction of some natural resource management technologies, including minimum tillage and donkey traction.

Based on the initial diagnostic studies and subsequent focus studies and interactions in the PLWs, the project will facilitate new crop technology interventions in the coming year, including soil and water conservation measures/tools, grape introduction, spice introduction, and gum and incense production systems. A summary the crop technologies to be facilitated in each PLW is provided in section 2.4.1 (activity 411).

The project facilitated the introduction of livestock production methodologies including, development of communal/swampy area for grazing land/fodder production; fodder species introduction, sorghum stover utilization, use of Urea Molasses Blocks (UMB), dairy production, trypanosomiasis control, honey wax production, bee forage production, sericulture production. Promising technologies will be expanded to other PLWs based on market demand as well as the introduction of new technologies including improved cattle (with the help of project micro finance), improvement local cattle (Fogera and Mahebereselassie), cattle fattening, improved sheep and goat production systems (also see breeding and fattening under the input supply) , queen bee rearing and fish production technologies. A summary the livestock technologies to be facilitated in each PLW is provided in section 2.4.1, (activity 411).

Input supply/finance interventions - 323

The IPMS project encourages the establishment of an efficient and effective input supply system for market-oriented agricultural development activities. The support to the input supply system shall be primarily focused at the PLW level. Farmers or individuals from the farming community with entrepreneurial orientation shall participate in the delivery of various types of inputs. Farmer cooperatives and or CBOs shall also benefit from this exercise.

The types of inputs required by the farming community could differ between PLWs depending on the type of identified marketable commodity. IPMS shall consider enhancing the input supply system through two main channels. These are in the areas of capacity building (training) and targeted provision of necessary start up funds or credit administered through existing micro-finance institutions.

Crop input supply

The project facilitated the introduction of some crop input supply systems in 2005/06, including the chickpea and haricot bean seed supply system through cooperatives/unions, farmer based coffee seedling supply system, farmer based banana sucker supply, private onion seed supply system, private agro-chemical supply system and farmer based fruit seedling supply system. Based on the initial studies and subsequent focus studies and interactions in the PLWs, the project identified a number of key input supply interventions.

In almost all crop production systems the supply of improved seeds is a major bottleneck to development. The project therefore started facilitating the introduction of some crop input supply systems in 2005/06, including the chickpea and haricot bean seed supply system through cooperatives/unions, farmer based coffee seedling supply system, farmer based banana sucker supply, private onion seed supply system, farmer based fruit seedling supply system. These interventions will continue to be facilitated in 2006/07 and be expanded to other PLWs based on market demand. I will

focus on the production and marketing of vegetable (mainly onion, hot pepper, tomatoes, etc) and fruit (mango, avocado, papaya, banana, pineapple, apple, plum, etc) seeds/seedlings. This year the project wants to complement the farmer based crop input supply system with the introduction of village shops, which may also be used for the supply of agricultural chemicals, sprayers, vet drugs and supplies. Training shall be provided on the handling, storage, distribution, finance management, of supplies, depending on the item(s) in question (see 200 series). In addition, project credit funds shall be made available to shop owners through existing financial institutions.

Livestock input supply

The project did not yet intervene in the livestock input supply system, except that private potential suppliers and input supply interventions were identified in the field of animal health, animal feed and genetic improvement through bull stations and the establishment of breeder farms/groups for small ruminants.

Animal Health

The project will support the training of paravets to provide village based basic animal health services wherever feasible. Young farmers, preferably women, shall be selected from farming communities in the PLWs and will be trained in basic animal health services. These paravets shall be embedded in the community to deliver the services. Mechanisms of implementation shall be worked out with the respective BoARD. In addition, village drug vendors shall be trained for enhanced veterinary services at village levels. Credit funds shall be made available on need basis through existing financial institutions.

Animal Feed

The supply of animal feed, particularly concentrate, agro-industrial by-products has been identified as one of the bottle necks for the development of market-oriented beef, dairy and small ruminant production in the different PLWs. Interested individuals or cooperatives shall be selected to be involved in the supply of concentrate feeds at village levels. These feed resources may include roughage (grass hay, straw, etc), concentrate (bran, oil cakes, etc), UMB, and forage seeds. Training will be provided to interested individuals and cooperative members (see 200 series). Credit funds shall be made available on needs basis through existing financial institutions.

