

Report for
Partners of the Americas
Farmer to Farmer Program
and
Fundación Cosecha Sostenible Honduras
September 15 – 30, 2012



Submitted by:

Howard Fenton, Accountant, University of Wisconsin-Extension

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Farmer to Farmer Program (FtF)

Peggy Carlson – FtF Program Director

Christine McCurdy – FtF Program Officer

Fundación Cosecha Sostenible Honduras (FUCOHSO)

Claudia Cárcamo – FUCOHSO National Director

Roy Lara – FUCOHSO Agronomist and Program Leader

Salomon Zelaya – FUCOHSO Agronomist, Santa Bárbara Department

Juan Sanders – FUCOHSO Agronomist, Santa Bárbara Department

Jorge Rodríguez – FUCOHSO Agronomist, Santa Bárbara Department

Jacobo Suazo – FUCOHSO Agronomist, Santa Bárbara Department

Jaime Soto – FUCOHSO Agronomist, Yoro Department

Victor Castillo – FUCOHSO Agronomist, Yoro Department

Translators

Thomas Hebert – Bilingual Teacher & Beekeeper, Jesús de Otoro, Intibucá Department

Erlin Perez – Bilingual Student and Soccer Player, Copán Ruinas, Copán Department

Executive Summary

My work focused on showing FUCOHSO farming families (beneficiaries) a simple method for keeping accurate, written records of crop production activities and resources used such that they could then use that information to make decisions aimed at improving their financial positions. The farm families selected for this training are preparing to enter a new phase of activities in a five-phased program FUCOHSO is working through with these beneficiaries. In this phase farmers begin to focus on marketing surplus agricultural goods and artisanal products with the goal of boosting their income generation and ultimately improving their quality of life.

The seven training workshops we conducted were meant to strengthen participants' capacity to accurately record crop production activities and resources used with the goal of gathering the data they will need to manage their costs and revenues. This data will become very useful as they begin to market and sell the goods they produce. To better manage the costs of production activities and resources used farmers must first have an accurate record of them.

While some FUCOHSO beneficiaries, primarily community leaders, have received some training in this regard in the past, a majority of them have not. An issue faced in these trainings was transferring knowledge to individuals with varying levels of education. A majority of families have completed primary school and are literate, but they have no further educational experience beyond this.

This was a joint project between FUCOHSO and Partners of the Americas' Farmer to Farmer Program.

FUCOHSO is a dedicated group of individuals working with a common purpose – improving the lives of the families who choose to work with them. The rapport I witnessed in village after village was a testament to the strong relationship built between FUCOHSO and the families through the hard work of the agronomists. They are the local, daily presence of FUCOHSO in the communities building strong ties that seem to have fostered among the families a spirit of cooperation and an eagerness to learn.

Partners of the Americas' Farmer to Farmer Program is dedicated to providing technical assistance to local agricultural producers, producer organizations, and agribusinesses throughout Latin America and the Caribbean. Through this program, volunteers share their knowledge on an individual basis to help increase farm production and farmer incomes while preserving the natural resource base.

Introduction

The diverse ecosystems and peoples of Honduras face serious environmental and socio-economic challenges. Logging and slash-and-burn agriculture have destroyed or damaged large parts of Honduras' once-pristine cloud and tropical forests. Rugged mountains and hills cover close to 80 percent of Honduras' total land area, making agriculture a challenge for the local families who depend on it for their sustenance and livelihoods. Threatened by extensive erosion, sedimentation and degradation of soils, the livelihoods of many subsistence farmers is at risk unless they can adopt sustainable farming techniques.

The Fundación Cosecha Sostenible Honduras (FUCOHSO), or Sustainable Harvest International Honduras, has been working in Honduras since 1997. The mission of FUCOHSO is to provide farmers with the necessary knowledge and equipment to improve degraded lands and rebuild ecosystems that were once rich in biodiversity. FUCOHSO is noted for its commitment to community participation and empowerment. Working with several hundred families, FUCOHSO has facilitated communal work projects, including information sharing and technology exchanges.

