# NEWSLETTER



### N.º 2 - March 2014

Building the Capacity of Smallholder Farmers and Farmer Organizations (BCFFO) to engage in agricultural value chains in Sofala and Manica Provinces in Mozambique

Funded by the Alliance for a Green Revolution in Africa - AGRA



As a result of the capacity building of the farmer associations, many of them have prepared their statutes and others are in the final stage of preparation. On the other hand, associations which already had statutes have restructured them based on the guide provided by the Project. Legalization of associations is expected by the month of June 2014.

Another gain resulting from the intervention of the institutional capacity building component was the identification of 204 associations and 3 cooperatives. In addition, 40 "mother & baby" demonstration plots have been established, i.e. 10 in each of the target districts of the Project, except Gorongosa, activities of which have been temporarily suspended due to the political and military situation affecting that region. Thanks to the Demonstration Plots already established, smallholder farmershave learned to sow in rows (observing crop spacing). They have also learned to control pests by using chemical methods (use of synthetic pesticides) or by using alternative methods (use of botanical pesticides, i.e. plants). In parallel, the demonstration plotsare meant to be learning plots for the farmers.

As for markets component, the training undertaken in December last year resulted in 35 members of associations trained and a total of 3500 replicason how to handle products in the post-harvest period.

In Sussendenga, for instance, the smallholder farmer, Francisco Marimbe, trained by Kixiquila as a trainer has then taught Collective Marketing and Price Negotiation to 11 associations of Dimbautore area - Chicuízo. Another achievement is that from the training undertaken, smallholder farmers already started to set sales targets, as they know how to quantify production for sales and, therefore, separate a portion for household consumption and the surplus for sale. At the same time, the capacity building in markets has provided to the smallholder farmers skills to negotiate their produce at fair prices, in order that they get profits, thus making farming something that pays off.

Another outcome that could be outlined is the fact that farmer associations are committed to building produce aggregation centers, in other words, sites where yield share accumulated, on a temporary basis, for subsequent collective sale.

Rehabilitation of two warehouses (in Vandúzi and Sussendenga) coupled with the acquisition of equipment to ensure appropriate environmental conditions for the storage and maintenance of produce is a gain for the associations. Still with respect to the warehouses, a curious fact is that Kuchena Hakufapi Association, in Gondola, wants to build a warehouse and, to this end, it has scheduled the production of bricks for the walls of the future warehouse and a credit application for roof covering.

As for potential buyers, a total of 18 potential buyers have been identified, and we can say that there is a market for placing surpluses from the associations. Interestingly enough, in Sussendenga, in the community of Chicuízo, there is a Union of farmers associations that wants to become a cooperative in the near future, legalization of which, at the district level, shall occur by the month of April 2014.

The gender issue is a matter taken into consideration very seriously by the stakeholders of the Project, in such a way that women members of an association have the same opportunities to hold leadership positions, even though it is still a challenge to have an increased number of women in associations, as they are in a minority when compared to men. And this have been observed at several Project implementation levels.

One of the deliverables of the Project is the provision of credits to smallholder farmers, upon development of a business plan. In effect, through Kulima, the Project has trained smallholder farmers on how to prepare their business plans and the impact thereof is that 110 business plans were submitted to Kulima, of which 102 were approved and already have accessed to credits in cash and in species (seeds, fertilizers, pesticides). 3% is the interest rate payable by the end of the agricultural season.

Lastly, we could state that the production technologies introduced by the Integrated Project not only through training of beneficiaries but also by taking into account what is seen in the field will be translated into relatively high levels of agricultural produce and good sales taking into account the availability of the market. The Integrated Project is promissing!

### INSTITUTIONAL CAPACITY BUILDING

In order that the dear reader be aware of the impact of the training administered to smallholder farmers in September last year, the newsletter editor interviewed Mr. Américo Tresébio, coordinator for the institutional capacity building component. The conversation reads as follows:



Américo Tresébio, coordinator for the institutional capacity building component

## What was the impact of the trainings given to smallholder farmers for the "life" of the associations?

Following the capacity building on establishing associations, we believe that something has changed in a positive fashion:

- Smallholder farmers are aware of the advantages of working collectively, i.e, in Fos', because matters are treated more seriously, and so it brings more gains to the members. These gains can be sumarized up as follows: facilitating access to trainings, improved inputs, to bargain prices and even imposing limits on certain topics, something that does not occur when a person works individually.
- 17 associations have developed their statutes and 20 are in the final stages of the preparation. Legalization is expected between April and June 2014;
- Associations became more strong and consolidated;
- Over time, we note that the number of members in the associations is increasing;
- A Union of the associations was formed in the community of Chicuízo Madhetere.