Establishment of bull stations

In areas where farmers are interested to enhance the genetic merit of their cattle, bull stations shall be established for breeding purposes including Zebu, Fogera and Friesian. Elite and capable farmers shall be selected from the community to manage a bull station. Farmers shall be trained in the management and handling of breeding bulls. Selected bulls shall be made available through the facilitation of the IPMS project. These bulls shall be handed over to the handler and a special contractual agreement shall be made with the project. Feeding and management of the animal shall be the entire responsibility of the farmers. Bulls shall be allowed to serve for one year only in order to avoid inbreeding. Handlers shall be required to register a minimum number of allowable matings per year. Farmers shall be charged for mating their cows. Credit funds shall be available for the purchase and maintenance of breeding bulls through existing financial institutions.

Breeding and/or fattening of sheep and goats

Where there is potential for market-oriented sheep and goat production, IPMS shall attempt to establish a production system whereby farmers involve in the breeding and/or fattening operations depending on their resource endowment. Farmers could be divided into two groups.

One group of farmers shall be encouraged to undertake breeding activities only to ensure production of adequate number of lambs/kids for fattening. Training shall be provided on the selection, management, breeding and handling of young animals, with consideration on the resource based and the optimal reproductive cycle. Young animals shall be kept and managed until weaning and shall be sold out. Credit funds shall be available to farmers through existing financial institutions. For marketing purposes, this group of farmers shall be linked with the second group charged with fattening of animals

Another group of farmers shall be targeted for the production of marketable animals. Weaned animals shall be purchased from the first group of farmers. Animals shall be managed with a clear objective of producing animals for the market. This group of farmers shall be linked with export abattoirs. Credit funds shall be available for this operation through existing financial institutions.

Farm tools and equipment repair and maintenance

In the past year, the project started intervening improving the skills of small scale village level entrepreneurs for repair and maintenance of farm equipment in Atsbi. This will now be expanded to other PLWs based on demand.

Village blacksmith and/or individuals with technical orientation shall be selected from the community to enhance their skills for the production of farm tools and/or repair and maintenance of farm equipment. Technical training shall be provided to enhance their skills for the production of various farm tools. In addition, some training on repair and maintenance of farm equipment such as treadle pumps, motor pumps, etc shall be provided. Credit funds shall be available through existing financial institutions.

A summary of planned activities for input supply and credit facilitation is presented in the Table below.

Planned Input supply and credit facilitation by IPMS for the private sector - 2006

Activity		Ada'a	Meisso	Dale	Alaba	Fogera	Metema	Atsbi	Alamata
Village shops									
	Training	✓	✓	✓	✓	✓	✓	✓	✓
	Credit	✓	✓	✓	✓	✓	✓	✓	✓
Seed/seedling									
• Vegetables	Training	✓	✓		✓	✓	✓	✓	✓
	Credit	✓	✓		✓	✓	✓	✓	✓
• Fruits	Training	✓	✓	✓	✓		✓	✓	✓
	Credit	✓	✓	✓	✓		✓	✓	✓
Animal									

Health									
• Paravets	Training	✓	✓	✓	✓	✓	✓	✓	✓
	Credit	✓	✓	✓	✓	✓	✓	✓	✓
• Drug supply	Training	✓	✓	✓	✓	✓	✓	✓	✓
	Credit	✓	✓	✓	✓	✓	✓	✓	✓
Animal Feed									
	Training	✓	✓	✓	✓	✓	✓	✓	✓
	Credit	✓	✓	✓	✓	✓	✓	✓	✓
Farm Tools/Equip									
	Training	✓		✓	✓	✓	✓	✓	✓
	Credit	✓		✓	✓	✓	✓	✓	✓
Bull station									
	Training	✓	✓	✓	✓	✓			✓
	Credit	✓	✓	✓	✓	✓			✓
Shoats breeding/fattening									
	Training		✓	✓	✓		✓	✓	✓
	Credit		✓	✓	✓		✓	✓	✓

Marketing/finance interventions - 324

IPMS is also facilitating improvements in marketing and value adding. This is specifically targeted at small scale traders/entrepreneurs and primary cooperatives.

In the past year, the project has facilitated the introduction of marketing interventions including interest group formation around commodities (fruit, dairy, fish, honey, sheep and goat), introduction/demonstration of value adding equipment including small scale processing equipment (dairy and honey). Wherever opportunities exist, the project will also facilitate the introduction of contract farming/out growers' schemes. These interventions, facilitated by the project's micro finance component, will be expanded to other PLWs based on market needs. (Also see section 2.4.1, activity 413)

2.4 Development of recommendations

Objective: *To generate, communicate and promote gender sensitive policy options and strategies, on technology generation and use, input/output marketing and small scale agri finance for scaling out and up market oriented agricultural development of national and international relevance.*

As stated earlier, IPMS is following an ISA in its research and development activities. It takes a holistic view of the commodity system/sector, with a focus on actors, their habits and practices, their interactions and linkages, the learning processes. Building innovation capacity and various approaches to doing this are also a focus area.

