

Building Networks for Market Access

Lessons Learned from

**The Rural Knowledge Network (RKN) Pilot Project
for East Africa (Uganda, Kenya and Tanzania)**



FAO/Government Cooperative Programme





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Prepared by Paul Nyende
under the overall guidance of the

**Research and Extension Branch
Office of Knowledge Exchange, Research and Extension**

Food and Agriculture Organization of the United Nations

Rome, 2011



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ISBN 978-92-5-106789-5

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Photo credit: P. Nyende (Cover, figure 4, 6 and 9), K. Nichterlein (figure 5, 8 and 13)

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List of abbreviations

ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AWF	African Wildlife Foundation
B2B	Business-to-business
CoB	Cash-on-the-Bag
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer field school
IBM	Information Board Manager
ICT	Information and Communication Technologies
IFAD	International Fund for Agricultural Development
LLL	Linking Local Learners
LTU	Lead Technical Unit
MAC	Market Access Company
MIM	Market Information Manager
NAADS	National Agricultural Advisory Services
NGO	Non-governmental organization
NMC	National Marketing (Access) Company
PPP	Public-private partnerships
RAVI	Rural African Ventures Investment
RENTCO	Rural Entrepreneurs Network Tanzania
RKN	Rural Knowledge Network
RM	Regional (Transaction Security) Manager
SMS	Short Message Service
TSS	Transaction security services



Overview

The original aim of the Rural Knowledge Network (RKN) was to make more information available, specifically about markets, to smallholder farmers. The core idea was to provide information to farmers and traders about current market prices in different markets around the country. This was done by building a network of entrepreneurs who collected price information regularly and sent it to a central collecting Internet platform facility. This facility then sent out the consolidated price information for all of the different markets by mobile phone Short Message Service (SMS) to many of the same people, who posted it on information boards in local markets.

This was implemented through a business model that used a rapid and cost-effective mobile phone SMS communication system between many entrepreneurs located in widely dispersed rural areas. The business model comprises clients, network members and support service providers. Clients are all the players in the value chain, particularly small farmers and larger-scale buyers. Network members are independent rural entrepreneurs at national, regional and village levels, each level operating as an independent business in its own right.

The business proposition was that spreading agricultural market intelligence was not just about price information and marketing opportunities, but also about products that need to attract a range of customers that are widely spread out in the rural areas. This pro-poor market access business communication network and communication model has huge potential, but it is also a challenge because the business model is totally new to the East Africa region.

Thus, in an effort to set up and nurture these commercial market access service networks, the RKN initiative tried to address key questions faced by the network members:

- 
- What are the challenges of the market access network members at all the three levels of operation and clients?
 - What are the ways through which the network members can earn their incomes?
 - What key attributes, skills and characteristics should the network members have?
 - Should network members be inside or outside the market chain?
 - How will the entrepreneurs/network members start up and establish their businesses?

By the end of the project in March 2010, the RKN project had given birth to a network comprising three National Marketing Companies (NMCs), i.e. AgriNet Uganda Ltd, in Uganda, AgriTrade Co. Ltd, in Kenya, and Rural Entrepreneurs Network Tanzania (RENTCO) in Tanzania. Each company operates a network of rural entrepreneurs covering several districts within a region. The network evolved into a three-tier structure to provide market access services on a commercial basis in each country with the National Marketing Company (NMC) at the national level, the Regional Managers (RMs) and Market Access Companies (MACs) in the regions and the Information Board Managers (IBMs) at the village level.

The key achievements of the RKN initiative were:

- establishment of a commercial relationship between business operators;
- invention of a way to operate a market intelligence service commercially;
- demonstration of the commercial viability of IBM business opportunity;
- testing of a knowledge management system for commercial operations in real life practice;
- development and testing of the operations of Transaction Security Services (TSS);
- overcoming of trade barriers with Cash-on-the-Bag (CoB) financing.



The RKN project worked in a very flexible and fast-changing environment, thanks to the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD) for allowing room for this flexibility without which the “action research”, changes in the business model, project management structure and lessons generated would not have been achieved. The managers of RKN were able to make flexible and robust responses to changing situations and lessons ploughed back into the learning. Due to the demonstrated benefits and impact the RKN project has shown to small-scale farmers and local traders, some new projects and partnerships have emerged such as with the National Agricultural Advisory Services (NAADS) in Uganda, the African Wildlife Foundation (AWF) in Kenya and Zain, a telecommunications company in Tanzania.

Supporting small-scale farmers to access markets is highly recommended in East Africa and it should be a priority in all agricultural development programmes in the region. The RKN momentum should be continued by strengthening and expanding the commercial market access service network set up under the RKN project. Further efforts should be made to address the gaps and needs identified during project implementation. Specifically, a mechanism and access to funds for providing short-term trade credit to facilitate small farmer trade should be established. Current trials providing credit to transaction secure deals should be rolled out so that farmers can be paid Cash-on-the-Bag/Cash-on-the-Horn. The rural market access business networks established under the project should also be expanded to reach commercially viable scales through the ongoing IFAD, FAO and other development programmes in the region.



Acknowledgements

The Rural Knowledge Network (RKN) Pilot Project for East Africa (GCP/RAF/401/IFA) was implemented by the Food and Agriculture Organization of the United Nations (FAO). It was funded by the International Fund for Agricultural Development (IFAD) and by FAO through in-kind contributions. Our thanks go to Agridea and Rural African Ventures Investment (RAVI) for launching and supporting the new business model, and to IFAD and FAO for supporting and nurturing the business model thus enabling market access. This was the first project which established private enterprises and helped them on their way to becoming self-sufficient and functioning businesses in a fast-changing environment. Through this innovative and flexible approach, invaluable lessons were learned which otherwise would not have been achieved. The managers of RKN in Uganda, Tanzania and Kenya were able to meet the challenges of the situation and constantly adapted the working modalities of the enterprises on a “learning-by-doing” basis.

FAO facilitated the development of the three national market access networks established under AgriTrade in Kenya, Rural Entrepreneurs Network Tanzania (RENTCO) in Tanzania and AgriNet in Uganda. These commercial networks were created to provide a regular service for the smallholder farmers to gain easy market access for their produce.

The network within each country was driven by a strong team of Regional (Transaction Security) Managers, backed by commercial business entities (Market Access Companies and Information Board Managers) at district and village levels respectively. The dedicated work of these strong country teams of rural entrepreneurs ensured the testing of the business concepts and ideas and was highly appreciated. The technical support and mentoring of the network members was done by Agridea and RAVI, with timely support from Traidcraft. Special thanks go to the business community and network members for delivering the goods and services using this unique approach.



