

MoARD-IPMS Workshop on

**ALTERNATIVE MODES OF AGRICULTURAL SERVICE DELIVERY FOR
INNOVATION AND IMPACT**

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Executive Summary

Ethiopia is in the process of transforming its agricultural sector from subsistence to market orientation. A number of ingredients are necessary for achieving market orientation and key among these are technologies and service delivery. Service delivery includes generation and introduction of new technologies, the supply of inputs and financing of inputs, and marketing, by both public and private service providers.

Over the years, one observed a significant shift in mindsets from believing that technology generation and dissemination were linear and independent processes, to recognising that farmers are an important actor in this process with feedback loops. The Ethiopian Agricultural Research System (EARS) effectively responded to the challenge of agricultural transformation and engaged in developing and promoting technologies to respond to market opportunities. In the last two years, a range of changes in the institutional and external environment have begun to take place. The rural extension services are on the threshold of a major shift in extension service delivery through the Farmer Training Centre (FTC) system. Government policy is now stimulating diversification of input/service provision, involving private sector. The challenge in this dynamic institutional setting is to develop a system with improved flows of knowledge, improved capacity and linkages between different partners in development and improved development processes, including technology introduction, and input/output marketing to facilitate the development of marketable commodities.

The MoARD in collaboration with IPMS convened a workshop with key stakeholders and decision-makers from eight Woredas in four Regions in which IPMS is operational, to deliberate on the issues confronting development of effective and efficient alternative service delivery systems. This report presents a summary of the workshop proceedings.

The current extension system was shaped by changes in economic activity, population growth and political changes and evolved over time. This system, which was externally supported and operated mainly in a project mode, developed weaknesses on many fronts. The system focused on technical innovation to the detriment of institutional innovation and this led to a situation where the productivity increases could not be realised to the desired potential.

Presently the EARS is committed to developing, scaling up and out of improved technologies through partnerships and networking through a commodity-based innovation system framework. The initiative has had a significant impact with a range of commodity technologies being scaled out. The major factors triggering success in scaling out efforts have been commitment and entrepreneurship of researchers and, involvement of all actors in the market chain. IPMS focuses on the development of alternative approaches to technology and service delivery based on a learning approach instead of getting boxed in with traditional approaches. IPMS is also engaged in capacity building of various actors including farmers, public and private sector, in particular the extension services to enhance the innovation, capabilities and service delivery systems for enabling scaling up and out.

A generic service delivery framework essentially has three interwoven levels of 'organising demand'; 'responding to demand' (the responsive service provision) and; 'supporting the response' (policies and legislation) which need to play together. For the

Ethiopian situation, this framework revealed that the demand side is particularly weak. Farmers and communities are not well organised to be able to analyse their real needs and demands and validate it in view of their own resources. Nor are communities organised to experiment on their own and find their own solutions to problems. On the service provision side, the challenges have shown that the pluralism aspect of it is weak and that service providers are not working together for their mutual effectiveness. They are also not providing the space for communities to determine their own destination and demand. The service providers set their own targets and technologies as solutions. On the policy side, it was analysed that policies are not converging towards a common and shared agenda for a coherent agricultural / rural development, nor are policy development processes linked to the different levels.

In response to the challenges identified, the workshop identified 5 major strategic intervention areas towards alternative modes of service delivery.

1. Development of effective approaches to R&E with farmers
2. Development of the demand side of service delivery
3. Development of competent + performing learning organizations
4. Development of supportive and enabling policies for innovation and impact
5. Development of institutional arrangements for integrated service delivery and impact

These areas with possible strategies arising from the group discussion and experiences shared were used to identify the areas which need to be developed through testing to arrive at approaches/methods. The six broad priority areas identified which have a high likelihood to make an impact are:

- **Demand-led extension:** attempts could be made to develop a community and farmer based innovative system of service delivery. This requires capacitating farmers to articulate the demand side. The extension service should be groomed to recognize and utilize indigenous knowledge, design participatory extension strategies based on community resource base.
- **Value addition and market linkage creation:** market assessment and development of strategies for value addition, capacitating the extension service to play the role of market linkage facilitator should be emphasized.
- **Transformation of organizational systems, culture and processes:** A transparent reward system is necessary to enhance commitment of DAs along with changes in TVET curriculum. The service delivery systems have to be developed through dialogue.
- **Institutionalization of commodity-based innovation systems development and learning:** creation of commodity platforms could be a springboard to take the EARS and IPMS pilots to scale and scope.
- **Alternative input supply systems:** active inclusion of private sector and farmers in seed and other input supply is required. The credit services should design systems that encourage more follow-up, targeting, providing wider options and risk insurance for credit.
- **Mechanisms for networking, sharing and learning:** Mechanisms for sharing success stories from different regions to cross fertilise ideas and draw principles have to be tried. Extension should be an active player in this process to become an observant/learning institution.

The workshop concluded that these research/testing areas should be treated as priority areas for all agencies engaged in research, including projects like IPMS.

RARIs, EIAR, any other public sector actor (e.g., Regional marketing agencies), NGOs or IPMS could initiate and drive the testing/action research. The participants felt that external projects like IPMS have a major role to play in research and capacity building to enable this. The report describes in detail these areas and the suggested modalities for trying out the alternatives.

1 Introduction

1.1 Background

Ethiopia is in the process of transforming its agricultural sector from subsistence to market orientation. A number of ingredients are necessary for achieving market orientation and key among these are technologies and service delivery. Service delivery includes generation and introduction of new technologies, the supply of inputs and financing of inputs, and marketing. Both public and private service providers are involved in the provision of these services.

