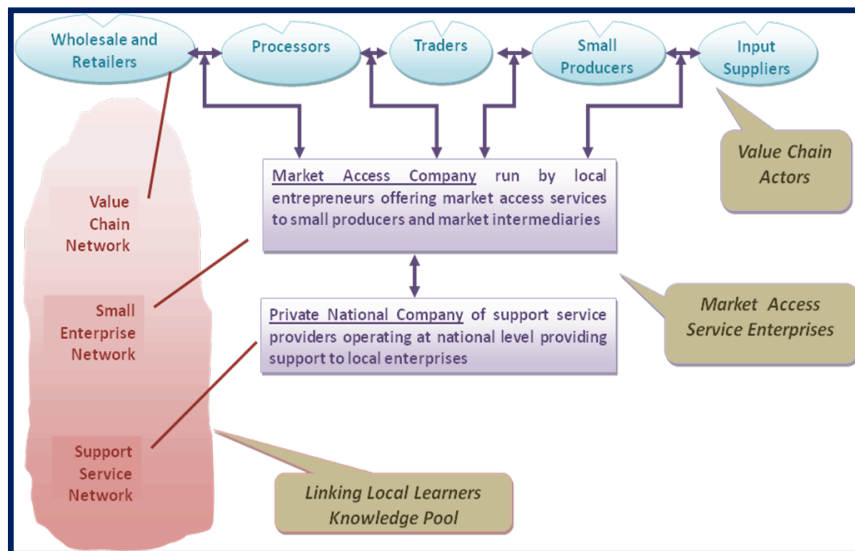


**FINAL REPORT JANUARY 2010**

**FOR IFAD SUPPORTED**

**"Rural Knowledge Network Pilot Project  
for  
East Africa"**



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## **1. Introduction and Summary**

The Rural Knowledge Network project<sup>1</sup> for East Africa completed its third and final year in 2009. During this time further learning took place among network members at local, district and national level in Tanzania, Kenya, and Uganda. Learning focused on commercialisation of market access services to small farmers. Agridea was contracted<sup>2</sup> to provide technical assistance to the companies implementing the project: AgriNet in Uganda, AgriTrade in Kenya, and Marketing Partner in Tanzania. Technical assistance was to support the emergence of a commercial network of local businesses providing market access services to all actors in the marketing chain especially small farmers. The task was to build a rural business communication network. The business proposition is to use rapid communications between many entrepreneurs located in widely spread rural areas for more efficient marketing. Spreading intelligence not just about marketing opportunities, but also about products that need to find rural customers appeals to a wide range of clients. Such business communication networks have huge potential; but they are also a challenge because the business model is new to East Africa.

The market access services provided by the networks include market intelligence as well as assistance with deal making and selling manufactured products. While these services are now being offered commercially their scale of operation is too small. The network coverage is not large enough and the business turn over 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 now because of the large amount of capacity building and R&D required to set up the network. Nevertheless, business plans indicate commercial viability demands a larger network doing more transactions.

What the project has managed to achieve is commercial relationships between business operators and profitability for the Information Board Manager business opportunity. The project has also invented how to operate a market intelligence service commercially. Small farmers now have more choice of buyers, more ways to sell and more choice of markets. Transaction security services handle everything for the secure movement of product from the farm to the factory as well as the movement of money back to the farmer. An SMS/Internet application that tracks these deals is still to be developed. Nevertheless, these services will not be competitive unless supported with a short-term credit facility so that farmers can be paid 'Cash-on-the-Bag'. Further income streams were needed to improve commercial viability of the network. Marketing products for manufacturers with rural customers has begun to provide a steady commission to some network members. Explorations are underway on how network members can add further income from enhancing warehouse operations. These achievements are discussed in section Three<sup>3</sup>.

While achievements highlight successes many hard lessons have been learned and much still needs to be done. Lessons were learned because the project had a well-defined knowledge management system for developing commercial operations. The Linking Learners platform has emerged as an indispensable tool for sustaining the critically important business-to-business learning between network members. Network members learned:

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<sup>1</sup> Project: GCP/RAF/401/IFA

<sup>2</sup> Agridea contract Terms of Reference can be found in Annex A.

<sup>3</sup> More details on these achievements can be found in the business practices and stories documented this year as listed in Annex B.

- Many deals with large buyers fell through this year. Network members learned that they must think at least six months in advance and prepare themselves for the deal opportunities that they expect to emerge. They also learned that if they cannot provide farmers with cash-on-the-bag, then their service will not be competitive. Trials on the management of credit facilities so that farmers can be paid 'cash-on-the-bag' are underway. But they are only on a small pilot basis and fully commercial operations are still to be developed.
- Throughout the year Information Board Managers in more remote locations continued to struggle with Internet access. Despite great progress in ICT equipment technical and language challenges remain. Trials on leasing operations to make ICT equipment affordable in these areas continue. But they are only operating in Tanzania and should be scaled up to cover Kenya and Uganda as well.
- Network members' discovered that the support service they need were too costly. They saw that business performance markedly improves when regional managers run their own business networks. With regional managers off the books of the national support service the costs for support services fall dramatically. Regional managers are now beginning to set up their own companies to run the networks in their regions. The new businesses will need support in the coming year.
- The project's approach to commercialization of national service providers worked best in Kenya, less well in Uganda, and failed in Tanzania. They learned that in Tanzania it is better to develop business networks from the 'ground-up'. The new Southern Highlands Biashara Mapema business network provides a commercial foundation for a ground-up approach in Tanzania. However, re-growing the network in Tanzania will need considerable support in the coming year.
- The project's attempts to launch commercial services through NGO's almost all failed. The problem appears to be that NGO's, while offering good services, did not have procedures in place for sustaining services once funding ceased. NGOs are better at training farmers to use commercial services. They are better at training entrepreneurs in business skills. Network members and their clients, especially small farmers, will need support for capacity building in the coming year.

The lessons learned are presented in section Four below<sup>4</sup>.

The report closes with six recommendations. Recommendations that we think can stimulate the provision of commercial services in market access. The recommendations are not for IFAD alone. Partnerships with the private sector and other social investors will be necessary. IFAD can take the lead in developing these partnerships. In this spirit of partnership we recommend that IFAD and its development partners find ways for:

1. Making short-term trade credit available to facilitate small farmer trade be made available.
2. Developing rural networks of ICT skilled entrepreneurs be developed.
3. Expanding rural business networks to be expanded to reach commercially viable scales.