IPMS propose to test the following hypotheses as a part of its research:

- Following an ISA (bringing the right network of actors together and fostering the right kinds of interactions, considering the policy and institutional context) for promoting market-oriented agricultural development will lead to the desired impact

- Development of an effective Knowledge management system and learning behaviours is crucial for accelerating market-led agricultural development
- Targeted capacity strengthening efforts (public and private sector) coupled with efforts to bring about changes in habits and practices are critical for enhancing the capacity to innovate

IPMS in the first year of its operations has gained considerable knowledge about key actors operating in some commodity systems/sectors. This will now be used as the base for developing a conceptual framework of the innovation systems that are at play in various contexts. This overarching framework will help strategize on how various project components feed on each other and contribute to the innovation processes.

IPMS is taking up a series of complementary research activities to test these hypotheses. The IPMS research started with rapid assessment studies on priority commodity (production, input supply, and marketing) and institutional arrangements in the PLWs (see 310). This research was conducted by the IPMS team in collaboration with the main stakeholders. These assessments were complemented with **baseline studies** at household, village, district (Woreda), Regional and Federal levels. These studies provide information to measure project results and impact over time, as well as provide more quantitative information on commodity-specific technologies and institutional arrangements, thus complementing the qualitative knowledge generated through the initial PRA studies.

Whenever more information on the existing situation was required to design interventions, IPMS facilitated focus studies through its own staff, regional/national/international research staff and MSc students from Ethiopian Universities. These **focus studies** will be completed and documented in the coming year and are summarized below. It was pointed out by the Steering Committee that in general research conducted by MSc students was dictated by research agendas set by the Universities and the academic requirements for MSc. Such research was therefore often lacks relevance to the development community. Influencing the university's research agendas through platform discussions as well as the involvement of development actors in defining research and co-supervision was recommended.

As indicated before, IPMS also started to facilitate⁵ the introduction of technologies, processes, approaches and methods for market-oriented commodity development in the past year and these will be monitored⁶ and documented, together with any new interventions in the coming years. This is referred to as **action research and learning**.

All the above mentioned research activities in various forms feed upon each other and will be synthesized to test the proposed hypotheses. They have been split into various heads to make their organization and monitoring easier.

While reviewing last year's activities, a number of observations were made on the project's research component. These are:

⁵ Facilitation may consist of training (see 200 series), provision of inputs for experimentation and demonstration and/or provision of credit, assistance in formation of groups and linkages.

⁶ This will include the monitoring of processes.

- Insufficient attention had been paid to defining “institutional” research (outputs), in particular for knowledge management, capacity building, and processes and approaches for planning and developing a market oriented research and development program.
- Within the context of an innovation systems approach, integration of the different research and development components for a commodity should be highlighted and documented.
- Some of the research could lead to the development of methodologies and tools applicable in and outside Ethiopia. These outputs should also be stated clearly as outputs in the project component.
- The dissemination of the project’s findings through participation in seminars/conferences, policy briefs, mass media should get emphasis. The project will develop a communications strategy and strengthen the communication tools and approaches, including joint learning processes.

To take into consideration the above, the activities and outputs of the project’s 410 and 420 series were reorganized as follows:

- 410 Commodity component and system research
- 420 Institutional processes, approaches, tools and methods research
- 430 Promotion of project strategies and recommendations

2.4.1 Commodity component and system research - 410

Commodity development research includes component research on production, natural resource management, input supply and marketing as well as system research which bring together the different research and development components into an innovation system aimed at increasing impact. In this section, the commodity and system research activities are presented.

Production and natural resource management research 411

Baseline study

The baseline study contains household, farming system level data on technology uptake and performance in the rural areas. This information will be analyzed, including an analysis of biophysical, socioeconomic and spatial factors affecting uptake and impact. The results will be published in the project working paper series (a separate paper). - IPMS/IFPRI

Focus studies

The following focus studies, initiated in 2005/06 on existing technologies will be completed/published in the working paper series in 2006/07:

- Fruit and coffee production system in Dale Woreda – by ICRAF/IPMS
- Water harvesting and use in Atsbi Woreda – by MSc student/IPMS
- Water harvesting and use in Alaba Woreda – by MSc student/IPMS
- Water use technologies in Alamata Woreda – by IWMI