Participating families go through five phases of activities (lasting about 5 years) as they progress towards leading sustainable livelihoods. During Phase One communities and families are selected for participation in the program based on predetermined criteria. Families are prepared for their commitment to the next five years of work. The objective of Phase Two is to improve family nutrition and secure food systems through crop diversification and the teaching of sustainable farming techniques. In Phase Three, families begin to initiate the farming practices necessary to improve household income through diversification and commercialization at local levels. Phase Four seeks to have families increase their income through the sale of farm produce and other goods in local and regional markets, while enhancing work plans to focus on business skills and securing sustainable social and economic conditions. Finally, in Phase Five, families work on creating and inspiring self-sufficiency and community leadership while reducing their need for direct aid.

Chronological Overview of the Farmer to Farmer Visit to Honduras by Howard Fenton

Saturday, September 15, 2012 – Traveled from Madison, WI to Valle de Angeles, Francisco Morazán, Honduras

Sunday, September 16, 2012 – Free day, met with Claudia Cárcamo to get a brief overview of the next two weeks

Monday, September 17, 2012 – Traveled from Valle de Angeles to El Progreso, Yoro Department. Picked up Amanda Zehner, Sustainable Harvest International, Small World and Field Coordinator, in Tegucigalpa and Thomas Hebert, my first translator, in Siguatepeque, Comayagua Department.

Tuesday, September 18, 2012 – Traveled with Roy Lara and Tom Hebert to Pinalejo, Quimistán, Santa Bárbara. Met Salomon Zelaya in the afternoon and conducted our first workshop in Tierra Amarilla, Santa Bárbara.

Wednesday, September 19, 2012 – Conducted a workshop with Roy Lara, Salomon Zelaya, and Tom Hebert in El Cacao, Santa Bárbara.

Thursday, September 20, 2012 – Conducted a workshop with Roy Lara, Juan Sanders, and Tom Hebert in Las Flores, Santa Bárbara. Traveled to Trinidad, Santa Bárbara.

Friday, September 21, 2012 – Conducted a workshop with Roy Lara, Jorge Rodríguez, and Tom Hebert in Santa Ana, Santa Bárbara.

Saturday, September 22, 2012 – Rest day; toured Trinidad.

Sunday, September 23, 2012 – Rest day; toured Trinidad. Tom Hebert left to return to Jesús de Otoro. Briefed Erlin Perez, my new translator, on the workshop format; went over terms with him.

Monday, September 24, 2012 – Conducted a workshop with Roy Lara, Jacobo Suazo, and Erlin Perez in Cablotal, Santa Bárbara. Traveled to La Habana, Yoro.

Tuesday, September 25, 2012 – Conducted a workshop with Roy Lara, Jaime Soto, and Erlin Perez in El Tablón, Yoro.

Wednesday, September 26, 2012 – Conducted a workshop with Roy Lara, Victor Castillo, and Erlin Perez in La Albardilla, Yoro. Traveled to El Progreso, Yoro.

Thursday, September 27, 2012 – Rest day; trip with Roy Lara and Erlin Perez to Tela and the beach at El Triunfo de La Cruz, Atlántida.

Friday, September 28, 2012 – Rested in the morning had lunch at the El Progreso office of FUCOHSO and gave an overview of the workshops conducted over the past two weeks to three interns working in the office.

Saturday, September 29, 2012 – Traveled to Tegucigalpa with Claudia Cárcamo; checked into the Hotel Nuevo Boston and walked around the neighborhood.

Sunday, September 30, 2012 – Early morning stroll to Parque Morazán and the cathedral. Took a taxi to the airport where I met Claudia Cárcamo. Returned to Madison, Wisconsin.

Activities

Activities during this trip included conducting seven workshops with farmers who are working with FUCOHSO. The workshops were held in villages in the Santa Bárbara Department (Tierra Amarilla, El Cacao, Las Flores, Santa Ana, and Cablotal) and Yoro Department (El Tablón and La Albardilla). There were 88 participants at the seven workshops; sixty-two (70.5%) of the participants were male and twenty-six (29.5%) were female.