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<sup>4</sup> More details on some of these lessons are documented in short briefs as listed in Annex B.

4. Developing user-led programming to be developed for SMS-Internet applications that will benefit rural areas.
5. Conducting pre-commercial R&D to be conducted on new ventures for rural business networks.
6. Donor projects to avoid providing subsidised or free market access services where commercial services exist.

Each of these recommendations is discussed in section Five below.

Looking to the immediate future we are confident that AgriNet and AgriTrade will continue to develop their networks in Uganda and Kenya, respectively. We are confident that the Southern Highlands region will provide a foundation for re-growing the network in Tanzania. Each company has identified champions to spearhead further expansion of their networks. These are the people that Traidcraft will continue to train under their contract with IFAD. Agridea will continue to provide mentoring through the Traidcraft project. Further support to the commercial development of the network will be provided by Rural African Ventures Investments (RAVI) a UK based company. RAVI will assist networks find the funding to grow their businesses to commercially viable scale.

The achievements so far of the networks have come to the notice of social investors. Some have shown a strong interest in assessing the investment opportunities that are emerging here. RAVI is holding discussions with various financial institutions engaged in social investments. The investment opportunities at the forefront are: Cash-on-the-Bag short-term credit, solar equipment for lighting, leasing of ruggedized net-books and smart phones, and building village warehouses for renting out.

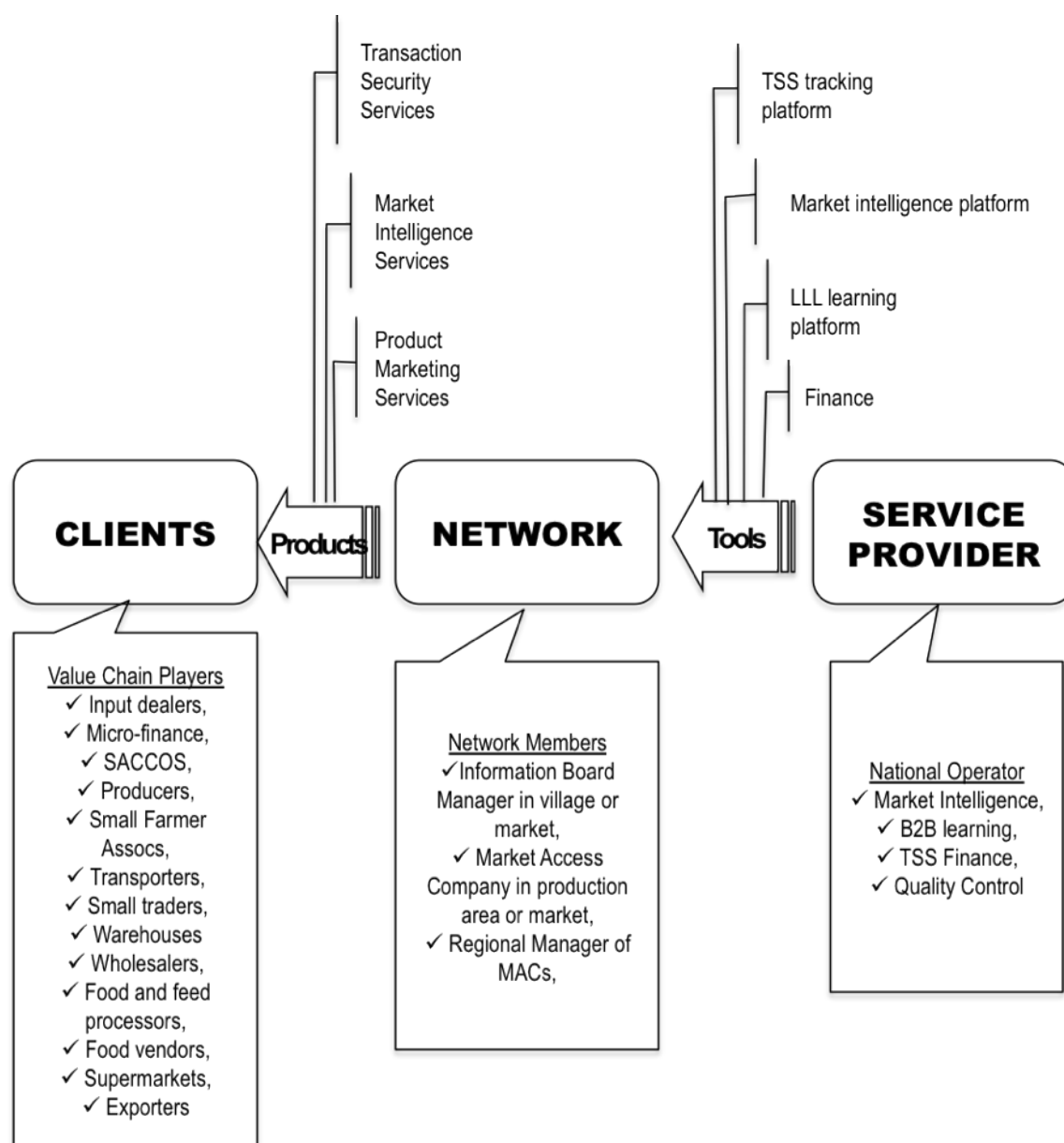
## **2. The Pro-Poor Market Access Business Model**

The business model comprises clients, network members and support service providers as shown in Figure 1 below. Clients are all players in the value chain particularly small farmers and larger buyers. Network members are independent rural entrepreneurs. Three levels of business operation are required to act as a network. Each operation is a business in its own right:

- Information Board Managers (IBMs) managing an information board are the frontline contacts with farmers. Dispersed in rural villages and market places they are responsible to efficiently move information and organize transactions in the field.
- Market Access Companies (MAC) at the district level manage a local network of IBMs and organize transactions at their level.
- Regional Managers organize the coordination of the network for sourcing large volume deals for large buyers. They also mentor the MACs and IBMs in their network. (In the original business model regional managers were staff to the service provider)

National service providers or National Marketing Companies (NMC) provide network members market intelligence as well as the business-to-business learning services. They license all network members to share market intelligence and collaborate in trade with each other. Three NMCs have been set up: AgriNet in Uganda, AgriTrade in Kenya, and Rural Entrepreneur Network in Tanzania.