1. Introduction

1.1 Background and rationale

Agricultural markets in the East Africa region are characterized by a myriad of constraints, among them being very long chains of transaction between the farmer and the consumer; poor access to reliable and timely market information; small volumes of products of highly varied quality offered by individual smallholder farmers; and poorly structured and inefficient markets. This has resulted in wastage of produce and low prices to smallholder farmers. Lack of timely and relevant market information to all market actors results in distrust and therefore sometimes dishonesty. Under such circumstances dubious intermediary actors have flourished and further damaged the trust relationships required for efficient and profitable marketing along the whole value chain. The RKN initiative intended to address some of these gaps in the region.

As the name suggests, the original aim of the RKN was to make more information available, specifically about markets, to smallholder farmers. The core idea was to provide information to farmers and traders about current market prices in different markets around the country. This was done by building a network of entrepreneurs who regularly collected the price information and sent it to a central collecting Internet platform facility. This facility then sent out the consolidated price information for all of the different markets by SMS to many of the same people, who posted it on information boards in local markets.

The business proposition was to build a market access business network that uses a rapid communications and market intelligence sharing system among its members and clients. The core business of the network was to collect and disseminate market intelligence and broker deals between buyers and sellers. The network members comprised entrepreneurs located in widely dispersed rural and urban areas for more efficient marketing between rural producers and urban consumers. The network was charged with the role of spreading intelligence to a wide range of clients, not

just about marketing opportunities, but also about products that need to attract rural customers. Such business communication networks have huge potential, but they are also a challenge because the business model is new to East Africa.

Thus, in an effort to set up and nurture commercial market access business networks to provide market access services to value chain actors, the RKN project tried to establish and nurture a market access network consisting of entrepreneurs, either as individuals or as small companies. The network developed into a three-tier structure in each country (Uganda, Kenya and Tanzania) consisting of front line service providers as Information Board Managers, Local/Regional Market Access Companies with Regional Managers and a National Marketing Company.

The key commercial services developed and offered by RKN were market intelligence and transaction security services (TSS). The unique selling proposition for these services offered by RKN members is that the members, on behalf of their clients and for a commission, take care of major problems associated with the buying and selling of farm produce. The market access network members make sure that the right quantity and quality of product is delivered at the right time in the right place for the right price to the buyer.

In order to remain commercial and viable, the network had to address key questions that their businesses faced:

- Who are the clients of the market access network and what are their marketing concerns?
- What are the ways in which market access network members can earn their income/money?
- What are the key characteristics of the various network members?
- Should the market access network members be inside or outside the market chain?
- How will the network start and be nurtured to reach commercial viability?

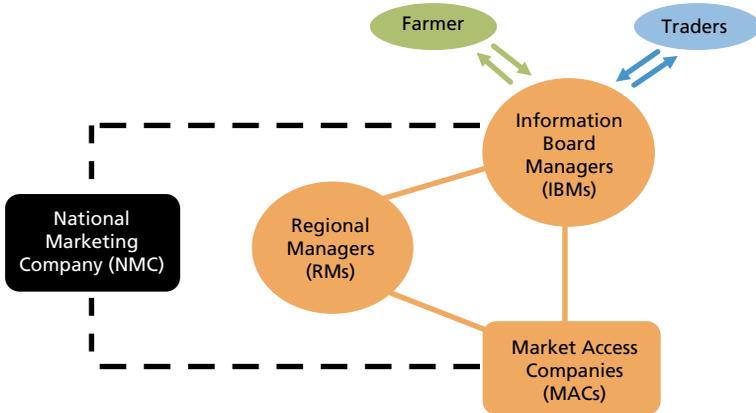


1.2 The pro-poor market access business model

The business comprises clients, network members who constitute the key players in the business and support service providers. Clients are all the value chain actors, particularly small farmers, agroprocessors, supermarkets, agro-input dealers and larger-scale buyers. Network members can either be individual independent rural entrepreneurs or small companies that are interested and willing to invest in providing market access services. The business model recognizes three levels of business operation that are required to act as a network and each operation is a business in its own right. The three business levels (Figure 1) are:

1. **Information Board Managers (IBMs)** – these individuals manage an information board business and are at the front line of the business with regular and direct contact with farmers and traders. They are dispersed in rural villages and market places where they are responsible for efficient movement of information and organizing transactions in the field.
2. **Market Access Companies (MACs)** – are individual entrepreneurs or small-scale companies at the district level that manage a local network of IBMs and organize transactions at their level. They ensure that the IBMs in their location access and share market intelligence, secure and coordinate local deals between farmers and traders, and provide technical backstopping and mentoring especially in financial management and business development services
3. **Regional Managers (RMs)** – are also individual entrepreneurs with relatively high business skills who organize the coordination of the district level network members (i.e. IBMs and MACs) for sourcing large volume deals for large buyers. They also mentor the MACs and IBMs in their network.

Figure 1. RKN market access network



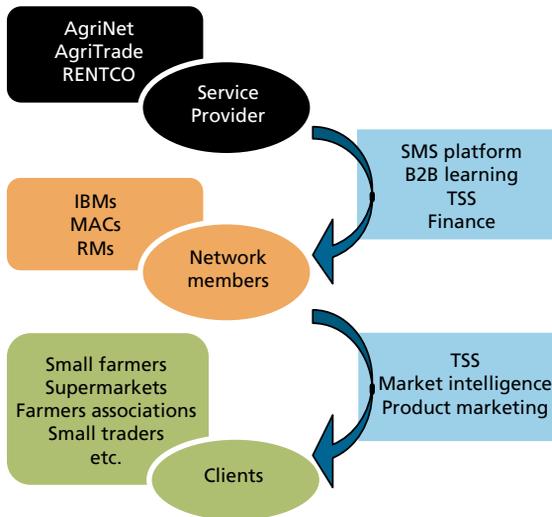
National Marketing Companies (NMCs) - These provide network members (i.e. IBMs, MACs and RMs) with the market intelligence SMS platform as well as the business-to-business (B2B) learning services that are critical for running an independent market access business. In essence, the NMCs are service providers who license all network members to share market intelligence and collaborate in trade with each other. Three service provider NMCs have been set up: AgriNet in Uganda, AgriTrade in Kenya, and the Rural Entrepreneur Network in Tanzania (RENTCO).