Each participant was provided with a composition notebook, an 8-digit mini handheld calculator, pencil, and an eraser.

Tierra Amarillo (Tuesday, September 18) Roy, Salomon, Tom and I arrived in Tierra Amarillo in the afternoon. We conducted our first workshop using a corn production cycle as an example to demonstrate and teach the recordkeeping system we wanted to introduce to them. There were 15 participants at this workshop, including 5 women and 10 men.

In each workshop we went through the following steps with the participants:

- Making a list of all the production activities associated with growing, harvesting and selling a particular crop that had been selected by the participants for that day's workshop.
- Grouping related production activities and giving each group a short, descriptive title. Some of the titles we used for this purpose included *preparación de terreno* (ground preparation), *manejo de cultivo* (crop management), *cosecha* (harvesting), and *venta* (selling).
- Creating a table using two side-by-side pages in the composition books for the purpose of recording in chronological order each production activity as it occurs. The table consisted of columns with the group titles identified in the previous step heading each one, along with columns with the following headings; *fecha* (date), *actividad* (activity description), *mano de obra* (days of farmer labor), and *ingresos* (revenues). The order of columns, from left to right, was; *fecha*, *actividad*, *mano de obra*, a column for each group of production activities identified in the previous step, and *ingresos*.
- Recording production activities in chronological order from the beginning of each new crop cycle to the last activity of the cycle. For each activity we identified in the production cycle we recorded: its date; a detailed description of the activity (including number of units of material or labor inputs purchased, or of crop sold, and the cost or selling price per unit); the number of days of the farmer's labor including the labor of unpaid family members; and the monetary totals of resources purchased and crops sold in the appropriate columns depending on the group to which each production activity belonged.

- Totaled each column containing numerical data after the last activity of the production cycle was recorded. The one exception was the column used to record activities associated with borrowing and repaying a loan. In this case, the amount borrowed was subtracted from the amount repaid to determine the interest cost of the loan (*prestamo*).
- Prepared a simple income statement (*cuadro final de ganancias*) using the column totals (or the column difference in the case of a loan) from the previous step. We did this by listing the revenue total and cost totals by group of related production activities and subtracting the total for all costs from the revenue total to yield the farmer's net income earned for the total number of days of labor recorded in the column *mano de obra*.
- Divided the net income (plus the market value of any portion of crop not sold but held by the family for their consumption) by the total number of days in the column *mano de obra* to get an average return for each day of labor expended during the production cycle.
- Analyzed of the data.

El Cacao (Wednesday, September 19) Roy, Salomon, Tom and I arrived in El Cacao in the morning. We conducted our second workshop, this one using coffee as the demonstration crop in our exercise. There were 19 participants including 7 women and 12 men.

Las Flores (Thursday, September 20, 2012) Roy, Juan Carlos Sanders, Tom and I arrived in Las Flores in the morning and conducted our third workshop. We used cardamom as the demonstration crop. Las Flores is a village close to the border with Guatemala and the farmers who grow this aromatic spice have access to markets in that country. There were 10 participants, all men.

Santa Ana (Friday, September 21, 2012) Roy, Jorge Rodríguez, Tom and I arrived in Santa Ana in the morning and conducted our fourth workshop. We used beans as the demonstration crop and introduced for the first time in our workshops activities associated with taking and repaying loans and paying rent for farm land. Thirteen participants attended this workshop; 3 women and 10 men.

Cablotal (Monday, September 24, 2012) Roy, Jacobo Suazo, Erlin Perez and I arrived in Cablotal in the morning and conducted our fifth workshop. Corn was selected by the group for purposes of demonstrating the recordkeeping process. There were 8 participants; 1 woman and 7 men.

El Tablón (Tuesday, September 25, 2012) Roy, Jaime Soto, Erlin and I arrived in El Tablón in the morning and conducted our sixth workshop using activities associated with growing corn to demonstrate recordkeeping. There were 9 participants; 2 women and 7 men.

La Albardilla (Wednesday, September 26, 2012) Roy, Victor Castillo, Erlin and I arrived in La Albardilla in the morning and conducted our seventh and final workshop using beans as the demonstration crop. There were 14 participants; 8 women and 6 men.