## What were the approaches used to facilitate knowledge transfer?

One of the approaches used to transfer technology and knowledge to members was the establishment of demonstration plots, which are useful as learning plots showing/exhibit production technologies, thus serving as a vehicle for transfer of technologies to smallholder farmers. We are aware that the level of education of most of our targetgroup does not allow us to use more advanced technology transfer modules. In this context, we have decided to assist farmers through demonstration plots. Thus through the Capacity Building component alone 40 baby plot for the associations have been established (10 in each district, with the exception of Gorongosa) by implementing the "mother & baby" methodology. The Institutional Capacity Building component has dealt with the "baby" which works as a replica of the "mother" demonstration plot which were established by the production component.

## Of what does the process of establishing demonstration plots consist?

The process of establishing demonstration plots is basically the involvement, at all cultivation stages, of all smallholder farmers who are part of that demo, so they could watch "in loco" basic techniques and best practices in farming to be followed over the course of cultivation from ploughing, sowing, weeding, thinning, ridging, pest control, determination of yields, harvesting and transportation. Under this process, smallholder farmers are engaged in the crop handling phase (crop treatment), for example, when a certain pest affects a given crop. They also learn how to control a pest or disease in crops, including precautions against pests and diseases.

### SUSSUNDENGA DISTRICT

## Union of Associations resulting from the institutional capacity building

The newsletter editor, together with Américo Tresébio, Trainer, under the Institutional Capacity Building component, had a meeting with a Union of eleven (11) associations in the community of Chicuízo – Madhetere. Hetalked to its members. Here is the summary of the discussion:

### **Composition of the Union**

The Union is composed of the following associations: "Kurima Malaene", "Nhaorombe, Urombo Wanhanha", "Trabalhar para receber".

### Union's Objective

It is a union of 11 associations wishing to form a cooperative, to be called Cooperativa Chicuízo [Chicuízo Cooperative].

The Union has a cooperative under formation. By the month of April this year, legalization of the cooperative is expected at district level.

### Actions already taken by the cooperative:

Several meetings were held to discuss ideas to make this dream of a cooperative to come true. The idea is to get the associations to work together, including the discussion of the statutes of the cooperative, following the merger of the associations, because the statutes of associations are already prepared.

The acting chairman is Mr. Marimbe. Later, on the final election of board members will take place prior to legalizing the cooperative.



The place where the Union holds its meeting.

### Location of the cooperative

The union already has a site for the future cooperative headquarters, located near the warehouse of Chicuízo, which was rehabilitated by the Integrated Project, through the Project's marketing component. On average, each Association is composed of 23 elements and the union has 260 members.

### Capacity building of the associations

Capacity building of the associations was administered by the Trainers of Trainers and consisted of the following contents:

- Cooperativism;
- Leadearship;
- Business plans;
- Development of statutes;
- Establishment of replicas or replicas fields in the associations.

### Preparations for construction of the cooperative headquarters

Associations are already getting ready to make 2,000 bricks each one to build the headquarters of the cooperative, by the month of June 2014.

### Purpose of creating the cooperative

The creation of the cooperative is intended for conquering market by way of collective sales of the associations' agricultural surpluses.

### Crops the cooperative wants to grow and commercialize

Future cooperative will grow and commercialize the following crops: maize, soya, sesame, and beans.

### Preparing the statute for the future cooperative of Chicuízo

The statute of the cooperative is developed in a participative manner, as the Project has provided a basis which guides the members of the Union of associations. In turn, those members approve the articles to which they agree, remove those articles they consider in appropriate and make comments and additions. When this process is over, that is to say, when the draft of the statutes has the consent of the Union of associations, the Project will compile the Statute of the future Cooperative of Chicuízo.

### Legalizing the associations and cooperative at the district level

It is expected that the associations are recognized by April 2014 and the cooperative by May 2014.

### Opinion of the chairmen of the associations regarding the Integrated Project

According to the chairmen of the associations, the members of these associations are happy with the capacity building, because of the new developments that they are witnessing. For this reason, the idea of creating the cooperative is irreversible, as it cultivates the spirit of team work; and thus this will make it possible to overcome communication barriers they have faced before.



The members of the Union of Associations

### **VOICE OF BENEFICIARIES:**

In order to know more from the beneficiaries about the impact of the training they have received from the Project under the production component (replicas) in Sussendenga, the editor of this journal heard the following testimonials:

#### Production techniques

"When I completed the training offered by the Project, in September 2013, I returned to organize a replica of what I had learned. The replicas I organized had the following contents: row-seeding, fertilization (fertilization techniques), plant density, the small hole technique (a pit into which seeds are placed). In parallel, I have taught the Intercropping techniques (I used 3 lots distributed as follows: Sesame with maize, maize with soya and beans with maize). Basically, I showed the members of my association that crops can be mixed with by using good spatial arrangements within the farm. Most importantly, those techniques should not end at the demonstration farm which we have opened, but they should be brought to our own farms. We easily notice that those techniques will bring some positive change in our yields." (Efuremo Elias Veremo, Trainer)

### Pest control

"I taught the members of my association the following: Techniques of identification and prevention of pests and diseases for the crops we grow" (Idem)

### Establishing a"mother & baby" replica farm

"In addition to the training that I administered, I mounted a replica farm along with members of my Association called "Enxada na mão"/ ["Hoe in hand"], which has 25 members." (Idem)