Technologies have been/are being developed/tested by research in collaboration with partner institutions. Ethiopian research in the past decade has become responsive to market demands and has started developing/testing varieties which are suitable for the export market. In the past, technology introduction services were seen as the mandate of extension service which passed on information generated by the research system. Farmers were considered passive receivers of this information. With the popularisation of a host of participatory approaches, the role of farmers in the generation of new technologies was recognized by researchers. However, mainstreaming of these ideas through the extension system left much room for improvement, especially since the package approaches introduced by the MoARD did not offer much scope for learning.

In the last two years, a range of changes in the institutional and external environment have begun to take place. For example, rural extension services are on the threshold of a major shift in extension service delivery through the Farmer Training Centre (FTC) system. To equip the FTCs (one planned in each kebele) with adequate skilled human resources, the government started the Agricultural TVETs and the graduates are now populating the FTCs as development agents in each peasant association. This poses a huge opportunity but also a major challenge as these institutions also need to transform to be able to successfully implement an alternative, market-based approach to agricultural development.

Rethinking the role of the extension services to stimulate the introduction of the various technologies is vital. Different aspects can be considered including: “How to increase knowledge flows between research, extension and farmers”, “How to get better access to indigenous knowledge and exploit it effectively”, “How can we optimize farmer to farmer knowledge sharing”, “Can other service providers be considered” and, “What technologies can be used including the use of IT based technologies as well as simple methods/approaches such as exhibitions, field days, leaflets, posters, radio” etc.

A necessary and integral part of the technology introduction services is the provision of improved inputs/services such as seeds, seedlings, agro chemicals, drugs, veterinary services, heifers, artificial insemination, credit, production and processing tools. Most of

these inputs were supplied through the agricultural offices linked to the packages. While this provision of services has contributed to the development of agriculture, several sources indicate that improved inputs/services are usually in short supply and delivery is often untimely. Government policy is now stimulating diversification of input/service provision, involving private sector. Actively pursuing this government policy and strategy will require rethinking the role of the MoARD in the provision of inputs and services. It shall also require building the capacity of the small input producers/suppliers, since in the past little or no attention has been paid to this.

The processing and marketing services for most of the agricultural products in the past were dominated by private sector organizations. Farmers were usually unaware of the market chain and potentials and had little say in determining prices. Several options are being promoted by the government to increase the farmer's income from marketing and processing, including the formation of cooperatives and better access to market information. The role of the MoARD in facilitating the provision of information at the farm level is still to be developed. Efforts are underway to initiate a Commodity Exchange for some of the major crops and opportunities should be explored to link this with field level information mechanisms.

The challenge within the institutional dynamisms outlined here is to develop a system which will have improved flows of knowledge, improved capacity and linkages between different partners in development and improved development processes, including technology introduction, and input/output marketing to facilitate the development of marketable commodities.

1.2 Workshop Objectives and expected outputs

The MoARD in collaboration with IPMS, convened a workshop with key stakeholders and decision-makers from all Regions and Woredas in which IPMS is operational, to deliberate on the issues confronting development of effective and efficient alternative service delivery systems. Overall, the aim of the workshop was to identify ways to make the agricultural service delivery system operate as a system to enhance innovation and impact. The desired outputs were:

1. A common and shared perspective and analysis between the different levels and partners on constraints and opportunities in service delivery
2. Possible ways to address some of the observed/ experienced shortcomings
3. A commitment and plan to experiment with alternative service delivery approaches
4. Mechanisms for sharing, learning and co-management of the experiments by the stakeholders

1.3 Process and methodology of the workshop

A Steering Group comprising of representatives of Federal and Zonal/Regional MoARD, EIAR, RARIs and IPMS guided the workshop preparation. Some invited papers

reflecting the current status of service delivery systems and experiences with alternatives or options were presented at the workshop.

The workshop was professionally facilitated in a sequence of 3 logical steps of analysis and brainstorming. The steps were:

- a. understanding current service delivery systems and the key challenges faced. Some experiences with alternative and innovative approaches were shared which led to the identification of key challenges in developing effective service delivery systems on a larger scale.
- b. Based on a service delivery framework for innovation and impact, major strategies to address the identified challenges were identified.
- c. Within those strategies, six areas were identified as the thrusts for trying out alternative methods of service delivery and initial ideas on design for testing various approaches were tabled.

2 Current service delivery systems

Several papers on the present service delivery system were presented. Two papers highlighted the evolution of the present extension system and its effectiveness and 2 papers on experiments with alternative approaches and methodologies carried out by EARS and IPMS. A brief summary will be provided here.

2.1 The present extension system

Agricultural extension has always been considered a critical tool for transforming agriculture, which continues to be a low input-low output sector. The current extension system was launched in 1995, which adopted a modified T&V system merging with technology diffusion experience of SG 2000. The Farmers Training Centres have been recently established to serve as nodes which could provide extension service (packages), training (short term and modular), demonstration and, centers of exhibition and information. The major changes in the extension system have been driven by dynamic economic activity, population growth and political changes. However, the extension operated in a project mode and was often donor-driven. The current system, PADETES, is the only one entirely driven and supported by the government.

There are a number of factors at play, which are creating a favourable environment for extension in Ethiopia. These include:

- government support and commitment with an enabling policy environment and decentralised decision making;
- establishment of FTCs; adequate number of DAs assigned to FTCs and;
- focus on market oriented production system.

