

and self-sufficiency crops that do not receive habitually phytosanitary treatments. The learned lesson is that many beekeepers are not crop farmers, getting to include also poor urban inhabitants, without own land who rent or lend parcels for their beehives. The project demonstrates to be effective in providing good income alternatives to minifundia zones, or at extensive fallow zones or with native vegetation ones, which usually do not provide economic income to their occupants and neighbors.

In this sense, it is contributed to the superior goal of the project "*to improve the standard of life of beekeepers through the establishment of the production of high quality beekeeping products*" on a complementary way and without overlapping with other projects destined to the agricultural improvement.

In commercialization aspects there are not yet lessons learned as far as the collective sale in bulk scale. The excess of demand over the supply side has resulted in most cases in individual sales and to local or traveling retailers who permanently demand more products, without questioning the levels of prices paid.

As far as the gender role, the study revealed that it does not exist differences between the family members as far as the work in beekeeping, except to the youngest families with minor children, in which the main tasks weight falls on the family head.

8.-Conclusions

1- Relevance: The relevance of the project is "*high*".

The conclusion is based on that the project has been an answer to demands from the committees of beekeeping producers since they already had received some type of previous cooperation but they required training for the improvement of their production and for income increase. Although the project was focused initially on increasing the diversification of beekeeping production, the need to improve qualitative and quantitatively the production of honey, forced the project to concentrate in this first stage. The performed investigation demonstrated the existence of an increasing internal market for honey and derivatives. In addition, the project counted on the active cooperation of MAG through the DIPA and the DEAG institutions, like counterpart organizations for programs for beekeeping promotion.

2. - Effectiveness: The effectiveness of the project "*is almost obtained*".

The assisted producers have successfully adopted the improved techniques for honey production and beekeeping derivatives, resulting in an increase of production and on monetary income. The quality of products has been significantly improved by means of the installation and operation of the Centers of Gathering and Storing in the most advanced Committees, just lacking to complete them in the other locations. The beekeeping laboratory of MAG is in operative conditions serving to mainly honey merchants companies. The project was concentrated in the maintenance of the present equipment but new equipment was not acquired.

3. - Efficiency: The efficiency of the project "*is almost obtained*".

The basis for that qualification is in that the attended committees are in a diverse degree of development, for their own reasons of each one independently to the project. In the advanced committees, the result is highly satisfactory considering the economic results obtained. As far as the development of activities on the basis

of the planning, the majority of activities was fulfilled satisfactorily, except for the pending definition about the Chaco region, the delayed allocation of some base technicians from DEAG, and the non elaboration of the *Plan for Integral Diversification Management of Beekeeping in Paraguay*. The allocation of resources by the Project has been fitted and opportune for the objectives achievements.

4. - Impact: The estimated impact of the project "*is almost obtained*".

The basis for this qualification lay on achievement of this project superior goal, the income increase of beekeeping producers. Although this occurred in the most advanced committees, it is anticipated a similar result in the other committees. In addition, as far as the assumptions of the PDM neither negative incidences of agrichemicals in the bees population nor social conflicts were registered. However, some cases of robbery were registered or vandalism of beehives and it has been experienced the incidence of natural adversities on production, especially of droughts effects or excess of rainfall. This fact mitigates the obtained qualification. As far as the externalities, neither were registered increases of flies or other insects as a result of beekeeping production, nor bees' attacks to the neighboring population. Also in some cases there have been detected positive effects in near crop plots by better pollination. Finally, much interest was registered of the neighboring non beneficiary population to become a member of the existing committees or to try beekeeping activities.

5. - Sustainability: the sustainability of the project "*is almost obtained*".

The basis for this evaluation are founded on that although the committees are willing to face the operating expenses of the infrastructure and equipment at the Centers of Gathering and Storing, and to pay expenses for training if necessary, the weakness of availability of sufficient and opportune financial resources from the counterpart institutions does not allow a more higher qualification in this aspect. On the other hand, threats of negative environmental impacts do not appear. In addition, the organizational links within the committees assisted by the project have been fortified. Finally, negative effects of the beekeeping activity were not registered on the gender roles.

