OUTPUT 3. PROFESSIONALS AND OTHERS TRAINED AS FACILITATORS OF THE PARTICIPATORY RESEARCH APPROACH

Milestones

- * Professionals trained in the use of PR tools and methods
- * PME training strategy tested in potato production systems in Toralapa, Bolivia
- * Capacity of Bolivian national partners for implementing and supporting PME Systems within their communities, strengthened
- * PME training strategy strengthened by the exchange of experiences in the training workshops
- * Farmers' groups-experimenters initiating agroenterprise activities based on the technology generated in their experiments
- * Technicians of partner institutions in the Andean zone applying and promoting an agribusiness orientation in farmers' groups

Professionals trained in the use of PR tools and methods

Table 1. Participation in training events related to PR.

Dates	City & Country	Event	Participating Institutions	No. Participants
Feb.	Kabale, Uganda: Tanzania, Kenya, Malawi	FPR & PMR workshop	NARO	15
Feb. 10-11	Lilongwe, Malawi	Stakeholder project inception workshop & consultations	 ✓ Ministry of Agriculture, Dept. of Agricultural Research & Technical Services, Dept. of Agricultural Extension ✓ CARE Malawi ✓ World Vision ✓ Plan International Malawi ✓ Lilongwe Agricultural Development Division 	9
Feb. 17-18	Lushoto, Tanzania	Project inception workshop	✓ Africa Highlands Initiative ✓ Traditional Irrigation &	8

	City & No.				
Dates	Country	Event	Participating Institutions	Participants	
			Environment Protection Programme ✓ District Dept. of Agricultural & Livestock Development ✓ Lishe Trust ✓ SECAP		
Feb. 24-27	Jinja, Uganda	Follow-up & action plans development workshop	 ✓ NARO ✓ Agricultural Research Development Centres ✓ District Extension Coordinators ✓ National Agricultural Advisory Services ✓ Action Aid ✓ Africa 2000 Network ✓ Africare 	24	
Mar. 3-8	Honduras	Training workshop on management of CIAL database	✓ FIPAH ✓ EAP Zamorano	8	
Mar. 24-28	Lushoto, Tanzania	Market facilitators workshop	 ✓ TIP ✓ Africare ✓ Lilongwe ADD ✓ DARS, Malawi ✓ Africa Highlands	20	
Mar. 24- Apr. 4	Toralapa, Bolivia	CIAL methodology & PME System	✓ ACDI-VOCA ✓ Tarija Prefecture ✓ PROMETA-INNOVA ✓ GNTP-NUR ✓ PRODII ✓ JAINA ✓ CAD ✓ CIAT-SC-INNOVA ✓ QHANA Community Education Center ✓ FCAP-UMSS ✓ PROSUCO ✓ ASAR ✓ Mayor's Office, Llallagua ✓ FDTA Valles	29	

	City &			No.
Dates	Country	Event	Participating Institutions	Participants
			 ✓ APG ✓ AGAVAT FOCAM ✓ UTA-CEDAG-Tarija Pref. ✓ PROINPA ✓ PROMACEL-UMSS ✓ NIAP-Ecuador 	
Mar. 31 Apr. 11	Salima, Malawi	Integrating FPR & PMR	✓ DARS ✓ LADD ✓ CARE ✓ Plan International ✓ TIP-Tanzania ✓ NARO-Uganda ✓ CIAT	22
Mar. 24	Nairobi, Kenya	Stakeholder consultative meeting on "Strengthening institutional change process by enhancing participation of farmers in R&D process"	✓ KARI ✓ CMAD ✓ EAT	12
May 7	Cali, Colombia	Workshop on PR	 ✓ Fundation CIPAV ✓ INTEP ✓ Institute of Education Technical Professional ✓ Communities & Watersheds, CIAT 	10
May 26-31	Kabale, Uganda	Integrated agroenterprise development of potatoes	✓ Africare✓ Uganda National PotatoSeed ProductionAssociation	20
Various	Kabale, Uganda; Lushoto, Tanzania; Dedza, Malawi	Community workshop on leadership skills & gender	✓ Farmers from pilot communities in ERI sites✓ NGO partners	45