Figure 1. Market Access Business Model



Network members offer service products to their Clients. Products are paid for by the clients in the form of commissions, fees or margins on sales. The following products are offered:

- Market intelligence (sms bulletins, trade alerts, advertisements on information boards).
- Product marketing opportunities (processed flour, mobile money, water tanks, etc).
- Transaction security services (commodity trade facilitation on commission).

One service provider in each country provides the tools that network members need to offer their products to clients. The service provider also maintains the standards of the services through a license agreement they have with all network members. To maintain their license all network members are required to share market intelligence, report on their business performance, and collaborate in trade with each other.

The tools provided to the networks are:

- SMS platform for market intelligence.
- Business-to-business learning platform for sharing new business opportunities.
- Transaction security service tracking platform.
- Finance for short term credit on registered transactions.

Crucial to the operation of these small businesses is reliable access to ICT services. Modern communication technologies like SMS, email and the Internet help cut through the prevalent distrust along marketing chains. They can help clean up the inefficiency of marketing. The combination of improved efficiency and transparency along the chain has been demonstrated to result in marked increases of payments to small farmers for what they can market. ICTs also make it possible to scale up business operations to commercially viable volumes.

The business model ensures that poor people benefit from business, both as clients and as entrepreneurs. Small farmers get better prices for their produce and get better access to more lucrative markets. Small farmers have an opportunity to take up the business opportunities themselves as well.

The business model was further tested in 2009. Important lessons were learned. The changes made improved its commercial viability considerably as discussed in section Four. Over the year the operations of the model became more commercial as can be seen in the achievements shared in section Three below.

### **3. Main Achievements**

Here we present what we consider the main achievements of the last year. We focus on what took us closer to commercial viability. The first achievement is establishing commercial relationships between business operators. We also look at the commercial viability of the Information Board Manager business opportunity. This is the second achievement. Inventing how to operate a market intelligence service commercially is the third achievement. Giving small farmers more choice of buyers, more ways to sell and more choice of markets. Transaction Security Services for handling everything for the secure movement of product from the farm to the factory as well as the movement of money back to the farmer is the fourth achievement. The fifth achievement is to overcome trade barriers with trade credit so farmers are paid Cash-on-the-Bag. Incomes from these services kept network members in business but were insufficient for them to pay for the support they got from the National Marketing Companies. Further income streams had to be found for the network. Adding new income streams from product marketing is the sixth achievement. Marketing products for manufacturers with rural customers provides a steady commission to network members. During the year further income opportunities were explored. One achievement here is the exploration in how network members can enhance warehouse operations. The last achievement is testing of a knowledge management system for developing commercial operations. Here, the Linking Learners platform has emerged as an indispensable tool for sustaining the critically important business-to-business learning between network members. We present the eight achievements not only in terms of what was done, but also what still remains to be done.

### 3.1. Establishing Commercial Relationship between Business Operators

Key commercial relationships have been developed in spite of the non-commercial behaviour engendered by donor projects. Farmers expect free services from donor funded projects. Clients are reluctant to pay for services when they are supported by a donor project. This makes commercial relationships difficult to establish. Commercial relationships are difficult to establish with rural entrepreneurs as well. Rural entrepreneurs familiar with the ways of NGO projects expect payment to try out new business opportunities. Some even expect payment to attend training events. Finding entrepreneurs prepared to develop commercial relationships has been easiest in Kenya and hardest in Tanzania. The overwhelming presence of NGO activity in Tanzania goes some way to explain this. Much time has been spent on trying to train people with a non-profit mindset. It now appears that successful network 'champions' are better at finding commercially minded 'entrepreneurs' than national project coordination teams.

Despite the difficulties commercial relationships have developed between Information Board Managers and Market Access Companies. Commercial relationships have developed between network members and those regional managers who have set up their own regional network business. In Kenya and Uganda the owners of these regional business networks are in the process of developing commercial relationships with their National Marketing Companies for getting the support service they need. The commercial relationship between National Marketing Companies and the network members is affected through a license agreement. The agreement spells out the services to be supplied and the payments to be made for them. Payments include a service fee, cut on the commission of Transaction Security Service registered deals, and a margin on each SMS subscription sold. Today, every member of a network runs a registered private business. Commercial relationships are developing between network members and companies providing support services at the national level.

### 3.2. Demonstrating Commercial Viability of IBM Business Opportunity

Information Board Managers are members of a local network of rural businesses providing market access services. 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 free from the national service provider. They do not have to pay for the market prices and trade alerts they get each morning from the service provider. Market intelligence is shared among network members for free. However, they do not get 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: business-to-business learning services, 'Transaction Security Service' deals and product marketing. For these services network members will pay a nominal monthly service fee once their businesses reach scale.

In the last six months more and more IBMs are reporting regular incomes from adverts and deals to their regional managers. 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 of from their other businesses. Even less successful IBMs insist on continuing with their board as they believe it will work for them eventually. Across the network it is now clear how information boards can be a profitable business for a rural entrepreneur.

### **3.3. Operating Market Intelligence Commercially**

Keeping costs low and growing incomes from deal commissions and advertising fees makes it possible for rural entrepreneurs to profit from sharing market intelligence. All the rural entrepreneur needs is a mobile phone and cash to pay for sending an SMS every morning. Each morning they collect local market prices of commodities that are of interest to their clients and text them by SMS to their national service provider. The service provider then sends them prices of the markets and commodities of their interest. 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. Clearly the combination of main and local market prices with trade alerts is information local clients want. Moreover, small farmers appreciate the chance to advertise what they have to sell in the search for better prices.

This is a major breakthrough. Over the last six months Information Board Managers consistently show that the gathering of relevant market intelligence can operate on a commercially viable basis. What has not been proven is whether the support services IBMs require can also be commercially viable. The national service provider carries out the price sharing operation of 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. The costs of these staff are to be recovered through the sale of subscriptions to SMS bulletins or alerts. While farmers and traders appreciate the convenience of getting market intelligence on their phones it is unclear whether a sufficient number of clients can be found who will be prepared to pay the monthly subscriptions. So price collection and sharing is self-sustaining. But the demonstration of commercial viability of support services, that is enough sales of SMS bulletins to cover the costs of data management, remains a challenge for the future.