However, some major weaknesses have undermined these efforts, leading to results/impacts which are far below expectations. These include:

- **farmers capacity:** limited success in enhancing the decision making capacity of individual farm families and communities;
- **technology limitations:** limited availability of technologies and insufficient consideration to building on the indigenous knowledge and experience of farmers;

- **planning capacity:** poor capacity of extension service in problem analysis, planning, M&E;
- **overambitious plans:** for covering wider areas with limited resources and top down (quota) transfer of technologies;
- **Institutional instability:** frequent restructuring and high staff turn over and generally low commitment and motivation of staff and;
- **weak linkages, coordination and communication:** inadequate coordination of research, extension, credit, inputs, markets and of non public extension service providers and poor communication and information exchange/ linkage.

These gaps are also reflected in a study on the performance of extension in terms of adoption and productivity increases. A study conducted by EDRI showed that about 67% of adopters and 25% of non-adopters were contacted by extension. However, most farm households from both adopters and non-adopters have neither direct contact nor formal link with research centers and credit institutions, NGOs, or the Seed Enterprise. The two most important inputs in extension promoted in Ethiopia are inorganic fertilizers (Urea and DAP) and improved seeds of maize and to a much lesser extent wheat and teff along with management practices.

The access to extension services is also an important issue. The study showed that farmers will have to travel an average distance of about 3 km to reach a development agent, 4.8 km to home agent, 7.8 km to credit service, 7 km to input service, 4 km to demonstration farms and 20 km to research centers. There is no significant difference among the regions in terms of accessibility to development agents.

In the area of credit, the overall repayment rate of loans rises to as high as 93% reaching nearly 98% and 95% in Tigray and Amhara respectively. Between 38% households in SNNPR and 60% in Amhara averaging nearly half, finance their loan of inputs from the sale of grain. Of the 171 households who offered the reasons for their inability to pay their loans, 85% in SNNPR and 75% in Amhara attributed it to low prices of output.

Regarding preferences of handling inputs delivery, nearly half each of the total households opted for cooperatives and Extension for fertilizer and to a lesser extent for seed. Those who opted for delivery by the private sector cited timeliness, friendliness, flexibility, low interest, non-requirement of collateral, being more sympathetic etc as the reasons for the preference.

The Total Factor Productivity (TFP) of most extension farmers exceeds that of non-extension farmers, for obvious reasons. In addition to extension services, agro-ecology/regional variations largely determine the level of TFP and efficiency of farmers (rainfall, soil, moisture, etc). There is a large potential to increase efficiency, especially of the extension farmers. Socio-cultural variables and labor use are important variables in both efficiency & TFP. The study highlights a need for targeting the geographical factors while designing and promoting extension packages.

The extension system has mainly focused on technical innovation and almost ignored institutional innovation, which has resulted in its being less ineffective. There is perceived increase in productivity due to extension efforts, but not to the full potential.

2.2 Alternative strategies and approaches to service delivery being tested presently

Two papers highlighted present innovative approaches: the first one from EARS and the second one from IPMS.

The Ethiopian Institute of Agricultural Research (EIAR), the umbrella body for Ethiopian NARS, over the past decade experimented with some new approaches for effective Research for Development, with some significant outcomes. The introduction of Broad Bed Maker (BBM) in 1980s resulted in reclamation of vertisols resulting in higher land availability for cultivation. The local maize hybrids released in 1990s increased yields and production considerably. The wheat technologies of the 2000s averted the collapse of the food processing industry.

Presently the EARS (Ethiopian Agricultural Research System) is committed to developing, scaling up and out of improved technologies through partnerships and networking through a commodity-based innovation system framework. This initiative has been developing the conceptual understanding and skill development of its researchers to facilitate innovation systems and value chain approaches. The initiative has been a great success with a range of technologies being outscaled to a large scale (up to 40000 farmers are involved in the bread-wheat initiative for example).

The major factors triggering success in scaling out efforts have been commitment and entrepreneurship of researchers and, participation of all actors. The researchers and research managers went through a training & coaching process which enabled them to internalise the innovation system framework and made them entrepreneurial enough to take things through to impact, rather than leaving their technologies on the shelf. Major challenges remain in terms of mainstreaming the new approach across the board and bridging the disconnect between research-extension-smallholders and smallholders-markets. Often researchers are now seen as intruding extension although they are trying to include extension services as partners.

EIAR has been following a Consortium approach with partnerships as the key for addressing these complex challenges. This is expected to help unleash the synergies among partners while exploiting complementarities. The sharing of costs, risks and benefits would also help in achieving economies of scale and scope. The consortium comprises the Lead organization, collaborative platform and an Action alliance, each with a definite and specific role. The collaborative platform would include National/regional research centers, Higher learning institutes, International agricultural research centers/networks, Ministry of Agriculture & Rural Development (Extension) and, Non-governmental/community-based organizations. The Action alliance would include implementing partners like smallholders, cooperatives, cooperatives' unions; Agricultural input, agro-processing, marketing, and export firms; Credit, savings, and business development institutions/services and; Regional, Woreda, local administrations.

The second paper reflected the IPMS experiences. The IPMS project of MoARD, implemented by ILRI, has been operational for over a year in eight woredas in four regions, with a purpose of strengthening the effectiveness of the Government's effort to transform agricultural productivity and production, and rural development in Ethiopia to

market oriented agricultural development. The project has been working on development of new approaches and processes for

- development of market oriented agriculture centered around specific commodities with market potential
- knowledge management
- innovation capacity development.