Network members offer services paid for by the clients in the form of commissions, SMS subscription fees or margins on sales. The following services or products are offered:

- market intelligence (SMS price bulletins, trade alerts, advertisements on information boards);
- product marketing opportunities (agro-inputs, processed flour, mobile money, water tanks, etc.);
- transaction security services (TSS) (commodity trade facilitation on commission basis).

Service providers in each country (AgriNet in Uganda, AgriTrade in Kenya, and Rural Entrepreneur Network in Tanzania, RENTCO) provide the tools that the network members need in order to offer their services to clients. The service providers also maintain the standard of the services through a licence agreement they have with all network members. To maintain their licence all network members are required to share market intelligence, report on their business performance, and collaborate in trade with each other.

Figure 2. Pro-poor market access business model



The tools provided to the network members by the service providers are:

- SMS platform for sharing market intelligence;
- business-to-business (B2B) learning platform for sharing new business opportunities;
- transaction security service (TSS) tracking platform;
- finance for short-term credit on registered transactions.

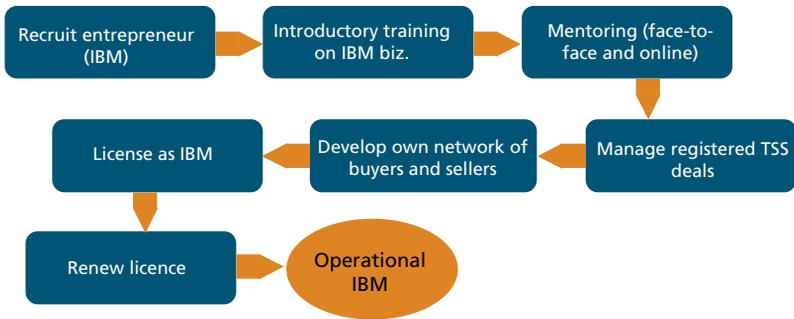
Reliable access to Information and Communication Technology (ICT) services is crucial to the operation of the market intelligence and brokerage businesses. Modern communication technologies, such as the mobile phone SMS, email and the Internet, have greatly increased the efficiency and cost-effectiveness of information exchange and hence helped cut through the prevalent distrust along marketing chains. This has helped clean up the inefficiency of marketing. The combination of improved efficiency and transparency along the chain has been demonstrated to result in marked increases in payments to small farmers for what they can market. The business model therefore ensures that poor people benefit from business, both as clients and as entrepreneurs. Small-scale farmers obtain better prices for their produce and better access to more lucrative markets.



2. Project approach

The design and implementation of the Rural Knowledge Network (RKN) Concept evolved and changed substantially during the course of project implementation. However, in a nutshell, the major thrust was on supporting the emergence, formation and operationalization of a rural business network of RMs, MACs and IBMs. The process involved identification, screening, selection, coaching, training, mentoring and licensing of small rural entrepreneurs (MACs and IBMs) by their NMCs. The flow chart in Figure 3 illustrates the critical steps needed to become an IBM.

Figure 3. Steps to becoming an IBM network member



The project used an action learning approach. Through peer-to-peer or business-to-business (B2B) learning over the Linking Local Learners (LLL) platform (www.linkinglearners.net) the RKN brought together enterprising individuals who generated various business lessons and ideas that were implemented and documented through an action learning process into best business practices, hence putting together a business model.

In the third and final year (2009) of project implementation, the network members at local, district and national levels focused on commercialization of market access services to small farmers and other value chain actors. The RKN thus moved towards brokering deals as a core income generating activity, with the information boards driving the business and deals brokerage operation. Agridea was contracted to provide technical assistance to the companies implementing the project: AgriNet in Uganda, AgriTrade in Kenya, and Marketing Partner¹ in Tanzania. Technical assistance was given in supporting and mentoring the emerging commercial networks so that they could grow and sustain their market access services.

The market access services provided by the networks included market intelligence as well as assistance with dealmaking and the selling of manufactured products. While these services are now being offered commercially, their scale of operation is still very small. The network coverage is not large enough and business turnover is not high enough. Individual network members are making small profits but not enough to pay for the national technical support services they depend on. Collectively, network members cannot yet make enough money to cover their support service costs. These costs are inflated at present because of the large amount of capacity building and R&D required to set up the network. Nevertheless, business plans indicate commercial viability depends on a larger network doing more transactions.

In terms of project structure and management, project activities were coordinated by a Regional Project Coordinator and National Coordinators working under the supervision of the FAO country representatives and FAO's Lead Technical Unit (LTU) for project technical matters at headquarters. This implementation and management structure changed in the second year of the

¹ While Marketing Partner was the RKN project implementing company in Tanzania, Rural Entrepreneur Network in Tanzania (RENTCO), was established to take over the function temporarily filled by Marketing Partner when the project finished



project to direct contracting of the NMCs by FAO to establish and develop market access networks in their respective countries. This change came about when the Project Steering Committee meeting held in Rome (20 February 2008) reviewed the project implementation plan and agreed that the National Coordinators and the backup companies they established at the national level, as well as the mentors, the MACs at district level and IBMs at local level, needed to learn how to work in a commercial manner in order to be accepted by the private sector clients in the market chain and not to be seen as a public service provided for free. This project management structure was maintained until the end of the project in March 2010.

3. Main achievements

The main achievements of the RKN initiative over the three years of project implementation period were:

3.1 Establishment of a commercial relationship between business operators

The project established and nurtured a growing network of market intermediary companies who provide market intelligence and market access services for small farmers in Kenya, Uganda and Tanzania. In each country a national marketing company was set up and each one operates a network of rural entrepreneurs covering several districts within a region. In Kenya, 16 MACs and 22 IBMs were established and licensed by the end of the RKN project (March 2010); in Uganda, 12 MACs and 18 IBMs, were established and licensed, while in Tanzania only five MACs and 12 IBMs are operational. Commercial relationships have developed between network members and those RMs of the NMCs who have set up their own regional network businesses. When the project ended, the RMs ceased being NMC staff because NMCs had no funds to keep a large number of staff. Instead, RMs have now developed an agent relationship with the NMC and are in the process of forming regional business network companies. In Kenya and Uganda the owners of these regional business networks are already developing commercial relationships with their NMCs to obtain the needed support services. The commercial relationship between NMCs and the network members is effected through a licence agreement. The agreement spells out the services to be supplied and the payments to be made for them. Payments include a service fee, a cut on the commission of TSS registered deals, and a margin on each SMS subscription sold. To date, every member of the network runs an independent market access service business.