Dates	City &	Event	Doutionating Institutions	No.
	Country		Participating Institutions	Participants
July	Popayán	Training for rural	10 CIALs from	17
1- 3	(Cauca),	agroenterprise	CORFOCIAL with the	
	Colombia	development, with	participation of 15 farmers &	
		emphasis on	2 technicians	
		financial		
		management, Gloria		
		Liliana Lasso		
T 1 20	T	Buitrago	(NAPO	22
July 28-	Jinja,	Integrating gender	✓ NARO	22
Aug. 2	Uganda	analysis	✓ ARDC	22
Aug.	Tororo,	Market opportunity	✓ Africa 2000 network	23
11-16	Uganda	identification &	✓ Cash farm	
		enterprise selection	✓ NAADS	
			✓ Tororo district	
			✓ Katamata Farmers'	
G .	A 1	DD 1 0	Group	22
Sept.	Arusha,	PR approaches &	TSBF-Africa soil fertility	32
28-Oct.	Tanzania	scaling-up strategies	network	
11		for soil-fertility		
0 + 27	T	management	/ AC:	2.4
Oct. 27-	Tororo,	PME	✓ Africare	24
Oct. 31	Uganda		✓ Africa 2000 Network	
			✓ NARO	
			✓ DARS ✓ LADD	
			✓ LADD ✓ TIP	
			✓ DALDO	
			✓ KARI	
			✓ EAT	
			✓ ILRI	
TOTAL		17	75	352

Participatory monitoring and evaluation workshop, Toralapa, Bolivia

Facilitators: Luis Alfredo Hernandez R¹, Elias Claros Trujillo²

Background

The strategy of capacity building in the "Promoting Changes" project determined that the Bolivian system of agricultural and livestock innovation would be strengthened if those who provide the services of research and technical assistance were experts in participatory methodologies. It also states that to build a critical mass of experts in these methodologies, it is necessary to build these capacities in the institutions and organizations to support the target groups to incorporate those methodologies in the technological innovation processes.

Based on the aforementioned strategy, the "Promoting Changes" project has been promoting training workshops in participatory monitoring and evaluation (PME) to share experiences with this approach, identify groups of people or organizations interested in collaborative activities in the future, and develop appropriate PME systems in Bolivia.

This PME workshop describes the methodology that is being used to train groups of technicians, professionals and farmers in PME. At the end an analysis of the experience was done, and commitments to implement the systems by the trainees were established.

Objectives

The following objectives were proposed for the workshop:

- Strengthen the knowledge about PME
- Promote the establishment of PME systems
- Exchange knowledge and experiences about the establishment of PME systems
- Provide tools and methods to promote the establishment of PME systems
- Suggest some steps for establishing PME systems

Methodology

Participants' expectations and their relation to the workshop objectives

Table 1 gives the predetermined objectives of the workshop and the participants' expectations prior to beginning the event.

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Table 1. The participants' expectations and their relation to the workshop

objectives.

objectives.			
PME Workshop Objectives	Participants' Expectations		
Strengthen the knowledge	✓ Increase knowledge on PME to apply it to the		
on PME	institution's activities and projects		
	✓ Know and learn new knowledge to be able to carry out		
	PME in the CIALs		
Promote the establishment	✓ Learn about PME		
of PME systems	✓ Form a good conceptualization of PME methodologies		
•	✓ Increase the knowledge on PME techniques		
	✓ Improve knowledge through participation		
	✓ Acquire knowledge and skills on PME		
	✓ Learn more about PME, as well as learn new strategies		
	related to it		
Exchange knowledge and	✓ Strengthen capacities through the exchange of		
experiences about	experiences		
establishing PME systems	✓ Exchange experiences in PME		
Provide tools and methods	✓ Learn methodological tools to strengthen CIALs		
for promoting the	✓ Expand knowledge, instruments, methods for PME		
establishment of PME			
systems			
Suggest some steps for			
establishing PME systems			
Agree upon action plans	✓ Establish relations with all participants to establish		
with the entities	joint work in PME		
participating in the			
workshop to establish			
PME systems			
	✓ Establish solid relationships with participants		
·			

The first column of Table 1 relates the predetermined workshop objectives in relation to the participants' expectations. In general the expectations and the objectives are correlated. Some of the participants' expectations have an indirect relation to the objectives. For example, the establishment of solid relationships with the participants is related to the exchange of experiences, just as the steps in the methodology are related to methods for establishing PME systems. Thus it was not necessary to adjust the content of the workshop considering the correlation between the expectations and the objectives.