Extension service has a major role to play in such transformation and to be able to do this, it also needs a transformation. The underpinning paradigm needs to change from technology transfer to development of innovation system. IPMS experimented with some new approaches in various woredas. Though it is too early to comment on the outcomes or sustainability and replicability of such interventions, this highlights the presence of alternatives/options and the importance of experimenting with different approaches instead of getting boxed in with traditional approaches.

IPMS project has created market linkages in a few cases by bringing small farmers and markets together. A case in point is the Ude dairy farmers in Ada woreda, linked up with Ada Dairy co-operative to create a market for milk being produced. This was facilitated by the MoARD through a dialogue with all the actors involved. Considering the dairy innovation system, the issues which are attendant to making this sustainable and successful, including increasing the milk production through increasing the number of improved cows and forage availability are being addressed. Another similar example is the case of onion production in Fogera woreda in Amhara Region. Awareness creation, knowledge exchange and dialogue through study tours, exposure visits, meetings etc set the scene for the parcel of interventions spanning capacity building, knowledge management, input supply and marketing arrangements.

The main marketing interventions of IPMS till date included small scale processing and storage; business oriented cooperative/ market group formation; formation of Commodity platforms; Identification and linkages with markets; provision of market promotion, information and; provision of credit for innovative marketing interventions.

The new approaches to input supply that IPMS experimented with include Farmer based seed/seedling multiplication (community seed banks, individual farmers, groups); livestock breeder farmers; para vets; bull station; village shops; cooperative/input group formation/strengthening and; providing credit for innovative input supply interventions and new institutional arrangements.

The main production-oriented interventions comprise introduction of market oriented varieties/breeds; market oriented crop, livestock and NRM husbandry practices; credit for innovative production technologies and new institutional arrangements.

IPMS is engaged in strengthening the capacity of educational institutions, public sector staff in new concepts and skills, empowering farmers, pastoralists and private sector partners and strengthening partnerships between the actors. In this process, IPMS is also trying out alternative approaches to capacity development by using mixed groups during trainings or exposure visits (Public sector staff+ farmers, husband and wife etc); delivering need-based and practical, hands on training, engaging local resource persons (e.g., skilled women farmer for onion planting in Alamata, tannery staff in Atsbi) etc.

Study tours, field days, Technology exhibitions, Knowledge management centers at Woreda level, FTC knowledge centers, Knowledge groups, Use of various media (radio, leaflets, poster) and development of NAIRC and portal at the federal level with linkages

to Woreda and FTC are some means being used for promoting knowledge management.

The Advisory and Learning Committees at national (NALC), regional (RALC) and woreda (WALC) levels; commodity platforms at woredas level have been designed as structures which would facilitate learning from the IPMS experience and internalizing the lessons and help mainstream them in government strategies as applicable.

IPMS is focusing and placing emphasis on building the capacity of various actors including farmers, public and private sector to enhance the innovation, capabilities and service delivery systems for enabling scaling up and out, which is complementing the efforts of EARS.

After the presentations on both the existing mainstream system for service delivery and the innovative experiments with new approaches, the group took stock of the challenges which remain to foster rural service delivery.

3 Key challenges in service delivery for innovation and impact in Ethiopia

Based on an understanding of the current systems and its shortcomings and the options that might be available related to agricultural service delivery to enhance innovation and impact, the key challenges were distilled into 9 categories. They are summarised as follows:

1. **How to develop and make available appropriate technologies for different contexts:** Even though the research has generated many technologies in the past years and the MoARD tried to import technologies available from other countries, it appears that technologies are still not available for many different eco-systems like the pastoral systems, there is still need to focus on technology development in addition to the challenge of technology dissemination. It is also obvious that livestock related issues have not been well-addressed both by the research and extension systems. Many times the solutions provided only consider the technical domain and ignore the institutional aspects, making them ineffective. It is important to balance strategic research, technology borrowing/buying and scaling up/out.
2. **How to implement extension building on farmers knowledge , resources and dynamics:** The Extension service should be dynamic and flexible to be able to contribute to the agricultural transformation in Ethiopia. The current system is monolithic, state-driven and supply driven rather than responsive to farmers demand and market demands. To be effective a pluralistic extension system is required where different service providers can contribute with their capacities. Farmers indigenous knowledge, community resources and the ability of farmers to be experimenters in their own right are not taken into consideration as huge potential to be unleashed. Farmer to farmer linkage and role in technology adoption and dissemination as well as the linkage of actors and cross-cutting issues gender, HIV/AIDS and environment are not built into the extension system and thus the potential is not exploited. It needs to shed the “control” syndrome and learn to provide “options” and space to allow the farmers to make informed decisions/choices.
3. **How to implement “market development”:** It is important to understand what is meant by market orientation and distinguish it from selling surplus. Economic incentives through market are important for technology adoption. The key issues to be addressed here include design and provision of marketing extension, market intelligence and effective feedback; linking farmers with markets; identify source of credit and facilitate access; improvement of input supply and credit facilities and making such arrangements sustainable.
4. **How to identify and develop the demand for services by farmers as driver for extension and research:** Making the Extension services effective will require them to transform from being supply driven systems to demand-led and participatory systems in their true spirit. Both research and extension should be based on priority problems of communities as expressed by them. This needs

empowerment of communities and capacity building to help them critically analyse their and articulate their needs based on their capacities.