### Strengthening Associations

"The statutes of associations are a guide towards strengthening the union of associations." (Idem)

### Lessons Learned:

"I learned that for an Association to be successful it is essential for its members to work in groups; according to the saying union is strength." (Efuremo Elias Veremo, trainer of trainers)

"The technologies I have been taught (spacing, basal fertilization and top soil fertilization application) lead to considerable increase in agricultural yields, because they make it possible to increase the amount of plants per area, unlike the past." (Idem)



Efuremo Veremo explaining what he does in his farm

### **GONDOLA DISTRICT**

### Activities of Kuchena Hacufapi Association

Kuchena Hacufapi Association, located in the area of Niza, Administrative Post of Zembe in Gondola district was one of the associations visited by the newsletter editor. The conversation held with the members of the Association brought the following findings.

### Gender:

The Association takes into account the gender issue that is why there is a balance between the number of women and men (11 women and 12 men). At the same time, women hold leadership positions. In this context, the ladies Elisa Mauche, Graça Luís and Tabita Zacarias hold the position of Treasurer, Supervisor and Vice President, respectively.

### Leadership of the Associationin the medium and long term

According to the Secretary of the Association, Mário Luís, looking at the leadership in the medium and long term, there should be an experienced leader and a young assistant who could go about learning how to be a leader in an association. In this context, the Vice-chairwoman of the Association is very young and the idea is that when the chairman retires or if replacement is required, the vicechairwoman will take office with deep knowledge on how to lead the association. In this Association there are 3 trainers of trainers (ToT).

### Impact of the Integrated Project on the life of the Association

Every member agrees that there were changes in technologies used in the agricultural production, thanks to the training given to trainers of trainers and replicas organized by those ones to the other members of the Association. It is expected an increase in production and income of the Association. With the lessons learned by the project intervention, the union of the Association was strengthened.

### Cultivation Areafor the Association

The Association has an area of 33 hectares of which 7.8 hectares have been explored till date of interview (4 hectares of soya and 3.8 hectares of maize), due to constraints arising from lack of machinery to clear the bush.

### **VOICE OF BENEFICIARIES**

### Testimonials from some members of Kuchena Hacufapi Association

To gauge the results of the capacity building in Gondola, we heard testimonials from some members of Kuchena Hacufapi Association. Please read them below:

### Dream of the Association

"We now have knowledge and vision, thanks to the support of the Integrated Project. With the knowledge and vision we are able to produce and sell more. Therefore, Association is committed to selling the producein order to afford to buy machinery in the future. The machinery is intended to give more dynamics to the production area" (Elisa Mauche, treasurer of Kuchena Hacufapi Association)



Elisa Mauche, treasurer of Kuchena Hacufapi Association

### Lessons Learned by the Association

Associativism provides manifold benefits, such as:

- Exchange of Experiences between members of the Association;
- Strengthening unity of the members of the Association;
- One can achieve what he or she cannot on their own. For instance, collectively itis possible to purchase a tractor." (Graça Luís, Supervisor of Kuchena Hacufapi Association)



Graça Luís, Supervisor of Kuchena Hacufapi Association, with baby in hands

### Relationship between the Association and the Project

"Relationship between the Association and the Integrated Project is fit as a fiddle, taking into account that the implementers of the Project are working directly with field staff and receive visits from the coordinators of the integrated Project components who honor their commitments (schedulling of dates for the visits and focus on the Project goals, namely compliance with the Project implementation phases). For example, when a pest comes up, there is an immediate response on the part of the Project."(Luís Raimundo, chairman of Kuchena Hacufapi Association)

### **Storing Produce**

"Due to the lack of an infrastructure to store the produce which will greatly increase with the introduction of technologies that we have learned through the Project intervention, our Association wants tobuild a warehouse. Indeed, there is a plan to manufacture bricks to build the walls of the warehouse. The main constraint we have is our inability to cover it, so we need funding." (Luís Raimundo, chairman of Kuchena Hacufapi Association)

### Sustainability of the Association

If we get a tractor, field clearing will be carried out in good time, and agricultural production will be very large, making it possible to negotiate and sell the produce at a price that gives us good profits. With a warehouse and a tractor our Association will undoubtedly be sustainable." (Idem)



Luís Raimundo, chairman of Kuchena Hacufapi Association

### INPUT MARKETS

In order to become aware of the bigger picture of the marketing component, we talked to the coordinator of this component, Anésio Walter. Here is a summary of his statements.



Anésio Walter, on right, coordinator of marketing component

### Goal of the marketing component under the project:

Improving access to distribution markets for smallholder farmers and reduce post-harvest losses

### Actions taken to pursue this goal:

#### 1. Training of trainers on post-harvest handling:

Deliverables in the area of trainers' training and postharvest handling were as follows:

• 35 members from various associations undertook training;

• Post-harvest handling replicas have been organized, covering a total of 3500 smallholder farmers.