### **3.4. Operations for Transaction Security Services**

Transaction security services provide the buyer and seller with delivery of the agreed volume and quality of produce at an agreed time and place. In practice this means a full 10-ton lorry carrying the right variety of produce, properly graded, dried and packed, with no debris arriving at the processing factory gate on the agreed day and time. Transaction security services provide the seller with payments as agreed at the point of change of ownership. In practice this means farmers get paid the agreed price per kilo when their produce has been weighed and checked at a pre-determined collection point. Transaction security services track produce as it moves from the farm to the factory, so that if anything goes wrong it can be fixed without a fight. In practice this means that the sources of any losses, like poorly sealed bags can be identified and fixed. Transaction security services can also trace a bag of produce right back to the farmer who supplied that bag. In practice this means that every bag is labelled once it has passed weight and quality checks at the collection point.

The commercial service must therefore secure: a) the reliable bulking of produce of correct quality, b) the movement of product from farm to factory and, c) the movement of cash from buyer to seller. Such 'Transaction Security Services' directly linking producers and large buyers reduce the inefficiencies in marketing chains enough to give better prices to both farmers and buyers. Transaction Security Services have emerged as a key to improving small farmer access to markets and better prices. Operational procedures for tracking and tagging bags have been piloted. But their complexity requires further R&D. 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.

### 3.5. Overcoming Trade Barriers with Cash-on-the-Bag

Paying farmers with cash at the time they hand over their produce turns out 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. A commercial service taking the risk of putting up the cash so small farmers can be paid as they hand over their crop is what farmers and buyers want. The risks of providing short term credit so farmers can be paid 'Cash-on-the-Bag' are: first, that farmer's will not bring the right quality and quantity of produce to the right place and right time for pick up; and second, that buyers will not pay the agreed price at the agreed time. The networks' Transaction Security Service' takes care of these risks.

A few trials providing 'Cash-on-the-Bag' financing to 'Transaction Security Services' deals have been made. Although small these trials show that such services can have a substantial and immediate impact on farmers income and be profitable for their operators. A 'Cash-on-the-Bag' credit facility can overcome the distrust barrier to trade. The procedures for providing a Cash-on-the-Bag credit facility as well as the tools to track their use are developed and ready for scaling up. However, the SMS/Internet application for tracking these deals is still to be developed. Cash-on-the-Bag and Transaction Security Services 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 'Cash-on-the-Bag' financing with 'Transaction Security Services' is probably the most important learning that took place in the project.

### 3.6. Adding New Income from Product Marketing

Marketing products to rural customers has emerged as a new income opportunity for network members. Manufacturers of products whose customers live in rural areas often struggle to reach them. A well-connected network of widely distributed entrepreneurs located in remote rural areas is seen as a 'ideal' vehicle for them to get their products out. Any one rural agent has only a small catchment area of potential customers. Thus, a ready-made network of rural entrepreneurs capable of marketing a wide range of products because they are well connected is an ideal partner to do business with.

This income stream was not included in the original business model. Originally incomes were expected from advertisement fees and commission on local deals. For many Information Board Managers these incomes were too small. Incomes from commissions from Transaction Security Service deals while promising are difficult to realise, as are subscriptions for SMS bulletins and alerts. Before these business opportunities pick up

network members need to generate more cash flow. Marketing other peoples' products can provide a steady income. Product marketing is, however, not without its risks. Network reputations can suffer when low quality results in farmers returning products. Conversely, if a manufacturer cannot meet demand reputations also suffer. Both products and manufacturers or suppliers need to be selected with care.

Recently AgriNet in Uganda visited India as part of its negotiations with a manufacturer of bio-fertilizers. The opportunity is to distribute their products through the network on a commission basis. This makes sense because a number of network members run small agro-input shops. Indeed many of the entrepreneurs taking up the market access business opportunities already run agro-input shops. NMCs are busy negotiating marketing distribution for water storage tanks, water filters, and knapsack sprayers. Mobile money providers are also discussing ways in which network members can become local cash distributors. It is not just NMCs that are seizing product-marketing opportunities. The regional networks in Western and Central Kenya have been marketing tea and flour for some time now. Indeed, Kemwa Foods in Nakuru is almost totally reliant on the network to distribute their fortified flour. Similarly, AgriFeeds in Uganda uses AgriNet to market its animal feeds throughout the network.

### 3.7. Enhancing the Use of Warehouses

Suitable warehouses are either non-existent in villages or in disrepair or empty. Often they are empty because too many farmers have negative experiences using them. Time and again their hopes for better prices from collective selling are not realised. This is not always the fault of the warehouse managers. Desperate farmers will sell their crop early breaking collective agreements and thus the chance for better prices. Shortage of operating rural warehouses, for whatever reason, forces traders to store crops in the small rooms of houses or shops around market places. None of these places are suited to proper storage of crops. Nevertheless, they are where most crops go once they have left the farm or roadside collection point. Resorting to small rooms for storage does not occur simply because there's no warehouse. Indeed, donors and governments generously support market infrastructure. Furthermore, support for warehouse receipt systems has spread across the region. However, the project discovered the weakness of current warehouse operations has more to do with unsuitable ownership and inflexible management than with available space. The absence of market linkage operations and insufficient or poorly designed credit facilities just makes the situation worse. These weaknesses need to be addressed. Having small quantities of produce distributed across many small rooms makes bulking up crops for large deals costly and difficult.

Separating the ownership of the warehouse from its management could address a key weakness. This alternative sees specialized construction companies building a string of five or more village-level warehouses. Each warehouse would hold up to 200 tons depending on the number of farmer groups it serves. The warehouses would be owned by the construction company and rented out to local entrepreneurs. The owners would maintain the buildings, security and access road. The tenant would manage the storage and marketing of the crops. Since the tenants would earn more from commissions from sales than from storage fees they would want to make sure all local produce goes through the warehouse. A number of Market Access Companies in Kenya, Uganda and Tanzania are now ready to take on this rental opportunity. They see these village warehouses as ideal for managing collection points, organizing auctions, and bulking up produce for larger buyers. Construction companies are being approached and one in Tanzania has express interest in the concept. Network members

are keen to enter as warehouse managers. This alternative business model for enhancing the use of warehouses by small farmers is ready for presentation to social investors.