9.- References

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ANNEX 2

Interviewed Number	01	02	03	04	05	06	07	08	09	10	11	12	13
1	Francisca Isidora	Martinez Barreto	Cordillera	Aytra	0	5	0.5	0	0	Manioc, Beans, Corn	Transfers from Asunción from 2 persons	10 beehives	3 beehives
2	Emilio	Jimenez Martinez	Cordillera	Aytra	2	4	2	0	0	Manioc, Beans, Corn	Once a week	10 beehives	10 beehives
3	Julio	Miranda Roa	San Pedro	Santani	2	4	10	0	2	Peanuts, Corn.	Professor.	1 beehive	1 beehive (trial)
4	Alberto	Miranda Roa	San Pedro	Santani	5	7	20	6	4	Manioc, Corn, Peanuts, Beans.	Professor, sales, mason	1 beehive	8 beehives
5	Basilio	Miranda Raimondi	San Pedro	Santani	6	1	20	3.5	2	Manioc, Corn, Peanuts, Beans, Pineapple	No	1 beehive	10 beehives
6	Bernardo	Miranda	San Pedro	Santani	3	5	20	5	1	Manioc, Corn, Beans, Sugar Cane.	Masonry	3 beehives	15 beehives
7	Migdonio	Benitez Miranda	San Pedro	Santani	7	8	10	3	3	Corn, Manioc, Beans, Peanuts.	No	4 beehives	16 beehives
8	Estanislao	Fernández Giménez	Cordillera	Aytra	4	6	360 m2	0	0	Peanuts, Corn.	House builder	10 beehives	10 beehives
9	Eulalio	Ibarra Giménez	Cordillera	Aytra	0	6	3	0	0	Manioc, Beans, Corn	Professor and occasional work.	10 beehives	7 beehives
10	María Emma	Molina	Cordillera	Aytra	6	4	1	0	0	Manioc, Corn, Peanuts.	Fisiotherapist	2 beehives	5 beehives
11	Milciades	Vera	Paraguari	Sapucal	5	5	0.5	0	0	Manioc, Corn, Beans.	Fundación Takuara rendá.	8 beehives	39 beehives
12	Heliodoro	Torres Espinola	Paraguari	Sapucal	5	5	20	3	1	Beans, Manioc, Corn, Peanuts.	n.d.	2 beehives	8 beehives
13	Gloria Mercedes	Ferranño de Diaz	Paraguari	Sapucal	2	4	100x30mts. + 5 Has. appart.	2	0	Beans, Manioc, Corn, Pineapple.	Retail market	3 beehives	8 beehives
14	Juan Pablo	Contrera	Paraguari	Sapucal	0	3 young members	1	1	0	Beans, Corn, Manioc.	Wage earner from Fundación Takuara	0 beehives	Just for Committee
15	Cesar Raul	Cristaldo	Caaguazú	JM Frutos	3	5	50	0	0	Manioc, Beans, Peanuts, Corn	Pharmacy owner	10 beehives	30 beehives
16	Eugenio	Gauto	Caaguazú	JM Frutos	2	2	1	0	0	0	Watch repair	15 beehives	22 beehives
17	Miguel Angel	Estigarribia	Caaguazú	JM Frutos	6	2	2	0	0	0	Brick maker	15 beehives	35 beehives
18	Ovidio	Gauto	Caaguazú	JM Frutos	10	3	0.082	0	0	0	Beehive maker and beehive nucleus provider	22 beehives	30 beehives
19	Pedro Carlos	Madsen Gauto	Caaguazú	JM Frutos	6	4	104	No response	0	Manioc, Corn.	Carpenter, logger	19 beehives	19 beehives
20	Francisco Anuncio	Vera Silvero	Caaguazú	JM Frutos	6	3	5	2	4	Peanuts, Beans, Peanuts, Manioc, hortalizas.	Photographer	2 beehives	9 beehives