### Objective of the trainingin post-harvest handling:

Members of the associations that were created and the smallholder farmers should be able to give training to other members of the same Association, in such a way that post-harvest losses can be lowered, because the current situation in the country is of about 40% losses. Project is committed to reducing losses to the range of 10-20%.

#### 2. Training in collective Marketing and Market Negotiation

Replica of the training in collective Marketing and Market Negotiation made it possible for 4,800 smallholder farmers to be covered within a period of 5 months.

#### • Objective of the training:

Objective of the training was to encourage the associations, within the union, to carry out collective sale of their surpluses to potential buyers at a fair price.

#### • Importance of negotiating prices

Typically, when a customer buys bulk he or she wants to pay a low price. Given this detail, to avoid the potential buyer to stipulate a price that prejudices the smallholder farmer, in such a way that the latter cannot make a profit, negotiation is required.

#### • Objective of market negotiation:

Making it possible for the parties to reach an agreement (contracts that stipulate fair prices), without losses for both

the smallholder farmer and the buyer, which means that sales revenue must cover the production costs and, on the other hand, the customer must make gains by reselling the product.

#### 3. Establishing Aggregation Centers

6 Aggregation Centers were established in the communities of the districts that follow:

- Manica District: communities of Dororo, Mavonde, Mucone and Chirodzo;
- Sussundenga District: community of Munhinga;
- Gondola District: community of Zembe.

#### 4. Rehabilitation of warehouses

Warehouse of Sussundenga was rehabilitated (ventilator shave been installed. A partition was placed, and the internal and external walls were partially plastered). In the warehouse of Vandúzi, in Manica district, the main gate was built, and equipment including electronic and mechanical scales, moisture meter and temperature gauge were provided.

### Impact of the rehabilitation of warehouses

When the rehabilitation of warehouses is concluded, the associations will be able to keep and store products that will later be sold at a time that prices are acceptable; since in the early period of commercialization of agricultural produce, prices are relatively low and as the product becomes scarce, prices increase.

#### 5. Making basic equipment available for the warehouses

The following equipment is already available:

- Simple temperature and environment gauges;
- Moisture measuring equipment, which serves to gauge moisture of grains themselves (cereals), ideal moisture percentage of which is 13%, for keeping it in the warehouse;
- 4 Ventilators, objective of which is to ventilate the warehouse;
- 6 scales to be used to weigh the produce itself.

#### 6. Connecting smallholder farmers to potential buyers

This is a very complex component, because both parties do not dare to take a chance blithely, that is to say, the smallholder farmers hardly determines the quantities he or she will provide to his or her customer, and the customer, in turn, does not agree to conclude a contract with an uncertain quantity of products. Surely, this is the reason why the integrated Project exists. Anyway, it should be noted that a total of 18 potential buyers have been identified by the marketing team; and based on this, buyers will be selected to sign contracts with smallholder farmers so to establish a fair price. Importantly, the marketing team has identified potential buyers for each of the following crops: maize, beans, sesame and soya.

#### 7. Next steps under the markets component

In the next step, i.e., before the month of April 2014, the following actions shall be carried out:

- 1. Training in financial Management;
- 2. Training of storekeepers.
- 3. Continuation of replica sessions.

### SUSSUNDENGA DISTRICT

### **VOICE OF BENEFICIARIES**

Training activities for the associations in collective marketing and market negotiation.

In September 2013, Project promoted the training of trainers in marketing component. From then onwards, a lot has happened. Within this scope, the editor of this journal together with the Coordinator of the Marketing component, Anésio Walter, travelled to the district of Sussendenga, namely the community of Chicuízo to hear the testimonials of the beneficiaries of the Project. The testimonials are as follows:



Fransisco Marimbe in his farm

### **TESTIMONIALS OF THE BENEFICIARIES**

### Contents taught over the training

"Following the training I received, in September 2013, I then trained other farmers in the following areas: collective Marketing and Market Negotiation. I have already trained 11 associations from Sussendenga, in the Dimbautore-Chicuízo area." (Francisco Manuel Marimbe smallholder farmer and trainer in the market component)

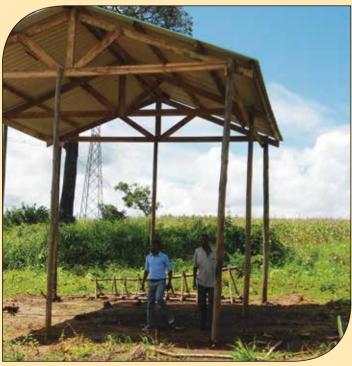
### Impact of the training given to associations

Marketing plan administered to the associations made it possible for them to learn that for good sales it is necessary for a person to know how to negotiate. Also, a person must know how to set goals and keep in mind that it is important to have quality crops and seeds. With such goals, associations have come to know the quantity to sell and, therefrom, they shall separate the portion for consumption and the portion for sale, which is linked to the goals they set." (Idem)

"Associations have learned how to attract customers, how to negotiate a fair price and the need to have a spot for promotion (Aggregation Center) of the produce. Also, they realized that when the products have uniform specifications, as is the case of the same grain size and same color, products have a relatively better price when compared with assorted products." (Idem)