### **3.8. Testing Knowledge Management System for Commercial Operations**

The Linking Learners online platform [www.linkinglearners.net](http://www.linkinglearners.net) provided network members with a tool to generate and manage knowledge about their business operations. Network members generate knowledge through peer-to-peer exchanges assisted by mentors. Mentoring peer exchange is a critical support service provided by the national service provider. Mentors encourage peer exchanges between network members through workshops, visits to their businesses and facilitating online learning exchanges. Knowledge generation is continued online between the face-to-face events. Knowledge generation focuses on inventing and enhancing business operations and business opportunities. The knowledge generated through peer exchanges is captured in the form of operational procedures, stories of experiences, and briefs on lessons learned. These documents are then made available for use to network members on the Linking Learners platform. It is not only network members who participate in the Linking Learners online exchanges. Network members invite on to the platform clients especially from among the farmer groups and buyers as well as ‘supporters’ from local government, ministries and NGO projects. Not all of those invited participate in the exchanges. Many just follow the discussions. These ‘lurkers’ when asked, say 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 Kuria (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 VCs 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).

Over the last year several breakthroughs have been achieved through peer exchanges on the Linking Learners platform. Perhaps, the most important breakthrough was the insights for operating the critically important Cash-on-the-Bag funds. The Linking Learners platform is now the forum for exchanging experiences on the management of these funds. Similarly, operational details for Transaction Security Services 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 website. 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 regional manager function to become a separate business in its own right. This is explained further in the next section on lessons learned. The platform also provides a tool for Traidcrafts’ business skills training. Linking Learners 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 Linking Learners platform has gradually evolved into a tool for business-to-business learning among active members of the network. It has emerged as an indispensable tool for sustaining critically important business-to-business learning.

## **4. Lessons Learned**

Here we present the lessons learned during last year. Lessons are learned from the experiences of network members through a process of trial and error and the sharing of these experiences in business-to-business peer-exchange. Commercialisation of services provides a focus for the learning. The major challenge being how market access services can be provided to all value chain players on a commercial basis. The interdependency of market intelligence and deal making were already known. Small farmers soon told us that knowing the price in a market is not enough to get their produce into that market. Indeed, many deals fall apart even when a buyer is found. Learning exactly how to operate a service that guarantees deals work with higher farm gate prices was the hardest lesson of last year. The mistakes made on large deals provided the first lessons shared here. Throughout the year Information Board Managers in more remote locations continued to struggle with Internet access. The second lesson is that despite great progress in modern technology technical and language challenges remain. Like all the best lessons the third lesson came from costly mistakes. We learned that our national support service was too costly. So we are now changing model from a large national company to a small support service operation to cut costs. Our approach to commercialization of service providers worked best in Kenya, less well in Uganda, and failed in Tanzania. The fourth lesson is to develop business networks from the ‘ground-up’ in Tanzania. The new Southern Highlands Biashara Mapema business network provides a foundation for a ground-up approach in Tanzania. Trial and error provides the experiences for the last lesson shared here. We tried many times to give NGO’s the role of launching commercial enterprises. It did not work. We learned that NGOs are ill equipped for launching commercial enterprises.

### **4.1. On Large Deals**

Large deals earning large commissions should provide an early income to network members. This was our original idea for achieving commercial viability. Our expectation was that these commissions would provide profit to the network members and pay for the national support services as well. Our expectation was that large buyers ready to pay commissions of around 5% would be easy to find. Our expectation was that network members would be able to source produce for buyers quickly. While buyers have been easy to find most deals are never completed. This is not to say that network members do not make money from deals. Most make enough commission from local deals and adverts to keep their businesses going. However, these earnings are insufficient to cover the costs of the support services provided by the National Marketing Company. Two reasons explain this failure:

- The first reason deals fail is because they are discovered much too late. Big buyers want large quantities delivered quickly. Buyers enter the market at the last moment demanding produce be delivered immediately. This leaves the network with insufficient time to organize the collection and movement of produce. This was compared to trying to run in the dust trying to catch a bus that has already passed. To continue the analogy, instead of ‘running in the dust’ our networks should be standing at the roadside ready to flag the bus down when it arrives. Network members have yet to learn to do the strategic preparation for their deal making. They need to prepare themselves to react to situations that are known to regularly emerge. Preparation of forward marketing agreements well before harvest and organising for regular deliveries of produce are being tried out now.
- The second reason deals fail is because farmers are reluctant to hand over their produce unless they are paid on the spot. Many deals have fallen through at the last minute because farmers’ side sold their produce to others offering cash. Networks

discovered rather late that deals fail unless farmers are paid “cash-on-the-bag” at collection points. Big buyers are not willing to advance the cash because they do not trust the farmers. Neither do they trust new business ventures. Since network members cannot provide the credit deals fail. Moreover, credit facilities for short term trading from banks do not exist or are much too expensive.

It took some time to explore this credit challenge and develop a low risk procedure for network members to access credit. Trials on the management of credit facilities so that farmers can be paid ‘cash-on-the-bag’ are underway on a small pilot basis.

The lesson here is that: a) network members must think at least six months in advance and prepare themselves for the deal opportunities that they expect to emerge, and b) a “cash-on-the-bag” facility is indispensable for starting to make marketing chains more efficient.

### 4.2. On Internet Access

Internet access remains a challenge for Information Board Managers living in remote farming communities. The challenge is partly technical and partly language. Some Information Board Managers, particularly in Tanzania, do not know English well enough to exchange ideas with their peers in English. Using Swahili has been tried without much success. No doubt this is partly due to the lack of good Swahili language mentors. Another option that could be tried is the addition of an online English-enhancement tool for people to improve their English while exchanging experiences. Recent test runs of this tool look promising. Despite the rapid expansion of Information and Communication Technologies in the region those living in remote areas, especially in Tanzania, are still left out. Smart phones and GPRS modems take the Internet to wherever there is a mobile signal. The technology exists for every network member to have access to the Internet. But, these technologies are expensive and beyond the reach of some. The challenge is immediate because without Internet access IBMs cannot fully participate in the Linking Learners online exchanges. This leaves these IBMs at a considerable disadvantage.

The challenge of the high cost and reliability of equipment can be met through leasing arrangements. The First Mile project has piloted a lease operation for GPRS modems and notebooks with some success. Leasing business operations and preliminary costs for the service have been developed. The nature of a leasing operation is now much better understood. We now know that it is not the technology or even the financing that is the bottleneck. Rather it is the entrepreneurial skills required to manage a rural network of ‘technicians’ to service the leased machines and collect the lease payments. Finding a local business to pick up the leasing business opportunity is underway.