Analysis of experiences in PME processes (participants' presentations)

The analysis of the presentations indicated that the PME systems have a project focus and logframe. Thus the participation of the users is relative in terms of the definition of indicators, formats, use of the information, etc. The most outstanding aspects of the presentations are highlighted here:

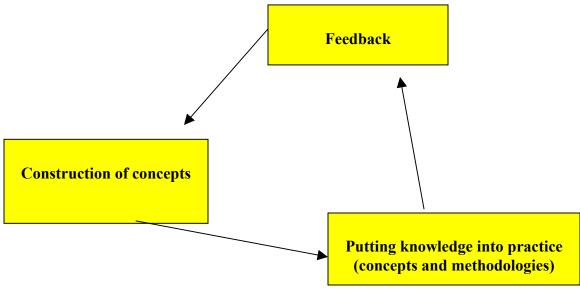
- *Project focus for PME*. The presentations indicated that the systems they are going to monitor have pre established work plans where the producers have not participated in their design (consultative participation).
- Logframe approach. The presentations showed that the activities in the PME systems are based on logframes. This implies predetermined activities, measurable indicators that can be verified, etc.; which confirms a project focus determined mainly by the interests of the entities or donors and, of course, with very low producer participation.
- *Negotiated indicators*. In the presentations it was observed that the predetermined indicators enter in a process of concertation (negotiation) with the producers. In this way the users of the PME systems do not intervene in the design itself.
- *Other presentations*. Some participants related research experiences in which communities intervened in a consultative fashion, without having true PME systems.

In conclusion we can affirm that the PME experiences presented by the participants have a project focus characterized by low levels of user participation, different from the PME system offered in the workshop, in which the users should be involved throughout the process. Nevertheless, there is a great opportunity for establishing PME within the new approach of the Bolivian system of agricultural and livestock technology (SIBTA), given that it starts with the demand of the beneficiary interest groups.

Strategy for training as part of the PME process

The facilitators promote discussions on the different topics referring to the PME, then they construct concepts and finally there is feedback from experiences in other contexts. Having finished this process, the participants can apply the knowledge acquired with interest groups and then discuss the results of the practice in plenary session.

Strategy of learning by doing



Conceptualization (Training Module 1)

First the participants' knowledge on the different concepts is determined and then it is reinforced with the presentation of drawings that represent the concepts in the daily activities of the interest groups. For this purpose, cards are used and each participant writes down what he/she knows about them. Then the related concepts are grouped in an exercise in a plenary session. Finally, an agreement is reached on the concepts.

After doing this exercise the following results were obtained (Table 2).

Table 2. Knowledge on the PME concepts.

Concept	Participants' Results	
Monitoring	 Verification 	
	 Accompanying the activities 	
Evaluation	 Assessment of results 	
	 Grade something 	
	 Assign value to something 	
Participation	 Joint decision-making (all actors of the process) 	
Indicator	• Sign	
	 Something that orients us 	
	 Something that tells us where we 	
	are going and where we have to go	

Analysis of the exercise at the level of the workshop participants

The process of conceptualization is easy, and there is good congruence with results in other contexts.

The following distinction was made between monitoring and evaluation: accompanying and verifying activities that are developed in a process (monitoring); and assign a value to the results obtained at given times to ensure that the decision-making process leads to the completion of the proposed objectives (evaluation).