- Dairy and meat production technologies and potentials in Fogera – by MSc student/IPMS
- Dairy production technologies and potentials in Mieso – by MSc student/IPMS
- Fodder production and use systems in Ada'a and Dale – ILRI/IPMS

In 2006/07 some additional focus studies will be conducted with the involvement of MSc students. So far the following studies have been identified:

- Cattle (meat/milk) production and marketing in Metema – MSc
- Dairy production and marketing in Dale and Alaba – MSc
- Dairy production and marketing in Alaba – MSc
- Sheep and goat production and marketing in Alaba – MSc
- Goat production and marketing in Dale – MSc
- Irrigation water use in Ada'a – MSc/IMWI

Action research and learning

The project also facilitated the introduction of technology interventions in 2005/06. These interventions will continue to be monitored in 2006/07 and be documented as “work in progress” case studies in the project working paper series.

Crop technology interventions:

- Introduction and development of Kabuli chickpea in Ada'a Woreda – ICRISAT/DZ EIAR
- Introduction of upland rice varieties in Fogera – ARARI/IPMS
- Banana introduction in Metema – IPMS staff
- Papaya introduction in Metema – IPMS staff
- Vernonia introduction in Mieso, Metema and Alaba – IPMS/Company
- Sesame and peanut introduction and promotion in Mieso – IPMS/EIAR
- Farmer based fruit tree nursery development and grafting systems in Dale – IPMS/EIAR
- Paprika introduction in Alaba – IPMS/OoARD/SARI
- Coffee seedling introduction in Dale – Awada (EIAR)/IPMS
- Vegetable introduction in Metema – ARARI/IPMS
- Introduction and use of donkey traction in Dale – IPMS/EIAR
- Introduction and use of minimum tillage in Metema – IPMS

Livestock technology interventions

- Communal grazing land development in Atsbi – TARI/IPMS staff
- Swampy area development for livestock feed resources in Alamata – TARI/IPMS
- Introduction of improved forages in Alamata – IPMS/TARI
- Improvement of sorghum stover utilization in Alamata – IPMS/TARI
- Trypanosomosis control in Dale and Fogera – IPMS/ILRI
- Introduction and use of MUB in Mieso - Adami Tulu/IPMS
- Introduction of honey/wax production technology in Fogera – IPMS/ARARI
- Introduction of honey/wax production technology in Ada'a – SAP TECH/IPMS
- Introduction of honey/wax production technology in Atsbi – IPMS/TARI
- Bee forage development in Atsbi – IPMS/TARI

- Bee forage development in Ada'a – SAP-TECH/IPMS
- Improvement of sorghum stover utilization in Alamata – IPMS/TARI
- Introduction and development of sericulture in Ada'a – EIAR/IPMS

In 2006/07 the project will expand some of the successful interventions to other PLWs and focus on a few more technology innovations⁷, for which monitoring will be started (also see 300 series)

Crop interventions

- Adoption of soil and water management tools in Alaba and Dale – AHI/SARI
- Variety testing of new Kabuli type chickpeas – EIAR DZ/ICRISAT
- Introduction and testing of grapes in Ada'a and Mieso – EIAR DZ/IPMS
- Expansion of horticultural crops production and marketing – Alamata, Mieso, Metema, Alaba, Ada'a – IPMS/EIAR/RARIs
- Introduction and testing of spices in Metema and Alamata – ARARI/TARI/IPMS
- Gum and incense production and marketing in Metema – ARARI/IPMS
- Introduction and testing of rice varieties in Alamata and Metema – ARARI/IPMS
- Introduction of soil and water conservation measures in support of market oriented development in Alaba and Dale - AHI/SARI
- Fruit production in Dale – IPMS/EIAR/SARI
- Introduction and promotion of Sidama variety coffee – IPMS/EIAR/SARI

Livestock interventions

- Introduction of improved cattle (meat/milk) production in Metema – IPMS/ARARI
- Introduction of dairy production in Dale, Alaba, Atsbi, Alamata, Mieso – IPMS/RARIs
- Introduction of sheep and goat production in Dale, Alaba, Atsbi, Mieso – IPMS/RARI
- Feed resources development in Fogera plains – ARARI/IPMS
- Fodder introduction in all PLS – ILRI/IPMS
- Introduction and use of MUB in Alamata – IPMS/TARI
- Fogera cattle improvement in Fogera – ARARI/IPMS
- Maheberesellasse cattle improvement in Metema – ILDP/ARARI/IPMS
- Cattle fattening system in Alamata, Mieso, Fogera
- Bee queen rearing system development in Fogera – IPMS/ARARI/EIAR/Private
- Apiculture development in Fogera, Atsbi, Ada'a, Alaba – IPMS/EIAR/Sap-Tech/Private
- Fish production technologies and marketing systems in Fogera – ARARI/IPMS
- Improved skins and hides management, processing and marketing in Atsbi, Dale, Alaba – IPMS/RARI/Private
- Improved communal grazing land management in Dale – IPMS/OoARD/SARI