3.2 Invention of a way to operate a market intelligence service commercially

This was a major breakthrough whereby the network members (especially the IBMs) have consistently shown that the gathering and dissemination of relevant local market intelligence can operate on a commercially viable basis. They try to keep their costs for gathering and disseminating market intelligence low and instead increase their income from commissions on deals and advertising fees. This has made it possible for network members to profit from sharing market intelligence. All the network members need to run an IBM business are a mobile phone and cash to pay for sending an SMS regularly. Each morning they collect local market prices of commodities that are of interest to their clients and text them by SMS to their NMC (service provider). The service provider then sends them the prices of the markets and commodities of interest to them. Putting this information up on their information boards everyday brings clients to them. Clients ask to advertise on their boards and for assistance in finding buyers for their products. The charges IBMs put on these services easily cover their costs and provide a profit margin. IBMs confirm that the profits they are making are sufficient for them to continue providing local price information to the national service provider. These services sell well to farmers and traders. It has been demonstrated that a combination of main and local market prices with trade alerts (offers to buy and/or sell) is the information local clients (farmers and local traders) want. Moreover, small farmers appreciate the chance to advertise what they have to sell in the search for better prices.

3.3 Demonstration of the commercial viability of IBM business opportunity

In the last year of project implementation, more and more IBMs reported regular incomes from advertising and commission on deals. More importantly, none of the successful IBMs has requested or received funding from the project to either launch or run their business operations. Rather, operating costs have

been met out of incomes either from the information board or from their other businesses. Even less successful IBMs insist on continuing with their information board as they believe it will work for them eventually. Across the network it is now clear how the information boards business can be a profitable business for a rural entrepreneur.

Figure 4. Sarah Mayanja, RM Uganda, training IBMs on mobile phone market intelligence SMS service



Successful IBMs make good profits from the income streams this business opportunity provides. They sell advertising space on their information boards for those who wish to buy or sell a diverse range of products. IBMs take a small commission every time they assist sellers find a buyer or buyers find a seller. More recently, IBMs have been able to charge a monthly subscription fee for arranging for their clients to receive daily market price bulletins or trade alerts on their mobile phones as SMS text messages. While each transaction is small so is the cost. IBMs do not have to pay for their information boards as these are provided for free from the national service provider (in Kenya and Uganda).

They do not have to pay for the market prices and trade alerts they receive each morning from the service provider. Market intelligence is shared among network members for free. However, they do not receive this information unless they share their own local market prices with the national service provider; so they pay for market intelligence by providing theirs for free. The service provider arranges for the exchange of market intelligence among all network members. They also provide: B2B learning services, TSS deals and product marketing. For these services network members will pay a nominal monthly licence or service fee once their businesses reach scale, that is, each network member earning at least USD 50 from SMS subscription sales and USD 1 000 as commission from deals per annum.

3.4 Testing of a knowledge management system for commercial operations

The Linking Local Learners (LLL) online platform (www.linkinglearners.net) provided network members with a tool to generate and manage knowledge about their business operations. Network members generated knowledge through peer-to-peer exchanges assisted by mentors, e.g. project consultants and the RMs. Mentoring peer exchange was a critical support service provided by the national service provider. Mentors encouraged peer exchanges between network members through workshops, face-to-face visits to their businesses and facilitating online learning exchanges. Knowledge generation focused on inventing and enhancing business operations and business opportunities. The knowledge generated through peer exchanges was captured in the form of operational procedures, stories of experiences, and briefs on lessons learned. These documents were then made available for use to network members on the LLL platform. It was not only network members who participated in the online exchanges; network members invited clients onto the platform, especially from among the farmer groups and buyers as well as “supporters” from local government, ministries and non-governmental organization (NGO) projects. Not all of those invited participated in the exchanges; many just followed the discussions. These “lurkers”

when asked, said they get value from their passive participation as these two examples from Kenya show:

- *“I am still interested in LLL because it has assisted me in promoting opportunities to my farmer groups and also enlightening me in various marketing strategies.”* Patrick Ksuria (Regional Manager, KENFAP).
- *“Of course am still very interested in Linking Learners. Its contributions from various members, from various areas has and is helping a lot, especially, in the areas of marketing of different value chains. Right now I am working with farmers with value chain actors of passion fruits, onions, tomatoes, kales and bananas where we are trying to zero in on marketing constraints and their solutions in the rural setting.”* Carol Kamau (District Agriculture Officer, Bungoma).

During the last project year several breakthroughs were achieved through peer exchanges on the LLL platform. Perhaps the most important breakthrough was the insight gained into operating the critically important Cash-on-the-Bag (CoB) funds. This platform is now the forum for exchanging experiences on the management of these funds. Similarly, operational details for TSS emerged from peer exchanges. This was the case both for conducting auctions and operating double loop deals. Detailed descriptions of these practices are available to network members on the platform Web site. The evolution in thinking about business models for providing support services to the networks has also taken place on the platform. Most important here was the idea to spin off the RM function to become a separate business in its own right. LLL allows course work to be discussed and developed prior to training workshops. It also allows practical exercises to be extended beyond the workshop to the workplace. The LLL platform has gradually evolved into a tool for B2B learning among active members of the network. It has emerged as an indispensable tool for sustaining critically important B2B learning.



3.5 Operation of Transaction Security Services (TSS) brand

Transaction security services (TSS) provide the buyer and seller with the delivery of the agreed volume and quality of produce at an agreed time and place. TSS is a branded service with a well laid out process and protocols for its operation and quality assurance. In practice, TSS for example means that a full 10-ton lorry carrying the right variety of produce, properly graded, dried and packed, with no debris, will arrive at the processing factory gate on the agreed day and time. TSS provide the seller with payment, as agreed, at the point of change of ownership. In practice, this means farmers get paid the agreed price per kilogram when their produce has been weighed and checked at a pre-determined collection point. TSS track produce as it moves from the farm to the factory, so that if anything goes wrong it can be fixed without a dispute. This means that the source of any losses, like poorly sealed bags, can be identified and fixed. TSS can also trace a bag of produce right back to the farmer who supplied that bag; this means that every bag is labelled once it has passed weight and quality checks at the collection point.