Conceptualization exercise at the level of the interest groups

• General description of the interest groups (farmers): The practice was implemented with farmers from the town of Candelaria in the Municipality of Colomi, which has 18 communities and 8 CIALs established. It is a microcenter of biodiversity with 70 varieties of Andean potatoes and 16 varieties of smooth-skinned tubers (*Ullucus tuberosus*). The CIAL in Candelaria has worked with these native potatoes with good results. Of 38 varieties evaluated for adaptation, they have selected 5. They are seed producers and want to give added value to their production with good selection and packing.

The workshop participants decided to define the terms based on the description of the

potato crop. They asked the interest group to describe the cycle of the crop and then tried to link them to the terms Monitoring (M), Evaluation (E), Participation (P) and Indicators (I).

• Analysis of the exercise at the level of the interest group in Candelaria. It was easy to describe the crop cycle for the participants in the workshop, but very difficult to relate them to the concepts (M,E,P, I). On occasions, for lack of mechanisms to accomplish the objective of the practice, the facilitators had to lead the participants.

Based on experiences in other contexts, it is preferable to conceptualize using activities known by the groups, before using an activity without preparing mechanisms that reflect the relations that are sought. In any case, the PME methodology was presented as a flexible format to be enriched in case of success.

Use of illustrations

Nowadays drawings are used to facilitate the training of producers with any level of schooling. However, the participants at this PME workshop do not yet manage openended evaluations, probing questions, etc.; which ensure that the process is based on the free expression of the producers.

It would probably be very useful to think about how to link the processes or activities that are traditionally done in the interest groups (crops, animal management, etc.) with the conceptualization of monitoring, evaluation, participation, objectives, activities and indicators, developing new strategies to facilitate the process. It would be more interesting if they started with illustrations developed by their own interest groups. It is it possible to induce the groups when we use an activity specific to the group as an example? This question is a reflection that we should do in order to avoid having to lead the process.

Use of flow charts

The participants did not use flow charts. However, in the discussion and analysis of the practice, Fausto Merino (Research Assistant from Ecuador) emphasized the importance of their use and the difference that should be made with the "agenda for a meeting." This participatory tool is very useful in these training processes at the level of the interest groups. Displayed in visible places, the flow charts make it possible to orient the groups, discuss the process with them, orient the methodology that is going to be used, etc.; and the reason why its use is recommended in processes of establishing PME.

Conclusions on Training Module 1

In the process of inquiring into the participants' knowledge of terms such as M, E, P and I, the PME methodology proposes exploring their knowledge first and then establishing a relation between these terms and routine activities such as the management of a crop

and/or use illustrations. In the former case, the new facilitators have to develop a strategy for constructing concepts.

It is also recommended to:

- Revise the conceptualization of the flow chart and distinguish it from other tools such as the agenda for a meeting
- Study and use flow charts, distinguishing them from other tools such as the agenda
- Practice the technique of open-ended evaluation to obtain greater spontaneity of the interest groups.

Formulation of the overall objective, current and future situation, activities, indicators and formats (Training Module 2)

Table 3 gives the definition of each term from Module 2. In the definition of the objectives, the relations with the concept "goals" and their characteristics such as "reachable," "verifiable," "concrete," "clear," etc. are highlighted. Moreover, the participants understand the importance of having objectives.

Table 3. Knowledge on objectives, their characteristics and importance.

Questions	Participants' Responses
What is an objective?	✓ It is a goal drawn up
	✓ It is what you propose to reach at the
	end of a process
	✓ It is a dream proposed
What characteristics should an objective	✓ Reachable
have?	✓ Measurable
	✓ Clear
	✓ Concrete
	✓ Verifiable
Why is it important to have a good	✓ To have the future clearer
objective?	✓ To know what we have to do ahead of
	time
	✓ To know where you want to go and
	structure a good work plan

To understand the current and future situation, predesigned illustrations were used that showed, through a time line, the activities that needed to be done chronologically in order to reach the proposed goals.

With the objectives of each entity, an exercise was done that made it possible to build the overall objective and the current and future situation of the same. Then the components of this objective were analyzed, and one was selected. Based on the one selected, the activities indispensable for reaching the objective were analyzed, and for some of them the indicators were defined. The participants defined the components of the formats in terms of "indicators," "time," "person responsible," etc.