5. **How to transform institutions towards performance, learning and coherence:** A major weakness in the system is the weak of commitment at institutional and individual levels. One of the manifestations is the very high individual staff turnover and frequent restructuring that is undertaken by the system. The system is mainly top down, quota-based with hardly any room for innovation, flexibility and adaptability. Initiatives undertaken are often large-scale with little conceptual-based pilot testing for learning and ensuring the approaches work before they are taken at large scale. For an effective and creative system which learns and improves continuously towards impact, however, institutional stability and coherence to maintain institutional memory is extremely essential.
6. **How to develop committed and competent professionals for innovation and impact:** Weak professional commitment and slow attitudinal change has been a major challenge facing the service delivery and innovation systems in Ethiopia. To enhance the professionalism of the service it is of paramount importance to develop a solution-oriented mind-set and entrepreneurship at all levels of researchers and extension agents to create impact and improve the system from their own level rather than blaming leadership. This performance enhancement and increasing of accountability towards their clients is a centre-point for any transformation of the service delivery system.
7. **How to design and implement coherent policies for innovation and impact:** There is an urgent need for well articulated appropriate policy supported with resources (operational funds at the grass root level are a major bottle neck for implementation of any policy/strategy) for implementation to make service delivery system effective. This requires first and foremost a shared/common vision and goal among the various actors playing a role in agricultural development – which needs to be developed and nurtured as a base for policy development processes.
8. **How to develop new approaches for innovation and impact and integrate them in existing structures:** A critical appraisal of new approaches and integrating the appropriate options into the existing system is urgently required. Presently many new ideas are tested outside the system and do not find their way into the mainstream. It is important to create space for testing new ideas, including alternative ways of capacity building, input supply system and, utilising local resource and indigenous knowledge. Efficient use of FTCs, which would be the fulcrum for future extension activities, has to be considered carefully. It is time to move away from undiluted focus on technologies to focus on people, process and approaches including building systems with built-in sustainable and efficient M&E systems to support impact assessment.
9. **How to reach a truly integrated and co-ordinated way of service delivery in a pluralistic setting:** The current system is largely government focused with rules and regulations which make it hard to accommodate private sector and others as partners in the development process. Integration/co-ordination and the mutual understanding among different actors is insufficient to create an innovation system. The mandates of the different players are often overlapping

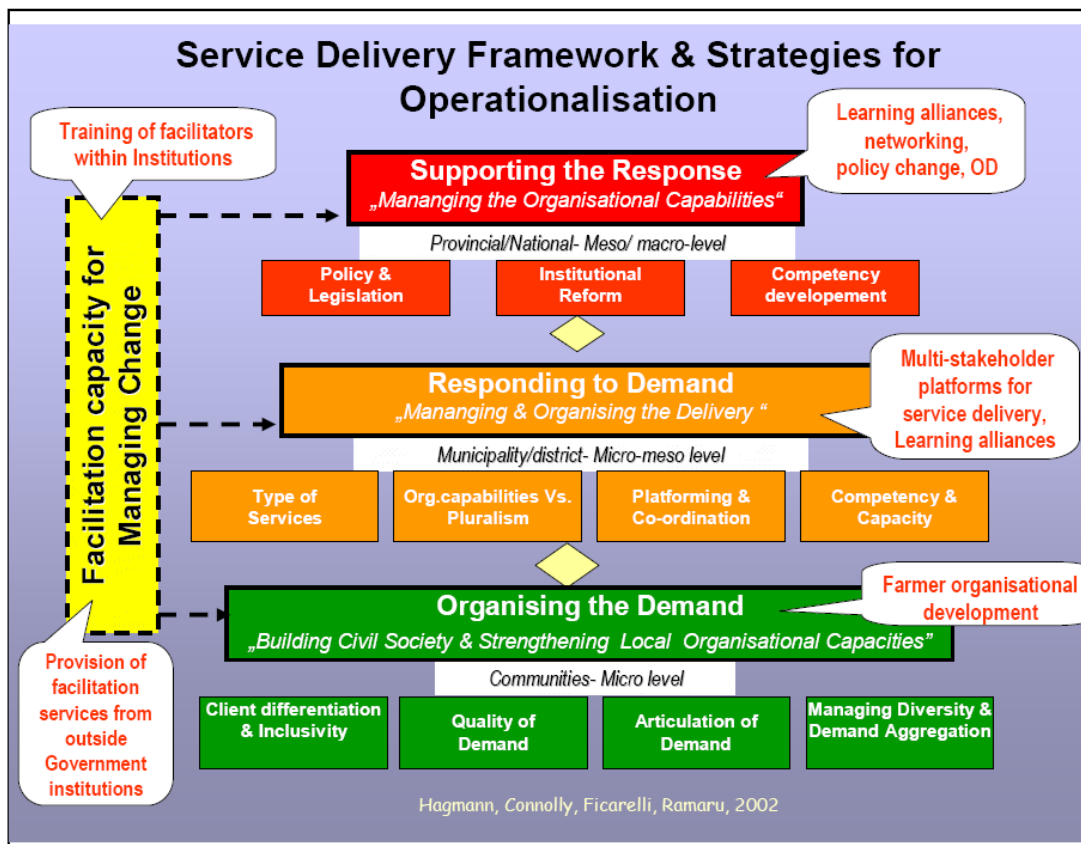
resulting in unclear roles and responsibilities and the resulting 'blame game' for having little impact. Even though the research system has provided good examples for scaling out technologies to create impact, it is not clear how much the extension system/ MoARD/BoARD have appreciated and internalized these approaches and lessons and will take them further. Strengthening the Research-Extension Advisory Council (REAC) would be one option, but ultimately any coordination mechanisms alone will not create a true innovation system. An integrated mode of working together in one process towards impact is more likely to achieve the goal. It is also important to differentiate extension from other agricultural services, as each requires a separate strategy, particularly when it comes to the involvement of the private sector. Extension should take on the new role of being a facilitator and a knowledge broker and realise that it is one among the multiple actors in the broader system. Institutionalizing pluralism in service delivery and an institutional strategy to foster development of private sector is crucial. Currently, there are few incentives for knowledge sharing among people and institutions – something which needs to be nurtured as a culture at all levels.