### **About Aggregation Centers**

During the conversation with Mr. Francisco Manuel Marimbe (smallholder farmer and trainer in the marketing component), he spoke of the existence of an Aggregation Center in his community. Here's the statement:



Aggregation Center

### Concept of an Aggregation Center

"Aggregation Center is where you will temporarily accumulate agricultural produce for subsequent collective sale." (Francisco Manuel Marimbe smallholder farmer and trainer in markets component)

### **Operating an Aggregation Center**

"The produce of an association is accumulated and then collective soldand later on is carried out. For example, the buyer says, on the day"x"I will show up and will need quantity "y". Then smallholder farmers get organized to make the requested yield available." (Idem)

### **Construction of Aggregation Center**

"The Integrated Project through the Marketing component has identified sites and has established 6 Aggregation Centers for products." (Idem)

### Criterion applied to identify the location for the Aggregation Center

"The sites were identified by the beneficiaries based on the proximity of the location where associations are situated. This criterion was used to reduce the distance between the place of production and the sales center. Often smallholder farmers lose out because of the transportation of surpluses between the point of production and the market." (Idem)

### Purpose of Aggregation Centers

"The purpose of Aggregation Centres is to benefit smallholder farmers who are part of the Integrated Project through associations with a place where they run collective sale of agricultural produce. People who are not members of the Project can alsobenefit from the Aggregation Center or storage center, because the ultimate intention of the Project is to see by the end of Project all stakeholders in agriculture getting benefits from their commitment to this activity." (Idem)

### Status of the infrastructure of the Aggregation Center

"When the rainy season is over, the infrastructure will be fenced in with bricks up to the ceiling and the floor is going to be cemented (putting a layer of cement). Associations will participate in the works together with the technical team of the markets component." (Idem)

## COMERCIALIZATION OF AGRICULTURAL INPUTS

### Visits to the warehouses of the following Associations: IDEAA, IAV and Dengo Comercial

With the purpose of assessing the installed capacity as a result of the Project intervention in the sphere of commercialization of agricultural inputs, the editor of this journal visited the warehouses of the following associations: IDEAA located in Vandúzi, in Manica district, IAV and Dengo Comercial both institutions located in the city of Chimoio, where he talked with Tendai Petessai Jambo (accountant for IDEAA), Sara Penicela (Administrative Director of IAV) and Maurício Dengo (owner of Dengo Comercial), the editor of this journal summarized the information as follows:

### MANICA DISTRICT

Summary of the talkwith Ms. Tendai Petessai Jambo from IDEAA

### What is the area of specialization and where is IDEAA operating?

IDEAA is an association of smallholder farmers growing oilseeds and working with farmers located in 3 districts: Manica, Gondola and Sussendenga. IDEAA supports their members from sowing to harvesting, and ensures market demand for sale of the produce of the members of the association.

### Role of IDEAA under the Project

IDEAA is engaged in marketing component and it is in charge of the following:

- Contacting potential buyers;
- Replicating the training on post-harvest handling (the initial training is given by Kixiquila);
- Training of storekeepers

### CHIMOIO CITY

### Summary of the conversation with Ms.Sara Penicela of IAV

### About the company Insumos Agrícolas e veterinários (IAV)

IAV is a business that commercializes fertilizers, cereal seeds and oilseeds.



L

Warehouse located in Vandúzi

- Supplying all basic equipment to the warehouses:
  - Scales;
  - Ventilators;
  - Moisture gauge for the local environment and for the produce itself.

### Project supportt rehabilitate the warehouses

#### Project has given its support as follows:

- Manufacturing a large iron gate already installed inthe warehouse of Vandúzi;
- Acquiring equipment (scales, ventilators and moisture meters for the local environment and the product itself) for the warehouse.

## Ongoing activities undertaken under the markets component

At present, the marketing component is undertaking replicas, a process that will last until the end of the year. Of the 35 smallholder farmers trained in post-harvest handling, each will train 10, totaling 350 smallholder farmers. Those 350 smallholder farmers will, in turn, train each, another 10, totaling 3500 smallholder farmers already trained and so on, throughout the Project.

### Integrating IAV into Integrated Project

IAV works with the Project by selling seeds and fertilizers on credit to agro-dealers (resellers) trained by AGRIMERC, who have a deadline of 30 days to pay, but sometimes they pay before the deadline and other times after this date, depending on how quickly smallholder farmers pay off the due amounts.



Sara Penicela of IAV

### Resellers working with IAV under the Project:

- Arlindo Santos Matsime (administrative post of Gondola, Gondola district);
- Guive More (locality of Mupandeza, administrative post of Moaha, Sussundenga district);
- Celestino Mahame (Moaha, Sussundenga);
- Lulai Seda (Moaha sede, Sussundenga).

### Capacity of IAV to supply seeds

IAV can supply large quantities of seeds and it still hasstock.