• Analysis of the exercise at the level of the interest group. The field practice of was done with 24 farmers belonging to the association of producers of seed potatoes. Four subgroups of 6 people each were formed.

Table 4 indicates that the subgroups, working simultaneously (independently), managed to define objectives, indicators and activities (they were also able to design formats). An interesting result reflected in this table is the fact that constructing the objective "better organization," they prioritized the same activity, "meetings" and thus obtained similar indicators such as "number of meetings" in all the subgroups. This could indicate the efficiency and efficacy of the proposed PME process (Table 4).

Table 4. Objectives, activities and indicators of the subgroups.

Working Group	Objective	Activities	Indicators
1	Strengthen our organization	Attend meetings	# of meetings
2	Grow as an organization	Meetings	Records of partners
3	Want to be organized	Look for interested people (meetings)	# of visits to communities
4	Produce and multiply seed in an organized way	Training	# of training events dedicated to seed multiplication

General conclusions

- A capacity in the process of establishing PME was created.
- Institutional commitments were established through the work plans presented.
- The proposed PME process was well accepted by the participants, who generated diverse ideas on its application.
- The facilitation of the PME processes should consider people who are able to speak Quechua because it is the language most frequently spoken in the communities.
- It seems that the conceptualization of the diagnosis in the CIAL course caused confusion in the definition of the objectives of an interest group; nevertheless, the proposed PME system helped distinguish between the two concepts.

Promoting a business and market orientation in CIALs from Colombia, Ecuador and Bolivia: Report of follow-up activities to the Second Workshop on "Design of Integrated Agroenterprise Development Projects." Part 1: Cauca (Colombia) and Ecuador

Research: Carlos F. Ostertag³

Background

This collaborative project between IPRA and the Rural Agroenterprise Development Project (RAeD, SN-1) at CIAT has focused on promoting a more businesslike perspective among some CIALs in Colombia, Ecuador and Bolivia. For this purpose, two 3-day workshops were held in Conocoto (Ecuador) in 2002, with the participation of technicians from NGOs that support the CIALs and their members. The first workshop focused on presenting basic business concepts and the methodology for identifying market opportunities for small rural producers, while the second workshop centered on the process of analyzing a production chain and the design of an integrated agroenterprise development project (IAP). The IAP consists in developing an action plan to strengthen the production chain under consideration.

This report⁴ corresponds to the follow-up activities to the second workshop, consisting in the analysis and development of an action plan to strengthen the selected production chain. Reference is made to visits to Cauca and Ecuador to follow up the activities of a CIAL in Cauca, dedicated to maize production, and to three Ecuadorian CIALs located in the provinces of Chimborazo, Pichincha and Carchi.

CIAL in Morales (Cauca), 8 July

Activities carried out

This CIAL is located in Carpinteros, a village in the municipality of Morales in the Province of Cauca. There is a maize growers' association with 34 members. CORFOCIAL, the second-order organization, provides support through its technician, Bolívar Muñoz.

This CIAL is working on maize, sugarcane for making *panela*, a noncentrifuged sugar in block form, and guinea pigs. After prioritizing, they decided to focus on yellow and white maize. With the collaboration of the CIAL leader, they conducted a rapid market study to identify potential buyers of maize in Piendamó and Popayán. They proceeded to identify the different actors in the chain. They studied the support system for maize (Office of the Mayor, CORFOCIAL. SENA, etc.). The organization of maize growers was evaluated, which revealed a deficiency in outcomes and in the level of commitment of several members. Based on this analysis, the organization has undergone an overhaul. They proceeded with the analysis of the critical points in the production, processing and

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⁴In this report recommendations are presented for each case separately; thus some of them are repeated.

marketing links. Then they prepared the problem trees to identify the causes and effects of the diverse limiting factors in the chain. They then converted the problem tree into an objectives tree, ending up with the action plan or the design of the IAP. They plan to write and present a project to the Office of the Mayor of Morales. They are very interested in lowering production costs and in initiating activities to generate aggregate value.