The nine key challenges embrace the dimensions of change required to make the Ethiopian agricultural service delivery system more effective, efficient and relevant to produce the desired impacts. The next step is to look at possible strategies to address these challenges. Many solutions are in the system but need to be brought out and further developed and mainstreamed.

4 Towards strategies for alternative modes of service delivery systems addressing the challenges

4.1 A framework for service delivery

A generic framework for service delivery (developed by Hagmann et. al. 2002), was used to visualise various levels one is dealing with in the development of a system. This led to identification of issues to focus on while developing strategies.



The essence of the framework are the three interwoven levels of ‘organising demand’, ‘responding to demand’ (the responsive service provision) and the ‘supporting the response’ (policies and legislation) which need to play together. Without a well organised demand side, for example, service delivery will remain ineffective and dependent on the good will of service providers. Without service providers who are capable of responding effectively to the demand aired by stakeholders, the system will be ineffective too. Therefore, for improvements of service delivery one needs to analyse the different levels and develop them simultaneously. The capacity to manage change within these levels and across is central in service delivery reform.

For the Ethiopian situation, this framework revealed that the demand side is particularly weak. Farmers and communities are not well organised to be able to analyse their real needs and demands and validate it in view of their own resources. Nor are communities

organised to experiment on their own and find their own solutions to problems. On the service provision side, the challenges have shown that the pluralism aspect of it is weak and that service providers are not working together for their mutual effectiveness. They are also not providing the space for communities to determine their own destination and demand. The service providers set their own targets and technologies as solutions. On the policy side, it was analysed that policies are not converging towards a common and shared agenda for a coherent agricultural / rural development, nor are policy development processes linked to the different levels.

The framework helped to structure the analysis of possible interventions to improve the system for innovation and impact.

4.2 Strategic intervention areas to address the challenges

In response to the challenges described above, the workshop identified 5 major strategic intervention areas towards alternative modes of service delivery.

1. Development of effective approaches to R&E with farmers
2. Development of the demand side of service delivery
3. Development of competent + performing learning organizations
4. Development of supportive and enabling policies for innovation and impact
5. Development of institutional arrangements for integrated service delivery and impact

These intervention areas were further processed in terms of possible strategies to pursue towards improving the effectiveness of the service delivery system. They were grouped into 4 clusters and are described here:

4.2.1 Development of effective approaches to R&E with farmers

In the area of Research, the major challenge is the low integration and coordination of Research-Extension-Farmer-Credit-Input supply linkages. A transformed research system would have different and broader mindsets favouring recognition and participation of all relevant actors.

Possible strategies to achieve this were identified as:

- Investment in capacity building,
- Creation of platforms involving researchers, farmers, policy makers, extension, input/credit supply,
- Establishment of an impact-based performance appraisal system in place with continuous monitoring and evaluation.
- Enhance institutional commitment and a strategic, long term vision

For the Extension sub-system, the major challenge is the limited competence of extension agents. Communication skills, practical exposure during their training and resources availability for demonstrations need to be enhanced so that the extension

agents can function ably. Extension should not be a specialised task, but rather every one needs to be equipped to take on extension function. On account of their proximity to grassroots level, staff of MoARD is often used in a political way, making extension services less focused and confused in the roles.

A reformed extension system should comprise of agents who understand the research system and its functions and outputs and also the socio-economic condition of the farmers and then combine them in order to be able to communicate effectively.

Capacity building, judicious use of FTCs as live schools and a result-oriented performance appraisal system should help achieve these goals. Institutional and professional commitments, adequate respect for and recognition of the profession and professionals, provision of adequate resources would determine whether such a transformation becomes a reality or not.

4.2.2 Development of the demand side of service delivery including Markets

There is a vacuum of market services in Ethiopia. Though structures exist at regional, zonal and Woreda levels, they are functioning suboptimally due to limited manpower and budget. Structures vary across the regions (Agricultural marketing agency in the south has a structure up to Woreda level). Market information is being collected (Woreda to regional level), but the assessment of market potentials is not reliable. The information is often not shared with the end users as there is no feed back mechanism for such an information sharing. Overall, the extension service is generally not yet competent to deal with market orientation in an effective way – neither in the training in TVETs nor in practice. Local / farmers organizations on the other hand, are weak in marketing skills, particularly in assessing the market demand when they produce and can not sell. Credit services mainly focus on production rather than on the market functions and as there is very limited involvement of private sector on Input/Output marketing, the marketing side of market orientation needs to be fostered strongly.

The vision would be to have capacitated staff in place to address marketing issues at all levels (from Federal ministry down to the farmer), have available legal advisory support to enforce contractual agreements, adapt Extension service towards market orientation, build Business development services for farmers organizations and orient credit to marketing elements as well. This should ultimately result in an agricultural system which is well-integrated with the market.