The MAC's network therefore secures: a) a reliable bulking place for produce of the right quality, b) the movement of product from farm to buyer, and c) the movement of cash from buyer to seller. Such TSS directly links producers and large buyers, reducing the inefficiencies in marketing chains and giving a better price to both farmers and buyers. TSS have emerged as a key to improving small farmers' access to markets and better prices. Operational procedures for tracking and tagging bags have been piloted, but their complexity requires further research and development. At present, the many steps in the operations are tracked and communicated manually. Communication of each step still needs to be automated through a yet to be developed SMS/Internet application. Such systems already exist in the private sector, however it may need to be adapted to the market access services developed by RKN.

3.6 Overcoming trade barriers with Cash-on-the-Bag

Cash-on-the-Bag (CoB), or Cash-on-the-Horn for livestock, is a terminology used to describe a procedure for paying farmers with cash at the time they hand over their produce to the buyer or warehouse. This marketing procedure has been proved to be the only way to secure trade between small farmers and large buyers. Most small farmers sell their crops at very low prices to middlemen who come to their farms with cash. Farmers, trying to get the better prices larger buyers offer, fail when they do not trust each other. Small farmers rarely trust distant buyers to pay them. Large buyers rarely trust distant farmers to send the agreed quality and quantity of produce. As neither party is prepared to either hand over their crop or hand over their cash deals fall apart. The network, therefore, developed a commercial service to take up the risk of providing and securing the cash so that small farmers can be paid when they hand over their crop. This service is greatly appreciated by both farmers and buyers. The risks of providing short-term credit so that farmers can be paid Cash-on-the-Bag are: first, that farmers will not bring the right quality and quantity of produce to the right place and right time for pickup; and second, that buyers will not pay the agreed price at the agreed time. The networks' TSS takes care of these risks.

A few trials providing CoB financing to TSS registered deals have been made with some regional networks. Although small, these trials show that such services can have a substantial and immediate impact on farmers. However, the incomes of the service providers are not yet profitable. A CoB credit facility can overcome the distrust barrier to trade. The procedures for providing a CoB credit facility, as well as the tools to track their use, have been developed and are ready for scaling up. However, the SMS/Internet application for tracking these deals is still to be developed. CoB and TSS can increase the efficiency of operations along the marketing chain. Marketing efficiency gains are big enough to give farmers and buyers better prices as well as sustain a commercial service. How to operate CoB financing with TSS registered deals is probably the most important learning that took place in the project. The NMCs are in the process of negotiating

credit facilities with development partners to roll out this service to small-scale farmers through public-private partnerships (PPP). Some PPP agreements have already been signed and are being implemented, such as with the African Wildlife Foundation (AWF) and AgriTrade Kenya.

Figure 5. An IBM displays his products during a trade fair



4. Key activities

4.1 Establishment of a market information system

The task was to develop a system for systematic gathering, recording, analysing and disseminating “real time” agricultural market data (intelligence) about commodity prices, markets, buyers/sellers and other market support services. The process of building this market intelligence system evolved from initially using the Tradenet platform (www.tradenet.biz). This platform was already developed and was found to be too sophisticated and offered minimal interaction between the users and the platform developers who were based in Accra, Ghana. Besides, the platform developer was not willing to customize the platform to suit the needs of the RKN users. The cost of the Tradenet platform was also prohibitive for a young business and it was therefore tested and used for only six months by the networks in Uganda and Tanzania before changing to the Mobilinfo platform (www.mobilinfo.co.tz). For various administrative and coordination challenges, no portal link to the Tradenet platform was opened for use by the Kenyan network. The persons contracted to deliver the training were not readily available, and therefore the Kenyan network never used the Tradenet platform but instead used a simple local platform SMSanyone (www.smsanyone.com). Although it was quite cheap this platform did not have any backup in the form of an online database.

By the end of the project, all the networks in the three countries had adapted the use of Mobilinfo platform (<http://mobilinfo.co.tz/smsdirect/project/>). The key features of the platform are:

- The platform can send out bulk SMSs, that is, one to many.
- The platform has an online database where data, e.g. on clients and markets, can be stored and accessed.
- The platform is linked to all mobile telephone networks so that one can send or receive SMS text messages from the platform.

The platform facilitated the recording, analysing and disseminating of market data (intelligence) generated by the network in a cheap and fast manner. However, on a daily basis, the network members (IBMs) collected and sent local market price information and trade alerts (offers to buy or sell) from their markets on various commodities and markets to a central unit (Database Manager at the NMC head office) where the information was decoded, analysed, formatted, re-coded and resent out to various information users including the market access network members, farmer groups, traders, agroprocessors and development agencies. The costs of setting up the platform, market price collection and sharing were partially met by the project and the project beneficiaries (IBMs and MACs) but the process will be sustained through sales of SMS information bulletins to subscribers. During the project period sale of market intelligence (i.e. real time market price information and trade alerts) started with ten subscribers in Uganda, four in Kenya and eight in Tanzania. A service pricing model for the market intelligence service was also developed by each NMC (example from AgriNet).

4.2 Agribusiness development (Mentoring)

4.2.1 *Learning platform*

Learning together through pooling knowledge from diverse groups of learners was a key activity of the project. The Linking Local Learners (LLL) Internet learning support service (www.linkinglearners.net) helped those members of RKN with Internet access to share both their expertise and challenges in a learning community of practice. Learners that were registered as members of the platform shared ideas for progress through the synergy created by many diverse groups pooling their knowledge together. This Internet learning support service works like any other Web site, with a public part and a private part for members only. Clicking on the “LLL Hot Button” on this Web site takes members to the LLL Internet service KnowledgePool from which they can go directly to the learning teams. Once in a learning team they can use all the learning tools available. The learning support service also works

like a mailing list. This means that all the learners in a learning team receive all the messages through an email, so everyone sees how a discussion is developing, or how the library is growing and everyone can either email in their ideas or post them directly on the Web site. Individuals usually work together in learning groups. The groups meet face to face during events such as trade fairs and training workshops. Each group has a mailing address and thereby becomes a member of the learning team. The learning team is a network of various groups who work on the same topic and exchange ideas over a distance. For instance, “Demand Driven Services” is one such learning team. Each learning team may have various topics on which they exchange information. All learning teams together share the KnowledgePool and everybody can search and use the information and ideas there.