In the process of analyzing the chain, the CIAL had problems in bringing together the middlemen and merchants in a meeting; thus they had to limit their meetings to the producers. The commercial information was obtained from traveling and interviews in the work place.

Recommendations

- First of all, the Maize Growers' Association should strengthen their leadership and administration in order to have well-founded objectives and strategies. The members should also know what their specific responsibilities are and be committed to reaching the objectives they have set. The Association should also adopt an organizational chart with well-defined functions in order to develop their business activities more efficiently and effectively. This point is in addition to the fact that the Association needs to execute the action plan it has proposed to strengthen its position in the maize chain.
- The leaders of the Association or the CIAL with an aptitude for business should receive training and technical support in business, including business and market orientation, foundations of business management, strategic planning and preparation of business plans. It is not sufficient to give a short training course on the topic to the technician of the supporting entity.
- For this purpose it is recommended that the Association carry out processes of strategic planning and develop business plans for the production activity and business selected. Although these topics were presented in the first workshop in Conocoto (Mar. 2002), the importance of organizing a workshop for technical advisors of the CIALs and producers on the topic of the business plan was communicated to IPRA.
- This CIAL should examine in greater depth the market study on maize in Colombia, including the diverse segments (grain, processed and transformed) and trends in domestic production and imports.
- They should also review the cost structure that they are using at present in order to become competitive. It is recommended that they use the RAeD software, RentAgro. The CIAL's agricultural research should support this point.
- In their analysis there was no figure illustrating the links and actors of the chain, including importers of maize and the diverse market segments.
- One of the CIAL leaders expressed his interest in business-oriented training and technical support. This and credit are the main needs of the CIAL in its efforts to strengthen its business. This point is related to compliance with the recommendations made in the first point.

CIAL Flor Naciente, near Riobamba (Chimborazo), 12 August

Activities carried out

This CIAL, which is a half hour from Riobamba, consists mostly of indigenous women. It is located in the parish of San Juan, alt. 3300 m. The community works on 38 ha of an old hacienda that they have been buying with the fruit of their hard work, farming. They have the support of the FORTIPAPA project, through their technician Julián Pucha, to study new potato varieties including Papa-pan, Fripapa, Rosita and Santa Isabela, using their traditional variety Rábida as a check. They are also doing research on upland rice, which did not do well and quinoa, of which they already have 6 lines approved.

Their work can be divided into two types: preparation of the proposal for the IAP on potatoes (FORTIPAPA) and business development for transforming the production (CIAL and FORTIPAPA).

Development of IAP

The technician Julián Pucha applied the methodology of identifying market opportunities (topic of the first workshop), consisting in the preparation of a biophysical and socioeconomic profile of the region of the CIAL in question and the execution of a rapid appraisal of markets in Riobamba. The following market opportunities were detected: potatoes, *chochos*, peas, *taxo* and "*mortiño*".

The potato chain in Ecuador was analyzed, working from the national level down to the CIAL community, using the IAP methodology presented in the second workshop in Conocoto (Aug. 2002). The technician based the exercise partially on work done by FORTIPAPA, focusing on three products: potato chips, potatoes cut in thin strips for french fries, and whole potatoes, washed and selected. An evaluation of the CIAL Nuevo Amanecer was also included.

It should be noted that FORTIPAPA is in the process of entering into an alliance with several institutions including the Project Emprender, implemented by the Swiss NGO InterCooperation, in order to execute an IAP at the level of Ecuador, with emphasis on the market development of new potato-based products, targeted to supermarkets and agroindustries. FORTIPAPA also plans to conduct a more complete market study for the diverse products derived from potatoes, with the support of local universities.

Business development

It is important to highlight this joint work between FORTIPAPA and the CIAL, given that with the CIAL's own resources and the enthusiasm of the promoter Hilaria, they were able to do research on processes for making potatoes for french fries as well as potato chips. After some technological explorations with the potatoes cut in thin strips, they reached the conclusion that they needed to perfect the process by adding antioxidants to keep the potatoes from darkening in color. They finally decided to work with the other product: potato chips in bags.