⁷ This may include some field research on new varieties and methods

Input supply system research 412

Baseline studies

The base line study contains household, farming system, village and district level data on input supply/services in the rural areas. This information will be analyzed and be added to the PRA studies of the PLWs. These enhanced PLW studies will then be published in the project's working paper series – IPMS.

A special paper on livestock input supply system will be developed for the annual conference for the Ethiopian Society of Animal Production. This paper will be developed on the basis of the PRA studies and the baseline data - IPMS

Focus studies

The project facilitated some rapid assessments of input supply systems in particular on haricot bean seed multiplication in Dale and Alaba with CIAT. This information will be incorporated in the documentation of the proposed haricot bean intervention in both PLWs (see below).

Some other existing input supply systems will be studied and documented through construction of institutional histories. Some of the potential cases to be taken up this year include:

Seed supply systems (Institutional history + process monitoring) – leading to a comparative analysis of more traditional and new crops – in particular on teff, wheat, and sorghum.

Institutional history of changes in water management practices and implications for rice and vegetable cultivation and livestock production (Fogera, Alamata, Atsbi)

To design appropriate interventions, a study on smallholder breeding and production strategies for small ruminants will be undertaken in Mieso, Alaba, Atsbi and Dale in 2006/07.

Action research and learning

During the past year, IPMS facilitated the introduction of innovative input supply systems in some of its PLWs. These innovations will continue to be monitored in 2006/07 and documented as “work in progress” case studies in the project working paper series.

Crop input supply interventions

- Farmer/Union chickpea seed multiplication/supply system in Ada'a Woreda – ICRISAT/DZ EIAR
- Farmer to farmer teff seed supply system in Ada'a – IPMS/EIAR
- Farmer based fruit tree nursery system in Dale – ICRAF/EIAR (Melkassa)
- Farmer based vegetable seed multiplication/supply system (onion, tomato, carrot, etc) in Alamata, Fogera and Mieso – IPMS
- Farmer based banana sucker multiplication/supply in Metama – IPMS
- Farmer based sorghum seed multiplication/supply system in Metama – ARARI/IPMS

- Farmer based haricot bean seed multiplication/supply system in Dale and Alaba – CIAT/IPMS/EIAR

Livestock input supply interventions

- Community/private sector drug supply and treatment system for trypanosomiasis control in Dale and Fogera – IPMS/ILRI

In 2006/07, IPMS will expand some promising innovations to other PLWs and also facilitate some additional innovations, for which monitoring will be started. (also see 300).

Crop input supply interventions

- Farmer based onion seed multiplication systems in Alamata and Fogera - IPMS
- Farmer based haricot bean seed multiplication in Alaba and Dale – CIAT/EIAR /IPMS
- Farmer based fruit tree nurseries in Dale - EIAR/ICRAF/IPMS

Livestock input supply interventions

- Private bull stations in Ada'a, Fogera, Dale – IPMS/RARIs
- Paravet system in Miesso, Metama, Fogera, Alaba, Alamata, Atsbi – IPMS/RARIs
- Establishment of breeder group for small ruminants in Atsbi, Miesso, Dale, Alaba, Metema – IPMS/RARIs
- Fodder seed supply system in Dale, Alaba and Ada'a - IPMS/ILRI/RARIs
- Inputs for skin and hides processing in Atsbi, Dale, Alaba – IPMS
- Veterinary drug supply and service delivery system in Metema, Fogera, Alamata, Dale, Alaba, Atsbi, Ada'a – IPMS/RARIs
- Livestock feed supply system in Dale, Alaba, Miesso, Alamata, Fogera and Ada'a – IPMS
- Dairy and small ruminant genetic material supply system in Dale, Fogera, Ada'a, Alaba, Miesso, Atsbi – IPMS
- Public vs private AI delivery system in Ada'a – IPMS/EIAR
- Apiculture input supply system – Fogera, Atsbi, Alaba, Ada'a – IPMS/Sap Tech/RARIs

Marketing research - 413

Baseline study

The base line study contains household, farming system, village and district level data on marketing/services/participation in the rural areas. This information will be analyzed and be added to the PRA studies of the PLWs, which will be published in the project's working paper series - IPMS

Focus studies

During the past year, IPMS facilitated market chain/potential studies on a number of commodities. These studies will be completed in the 2006/07 and documented in the working paper series.