To achieve this substantial capacity building at all levels in the Agricultural sector (visioning, creating forwards and backward linkages etc.) is required, with a strong focus on extension service and Micro financing credit institutions. Farmer organization becomes a very critical element given the fact that we are dealing with millions of smallholders who need to be engaged in the process. Improving productivity is also important to achieve any substantial market orientation in various contexts and for various commodities in the country.

The determination, commitment and responsibility of experts and decision makers to bring change; a leadership that facilitates innovation, flexibility and adaptation; a strong business development service and; attitude of the farmers would be the critical success factors.

4.2.3 Development of competent + performing learning organizations and policies for innovation and impact

The major issues underlying the challenge of institutional transformation are weak reward systems for performance and learning, limited sense of ownership and accountability, insufficient transparency in the institutional management in relation to reward and promotion, involvement of extension workers in non-extension tasks and, institutional instability. In the current reward system, impact orientation or learning orientation is little appreciated.

The vision would be to have an appropriate reward system in place, highly motivated staff with sense of ownership, transparent and accountable management system, extension staff focused on extension service delivery and, institutional stability.

To realize this vision, some strategies that have to be put in place are

- development of a system based on performance and learning - moving away from output to outcome oriented performance measurement might contribute positively towards this
- introduction of participatory planning and learning processes and
- introduction of transparent and accountable system and testing it. Commitment of all Stakeholders and having adequate freedom to experiment with new way of doing things would determine, whether this can take off.

The major challenge related to policy is the limited awareness and limited contribution towards policy formulation and implementation at the lower levels of the system. We need to have staff which is well informed on policy and contributing to policy formulation and implementation, based on their experiences on the ground.

The major strategies to attain this would be to

- design a program for policy orientation,
- test programs for participatory policy formulation based on learning and evidence,
- employ cycles of implementation, testing and learning. Time, resources and political will be crucial in making this happen.

4.2.4 Development of institutional arrangements for integrated service delivery and impact

The major issues underlying this challenge are a low level of integration among actors and lack of strategy to involve private sector. What is envisaged to be achieved is an integrated, coordinated and effective service delivery system.

Some promising strategies and alternatives that could contribute to this are:

- developing clear modality among partners including institutionalizing pluralism, identifying roles and mandates of partners, changing attitude and commitment at all levels and
- creating an enabling environment for private sector to take part in service delivery.

Some alternatives would be to strengthen the existing Research Extension Advisory Council (REAC), with full time staff and making the national secretariat office accountable to the council.

Change in attitudes, even if gradual, and development of shared responsibility, accountability and willingness among partners would be critical for the success of these strategies.

The possible strategies were numerous and it was necessary to prioritise thrusts around which new ideas can be developed and tested in the service delivery system.

5 Thrust areas for trying out alternative methods of service delivery

The strategic intervention areas with possible strategies arising from the group discussion and experiences shared were used to identify the areas which need to be developed through testing to arrive at approaches/methods. The six broad priority thrusts which have a high likelihood to make an impact are shown in the table below:

Challenges	Strategic intervention areas to address challenges	Priority thrust to experiment with in the near future
How to develop and make available appropriate technologies for different contexts	Development of effective approaches to R&E with farmers	
How to implement extension building on farmers knowledge resources and dynamics		
How to implement “market development”	Development of the demand side of service delivery	1. Demand-led extension
How to identify and develop the demand for services by farmers as driver for extension and research		
How to transform institutions towards performance, learning and coherence	Development of competent, performing and innovating learning organizations as service providers	3. Transformation of organisational systems, culture and processes
How to develop committed and competent professionals for innovation and impact?		
How to develop new approaches for innovation and impact and integrate them in existing structures?		
How to design and implement coherent policies for innovation and impact?	Development of supportive and enabling policies for innovation and impact	
How to reach a truly integrated and co-ordinated way of service delivery in a pluralistic setting	Development of institutional arrangements for integrated service delivery and impact	6. Mechanisms for networking, sharing and learning

The issues that comprised the other strategic intervention areas were not seen as priorities to develop at the moment.

The thrusts entail a range of aspects which were further processed and a first outline of how these thrusts would be tested was developed.

5.1 Demand-led extension:

An interesting approach would be to attempt development of a self-contained extension system at community level based on a farmer-based innovative system of service delivery. This could be an organically developed community-based approach. We can experiment with different ways of capacitating farmers to better articulate the demand side. Extension should be trained to achieve this. The extension service should be groomed to recognise and utilise indigenous knowledge, design participatory extension strategies based on community resource base. The promising approaches should be assessed.

Demand-led extension	
<i>How should we try/develop the approaches</i>	-Test in 2 woredas/region with 1 representative PA/woredas -Organise participatory platform for articulating demand - Identify problems and possible interventions by the community through dialogue
<i>Who owns the testing</i>	-relevant stakeholders -GO, NGO, CBO, individuals, private businesses
<i>Who drives the testing process and integrates</i>	MoARD, OoARD at all levels Other facilitators
<i>What mechanisms are required to create a supportive system</i>	implementing committee/group with representatives from federal to community level
<i>How can external projects (like IPMS) support</i>	-capacity building -facilitation of platforms/dialogue -access to input-output markets -credit provision

5.2 Value addition + market linkage creation:

Value addition for various commodities based on an assessment of the market needs to be tried out. The extension service should be capacitated to play the role of market linkage facilitator and become market /demand responsive, based on an assessment of local resources and potential.

Conducting some market research is very essential, especially considering the broader issues in terms of market system performance.