### What IAV thinks of the Project?

"For IAV, the Project is a great help to smallholder farmers, because they do not need to travel long distances to acquire seeds, they can purchase them in their administrative post."

### Summary of the conversation with Mr. Maurício Dengo (Dengo Comercial)

#### About the suppliers of seeds

There are two companies that supply seeds to Agrodealers under the Project: Dengo Comercial and Nzara Yapera. Project subsidized the production of 90 ton of maize seeds.

Dengo Comercial supplied 128 tons to Hub agrodealers (wholesalers) identified by AGRIMERC, who had the responsibility to assist agro-dealers (retail dealers). Dengo Comercial supplies seeds to Hub dealers at the price of 15.00 MT (about USD 0.5) and those, in turn, supply to retail dealers (agro dealers) at 17.00 MT (about USD 0.57). The agro dealer, in turn, sells at a price of 20.00 MT (about USD 0.67) to smallholder farmers and geta profit of 3.00 MT (about USD 0.1).

Due to inexperience of some Hub Agro-dealers (wholesalers) and because they have no vehicles, at some point Dengo Comercial supplies seeds directly to retailtraders (agro dealers) at a price of 17.00 MT (about USD 0.57). This initiative/option has to do with the need to accelerate the timely availability of seeds, causing them to arrive on time to the final consumers, the smallholder farmers. In this case, this will help smallholder farmers to sow at the right and recommended season.

Of 128 tons of seeds supplied by Dengo Comercial, 35 tons of seeds are being commercialized.

Payments of inputs are being made in installments, since there are smallholder farmers who are still sowing.

In order to cover the 5 districts where the Project operates, the following resellers have been appointed:

#### For Manica province:

- IAV, for Gondola district;
- Manica Mbeu for the district of Manica;
- Ms.Emília as hub of Sussundenga.

### For Sofala province:

- SAMACHA Lda for Nhamatanda district;
- Mr. Sabete as Hub of Gorongosa.



Maurício Dengo of DC

### Hub dealer (IAV) pays off seeds they receive on credit

Hub dealer, in this case IAV, has already started to pay the credit for the seeds it received.

#### About the experience of selling seeds received on credit

In this respect, the Project plans to secure the supply chain of inputs to smallholder farmers by connecting seed companies, local resellers and smallholder farmers themselves. AGRIMERC, a partner of the Consortium is responsible for facilitating operationalization of this chain.

### Lessons learned by Dengo Comercial from the sales of seeds, according to the supply chain

"Supply chain is a way of extending seeds commercialization network, because resellers (agrodealers) undertake more training in seeds process. It is a way of helping farmers to buy seeds at the point of sale closest to their area of action."

"Difficulties are countless at the beginning. Success takes time to be achieved, but it is well worth it. Associations have everything to be successful, because they have achieved more than what was planned in terms of sales of agricultural inputs."

#### Capacity of Dengo commercial to produce seeds

"We have large capacity for producing seeds; that is why we are producing them (maize, sesame, beans) for the next agricultural season; and we have other clients outside Project. For this year, we expect to produce between 410 and 420 hectares of maize, providing that the rain does not spoil anything. In addition, for this year, we are expecting to produce beans and sesame."

"It is an experience that should continue because, based on the training received by smallholder farmers, and considering that the production cycle is well established by the Project, investment of the donor is valued. It is a winwin situation both for the seed producer, the reseller and smallholder farmer."

#### Seeds Quality Control

To ensure quality of seeds, Dengo Comercial does directly technical supervision from the production plot,

processing up to commercialization. This process is controlled and inspected by the SNS (Serviço Nacional de Sementes) [National Seed Service].

Following harvesting, seeds are subjected to laboratory to be pre-tested. Objective of such pre-test is to assess whether seeds meet basic quality standards (germination, moisture, mixtures or not with inert material and presence or not of diseases).

Once approved seeds are processed (they are cleaned and treated with chemicals). Once more, the seed is subjected to the second quality test which consists of testing germination, percentage of moisture and the presence of inert material. In case seeds are approved, the National Seed Service (SNS) issues the certificate of quality and, hence, the seeds are ready to be commercialized.

Next step is seeds packing for commercialization.

If seeds do not pass the pre-test, they are considered discarded and commercialized as grain.

#### Origin and destination of basic seeds

After preparing the production plan, Dengo Comercial purchases basic seeds from the Instituto de Investigação Agrónoma [Institute of Agronomic Research]under the coordination of (USEBA – basic seed unit). In parallel, Dengo Comercial works with international institutions such as the Instituto Internacional de Investigação Agrónoma (CIMMYT) [International Institute for Agronomic Research], which investigates various crops. It also receives donations of seeds and it has to bear transportation costs only to collect the seeds from the country where they are.

Basic seeds mentioned above are delivered to smallholder farmers hired to produce such seeds.

#### Seeds production process

The selected smallholder farmers have their own pieces of land over 5 hectares, to produce certified seeds in their farms for future commercialization.