The CIAL Nuevo Amanecer has worked out a process to make this product, for which they tested several varieties of potatoes and several types of oil. They had technical support from a FORTIPAPA foods engineer for the frying tests. They have begun local sales on a small scale in schools and at fairs, with a volume of about 300 bags (100 g each) weekly. They have rustic equipment such as plastic recipients, large frying pans, stove and slicers, bought by them and by FORTIPAPA; and they seal the bags by heat, using a candle and a knife.

The process of making the potato chips is as follows:

- They wash the unpeeled potatoes manually.
- They select the potatoes manually, preferring those that are healthy and have a uniform shape
- They peel the potatoes manually, trying to remove only the peel.
- The peeled potatoes are re-washed.
- The potatoes are cut into thin slices.
- If the variety used is Fripapa, it is fried directly; if it is another one such as Papa-pan, the chips have to be cooked 3 min. before frying.
- The chips are removed from the pan, and the oil is left to run off.
- The chips are placed in a polyethylene bag, sprinkled with salt and sealed with a knife, heated with the candle.

The CIAL has also calculated the cost structure for processing 25 kg of potatoes, and they know what their gross profit margin is. In their structure they have included the cost of their labor.

Recommendations

- All actors (IPRA, the local support institution and the CIAL itself) should bear in mind
 where the CIAL ends as a research body and where the rural agroenterprise begins. It is
 important to define whether the members of the CIAL and the agroenterprise are the
 same individuals or whether it is necessary to involve others. The rural agroenterprise
 should adopt an organizational chart with well-defined functions in order to carry out
 their business activities more efficiently and effectively.
- The leaders of the Association or the CIAL who have an aptitude for business should receive training and technical support on business. It is not enough for the technician of the supporting entity to have received a short training course on business because he/she will most likely not be present in the day-to-day running of the business.
- The head of the young agroenterprise should implement processes of strategic planning and develop a business plan for the selected production activity and business. Although these topics were presented at the first workshop in Conocoto (Mar. 2002), the importance of organizing a workshop for the technical advisors of the CIALs and producers on the topic of the business plan was communicated to IPRA.
- IPRA should promote the creation of complementary funds to support the transformation of the CIAL into a rural agroenterprise. Just as there are limited funds

for agricultural research (US\$50-100 per CIAL), there could be a larger, rotating fund or a system of reimbursement to finance technical and business consultancies and minor investments (equipment and tools) for the CIALs to become rural agroenterprises. This model is being promoted by the NGO Randi Randi for the CIALs in El Carchi in northern Ecuador.

- The CIAL Nuevo Amanecer should improve the quality of their product because the chips turn soft by the second day. Normally, potato chips can last more than 2 months without losing their crispness. According to experts in Colombia, this quality issue has to do with the following aspects, which could be new research topics for this CIAL:
 - ✓ The variety of the potato
 - ✓ The type of material used in the bag; explore changing from polyethylene to polypropylene
 - \checkmark The frying temperature; the higher the temperature, the better ($\approx 200^{\circ}$ C)
 - ✓ The peeled potatoes should have the starch removed by soaking them in water for several hours before frying.
- In this sense, FORTIPAPA could support the CIAL by identifying an expert in the production of potato chips to offer a rapid solution to the problem of the product losing its crispness.

CIAL Nuevo Amanecer, San Agustín Parish, Quito (Pichincha); 14 August

Activities carried out

This CIAL has nine members (six stable), mostly mestizo women who have done research on guinea pigs, tomatoes, rabbits, chickens and laying hens. One of its members, Antonio, is a young man who already has a rural agroenterprise that breeds and sells live guinea pigs, and who has participated in both workshops. This CIAL has the support of the NGO IIRR.

Two activities were held: A market study for yellow-footed, country-raised chickens in the capital city, Quito, followed by the analysis of the chain of country-raised chickens and the development of the action plan (IAP) for strengthening this chain. A good demand for these country-raised chickens was identified in Quito.