See Appendix 1 for the activities associated with a corn crop production cycle that we recorded during this workshop.

El Progreso (Friday, September 28, 2012) Erlin and I presented an overview of our workshops and the process we used to three (2 women and 1 man) recent high school graduates working as interns in the FUCOHSO national headquarters.

Findings and Recommendations

Most farmers could not respond to the question of how much they earn from the crops they grow and sell. They had no answer to our question of how much they earned from the sale of their harvested crops, on average, for each day of their labor. They know how much they pay the laborers they hire at various times during each crop production cycle. This was generally anywhere from L.60 – L.110 per day (about \$3 - \$5.50 per day).

The farmers have no record of the *insumos* (resource inputs) they purchase, the quantities they purchase, or the cost per unit (liter, sac). Nor do they keep records of the amount of harvested crop they sell, and at what price. They know these things in general, but not to the extent that they can look back at an accurate historical record, evaluate the data and the results of their labor, and use the information to decide how they might do things differently in the future that would make their efforts more profitable.

The purpose of my assignment was to provide FUCOHSO beneficiaries with a simple method of recording accurate information about their crop production activities. They could then use the recorded data to calculate the financial results of their labor and make decisions about future production activities with the goal of improving their income.

Workshop participants showed a strong eagerness to learn this simple method of recording production activities associated with growing their crops. They were attentive throughout the workshops that were, in some cases, four to five hours long. While we created a unique record of production activities during each workshop using flipchart paper taped to a wall, the participants created their records in the composition books we provided them for this purpose. They participated in discussions that came about in response to our questions, and they asked questions when they didn't understand a point we were making. I believe that this level of participation and engagement is a credit to the training the beneficiaries have received from the FUCOHSO field staff and past volunteers.

Recommendation #1 FUCOHSO field staff should create a comprehensive list of production activities associated with each crop grown by the beneficiaries they work with. While we and the workshop participants went through this step together, presenting them with a comprehensive list of production activities for each crop would eliminate the risk of the farmers failing to identify a production activity that should be recorded.

Recommendation #2 FUCOHSO field staff should create groups of related production activities for the participants to use in their records based on the production activities identified in Recommendation #1. Again, this will serve to eliminate any confusion about to which group a particular production activity belongs. Groups and their related production activities might include:

- **Semillero** – all production activities associated with planting and caring for seeds that will be transplanted to a nursery at a later date. The last production activity in this group would be that one performed just prior to transplanting in the nursery. Not all crops, corn and beans for example, will require the use of this group for recordkeeping purposes. However, I believe it is an activity group that would be necessary for coffee and cardamom growers.
- **Vivero** – production activities beginning with transplanting seedlings to a nursery and ending with the last production activity prior to moving the plants from the nursery to the field.
- **Preparación de terreno** – all production activities associated with preparing a field for seeding or transplants.
- **Manejo de cultivo** – all production activities in the field beginning with planting seeds, or transplanting plants from the nursery, and ending with the last production activity performed before harvesting begins.
- **Cosecha** – all production activities associated with harvesting a crop and moving it from the field to the house.
- **Mejoramiento** – production activities associated with enhancing or processing the harvested crop before it is sold. This activity group was identified during the workshop in El Cacao in which coffee was used as the demonstration crop. It was not identified as an activity group for any of the other three crops (cardamom, beans, and corn) used in the other workshops.
- **Venta** – production activities associated with moving the crop from the house to the market in those cases when the crop isn't sold at the house or in the village. It seemed that in many instances the buyers of the farmers' harvested crop came to the village to make their purchases. In these cases this activity group would not be necessary.
- **Alquila** – production activities associated with paying rent for land on which a crop will be grown. The description of this production activity should include the name of the person to whom the rent is being paid and any other details worth noting. While there may normally be only one activity in this group, the rent cost may be significant enough to warrant this activity group. If the rent is not a significant cost then it could be folded into *preparación de terreno*.
- **Prestamo** – activities associated with taking out a loan; borrowing and repaying money for the specific purpose of growing a crop. Details to be noted in the *actividad* column include: the name of the lender, the interest rate percentage, and the period on which the interest rate applies (annual, monthly, weekly, etc.). The amounts borrowed and repaid should be recorded in the *prestamo* column. The difference between the amount(s) repaid and the amount(s) borrowed should be recorded as the interest cost of the loan when preparing the *cuadro final de ganancias*.