On top of equipment costs there is also the costs of Internet access. Bandwidth charges are still too high in rural Internet café’s. High minute charges limit the time local entrepreneurs can spend browsing the Internet. Bandwidth charges should come down as the roll out of fibre optic cable spreads across East Africa. This will extend browsing times for many. Another way to reduce Internet costs would be to arrange for the Linking Learner online platform to interface with SMS text to mobile phones.

The lesson here is because Information and Communication Technologies change so rapidly leasing operations must incorporate a high level of flexibility to move with technical changes.

#### 4.3. On the Business Model for Technical Support to Network Members

It was found to be cheaper to run a small service operation at the national level for network members than to operate a large national company providing technical support. Changing from a large national company to a small service operation cuts costs. The original business model called for a managing director, two market information managers and four to five regional managers depending on the spread of the network. However, meeting these staff and operating costs required an annual turn over between one and two hundred thousand US dollars to break even. The new business model spins off the regional managers to become separate businesses in their own right. The new model comprises of independent regional business hubs that manage their own regional network of Market Access Companies and Information Board Managers. These regional businesses then purchase support services from a national service provider. These services include: a) market intelligence, b) business to business learning, c) registration of Transaction Security Service deals and d) Cash-on-the-Bag credit. Just three or four people can run this cheaper national support service.

Spearheaded in Kenya two Regional Managers have now set up independent business networks. Now their lead has been followed in two regions in Uganda and one in Tanzania. The change of status from employee to business owner is not for everyone. While this new model for support services is evolving in all three countries there are some operational issues to be worked out. The precise contractual arrangements between service provider and regional network are still under negotiation. The costs of providing support services and how they can be recovered are still under negotiation. It is also unclear whether and how national support service providers can generate their own income streams and reduce their costs to the networks.

The lesson here is that business performance markedly improves when regional managers run their own business networks. The costs for support services to the networks can be radically reduced.

#### 4.4. On Business Development Approach for Tanzania

The business development approach was the same in every country. It was an approach common to many donor projects: First set up a national project coordination office and then hire regional managers to do the work. In RKN this meant identify and train entrepreneurs to take up the Information Board Manager business opportunity. Each new entrepreneur receives training not just on the business operations but also on how to exchange experiences with their peers on the Linking Learner platform. Sharing prices every day and exchanging experiences and trade opportunities with each other binds the network members together. However, the weakness of a 'project' approach is that only the Information Board Managers behave commercially from the outset. National coordinators and Regional Managers are all directly paid by the project. When the project ends these people are lost to other jobs and the services stop. In RKN these support services were to continue on a commercial basis. In Kenya and Uganda the national project coordinators invested their own time and money to launch commercial National Marketing Companies. In Kenya and Uganda some of the regional managers made investments to launch companies to operate the networks in their regions. These investments were vital to sustaining the growth of the network during times when the project funds were delayed and after the project ended.

This business development approach did not work as well in Tanzania. This may in part be due to strong cultural differences towards business ventures between Tanzania and the other two countries. The first attempts by the national project coordinator and regional managers at

setting up a commercial enterprise failed. Due to poor performance the company ADL failed to secure a second contract to support the development of the network from FAO. The regional managers took up the FAO contract but failed to make adequate investments to keep the network growing when project funds were delayed. Unlike the national marketing companies in Kenya and Uganda who made their own investments to develop their network the Tanzanians only worked when project funds were available. The impact on the commercial development of the network in Tanzania was profound. Out of the five regions covered only the Southern Highlands network has demonstrated some commercial viability.

The commercial performance of the IBMs and MACs in the Southern Highlands suggests an alternative approach to business development. This network has been built by entrepreneurs with little formal education and isolated from official development projects. Middlemen and small traders dominate this network. Without assistance from their regional manager these entrepreneurs have developed their network from the ground up. They have learned the business through peer exchanges with Kenyan and Ugandan network members. Indeed they are now developing trade links directly with the MAC in Nairobi.

The lesson here is that Tanzania needs a specially tailored business development approach. Business development should enable the network to grow from the ground up. Building on successful entrepreneurs who have the experience, skills and motivation to 'recruit' new members to the network. Providing resources for these network 'champions' to grow their networks into regional operations will be a better approach. This approach enables leadership for the regional network to emerge from among its ranks.

#### 4.5. On the Role of NGOs in Business Development

NGO's, local and international, played an important role in the RKN and Firstmile projects. They were contracted as service providers to develop commercial services and nurture the emergence of commercial enterprises. The general practice was for the NGOs to reassign their contracted staff to take up the new work. Once in place these staff did a good job at developing and operating the service. While project funds supported their work small farmers greatly benefitted from better access to markets. Farmers regularly got prices 20 to 50% more than before. The plan was for these staff to continue providing these services as a commercial offer to small farmers after the project ended. It was expected that farmers and traders would simply pay for the services when the project 'subsidy' stopped. This did not happen.

Our attempts to launch commercial market access services through NGOs have almost all failed. This was most pronounced in Tanzania with NGOs contracted by the AMSDP. Farmer Field Schools and Farmer Unions offering market access services during the project failed to make the transition to commercial services. The only exception here was the Field Schools in Western Kenya.

The problem appears to be that NGOs, while offering good services, did not have procedures in place for sustaining their services once funding ceases. Often staff was reassigned causing the local service to collapse. Those not reassigned were more comfortable finding work with another NGO than switching to the private sector. Those who do stay prefer to look for more donor money than develop paying clients. Much of this is understandable given that during the project NGOs cannot build commercial relationships with their real clients. Farmers expect services from NGOs to be free. Buyers are no different. The clients themselves refuse to let commercial relationships develop however much the NGO may want them.



The lesson here is that NGOs are ill equipped for launching commercial enterprises. They are better at training farmers to use commercial services. They are better at training entrepreneurs in business skills. Capacity building is a role for which NGO's are better suited.