- Chickpea market chain/potential study – ICRISAT/SARI/Marketing Agency
- Pepper marketing Alaba Woreda – MSc student/IPMS
- Coffee marketing Dale Woreda – MSc student/IPMS
- Sesame marketing Metama Woreda – MSc student/IPMS
- Honey/wax marketing study – SAP TECH
- Fruit marketing study Tigray (Mekelle), Addis, Dale - ICRAF
- Rapid live animals/meat market map studies in all 8 PLS – ILRI/IPMS
- Rapid honey marketing studies in 6 PLW - ILRI/IPMS
- Rapid skins and hides marketing studies in 6 PLW - ILRI/IPMS
- Initial assessment of fish marketing in Fogera – World Fish/IPMS

In 2006/07 this will be expanded with new market chain/potential studies on:

- Fish market study Fogera – World Fish/ARARI/Marketing Agency (May/June)
- Rapid haricot bean market chain study in Dale and Alaba
- Market chain studies teff and wheat in Alaba – MSc studies/IPMS
- Market chain studies horticultural crops in Fogera. MSc students/IPMS
- Market chain study cotton in Metama MSc student/IPMS
- Dairy milkshed study in Alaba – MSc student/IPMS
- Dairy milkshed study in Dale – MSc student/IPMS
- Quantitative live animals/meat marketing studies in 8 PLS – ILRI, IPMS, RARIs and Regional Marketing agencies.
- Others

Action research and learning

In the past year, IPMS facilitated marketing, processing interventions in a number of its PLWs which will be monitored and documented as “work in progress” case studies in the working paper series, including:

- Sheep and goat production and marketing groups in Miesso, Dale, Alaba, Atsbi – IPMS/RARIs
- Honey production, processing and marketing groups in Atsbi, Ada’a and Fogera – IPMS/RARIs
- Dairy group formation and milk processing in Fogera, Alamata, Dale, Ada’a, Miesso – IPMS/RARIs
- Skins and hides processing and marketing in Atsbi, Dale, Alaba – IPMS
- Fish production and marketing groups in Fogera – IPMS/ARARI/WorldFish
- Cattle fattening and marketing groups in Fogera, Miesso, Alamata – IPMS/RARIs

Some of these innovations will be expanded to other project sites including honey groups to Alaba, dairy groups for Atsbi and skins and hides groups to Fogera.

IPMS will also start experimentation with livestock market information systems at PLW level in Alamata, Miesso and Metama and Alaba. This will include various forms of information sharing at Woreda and FTC level.

Commodity innovation systems 414

Action research and learning

Based on the above described commodity-specific interventions by the project, the development of commodity innovations systems will be documented this year including:

- Chickpea development in Ada'a – ICRISAT/DZ-EIAR/IPMS
- Haricot bean development in Alaba and Dale
- Dairy development in Fogera, Dale, Ada'a – ILRI
- Small ruminants sector (Atsbi, Miesso, Metema, Dale, Alaba)
- Poultry (Ada'a, Alamata, Atsbi, Meiso, Alaba, Fogera, Dale)

2.4.2 Institutional processes, approaches, tools and methods research 420

Knowledge management research 421

Baseline study

The base line study contains information on knowledge management at the PLW, regional and federal level. This information will be analyzed and be published in the project working paper series (a separate paper). – IPMS

Action research and learning

During the past year, the project has initiated several initiatives in the area of knowledge management, which will be further developed this year. The lessons learned at the federal, regional and PLW level will be analyzed and documented during this year in case studies including:

- Operationalisation of agricultural portal at Federal, Regional and PLW level, including content management processes and structures – IPMS/MoARD/BoARD
- Operationalisation of Woreda Knowledge management centres - IPMS/OoARD
- Functioning of selected FTCs as knowledge centres – IPMS/OoARD
- Functioning of community of practices in Woredas – IPMS/OoARD
- Technology exhibition as a tool for sharing knowledge – IPMS/BoARD/RARIs

A livestock market information for FTCs and Woredas will be tested in Miesso, Alamata, Metema and Alaba PLWs (see marketing research).

Capacity building approaches and processes (extension) research 422

Baseline study

The base line study contains information on the extension system, including TVETs at the PLW, regional and federal level. This information will be analyzed and be published in the project working paper series (a separate paper). – IPMS

Focus studies

During the past year an MSc student looked at the effectiveness of the training provided at Alaba PLW by the extension system. This thesis will be published as a case study in the project's working paper series.