Question Nr.	Interviewed Number				
	1	2	3	4	5
1.1.1	Committee functioning from IRC, they were told of another project	Professor Mario Blanco	not applicable	Part of Committee from IRC, the japanese expert visited twice and proposed propolis production accompanied by DEAG technician.	When JICA experts appeared accompanied by DEAG
1.1.1.1	Did not produce yet	Did not produce yet	Just for consumption	Locally, a retailer buyer visited him	Home sale
1.1.1.2	Have not harvested yet	Atyra, Tobatf, wherever they can	not applicable	To occassional buyers, nothing permanent	Buyers demands
1.1.3.1	Interesting, new things are learned and is a good income	For the Family, for income, for educational possibility	Income and consumption, it is very convenient. Want increase production	Higher income and Family consumption	Scarce work, helping themselves in tasks
1.1.4	no response	brick making	not applicable	The son dedicates to this item	Cotton, but not because of beekeeping
1.2.3	There is not a center of storing	There is not a center of storing	not applicable	Nothing yet	Used once.
1.2.4	Stamped wax and sugar	Stamped wax and sugar	Stamped wax and sugar	Sugar, wax they do it by themselves	Stamped wax and sugar
1.2.5	Caacupé	Atyra- sales center	Santaní, with own resources	Asunción, now at Comercial Caburef place	Santaní, with own resources
1.2.6	Complete equipment	Complete equipment	Complete equipment	Complete equipment, that received from project	Smokers, veils, gloves
1.2.7	Donation from IRC	Donation from IRC	Borrow from brother	Cnel Oviedo or Santaní, with own resources	Santaní.
2.1.1	not applicable	No response	not applicable	Those from honey	Enough
2.1.2	not applicable	No response	not applicable	Stamped wax, sugar	Increased rent production items
2.1.3	not applicable	Building a new house	not applicable	No response	Wires for fencing
2.1.4	not applicable	not applicable	not applicable	Family expenditures	not applicable
2.1.5	not applicable	Education	not applicable	Some	not applicable
2.2.1.2	not applicable	not applicable	not applicable	not applicable	Just wax
2.2.1.3	not applicable	not applicable	25 liters of honey, twice a year, for consumption	50 liters x 15,000 Gs.	30 liters x 15,000 Gs.
2.2.2	not applicable	Same	not applicable	Increased	Increased
2.2.3	not applicable	Increased (5Kg/bee hive box)	not applicable	Increased (10Kg/bee hive box)	Increased
2.3.1	"Trasciego", beehive control	Royal jelly, queen, management techniques	Control of queen, cleanings	Changing rise frames and feeding	Increase of progeny with new wax, the queen must be taken out
2.3.2	Quality and quantity	Quality	Started 2 years ago, first year of experience	Know when to harvest and must cover it to improve quality	Now they have adequate equipment for covering
2.4.2	not applicable	Dont have a center of storing	not applicable	In none yet	Extraction
2.4.3	not applicable	not applicable	not applicable	not applicable	Other harvest on May 15
2.4.4	not applicable	not applicable	not applicable	not applicable	Dont know yet
2.4.6	not applicable	not applicable	not applicable	A % for committee and for paying expenses	not applicable

Question Nr.	Interviewed Number				
	1	2	3	4	5
4.2.1	not applicable	not applicable	Neighbors with cotton: think that was the cause for production decrease	Beehives away from crop plots, sesame produced more than cotton	Less cropping or crops without agrichemicals
4.2.2	1 beehive a year ago	not applicable	not applicable	not applicable	not applicable
4.2.3	not applicable	Much rainfall, bees consume honey.	Drought	Drought	Drought
4.3.1	not applicable	not applicable	not applicable	not applicable	not applicable
4.4.2	not applicable	3 or 4 persons	1	2 neighbors	1
4.4.3.1	In the neighborhood	Atyra	Asunción or sell Locally.	Ocassional buyers.	Locally
5.1.1.1	Beneficial	No response	not applicable	Already looking results	Did not learned totally yet
5.2.1	getting closer, knowledge exchange	To think in sunflower, sesame and papaya plantations	Increase the assisted ones and beehives provision	Diversification, propolis produce a little	Need to buy more wax and beehives
5.2.2	n.d.	Yes, not specify	It benefitted committee members with higher income and consumption	More learning, improvement of production technology, strengthening the committee	Management, progeny rearing
6.1.2	Everything is done by her	All of them do it	Almost without alteration	Harvest the whole family, especially the spouse, now the elder son is more responsible	All together do it
6.1.3	No changes because beekeeping requires few time	Same goes on	No	Elder son is more responsible	No
6.2.1	Helping each other	Working all together, more facilities	No response	Family. Cooperativa Cnel. Oviedo.	No response
6.2.2	8/15 days	8 days	not applicable	15 days	45 days
6.2.2.1	not applicable	0	not applicable	0	Nothing yet
6.2.3	3 years	5 to 6 years	not applicable	16 years	10 years approx.
6.2.4	10	10	not applicable	8	8
6.2.6	Moving or parcel sale	Moving	not applicable	Moving, they were not land owners	3, some dont want to give time