#### Criteria for selecting seed producers

90 % of the smallholder farmers hired to produce seeds are headquartered in Catandica, for a strategic reason given that the district has a microclimate and good soils for production of varied crops, and in Manica (10%), because of the quality of precipitation and distance.

## PRODUCTION COMPONENT

### NHAMATANDA DISTRICT

Actions pursued in Nhamatanda District (Sofala province)



Mr. Cesario Fernandes, Kulima's Technical Assistant

With regard to activities under the production component, it is essential for us to speak with the KULIMA's Technical Assistant, Cesário Fernande sand who gives us the current statusin the form of a summaryas follows:

### Deliverables of the production component:

- 119 results demonstration plots have been established, with a growing number of crops and a development plan following the protocol (the technical recommendation letter that should be observed in demonstration plots);
- Access to credit for 102 smallholder farmers was facilitated;
- 182 smallholder farmers were trained in the area of Business Planning, of which 110 have developed their business plans and submitted to KULIMA. Of that number, 102 were approved and had access to credit.

### Impact of transferring ISFM technologies

Smallholder farmers should apply technologies over the demonstration at the demonstration plots and, given the satisfactory results that have arisen, within the coming years we expect to have further expansion of these techniques at the level of smallholder farmers over the areas covered by the Project. As from next year, and because technologies are already in place and already assimilated by smallholder farmers, it is believed that yield could double or triple; given that the universe of smallholder farmers that undergone training is relatively large, but with the challenge of expanding our targets we must establish more demonstration plots in order to achieve the planned targets.

With the increase in crop production under the project, agricultural commercialization is strengthened because demand is evident in the agricultural market, considering marketing work that has been developed by the Marketing component in the Consortium.

### About pest control procedures

Pest control can be chemical (using synthetic products) or by using alternative methods (botanical pesticides, that is to say, plants), to control certain pests and diseases. For instance, smallholder farmers learn how to fight pests prior to such pests reaching the economic level of losses, because, otherwise, the environment would be affected (ecological imbalance) and money could be spent on chemicals.

Farmers learn to use biological control through predators that can control such pests. For example, the owl and the snake are predators of rats which destroy crops, and some birds can control the locusts.

At the same time, farmers learn that if the number of predators reflects their prey (pests), no need for chemical control, because, rather than making a particular control, analysis of the agroecological system must be carried out.

### About agroecological system analysis

Analysis of the agroecological system consists of quantifying the pest (check for the extent of damage caused by the pest) and then we take the decision about carrying out chemical control.

### Perspectives (from now on)

According to CesárioFernandes, considering the replicas carried out by contact farmers, it is expected to reach a universe of 10,000 smallholder farmers who will directly assist demonstration plots. This will make them interested in the use of new technologies for agricultural production. With this universe of smallholder farmers, it is estimated that produce in this crop season (2013-2014) will be around 21,000 tons of various crops, such as maize, beans, sesame and soybean.

### •VOICE OF BENEFICIARIES

### Testimonials of members of the Associação Agro Pecuária Santa Isabel

In the visit to the Associação Agro Pecuária Santa Isabel which is headquartered in the Community of John Segredo in the district of Nhamatanda, the newsletter editor heard testimonials of the following gentlemen: Lourenço Lampião Domingos, Ernesto Bambulene, Bernardo Paulo Antónioand Fernando Manuel Maposse.



Lourenço Lampiao Domingos, at his demonstration farm

### **Testimonial one:**

The first to be heard was Lourenço Lampião Domingos (Contact farmer and member of the Associação Agro Pecuária Santa Isabel). Here are the statements:

"My mission as a contact farmer is to expand (replicate) the knowledge that was passed on to me by the technician (extension worker), to smallholder farmers belonging to my Association, and also to make the extension worker aware of the difficulties smallholder farmers face." (Lourenço Lampião Domingos, contact farmer)

"I have established a demonstration plotat my smallholding, in an area of 1 hectare, where I carry out and share experiences connected with the production techniques that have been taught, such as: intercropping, spacing and fertilization." (Idem)

### Contents taught in the replicas

"Under the replicas that I organize, members of the Association have been taught to strictly apply crop techniques, soil management techniques, with emphasis on intercropping, crop rotation and fertilization (application of chemical fertilizers and alsothey have been encouraged to use organic fertilizers, such as livestock manure and crop residues). In addition, members of the Association learned to observe sowing dates, including aspects related to agricultural commercialization (conservation of produce, marketing techniques, that is to say, how to search/ attract buyers, and the importance of transportation in the context of marketing). " **(Idem)** 

### Facilitating access to credit for smallholder farmers

"I have made a list of 100 smallholder farmers with whom I met and explained the objectives of the Project and criteria for obtaining microcredit. We prepared business plans and in accordance with other requirements requested by the Bank, we have organized the documentation. Then I presented the documents to the Kulima's Bank of credit for the purpose of obtaining credit for seeds and fertilizers." (Idem)

#### Credit received

"I received a credit of 37.500,00MT (around USD 1,250): 16.500,00MT(around USD 550, in cash, and 21.000,00MT (about USD 700), in inputs." (Idem)