Value addition + market linkage creation	
<i>How should we try/develop the approaches</i>	-value chain analysis (incl opportunities and constraints) -stakeholder analysis (key actor identification) -platform (incl key farmers who provide signals to other farmers, research, extension, brokers, traders etc)
<i>Who owns the testing</i>	OoARD + woredas administration (incl small industry)
<i>Who drives the testing process and integrates</i>	RARIs/EIAR

<i>What mechanisms are required to create a supportive system</i>	-Integrated and agreed workplan (WALC, RALC) -participatory M&E for learning (RALC, WALC, farmers) -Flexible support service – inputs, microfinance
<i>How can external projects (like IPMS) support</i>	-capacity development -technical advice -Genetic material support -market information -market intelligence -technology demonstration/materials -learning and documentation -facilitation role and support -use local resources like safety net, food security

5.3 Transformation of organizational systems, culture, processes

Institutional based innovative systems of service delivery have to be developed in a participatory mode through dialogue within the organisational systems. A transparent reward system has to be put in place and tried out for the outcomes it produces. Efforts to enhance commitment of DAs through an appropriate incentive system, along with changes in TVET curriculum to suit the current needs and demands should be pilot tested.

Transformation of organizational systems, culture and processes	
<i>How should we try/develop the approaches</i>	-introduce merit-based reward system -participatory evaluation mechanisms -encourage professional ethics and discipline -avoid role confusion -clear job description
<i>Who owns the testing</i>	-service providers and receivers
<i>Who drives the testing process and integrates</i>	-responsible public sector/facilitator
<i>What mechanisms are required to create a supportive system</i>	-encourage collaboration with organizations with similar mandates/roles -NGOs/public service, CBOs
<i>How can external projects (like IPMS) support</i>	-capacity building

5.4 Commodity based innovation systems development + learning

It would be important to learn more from EARS pilots and take those further in scale and scope. The creation of commodity platforms across levels and organisations could be a springboard to make these approaches work at large scale. This should lead to some lessons from which principles can be extracted to design systems for scaling out.

Commodity based innovation systems development	
<i>How should we try/develop the approaches</i>	-value chain analysis (incl opportunities and constraints) -stakeholder analysis (key actor identification) -platform (incl key farmers who provide signals to other farmers,

	research, extension, brokers, traders etc)
<i>Who owns the testing</i>	OoARD + woredas administration (incl small industry)
<i>Who drives the testing process and integrates</i>	RARIs/EIAR
<i>What mechanisms are required to create a supportive system</i>	-Integrated and agreed workplan (WALC, RALC) -participatory M&E for learning (RALC, WALC, farmers) -Flexible support service – inputs, microfinance
<i>How can external projects (like IPMS) support</i>	-capacity development -technical advice -Genetic material support -market information -market intelligence -technology demonstration/materials -learning and documentation -facilitation role and support -use local resources like safety net, food security

5.5 Alternate input supply systems:

The experimentation with alternative input supply systems can cover the credit service, seed and input supply. The credit services should design systems that encourage more follow up, more emphasis on targeting, providing wider options and, risk insurance for credit.

Private seed supply service could be encouraged, with basic seed supplied by ESE. Individual farmers, primary co-operatives, Unions could play a role in this. Farmer to farmer exchange can be promoted, concurrently building capacity of farmers, providing incentives to farmers. The government agencies can play a role in regulation for quality control, promotion, organising events like seed fairs for promotion etc. Alternatively, OoARD can sub-contract seed production and supply to private sector/farmers/CBOs.

Alternate input supply systems	
<i>How should we try/develop the approaches</i>	-assess/scan on-going innovative systems at all levels -design alternative location-specific system (willing participants) -implement, monitor, learn, evaluate at all levels
<i>Who owns the testing</i>	MoARD at all levels and farmers
<i>Who drives the testing process and integrates</i>	EIAR
<i>What mechanisms are required to create a supportive system</i>	Multi-stakeholder platforms at all levels
<i>How can external projects (like IPMS) support</i>	-identify gaps in on-going activities and design for filling gaps -share experiences -build local capacity

5.6 Mechanisms for networking, sharing and learning

Various mechanisms for sharing success stories from different regions to cross fertilise ideas and draw principles have to be tried out. Extension should be an active player in this process to become an observant/learning institution.

Mechanisms for networking, sharing and learning	
<i>How should we try/develop the approaches</i>	-identify type of service -map key partners -platform initiation/tools development
<i>Who owns the testing</i>	All platform actors
<i>Who drives the testing process and integrates</i>	-platform assigns a body with core competence in the service area in focus
<i>What mechanisms are required to create a supportive system</i>	-process documentation -dissemination of lessons learned -exploit existing/new media or fora
<i>How can external projects (like IPMS) support</i>	-gap identification -capacity enhancement

All these thrusts for experimenting on new ways in service delivery need to be fully developed and spelt out at a later stage when the commitment to engage in them is clarified. The learning process should be designed in a way that all the stakeholders can become co-learners and the system and the institutions actively observe and evaluate the 'pilots' in terms of integration of them into their own system.

6 Next steps

Beyond the steps identified as above, the actions shown in table 2 will be undertaken as a means of building on the work initiated in the workshop.

Table 2. Workshop follow-up actions

What	When	Who
Discuss framework with targeted partners – reach agreement		RALC, WALC, NALC
Design the actions together with partners		
Summarise the workshop deliberations and share with local actors	Next week	IPMS
Share summary with woredas – WALC chairs + members		WALC chair
Bring the workshop deliberations to the knowledge of RALC		WALC chair, IPMS
Share workshop deliberations and outcomes in MoARD + EIAR larger groups		Heads + IPMS