The project started documenting the operation and functioning of FTCs in Atsbi and Alamata. These will be complemented with some more information gathering and published as a working paper.

In the coming year, the project will continue doing focus studies on the extension system using MSc students. Some topics that would be covered include:

1. Ability and constraints of extension services to reach out to women farmers
2. Livestock related extension services – performance and constraints
3. Role of extension system in input supply and rural financing
4. Water users association and extension services on water resources development and use

Action research and learning

In the past year, many innovative processes for capacity development were introduced in the PLWs including;

- Joint DA and farmer training.
- Couple (husband/wife) training
- Needs (demand) based training
- Farmer study tours

In 2006/07 these approaches will be more systematically introduced and monitored across PLWs and published as case studies.

The project will undertake a capacity building experiment across PLWs using as factors composition of the trainees (man only, husband/wife) and training focus (supply driven, demand driven). An experimental design will be developed that will enable studying aspects of diffusion and outcomes of such capacity building interventions.

Platforms are proposed to be formed to jump start the commodity development in various woredas. Some of the processes will be monitored and documented.

- Apiculture (Ada'a, Atsbi, Fogera, Alaba)
- Rice (Fogera)
- Cotton (Alamata)
- Fattening (Atsbi, Alamata, Mieso, Metema)
- Dairy co-op development (Ada'a, Alamata, Fogera, Dale, Mieso, Alaba)

Approaches, processes and tools for market oriented development 423

Approaches and processes

The project introduced a participatory process for the development of a market oriented development in a District. So far this has been used in 8 PLWs. Methods and

tools which were developed later (see tools/methods) and/or brought to the attention of the IPMS project can be integrated in this approach and be tested in the development of plans in the additional PLWs.

The approaches and processes for implementing the project including participatory learning are still being developed. This includes new use of knowledge management mechanisms, alternative capacity building. Over time the project will develop guidelines based on the learning which takes place in the PLWs

Tools/methods

In the past year the need for tools/models to support market oriented development has become clear in the following areas:

- Tools/models for identifying production potentials. The project has started to develop some simple GIS tools for fodder livestock production systems in the PLW – ILRI/IPMS
- Models to demonstrate land use changes resulting from the introduction of marketable commodities. Such models will be used to assist agricultural staff and farmers in decision making. A start will be made with a district level chickpea model in Ada'a – ICRISAT/EIAR/IPMS
- Decision tools on soil and water management developed by AHI. Testing of these tools has started and will be completed in Dale and Alaba – AHI/SARI/IPMS
- Market chain analysis methodology. The project has initiated a number of market chain studies and is in the process of developing a manual on these studies in collaboration with CIAT's Rural Enterprise studies
- Guidelines for documenting institutional histories
- Guidelines for process monitoring
- Innovative extension source book
- Training modules on Innovation Systems
- In the past year the project tested a methodology to assess the status of Gender and HIV/AIDS in PLWs in order to mainstream gender and HIV/AIDS considerations in planning of a market oriented development. This methodology will be further tested in the additional PLS and then be published IPMS/Gender/HIV-AIDS consultant
- In the past year the project developed guidelines for Environmental Assessment Screening Reports following CIDA guidelines. These guidelines have been tested in 4 PLWs and will be tested further in the remaining PLWs. IPMS/Environmental consultant

Besides these studies, the project is expected to produce a manual for the rapid market chain analysis in collaboration with CIAT's rural enterprise development project.

2.4.3 Promotion of project strategies and recommendations 430

In the past year, the project has promoted its strategies and concepts on market oriented research and development through participation in conferences, seminars, research review meetings and occasional mass media (radio, TV, news paper). With

research findings becoming increasingly available, these efforts will be intensified during the coming year. The following activities are planned for 2006/07

- Participation/presentation in the review meetings of the national and regional research organizations (first quarter 2007). Participation/presentation in dairy, pineapple, oil and pulses platforms organized by SNV.
- Participation/presentation in donor group meetings on food security (regular)
- Co-organizing the annual Ethiopian Society of Animal Production (ESAP) conference on Institutional arrangements and services for market-oriented livestock development (September, 2006)
- A conference on market chain analysis studies in collaboration with EIAR, CIAT, ICRISAT, World Fish (first quarter 2007)
- Joint newsletter production with BoARD/RARIs
- Any other relevant conference opportunity which arises during the year

The project will provide articles/policy briefs for news papers during the year. Our website and news letters will also contribute to the promotion of project concepts and findings.