### 5. Recommendations

Here we present our recommendations to IFAD. We focus where we think IFAD can stimulate the provision of commercial services in market access. Our recommendations are not for IFAD alone. Rather, progress will require partnerships with the private sector. IFAD could also partner with social investors. Such partnerships could support commercialization up to the point where commercial investors can come in. In this spirit of partnership we recommend that IFAD and its development partners find ways for:

1. **short-term trade credit to facilitate small farmer trade be made available.** More specifically, we recommend that the current trials providing credit to transaction secure deals so that farmers can be paid Cash-on-the-Bag be scaled up.
2. **rural networks of ICT skilled entrepreneurs be developed.** More specifically, we recommend that the current trials providing leased ICT equipment in rural Tanzania should be scaled up to a commercially viable size.
3. **rural business networks to be expanded to reach commercially viable scales.** More specifically, we recommend that support enables local mentors stimulate peer-to-peer learning on the ground and online using the Linking Learners platform.
4. **user-led programming to be developed for SMS-Internet applications that will benefit rural areas.** More specifically, we recommend that new applications focus on market intelligence, transaction security tracking, and peer-to-peer exchange.
5. **pre-commercial R&D to be conducted on new ventures for rural business communication networks.** More specifically, we recommend that investments should take these ventures to the point where banks and commercial investors can pick them up.
6. **donor projects to avoid providing subsidised or free market access services where commercial services exist.** More specifically, we recommend that donor projects buy the commercial services that are available.

#### 5.1. Short Term Credit to Facilitate Trade

**Recommendation: IFAD find ways for short-term trade credit to facilitate small farmer trade be made available. More specifically, we recommend that the current trials providing credit to transaction secure deals so that farmers can be paid Cash-on-the-Bag be scaled up.**

Most produce moves from farm to market with money from the pockets of local itinerant traders. Sometimes traders will get cash advances from “agents” of large buyers. This behaviour severely limits the amount of cash available to buy produce from farmers. Limited access to cash results in wastage and inefficiencies in market chains. Itinerant traders only have enough cash to buy one load. Farmers must be paid cash before they will part with any produce. Once the trader has sold the first load he now has cash to buy the next load. Unfortunately when he returns for the next load the farmer has already sold to another trader. Not only is the trip wasted but also the trader must now spend more time finding produce to

buy. A trader may have to make two or three trips for each full load. Big buyers also suffer from inefficiencies. The cash advances they provide to their agents end up in the hands of smaller traders. These traders will side sell to a better deal instead of buying for the agent. Some will simply run away with the money. Some will buy cheaper poor quality produce and hope to get away with it. All this results in huge inefficiencies. Worse still it spreads distrust through the market chain from farmer to big buyer. It is only because there is no alternative that big buyers continue to use 'agents'.

Even an honest trader trying his utmost to fulfil his commitments cannot find a bank to provide trade credits at acceptable rates. One commercial bank offered short-term credit at 45% per annum. A further problem with banks is their requirement for collateral. These are often larger than small businesses can access. The banks are constrained as they have no way to check the credit worthiness of smaller traders who buy directly from farmers. Money on the black market that does not require collateral is up to 2% per day. Such high interest rates eat into the trader's profits. With these constraints in mind a short-term credit facility for trade has been set up. The credit is to be used exclusively by network members for facilitating deals that are registered as Transaction Security Services deals. The credit allows farmers to be paid when they hand over their produce. Farmers get 'Cash-on-the-Bag'. The buyer pays off the credit when the produce arrives at their premises. Tanzanian experiences look very promising as shown in the example of twenty farmers in Chunya who sold ten tons of Maize to small traders in Mbalizi market. The process was as follows:

1. IBM takes cash from COB-fund to pay farmers.
2. Farmers get paid 5,000/- Tsh per tin instead of the normal price that day of 4,500/- Tsh
3. Farmers' benefit from an 11% price increase on their Maize and are paid on-the-spot.
4. IBM transports the Maize to Mbalizi and delivers it to small traders in the market.
5. Traders pay a lower price for the Maize than they usually pay.
6. Traders pay IBM who returns cash into COB-fund within one week, along with 1% interest.
7. IBM deducts all expenses, eg. transport and loading costs, and remains with 51,000/- Tsh as commission.

### 5.2. Increase Rural Access to ICTs

**Recommendation: IFAD find ways for rural networks of ICT skilled entrepreneurs be developed. More specifically, we recommend that the current trials providing leased ICT equipment in rural Tanzania should be scaled up to a commercially viable size.**

The high cost and poor reliability of ICT equipment under rural conditions limits access in rural areas. For the RKN initiated market access business networks this means making sure suitable laptops and smart phones are affordable. With affordability also comes reliability. Faulty equipment needs to be repaired or replaced promptly. Moreover, in places where electricity supplies are interrupted or non-existent, alternative charging systems like solar power are needed. Providing reliable access to ICTs turns out to be a lot more than just owning equipment. A rural network of ICT skilled entrepreneurs offering leases to reduce costs and maintenance contracts to keep equipment working will go along way to improve rural access to ICTs.

### 5.3 Expanding Capacity of Rural Entrepreneur Networks

**Recommendation: IFAD find ways for rural business networks to be expanded to reach commercially viable scales. More specifically, we recommend that support enables local mentors stimulate peer-to-peer learning on the ground and online using the Linking Learners platform.**

The RKN project supported the emergence of a commercial network of rural businesses. The rural business communication network is now fully commercial. Each member of the network from Information Board Manager, Market Access Company, through to National Marketing Company with its regional managers either as staff or independent business is a registered private company. The Rural Knowledge Network has evolved into Rural Business Communication Networks. These networks are proving to be very attractive to potential clients. Small farmers, traders and buyers from factories or wholesale like the human presence the network has at both ends of the market chain. At the seller end, Market Access Companies and their Information Board Managers organize the collection and quality checking of produce. While at the buying end Market Access Companies organize the delivery of product. Also in demand is the handling of payments of farmers. Manufactures of products for rural customers like the reach of networks deep into rural areas. While the network may comprise independent private companies its monthly turn over cannot yet cover the costs of the National Marketing Company. The corporate overhead for training and growing the network is too large for the emerging network businesses to carry. Two things must happen for the network to be commercially successful: Firstly, the number of deals done by the network members must increase. Secondly, the number of network members must increase. The RKN has shown that commercial viability only comes at large scale. Giving a higher price to farmers' and a lower price to buyers' means that margins are low. A low margin business must operate at large scale to become profitable.

Many more rural entrepreneurs need to join the networks in Kenya, Uganda and Tanzania. New networks need to be started in other countries in East Africa. Trade links with Rwanda and Sudan are already developing. These new entrants need to learn the business from experienced network 'champions'. The way to scale up network numbers is through peer-to-peer learning. Exchanges between new and old network members supported with local mentors and cross business visits. The RKN has proven that the Linking Learners platform is an indispensable tool for business-to-business learning. Over the last year several breakthroughs have been achieved through peer exchanges on the Linking Learners platform.