4.2.2 Development of commercial market access businesses

The rationale behind the need to set up and support a pro-poor rural market information network through private companies was to ensure the commercial sustainability of the services developed when the project finished. RKN project activities therefore focused on supporting the network members to learn how to provide these services in a commercial manner in order to be accepted by the farmers and the private sector clients in the market chain and not to be seen as a public service provided for free. The key commercial services developed and offered by the RKN network were market intelligence and TSS. The unique selling proposition for these services offered by the RKN members is that the network members, on behalf of their clients and for a commission, take care of the major problems associated with the buying and selling of farm produce. The market access network members make sure that the right quantity and quality of product is delivered at the right time in the right place for the right price to the buyer. Various clients (sellers and buyers) are interested in the network services because the market access network acts as an independent broker to all the players in the market chain, with transparency for all players along the chain, and promotes fair trade and price discovery principles between key players.

Figure 6. Example of an Information board in Dokolo market, northern Uganda



4.2.3 Capacity development of market access players

In the process of setting up and running the market access business, the network members had a wide range of capacity gaps. Thus RKN project activities centred on assessing and addressing some of the capacity gaps of the network members at all levels. The training needs assessment of the MACs looked into the following key areas:

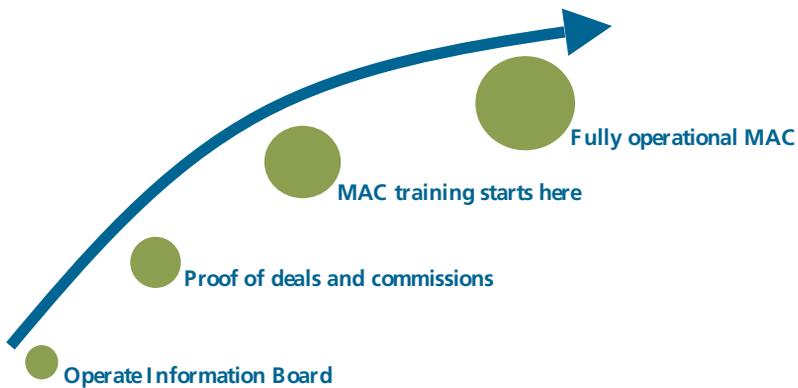
- the kinds of services being offered by the MAC network;
- the levels of capital and resources available to rural entrepreneurs for setting up and operating a MAC;
- the skills and aptitudes needed by people to be successful entrepreneurs;
- the kinds of experience they should have to be successful service providers.

The capacity development process used various methods, including training workshops, online and face-to-face mentoring, business counselling and trade fairs. The business development process followed a step-by-step process and the milestones for becoming a MAC network member are described below (see also Figure 7.)

Milestone 1: Identification and selection of the right entrepreneurs.

Like any other commercial enterprise the seed is one or more entrepreneurs. What was required were entrepreneurs that see the business opportunity and commit their time and money to seize it. Such entrepreneurs must have a reasonable client base among the farming community and trading businesses. These should not be civil servants or NGO staff as are so often seen running so-called “market access or linkage” projects.

Figure 7. Milestones for getting a MAC operational



Box 1. Skills and aptitudes a network member should have

- understanding of the MAC unique selling points of “Trust, Honesty, Fairness, Transparency”
- entrepreneurial ability to identify opportunities for people to make money
- be motivated, proactive and creative
- knowing how to negotiate, convening key players and facilitating learning events
- good networking communication and many contacts
- learning attitude and be collaborative
- organizational, financial

Box 2. Experience a potential MAC should have

- agricultural marketing/trading – knowing how it works
- information gathering, analysis, dissemination
- agricultural production
- learning/trying out something new
- planning – business, project, community
- working in collaboration with others
- running a business profitably
- Internet use

Milestone 2: ICT access. The entrepreneurs were required to raise sufficient capital to acquire a computer or daily access to one and a mobile modem or other solution for Internet access on a weekly basis. They were required to have an email address and be able to commit sufficient time to read and write emails and browse the Internet in order to keep in touch with network members.

Milestone 3: Registration on LLL Learning Service. The entrepreneurs were trained by a local business counsellor in how to use the LLL online learning platform (www.linkinglearners.net). They were also registered on the LLL platform. They were required to announce their intention to set up a MAC on the LLL platform. Once able to use the LLL platform the entrepreneurs then received both online and face-to-face support from the business counsellor.

Milestone 4: Developing a business model. The entrepreneurs were encouraged to develop a simple business model for their MAC. Entrepreneurs received online mentoring and B2B learning from other MACs on how to develop their business model. They also shared their business model with other MACs on the LLL platform. Building the model required the entrepreneurs to understand the marketing challenges of their clients, particularly farmer associations and small traders.

Milestone 5: Registering a commercial company. The entrepreneurs were encouraged to register themselves as a private commercial company with the district council (and/or national registrar if necessary) and to open a bank account. Ideally, companies are registered with their local Chamber of Commerce as this body can help them get started. Entrepreneurs also built relationships with key people in the district council such as the Agriculture and Livestock Development Officers, the Commercial Officer, and the Community Development Officer. They announced their new company on the LLL service to all the other MACs.

Figure 8. B2B learning meeting for network members



Milestone 6: Starting the business of Information Board Manager. MACs were required to find three to six local entrepreneurs willing and able to conduct the business of Information Board Manager (IBM) at strategic locations throughout their area of operation. The MAC then registered the IBM's email addresses on the LLL platform. The IBMs were then trained in market intelligence sourcing, information board management and income streams from advertising fees. A licensing agreement between the MAC and the IBM was then signed. A branded information board was set up at a strategic location and run as a business with market intelligence information coming from the MACs. IBMs received online mentoring and B2B learning from other IBMs on how to operate their businesses; they also shared their experiences with other IBMs on the LLL platform.

Milestone 7: Proof of deals. MACs and IBMs shared their early successes and failures at making deals on the LLL platform. They recorded their transactions and commissions on the LLL platform. They received online mentoring and visits from their business counsellor to verify proof of deals made and assess the commercial viability of their businesses.

Milestone 8: Training workshops. Once assessed as commercially viable, MACs then qualified to receive further training. Viable MACs received training on: market access business strategy; how to be a good commercial service provider; and on good financial management.

Milestone 9: Becoming an operational MAC. In order to become fully operational, the MAC had to have three to six IBMs running and collecting commissions from clients on local deals. The MAC had to meet all their operational costs from the revenue earned from the services offered. MACs were required to regularly share experiences about their deals on the LLL platform and be ready to participate in national trade fairs.