2.4.4 Crosscutting environment, gender and HIV/AIDS research 440

Environment 451

During the past year the project's environmental strategy was revised and guidelines were produced for environmental assessment screening reports (EASR). Four of these reports were completed and the remaining PLWs (including the additional ones) will be completed during this year.

The Steering Committee emphasized that specific attention should be given to the environmental aspects of water harvesting and use; especially since the use of water for market oriented development is considered an important component. Ground water levels are either rising or dropping resulting in negative environmental effects. The use of water balance models can be explored with the help of IWMI and irrigation researchers.

Monitoring the possible environmental impacts and development of mitigating measures will be initiated during this year, together with capacity building (see 200).

Gender 452

In the past year, gender studies were completed for priority commodities in the 8 PLWs. Woreda workshops aimed at using these findings to integrate gender concerns in the program of work have been conducted in 2 PLWs in the past year and such workshops will be held in the remaining 6 PLWs during this year.

Some focused /case studies will be taken up during the course of this year, which will result in working papers. Some suggested topics include:

- Ability and constraints of extension services to reach out to women farmers

- Role of farmer organizations and other social institutions in empowering women through knowledge sharing
- In-depth case studies to capture changes in gender-based participation in aspects of market-led agricultural development in IPMS PLWs
- Studies on impacts of training women
- Hot pepper production – gender dimensions in Fogera and Alaba
- Mapping of knowledge flows with focus on women
- Comparing information needs of men and women especially in livestock related activities
- Role of gender in market decisions

HIV/AIDS 453

In the past year, HIV/AIDS studies were completed for priority commodities in each of the 8 PLWs. Woreda workshops aimed at using the findings of these studies to integrate HIV/AIDS concerns in the program of work have been conducted in 2 PLWs in the past year. The initial assessments and the impact on project planning will be documented in a case study, and published in the project's working paper series – IPMS/HIV-AIDS consultant.

Some special studies which are proposed to be conducted this year include

- Impact of HIV/AIDS on agricultural/livestock production
- Documentation of successful innovative approaches (including an assessment of the Community Conversations approach) to addressing gender and/or HIV/AIDS issues in the agricultural sector

3 Project management (500 series)

3.1 Recruitment project staff (510)

In the first year, most HQ positions proposed in the PIP were filled, except the local gender consultant and the monitoring officer Both are under recruitment. The project also requested an additional position in support of the operationalisation of the knowledge management component.

Research and Development Officers for all PLWs have been completed. Some of the vacant positions for assistants and drivers will be filled during this year.

Recruitment of staff for the additional PLWs is subject to the decision taken by the governing board.

3.2 Consultants (520)

The project's RBM consultant will be employed to review the project's management framework (PMF) vis a vis the proposed changes in the structure and outputs. The consultant will also be asked to review the indicators and frequency and methods of monitoring as well as develop a detailed monitoring and evaluation plan, once the newly developed project monitoring officer has been recruited.

The project gender and HIV/AIDS consultant will be employed to provide guidance on the project's gender and HIV/AIDS activities and will be responsible for

summarizing the HIV/AIDS assessment guidelines and PLW assessments and proposed strategies for the project working paper series.

The project's environmental consultant will be employed to provide training to the project staff and key project actors on i) preparing environmental assessment screening reports (EASR) ii) monitoring the potential environmental indicators and mitigating measures. The consultant will also be asked to review the EASRs for the PLWs and provide some on the job assistance.

To introduce and develop the project's micro finance, loan guarantee and insurance component the project will employ a local consultant.

Other local and international consultants will be employed on a needs basis.

3.3 Contracting – Research and development partners (530)

The project will continue to involve the research and development partners on needs basis. Contracts will be required for partners taking on leaderships role for some of the activities

3.4 Office establishment in the PLW (540)

Offices have been established in the 8 PLWs. Whether or not offices will be established in the additional PLWs is subject to the decision by the project's management

3.5 Project monitoring and evaluation (550)

The project intends to hold another annual review meeting with the major stakeholders, including representatives from the steering committee, WALCs and RALCs in the first quarter of 2007.

The project restructured the management structure and created the management board which will have decision making power and the project steering committee which will be responsible for developing and monitoring the project's technical plan. Meetings of these structures will be held 2 to 3 times a year and on needs basis as required.

Project reporting (560)

Half yearly progress reports will be prepared as scheduled

Project communications (570)

The project website was launched and activities undertaken by the project and reports produced were posted. In the coming year the website will be made more interactive to facilitate entering information directly by the project staff.

News letters will continue to be produced during the year. Four issues are planned.