### 5.4. Open Source SMS/Internet Applications

**Recommendation: IFAD find ways for user-led programming to be developed for SMS-Internet applications that will benefit rural areas. More specifically, we recommend that new applications focus on market intelligence, transaction security tracking, and peer-to-peer exchange.**

A new approach to programming SMS-Internet application for mobile phones emerged from the difficulties using 'of the shelf' software. Ready made applications tend to be over designed. The many functions available are not all used and confuse rural users. Pioneered by software companies Ideso in Switzerland and MobilInfo in Tanzania, 'user-led programming' keeps applications as simple as possible. No functions beyond what is required are added. Programming only starts after a manual version has been tried. At first all the programmers do is automate the manual version. Then they change the software according to feedback from users under real conditions. They only program what has been actively requested from the

users. Applications developed in this way result in much less confusion and immediate usefulness.

User led programming would further enhance the market intelligence application. A new application for tracking Transaction Security Service deals needs to be developed. A new application for an sms interface with the Linking Learners online platform is needed. This application would greatly benefit those rural areas with the least access to the Internet. Such applications will not emerge commercially. Software companies focus on faster and easier urban markets. Furthermore there is a strong public interest in making sure such applications remain in the public domain, ie. open source.

### 5.5. Pre-Commercial R&D

**Recommendation: IFAD find ways for pre-commercial R&D to be conducted on new ventures for rural business communication networks. More specifically, we recommend that investments should take these ventures to the point where banks and commercial investors can pick them up.**

A rural business communication network provides a backbone on which many new ventures can be built. Market access is proving to be one such new venture. Manufacturers see these networks as vehicles to distribute their products to rural customers. This is particularly the case for makers of solar equipment. Successful leasing of ICT equipment also depends on such networks. Many new ventures become possible where a tightly knit network of entrepreneurs reaches rural areas. The very dynamic area of mobile money also offers new business opportunities for rural networks. Many of these new opportunities would greatly benefit rural development. However, before any benefits are realised a lot of operational R&D is required. What is shown to be technically possible still needs R&D to achieve operational and commercial proof of concept in rural areas. Investment in 'pre-commercial' R&D is needed to realise these new opportunities for rural business networks.

### 5.6. Commercial Services

**Recommendation: IFAD find ways for donor projects to avoid providing subsidised or free market access services where commercial services exist. More specifically, we recommend that donor projects buy the commercial services that are available.**

The commercial ventures that are emerging from the RKN effort depend on being able to sell their services. Without project support it is the income from selling their services that keeps these businesses operating. This is what the RKN project promised: Commercial, and thereby sustainable, market access services offered to farmers and market chain players. However, experience suggests there is the danger that the same services are again invented by other donor projects. These projects provide these services under subsidies or even for free. This behaviour sabotages of the commercial viability the very ventures that have been developed by RKN.

## ANNEX A. Terms of Reference

The objective of this ToR is to support the emergence of a commercial network of local businesses providing transaction security services to actors in the marketing chain especially small farmers. Specifically the ToR shall:

- Capture experiences of the businesses and farmers involved.
- Document impact, good business operations and lessons learned.
- Share experiences, ideas and operational practices between all collaborating partners and share lessons learned and the policy insights that emerge for public agencies wanting to engage with value chain actors in improving market access for low income rural households.

These objectives are to be achieved through two sets of activities as follows:

- *Capture and document experiences, impact and good business practices.* Undertake field visits to capture experiences of small farmers and the MACs in Kenya and Uganda. Document the lessons learned from all the field activities pertinent to the learning agenda of the local learners involved in the RKN project. Documentation is to include preparation of newsletters, briefs for donors and managers. Capture of experiences and impacts of the emerging market access companies on the income and livelihoods of small farmers is to include filming and interviewing local entrepreneurs on the ground for stories to be written up and made into short 3 to 5 minutes video. Interviewing and gathering information on the ground will also be used to identify and write up good practices.
- *Share experiences, practices and lessons learned using the Linking Local Learners internet learning support platform.* Facilitate learning exchanges on the LLL teams (DDS, ICE) that improve the business operations of the NMC, Market Access Companies and Information Board Managers. Provide and manage the Linking Local Learners internet learning support platform at [www.linkinglearners.net](http://www.linkinglearners.net) including hosting and maintenance of the contact person database and the knowledge pool of discussions and library contributions for the ICE and DDS teams. On a monthly basis update the website for sharing lessons learned with any interested parties.

By completion of the work the following outputs will be achieved:

- Key lessons learned prepared as short policy briefs for donors and managers.
- Commercial experiences of all actors in the market chain, especially farmers captured in stories and video.
- Good practices emerging from local businesses captured as operational manuals.
- LLL member contact database.
- Updated [www.linkinglearners.net](http://www.linkinglearners.net) website.
- Final report including all above documents.

A table itemizing each of these deliverables can be found in Annex. Table of Deliverables at the end of this report.

## **ANNEX B. List of Deliverables for December 2009**

### **Briefs**

- No 29. The Need for Market Reform Now
- No 30 Market Transaction Security Services
- No 31 Pro Poor Business Development

### **Business Practices**

- Product tracing
- Selling SMS
- Collection point management
- Cash on the Bag
- Double-Loop deals
- TSS deals

### **Newsletters**

- AgriNet, Uganda Newsletters: July, September
- AgriTrade, Kenya Newsletters: June, July, August, September, October, November, December

### **Stories**

- Story 71. Mugo. IBs in Nairobi Markets
- Story 72. Gichiru. AgriTrade, Nakuru Network
- Story 73. Wachira. Allaken IT
- Story 74. Kanyi. Allaken IBs
- Story 75. Kanyi. Allaken Horticulture
- Story 76. Mulindi. Karosa and Navakholo MACs
- Story 77. Mulindi. Dairy Market Network
- Story 78. Nyende. AgriFeeds
- Story 79. Nyende. Budaka Farmers
- Story 80. Nyende. Kyere Warehouse
- Story 81. Ntume. Hoima MAC
- Story 82. Luwerekera. IB's network Kampala
- Story 83. Opio. Lira MAC
- Story 84. Nakakeeto. AgriNet's Market Intelligence
- Story 85. Kinyanjui. Nakuru IBM
- Story 86. Mukhaye. Market Information Managers
- Story 87. Tweve. Southern Highlands Network
- Story 88. Nyende. Cash on the Chick