Interviewed Number					
Question Nr.	6	7	8	9	10
1.1.1	Oscar López informed them	Oscar López informed them	By the Veterinary Mario Blanco, Prof. from College, BTA from Carumbe'y.	By the Veterinary Mario Blanco, Prof. from College, BTA from Carumbe'y.	Through one of Committee members
1.1.1.1	Asunción	Asunción	Locally.	Locally.	Did not have production
1.1.1.2	Asunción	Asunción	It is storing, waiting to sell jointly, with JICA assistance	Wherever	not applicable
1.1.3.1	For the Family as consumption plus income	Increase production and sales	Income improvement and training betterment	Less work	It will become an income to improve Family level of life
1.1.4	Left a construction building, also cotton	Cotton, less profitable	not applicable	not applicable	Ocasionally physiotherapy to do group tasks
1.2.3	Once, recently equipped	In november first harvest, january second, february another harvest	not applicable	not applicable	not applicable
1.2.4	Sugar, wax they do it themselves	Sugar, wax sometimes is missing	Satmped wax and sugar	Satmped wax and sugar	Satmped wax and sugar
1.2.5	Santaní, with own resources	Santaní, with own resources	Caacupé and San Lorenzo	Caacupé.	San Lorenzo yand JICA
1.2.6	Smokers, veils, gloves and hat	More beehives, hats, smokers	Complete equipment	Complete equipment.	Complete equipment
1.2.7	Santaní.	Santaní, with own resources	We still dont need new equipment	We still dont need new equipment	We still dont need new equipment
2.1.1	Beekeeping improved enough. Stagnated prices	Honey	Honey	Not yet	not applicable
2.1.2	Inputs and implements	One hectar land	Income not enough	Saving for studying	not applicable
2.1.3	not applicable	Can not	not applicable	not applicable	not applicable
2.1.4	No response	Food	not applicable	not applicable	not applicable
2.1.5	Education	Health and education	not applicable	not applicable	not applicable
2.2.1.2	Tried propolis but unsuccessful	not applicable	not applicable	not applicable	not applicable
2.2.1.3	150 liters x 15,000 Gs. Asunción=20 thousand	2006=180 liters x 20,000 Gs.; 2007=90 liters x 20 thousand.	17 liters x 25,000 Gs.	No response	Did not sell
2.2.2	Increased	Same	Same	Prices depend on clients	not applicable
2.2.3	Increased	Increased	Increased	Increased 10 kilos per box	not applicable
2.3.1	Management and Feeding.	Maintenance of beehive, stamped wax in new rearings	Maintenance of boxes, how to avoid swarming, diseases tretaments and "trasciego"	Maintenance, trasciego.	Management of beeheive boxes and trasciego.
2.3.2	Better analisis at center of storing	Because they carry to the center of storing	It has been noted a considerable increase in production	No response	Before bees did not stay in beehives, now yes
2.4.2	To extract honey with centrifuge, weighing, quality control, anchoring (charge amount with JICA)	Centrffuge, analisis, but dont pack because label are lacking	not applicable	not applicable	not applicable
2.4.3	Once up to now	Every 15 days	not applicable	not applicable	not applicable
2.4.4	Not yet	All production for processing, not for direct marketing	not applicable	not applicable	not applicable
2.4.6	No response	No response	not applicable	not applicable	not applicable
4.2.1	not applicable	There are not large crop plots in the area	No crops in this zone	No crop plots near	not applicable
4.2.2	1 beehive	not applicable	not applicable	1 beehive 3 months ago	not applicable
4.2.3	Rainfall excess	Drought	not applicable	Rainfall excess	not applicable
4.3.1	not applicable	not applicable	not applicable	not applicable	not applicable
4.4.2		2	1	4 Many people want to work but there is no more space	2 families
4.4.3.1	Ocassional buyers.	Sell in Asunción.	No response	Up to now for consumption	not applicable