5. Successes, main outcomes and impacts

- There was “learning-by-doing“, interacting directly with traders and markets through “action research”.
- B2B learning on the LLL platform: a lot of learning focused on what others were doing in the East Africa region which provided network members with “dos” and “don’ts” in the business arena. The learning achieved was possible because many people met online rather than in meetings and workshops which would have been very costly.
- Cross-border trade between network members was tried out successfully. This was possible for commodities that are abundantly available in some geographical production regions and scarce in the areas of utilization. The farmers in the network obtained better prices for these commodities when compared with the prevailing market price.
- The TSS service has been launched commercially and is being operationalized in various networks in the East Africa region.
- The technical backstopping team, based in Europe (FAO headquarters’ Research and Extension Branch, RAVI, Traidcraft) and Ethiopia (FAO Subregional Office for Eastern Africa) provided extensive support through the www.linkinglearners.net platform, emails, face-to-face mentoring and Skype conferences.



6. Challenges and constraints

The first challenge was in the identification and selection of entrepreneurs who would join the market access network. It had been envisaged that the farmer field school (FFS) facilitators who already existed and had been trained under other FAO FFS projects in the region would constitute the bulk of entrepreneurs that would provide market access services to their FFS farming communities. However, it was later realized that these facilitators had a public employee or project staff mindset as previous employees of projects or non-governmental organizations (NGOs) and lacked entrepreneurial skills, thus they were unable to start up as entrepreneurs for market access business in their locations. This required launching a new search for rural market access entrepreneurs with business minds such as those who were already running other types of businesses, like Agro-Vet shop, produce warehouses, retail shops, secretarial services and mobile money transfer services.

The second challenge was for the network members to develop commercial relations with outsiders who also initially perceived the RKN members as development workers. This perception was hard to change since there was a need to acknowledge and recognize project development partners (IFAD and FAO) who funded and supported several RKN events such as the information boards and trade fairs. So the idea of creating profitable spin-off companies from the “learning companies” established during the RKN project activities was perceived with mixed reactions by both outsiders and some “insiders” in FAO and IFAD.

Because the RKN project spin-off businesses (NMCs, MACs and IBMs) sought to become profitable, this “silently” raised a number of concerns. Outsiders perceived that the RKN project pushed spin-off of profitable entities bringing these entities into direct competition with the businesses that they were originally intended to assist. In addition, these spin-off market access businesses also faced a number of inherent barriers to becoming

profitable. The project staff initially thought of themselves as development workers rather than business people and hence had associated expectations of their employment package, thereby creating a high cost structure.

Another challenge encountered by the project was the “crowding” of development agencies (mainly NGOs and projects) in the arena of agricultural market information service provision. In Uganda, for instance, some of these public agricultural market information service providers included Grameen Foundation, Infotrade, Foodnet, Tradenet and donor sponsored mobile telephone companies’ projects. These have poured in a vast volume of charity aid that has crowded and/or corrupted the business sector interested in developing market intelligence services as a profitable business. The presence of these donor projects has accordingly undermined the effort of emerging small-scale business service providers of market information. In the end, the market access business networks failed to sell market intelligence to potential clients who were already receiving such services free of charge from these projects. Despite this the RKN project endeavoured to work with various partners in a collaborative and coordinated manner, including joint ventures for establishment of market information services in rural areas (e.g. with the National Agricultural Advisory Services [NAADS] in Uganda, Zain, a telecommunications company in Tanzania, and the Wild Life Foundation [AWF] in Kenya) which offers greater potential for RKN members to roll out the services and build their networks.

Another challenge was in the area of developing commercial relationships between network members (MACs and IBMs) and farmers. There is a non-commercial behaviour engendered among small-scale farmers by donor projects. Farmers expect free services from donor funded projects. Clients, like private companies, are reluctant to pay for services when they know that the services are supported by a donor project and this makes commercial relationships difficult to establish. Commercial relationships have also been difficult to establish with some rural entrepreneurs (IBMs and MACs). These rural entrepreneurs familiar with the way



NGO projects operate expect to be paid to try out new business opportunities; some even expect to be paid to attend training events. Finding entrepreneurs prepared to develop commercial relationships was easiest in Kenya and hardest in Tanzania; the overwhelming presence of NGO activity in Tanzania goes some way to explain this. Despite the difficulties, commercial relationships have started developing among the network members themselves as market access service providers.

The collection of market intelligence and the associated advertising business around the information board has been proved to be a viable business opportunity for IBMs. However, what has not been proved is whether the support services IBMs require and are provided by their national service provider companies can also be commercially viable. The national service provider companies (NMCs) carry out the price sharing operation among the network members. Each day prices must be logged into a database and price bulletins prepared for sending out as SMS text messages to all network members. This is a job for two Market Information Managers (MIM) in each country in order to ensure reliability and consistency in case one is not available. The costs of these staff are to be recovered through the sale of subscriptions to potential clients. While farmers and traders appreciate the convenience of getting market intelligence on their phones it is unclear whether a sufficient number of clients will ever be found and/or acquired who will be prepared to pay the monthly subscriptions. So price collection and sharing is self-sustaining but the commercial viability of support services by the NMCs (i.e. enough sales of SMS bulletins to cover the costs of data management) remains a challenge to the network (NMC) for the future.

Lastly, RKN members focused on providing market intelligence and brokerage services because it is less risky and less demanding in terms of working capital. However, in the eyes of smallholder farmers and traders, there seems to be no major distinction between actual trading and the brokering of deals, which downplays the trust-relationship of the MACs with all players and the ability to become an “honest broker”.

7. Learning from the RKN project - best practices

- The design document of mid-2007 states that “MACs will be set up to provide agricultural market information and will be careful to avoid being drawn into trading itself in order to build the required trust-relationship with all players and become an honest broker” (IFAD/FAO, June 2007). However, this did not work out as all network members were later involved in brokerage and trading to sustain themselves.
- RKN worked in a very flexible and fast-changing environment, thanks to FAO and IFAD for allowing room for this flexibility without which the “action research”, changes in the business model, project management structure and lessons generated would not have been achieved. The managers of RKN were able to make flexible and robust responses to changing situations and lessons ploughed back into the learning.
- Due to the demonstrated benefits and impact the RKN project has shown to small-scale farmers and local traders, some new projects and partnerships largely attributed to RKN impact and lessons have emerged, namely:

A. UGANDA

- Cash-on-the-Bag (CoB) fund, a loan to AgriNet from RAVI for testing and operationalizing the CoB concept (USD 5 000)
– *Ongoing*
- Growing the market access network of IBMs
 - Established two agricultural market intelligence centres under the market information and marketing component of the NAADS programme in Mukuju subcounty, Tororo District (USD 1 000) – *Ended with 4 IBMs added to the network*
 - Establishment of 13 market intelligence centres under the market information and marketing component of the NAADS programme in Hoima District (USD 6 000) – *Started in October 2010*