In most cases, not all of the activity groups identified above will be necessary to record production activities and costs associated with growing a particular crop. Only those activity groups necessary to record production activities and costs should be used for recordkeeping purposes.

However, every record should include columns for the following data:

- **Fecha** – the date of each production activity recorded in chronological order. The date recorded for those activities that require a number of consecutive days to complete should be the final day of the production activity. However, the farmer may choose to record production activities on a daily basis. That’s good as well.
- **Actividad** – a description of each production activity including specific details: quantities of resource items purchased and the prices paid per unit. The total price paid for material inputs should be recorded in the column that corresponds to when the material is used. Thus, while a number of different resource inputs might be purchased on the same date the totals for each particular input would be recorded in either *preparación de terreno* or *manejo de cultivo* or *cosecha* depending on how the resource input is used. The description should also include, when appropriate, quantities of manual labor days (*jornales*) purchased and the unit price paid for a day of labor. The total cost should be recorded in the column appropriate for the activity being worked by the hired labor.
- **Mano de obra** – the number of days, recorded in whole or half days, the farmer works on each production activity. The number of days shall include the days of unpaid labor worked by members of the farmer’s family. None of these days should be included in the cost for paid labor.
- **Ingresos** – revenues collected by the farmer from the sale of the harvested crop.

Recommendation #3 FUCOHSO field staff, knowing the time of year beneficiaries generally start their new crop production cycles, should meet with the farmers in advance of those dates to encourage them to set up their record books for the purpose of recording production activities and costs during the up-coming production cycle. The field staff should be available to assist the beneficiaries with any questions they might have.

Recommendation #4 Recordkeeping for a particular crop production cycle should begin with the first production activity of the new crop and end with the sale of the last portion of harvested crop, or the final repayment of a loan if applicable.

In some instances, perhaps such as with coffee, the production process may continue year round. In this case, a specific date should be picked for the end of the production cycle. This is

necessary to establish a time period for which the net income statement (*cuadro final de ganancias*) should be prepared.

Recommendation #5 For those beneficiaries who are not literate, another member of the family who is should be given the responsibility of recordkeeping. This individual could record production activities on a regular basis as dictated to them by the farmer.

Next Steps and Future Volunteer Needs

I was able to accomplish what I hoped to on this assignment. The assistance I received from Roy Lara, each of the field technicians, and Tom Hebert and Erlin Perez were invaluable. And it goes without saying that the workshop participants, with their active involvement and engaged discussions, contributed mightily to the success of this assignment.

Next Steps: FUCOHSO staff should continue to encourage the participants who attended the recordkeeping workshops to begin and persist in their recordkeeping. This is a new skill for them and, like many newly acquired skills, it will require encouragement and assistance to take hold.

When recordkeeping trainings are scheduled in the future consideration should be given to asking Thomas Hebert if you could do the trainings. These trainings would have to be coordinated with his teaching schedule at the bi-lingual school where he works during much of the year. I make this suggestion having confidence in his ability to teach the recordkeeping process we introduced in these workshops. He handled all the discussions with the participants very well in Spanish and he has indicated that he will begin using this method with his own honey-production business.

Absent his availability I would be more than willing, given the flexibility of my job, to take on an assignment of this nature again. It was a wonderful and fulfilling experience for me, and I hope for the participants.

Future Volunteer Needs: A future volunteer need would be someone with experience in monitoring and evaluation (M&E) principles who would revisit those communities that participated in this assignment and any villages where beneficiaries may receive similar training in the near future. The purpose of this assignment would be to evaluate the outcomes of the recordkeeping workshops. Questions, such as the following, should be considered:

- Have the participants put the recordkeeping method they were shown into practice?
- If so, what difference has it made for them?
- Have they made decisions using the recorded information that changed their activities?
- What have they learned about their crop production from the recorded information?
- Has their analysis of the information and/or changes in activities made an improvement in the financial wellbeing of their families?
- What are the reasons for those participants who haven't adopted the recordkeeping method?
- What additional needs do they have that prevent them from recordkeeping?