The second activity was to begin a rural agroenterprise for producing country-raised chickens to be sold alive. The CIAL selected this line of production because (1) they already had the knowledge, (2) the demand was identified in the rapid market appraisal, and (3) there is a more rapid return on the investment than with guinea pigs. With the community's own investment and contributions (mingas), they constructed a chicken coop with a capacity for 50 chickens. The rations consisted of a commercial concentrate, supplemented with coarsely milled maize. The chicks were given the first vaccine. The CIAL managed to raise and sell locally two broods, but in the third, the chickens died, probably because they changed the supplier of chicks, which suffered from being transported such a long distance. They also had to face a period of low prices because of the importation of chickens from Colombia and Peru. At present the price of chicken has begun to rise again.

The chicks are bought at 2-3 weeks, and after 5 weeks they reach commercial weight. Despite the failure of the third brood, the group plans to continue with the business, but they are now aware that they should improve their technology, especially with respect to the purchase of the chicks (chicks 1 wk old purchased from a reliable supplier nearby) and to improve the infrastructure (coop and cages). Their target market is the city of Quito, and not the local community, due to the better purchase price.

Recommendations

- It is important that IPRA, IIRR and the CIAL itself have a clear idea of where the CIAL as a research body ends and where the rural agroenterprise begins. It is important to define whether the members of the CIAL and the members of the agroenterprise are the same people or whether it is necessary to involve other people. They should adopt an organizational chart with well-defined functions so as to develop their business activities more efficiently and effectively.
- The head of the chicken agroenterprise should implement processes of strategic planning and develop a business plan for the production activity and business selected. Although these topics were presented in the first workshop in Conocoto (Mar. 2002), the importance of organizing a workshop for technical advisors of the CIALs and producers on the topic of the business plan was communicated to IPRA.
- It is important that IPRA promote the creation of complementary funds to support the transformation of the CIAL into a rural agroenterprise. Similar to the funds available for agricultural research (US \$50-100 per CIAL), there could be a larger rotating fund or system of reimbursement to finance technical and business consultancies and minor investments (equipment and tools) for the CIALs in the process of becoming rural agroenterprises. This model is being promoted by the NGO Randi Randi for the CIALs of El Carchi in northern Ecuador.
- The IIRR should offer more technical support, to the extent that their resources permit. If this is not possible, IPRA should support this CIAL with resources so that they can obtain the advice of an expert in raising broiler chickens on topics such as minimum infrastructure, biological control of pests and diseases, and nutrition.

CIALs in El Ángel (Carchi), 13 August

According to the technician Patricio Ponce of Manrecur, the activities of the CIALs in this zone in northern Ecuador have been suspended for lack of funds. Manrecur did not implement the design of the IAP. The CIALs in the upper zone have been working on fodder beets, blackberries and native plants; while those of the lower zone have been working on raising animals such as guinea pigs, pigs, chickens and sheep.

The new Project Manrecur 3 has a more business-oriented approach and will continue with the CIALs, but they intend to decrease the dependency of the CIAL on the technician. There will be two funds to support the CIALs: the conventional one of US\$1000 to support the research activities for 10-15 CIALs, which will be rotating in nature, and the other, an investment fund of US\$10,000. In this way the CIAL has the opportunity to pass from the

Research Fund to the Investment Fund. An alliance among Manrecur, EcoPark and Manrena is also being explored in order to develop a process of Training of Trainers on the topic of the CIAL methodology.

Recommendations

- Workshop on business concepts and preparation of the business plan to train producers. This workshop can be held in November of this year or leave it for the first quarter of 2004. It would be convenient for CIAL producers interested in the business and whose educational level is not too low to participate. The agenda should include a review of basic business concepts (business and market orientation, foundations of business management, strategic planning and preparation of business plans), before proceeding to the topic of business plans. The topic of business plans can be approached first with the theory, then an example and finally develop a business plan in groups of two or three people.
- Organizational charts for the business. For each case the decision as to whether the CIAL and the rural agroenterprises should involve the same people or not, should be taken very rationally. The agroenterprise requires positions and functions that are certainly different from those of a CIAL, given that their objectives are different although there is some overlapping.