- Development and operationalization of a market access system for the FFS networks in the Lango subregion by the Emergency and Rehabilitation Coordination Unit (ERCU) of FAO Uganda (USD 15 000). 30 IBMs have been added to the network – *Ongoing*
- Developing and Strengthening Local Networks for providing Market Intelligence Services in Uganda, Kenya and Tanzania. Grant Application to Kilimo Trust (USD 98 000) – *Started in September 2010*

B. KENYA

- Kilimanjaro Heartland Livestock Enterprises Business Project with African Wildlife Foundation (AWF) for Maasai pastoralists (USD 120 000) – *Testing ‘Cash-on-the-Horn’, Ongoing*
- FAO Agribusiness Support for Smallholder farmers (ABSS) intended to roll out market intelligence network of IBMs – *under discussion*
- Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)’s support for “An investigation into impact of provision of market access by smallholders farmers in Nakuru, Kenya” (USD 6 000) – *Ongoing*

C. TANZANIA

- A joint venture with Zain Tanzania to sell and use Zain services by the members of the RKN network. Expected monthly sales volume of USD 7 000 - *Ongoing*
- Installation of sunflower pressing mill in Singida to a village of one of the network members. Investment value USD 45 500 – *Ongoing*
- Establishment of an organic poultry farm in Dodoma villages. Investment value USD 37 900 - *Ongoing*
- RENTCO, the NMC established under the RKN project, was appointed as Social Impacts Growing Enterprises’ Scouts by

Root Change (www.rootchange.org), a social investor with responsibility to link village social enterprises to Root Change. Total funds available for this work exceed USD 1 million - *Ongoing*

- Enrolment into a programme called “one product, one district” that aims to help people in the rural area to increase their income by establishing their own beekeeping businesses. The programme is sponsored by the International Labour Organization (ILO) and managed by the Small Industry and Development Organization (SIDO). RENTCO was given the responsibility to implement the programme in the Bahi district in Dodoma, where so far 60 people have enrolled.
- An agreement to supply sorghum from Dodoma for brewing purposes was reached with Tanzania Breweries Limited (TBL) to supply more than 1 000 metric tonnes worth USD 379 000 - *Ongoing*

8. Conclusions and recommendations

The RKN project achieved its goal of providing market information to farmers and traders specifically about current market prices and offers to buy or sell in different markets in Uganda, Kenya and Tanzania. This was done by building a network of entrepreneurs who collected market intelligence (on price and trade alerts) regularly, and sent it to a central collecting Internet platform facility who then sent it out as consolidated information to the network members, farmers and other interested people via mobile phone SMS. This information was then posted on information boards in local markets and public places for public use.

The RKN project was implemented through a business model that used rapid and cost-effective Internet and mobile phone SMS communication systems between many entrepreneurs located in widely spread out rural areas. The business model comprises clients, RKN members and support service providers.

The key achievement of RKN was the invention of a way to operate a market intelligence service commercially that generates trade opportunities for small scale farmers, traders and network members. Other services are still under development, for example, TSS for handling secure movement of product from the sellers to the buyers as well as the movement of money back to the farmer, operation of Cash-on-the-Bag (CoB) funds to overcome trade barriers with trade credit so that farmers are paid cash when they hand in their bags of produce.

The RKN project worked in a very flexible and fast-changing environment, thanks to FAO and IFAD for allowing room for this flexibility without which the “action research”, changes in the business model, project management structure and lessons generated would not have been achieved. Due to the demonstrated benefits and impact the RKN project has shown to small-scale farmers and local traders, some new projects and partnerships have

emerged such as with the National Agricultural Advisory Services (NAADS) in Uganda, African Wildlife Foundation (AWF) in Kenya and Zain, a telecommunications company in Tanzania.

International organizations such as IFAD and FAO need to explore new ways of encouraging and stimulating emergence of commercial business services with small-scale entrepreneurs.

IFAD and FAO loan programmes and technical cooperation projects respectively need to engage with small-scale private sector players not only as “contracted” service providers, but also as development partners who have interest in developing their businesses through a public-private partnership (PPP). The partnership needs run-up to the point where services become commercially viable. Loan programmes need to include opportunities for public partnership with the private sector to:

- develop business operations;
- determine actual costs and test service pricing models;
- build business plans on the basis of real incomes, real expenditures and real experiences of running a business;
- gain experience in providing services on a commercial basis, building a trading record and client base;
- link such partnerships with capacity development for farmers, clients and entrepreneurs in areas where commercial service are being developed.

It is recommended that assisting small producers to access markets in East Africa should be continued by strengthening and expanding the commercial market access service network set up under the project. Further efforts should be made to address the gaps and needs identified during project implementation. Specifically:

- A. **A mechanism and access to funds for providing short-term trade credit to facilitate small farmer trade should be established.** More specifically, it is recommended that the current trials providing credit to transaction secure deals should be rolled out so that farmers can be paid Cash-on-the-Bag/Cash-on-the-Horn.

Figure 9. IBM in Dokolo explains about the Information Board to community members



- B. The rural market access business networks established under the project should be expanded to reach commercially viable scales.** More specifically, it is recommended that support be provided through ongoing IFAD and FAO programmes and projects in the region, enabling the already existing expertise of local mentors (RMs) to stimulate peer-to-peer learning on the ground and online using the Linking Local Learners (LLL) platform.
- C. Technical assistance projects should avoid providing subsidised or free market access services where commercial services exist that can provide the services required.** More specifically, it is recommended that donor projects make use of the commercial services that are available and strengthen them instead of creating new public funded competing services that are rarely sustained by the public sector and are often too expensive to be taken on by the private sector.

- D. **Further customize the SMS market intelligence, i.e. phone to Web and Web to phone, that will benefit rural areas.** More specifically, it is recommended that new applications focus on market intelligence (i.e. intelligence that goes beyond market prices to include offers to buy and sell plus a link to local IBMs via a mobile phone to facilitate the transaction) and transaction security tracking.
- E. **There is a need to conduct pre-commercial R&D on new ventures for rural business communication networks.** Some of the ventures identified include rural solar electrification and rural ICT access. More specifically, it is recommended that investments should take ventures to the point where banks and commercial investors can pick them up.

ISBN 978-92-5-106789-5



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I2088E/1/03.11