Amanda Zehner and Claudia Cárcamo have experience in monitoring and evaluation and could perhaps fulfill this task or design an M&E tool that the FUCOHSO field staff could complete with the participants input after a sufficient period of time to permit their recordkeeping experiences to play out.

The basic recordkeeping method introduced in our workshops is one that can support the type of management decisions that allow farmers to affect future production activities and costs and, ultimately, their financial well-being.

At some point, after a significant quantity of production data has been recorded by the participants, a volunteer who can demonstrate how such data can be used for decision-making purposes might be considered. Such an assignment would focus on how the data can be used to make production decisions involving alternative production methods, alternative markets, and resource constraints. The volunteer, using data recorded by the farmers, could work with them to demonstrate the types of decisions they might make using the actual data. Once the farmers begin to see a tangible benefit from recordkeeping their motivation to continue using this tool should increase.

Appendix 1 Recordkeeping Example from the Workshop in La Albardilla on September 26, 2012							
Fecha	Actividades	Mano de Obra	Prestamo	Preparación de terreno	Mantenimiento de cultivo	Cosecha	Ingresos
20 Mayo	Prestamo - Caja rural (L.2,000; 5% por mes)		2,000				
25 Mayo	1ra limpieza de terreno (8 jornales x L. 60/jornal)	2		480			
30 Mayo	Compra glifosato (2 liters x L.100/l), fertilizante (1 quintal x L.700/quintal), insecticidas (1 liter x L.100/l.), foliar (1 liter x L.120/l.), fungicida (1 kg. x L.80/kg.), sacos (15 x L.12/saco), alambre (2 rollos x L.500/rollo)	1		200	1,000	1,180	
30 Mayo	Transporte los insumos			30			
5 Junio	Aplicar fumigación (4 jornales x L.100/jornal)	1		400			
8 Junio	Sienbra (12 jornales x L.60/jornal)	4			720		
20 Junio	2da limpieza y apoque (12 jornales x L.60/jornal)	4			720		
5 Julio	1ra aplicar insecticidas (1 jornal x L.100/jornal)	1			100		
20 Julio	2da aplicar fumigación (1 jornal x L.100/jornal)	1			100		
15 Sept	Arranque de frijoles (24 jornales x L.60/jornal)	6				1,440	
25 Sept	Aporreo (8 jornales x L.100/jornal)	1				800	
25 Sept	Transporte a la casa 30 sacos (15 mulas x L.60/mula), (2 jornales x L.60/jornal)					1,020	
27 Sept	Limpiar el grano (1 jornal x L.60/jornal) produciendo 25 quintales de frijoles	1				60	
2 Oct	Almacenar el grano (2 jornales x L.60/jornal)	1				120	
20 Marzo	Venta (20 quintales x L.750/quintal)						15,000
20 Marzo	Pagar el prestamo		3,000				
	Totales	23	1,000	1,110	2,640	4,620	15,000
	5 quintales de frijoles a cabo para el consumo en lugar L.500 por quintal						2,500
	Cuadro Final de Ganancias		Venta de 20 de marzo L.750/quintal		Venta de 20 de octubre L.500/quintal		
	Ingresos		L.15,000			L.10,000	
	Gastos:						
	- Prestamo	L.1,000			L.500		
	- Preparación de terreno	L.1,110			L.1,110		
	- Mantenimiento de cultivo	L.2,640			L.2,640		
	- Cosecha	L.4,620			L.4,620		
	Total de gastos		L.9,370			L.8,870	
	Ganancias		L.5,630			L.1,130	
	Valor de los frijoles a cabo para el consumo		L.2,500			L.2,500	
	Total de los ganancias de la cosecha		L.8,130			L.3,630	
	Mano de obra		23			23	
	Total de ganancias por día de mano de obra		L.353			L.158	

Description of Appendix 1

Appendix 1 represents the results of our recordkeeping workshop in La Albardilla on September 26, 2012. During this workshop the participants selected beans as the crop we would use to demonstrate the recordkeeping process.