### Criteria for obtaining credit

"The Bank requires a detailed business plan (indicating the probable income to be obtained after sale), personal documents such as ID card and other documents issued by local authorities of the neighbourhood or locality, confirming the place of residence. In addition, the Bank then checks the information in the field and checks the reputation of the person, i.e., whether the person is hard-working and honest. I have received the credit on account of my work in the farms. I work hard and the credit that I have been awarded is intended to cultivate sesame and includes ploughing, harrowing (make the soil soft after ploughing), weeding, sowing and harvesting." (Idem)

### Using the credit

"In order to increase the area of cultivation and yield, with the credit, I have paid the services of a tractor for the purpose of ploughing and the support staff for sowing and weeding. Thus, I increased 3 hectares of cultivation area for the production of sesame. I now have a total of 6 hectares of cultivation area. " (Idem)

### Impactarising from the credit

"Credit helped my activity a lot because it made it possible to increase my cultivation area. Of 3 hectares I had been working with, annually, I now have 6 hectares and so I can diversify crops. With this, I am expecting to have good yields." (Idem)

### **Credit Repayment:**

"After harvesting, I hope to return the credit that was given to me. By so doing, I am helping other members who also need to boost their activities. The 3% interest is welcome and it clearly shows that, indeed, it came to help those who are in need." (Idem))

### Other beneficiaries to cover

"There are six members of the Association who are in the process of obtaining credit, with support of the production component." (Idem)

#### Testimonial two:

The second member of the Associação Agro Pecuária Santa Isabel we talked to was Mr. Ernesto Bambulene, agricultural smallholder farmer. Here is his testimonial:



Ernesto Bambulene, at the center

"Under the Project, and using modern techniques we have learned, we carried outploughing and we are sowing." (Ernesto Bambulene, agricultural smallholder farmer)

### Challenges

"We are facing a tremendous struggle, as regards the activity of weeding (action to combat weeds which are unwanted plants, among cultivated crops) which requires recourse to labour outside households, since it is quite difficult to do weeding in 1 or 2 hectares, and this imposes additional costs." (Idem)

### **Testimonial three:**

The third agricultural smallholder farmer we spoke to was Mr. Bernardo Paulo António, who told us the following:

"I have learned to use technologies such as the row spacing (separation between cultures, on the order of 75/30), fertilization at 100 and 50%, cultivation without fertilization and Intercropping." (Bernardo António)

"The technologies we have been taught by the Project will make it possible to increase the yields of smallholder farmers to a level above the average." (Idem)

### **Testimonial four:**



Mr. Fernando Manuel Maposse

The fourth and last member of the Associação Agro Pecuária Santa Isabel heard by the newsletter editor was Mr. Fernando Manuel Maposse, contact farmer, who stated the following:

"To prevent association members and communities from travelling long distances to learn technological knowledgebrought by the Project, at my own farm where I have a results demonstration center, I replicate the training to pass on knowledge received from the capacity building sessions." (Fernando Manuel Maposse, contactfarmer)

### Impact of technologies

"Technologies I apply, such as fertilization and intercropping of sesame with maize help keep the soil fertile and increase yield to higher levels." (Idem)

### Using the credit

"I received a credit of 35.000,00MT (around USD 1167): 16.000,00MT (around USD 533), in cash, and 19.000,00MT (around USD 633)in fertilizers, seeds and drugs. The interest that I am going to pay is 3%. With the credit, I have paid for the following: ploughing (I have hired the services of a tractor) and the staff to support over weeding." (Idem)

### Results expected by the smallholder farmer

"I expect that harvest be much better than last year. Taking into account the level of growth of crops (maize, beans, sesame), even in case of drought, I will be successfully in sales and I will be able to repay the credit." (Idem)

### Business plan- the way to receive credit

"Kulima trained smallholder farmers in business planning, and we prepare our plans for accessing the credit. Some of the key points we have learned, in order to prepare our plan and have access to credit, are as follows:

• To know how to estimate input requirements for each crop (fungicide, pesticides);

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- To know how to select profitable crops (for instance, sesame is very profitable), guaranteeing repayment of the credit;
- To know how to estimate costs of production and revenues. " (Idem)

### LESSONS LEARNED:

- Smallholder farmers with a clear tendency to migrate from the use of open-pollinated varieties (OPVs) to hybrid seeds, motivated by the availability of chemical fertilizers at the production sites, and the high yields of hybrid varieties;
- It is important to have a clear strategy for inclusion of women in the various stages of the project, since this aspect calls for a considerable improvement;
- **3.** It is important to ensure continuous communication between the elements of the value chain, within the integrated programs.

### CURIOSITY:

Finally, hereby we would like to present the following concept which is being promoted by the Integrated Project: **Seed bank** – is a field where seed multiplication is carried out to preserve seeds that are endangered or which have insufficient stocks. Multiplication of scarce variety seeds is done, such as, sesame. Technicians go to a region where there are favorable conditions and regenerate the seeds and the objective is to preserve them so they do not become extinct.

Technical information

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