After preparing a comprehensive list of the production activities and inputs involved in producing a bean crop, the production activities were formed into four groups; *prestamo*, *preparación de terreno*, *mantenimiento de cultivo*, and *cosecha*.

Using these activity groupings we prepared a table on three sheets of flipchart paper taped to the wall for the purpose of recording production activities. The participants were shown how to create a similar table using two side-by-side pages in their composition notebooks. We created a column in the table for each of the four activity groups identified above, along with columns for *fecha*, *actividad*, *mano de obra*, and *ingresos*.

Once the tables were drawn on the wall and in their notebooks, we began to record production activities and resources in a chronological order. Where needed we recorded details about each activity or resources purchased. To standardize the process we asked the participants to relate the production activities and resources to what would be needed to grow a crop of beans on one manzana, a land measure used in Central America that is equal to about 1.75 acres.

Because these participants were likely to take out a loan at the start of the production cycle, we were able to demonstrate to them the process of recording the loan and its repayment, along with the calculation to determine the amount of interest paid. The simple method of calculating interest is simply subtracting the amount borrowed from what was repaid. We also demonstrated how they could calculate the interest at the rate of 5% per month. This worked out to L.100 of interest per month on a L.2,000 loan.

When resources for later use were purchased we recorded the quantity of each resource acquired and the unit price. The total costs for these resources were allocated to the appropriate activity group depending on when the farmer used them. In this example, L.200 of glifosato was to be used in preparing the field for planting. L.1,000 of fertilizer, insecticides, herbicides and fungicides were intended to be used in managing the crop after it had been planted. And finally, L.1,180 of sacks and wire were to be used during the harvest.

When labor was purchased we recorded the number of man days being paid for by the farmer and the price per day of labor. This was kept separate from the record of the number of days of the farmer's labor that would be necessary to complete a production activity. So each production activity requiring labor may have an accounting for the labor of the farmer and any family members separate from that of the paid labor.

Whenever possible quantities of production output, the harvested crop, were noted. In the La Albardilla example it was noted that 30 sacks of beans were transported from the field to the house using 15 mule trips and the labor of 2 men. After further processing (*limpiar el grano*) the quantity of harvest was 25 *quintales* (a weight measure where 1 quintal = 46 kilograms, or about 100 pounds).

Twenty *quintales* of beans were assumed to be sold on March 20th, about 5 months after the harvest. The delay in the sale allowed us to record a higher selling price for the beans than if they had been sold on October 20th. While additional costs consisting of L.500 in interest and L.80 for fungicide were incurred as a result, this was more than offset by the additional L.5,000 in revenue earned from the sale. The gain in income for the farmer and the value of a day's labor can be seen in the *cuadro final de ganancias* which compares financial results of the March 20th sale with that of a sale occurring on October 20th.

The *cuadro final de ganancias* also reflects the market value of the harvested beans that were not sold. In this case 5 *quintales* of beans were retained for the purpose of personal consumption. This represents a gain for the family in terms of a commodity that doesn't have to be purchased throughout the year. A conservative market value is given for these beans and is added to the net income generated from the beans that were sold to yield a total net gain from the harvested crop.

Finally, the total net gain from the harvest was divided by the total from the *mano de obra* column to calculate the value of a day's labor. This figure allows for comparison with other crops or wage earning opportunities.

At the end of several workshops, Roy Lara pointed out to the participants the high cost of the non-organic inputs many farmers were purchasing and applying to their fields and crops. He used the figures from the records we generated during those workshops to point out the savings potentials they could realize by adopting the organic inputs and sustainable farming methods being advocated by FUCOHSO. In the La Albardilla case, farmers might have seen a L.1,200 increase in their net income if it had not been necessary to purchase most of the items bought on May 25th. This represents an almost 15% increase in the L.8,130 net income to L.9,330.