Question Nr.	Interviewed Number				
	6	7	8	9	10
5.1.1.1	Once learned not losed anymore	No response	By aquired experience on training and increasing production	He likes it	They will have more opportunities for updating and improving production
5.2.1	Increase beehives number and improve marketing in scale	Continuous support, more frequently, base technician well trained	In future, trasport for his products	Improvements in the existing local	Higher support on training, production and marketing
5.2.2	New techniques learned	Children cooperates, family head market and spouse helps	On production Quality, and future expectation about marketing, the committee was highly decayed being better now	A more positive Vision, I like beekeeping more now	The group was consolidated and started to have more activities and production
6.1.2	All together do it	All together do it	All together do it	I do everything	I do everything
6.1.3	No	No	No	No	not applicable
6.2.1	Advantageous in marketing	To improve his performance	Associated ones can obtain more advantages	The group helps	Improve level of life
6.2.2	15 days	Every month	8 days	8/15 days	8 days
6.2.2.1	Nothing yet	Nothing	not applicable		not applicable
6.2.3	4/5 years	7 years	7years	3 years	5 years
6.2.4	8	8	10	10	10
6.2.5	2, because he is very busy and the other move to another settlement	Moving, lot sold	2 associates who did not show interest anymore	2, didn't like this activity	Retired for searching alternatives

Interviewed Number					
Question Nr.	11	12	13	14	15
1.1.1	Through one of Committee members	Invited in a course organized by Focapro.	Will become a project member, he had to be trained previously	A Committee member invited her	In the first meeting
1.1.1.1	Did not have production	Locally, Sapucaí y Paraguari.	At home	In the family	not applicable
1.1.1.2	not applicable	No change but planning to sell at Asuncion wholesale Market	Still does not have it	Don't produce yet	not applicable
1.1.3.1	It will become an income to improve family level of life	To improve life quality and the crops.	Now he can not work harder because of age	Now they can prevent beehives abandonment	He likes working with bees
1.1.4	Ocasionalmente physiotherapy to do group tasks	not applicable	not applicable	not applicable	not applicable
1.2.3	not applicable	Under construction	not applicable	not applicable	not applicable
1.2.4	Satmped wax and sugar	Satmped wax and sugar, sometimes smokers	Satmped wax and sugar	Satmped wax and sugar	No response
1.2.5	San Lorenzo yand JICA	No response	not applicable	Jica provided most, they invested too	Receive from Committee
1.2.6	Complete equipment	Complete equipment.	Dont have equipment	Smokers, the rest can be improvised	Protecting garment
1.2.7	We still dont need new equipment	Lended amnog associates	Artisanally made (former mosquito repelling fabrlic).	Some donations from JICA	Protective garment from Jica, smokers from Foundation
2.1.1	not applicable	They are in process	not applicable	Still dont know	not applicable
2.1.2	not applicable	Want to reinvest in the committee for equipments	not applicable	not applicable	not applicable
2.1.3	not applicable	not applicable	not applicable	not applicable	not applicable
2.1.4	not applicable	not applicable	not applicable	not applicable	not applicable
2.1.5	not applicable	not applicable	not applicable	not applicable	not applicable
2.2.1.2	not applicable	Propolis, stamped wax	Propolis in his own beehive boxes	They think royal jelly, pollen and propolis	not applicable
2.2.1.3	Did not sell	15.000 Gs. per liter on average	honey at 20.000 per liter.	honey (before 7 liters per beehive at 10.000 per liter).	not applicable
2.2.2	not applicable	Same	Same	not applicable	Same
2.2.3	not applicable	not applicable	Increased (6 a 7 liters last year)	not applicable	No response
2.3.1	Management of beehive boxes and trasiego.	Management of beehives, position of rise frames inside the boxes, artificial Feeding in winter and first steps for propolis production.	Management of beekeeping, propolis, did not know anything about larvae	Space in rearing cahmber so that queen oviposited, avoid swarming	Did not know about queen importance, nor how to manipulate the beehive
2.3.2	Before bees did not stay in beehives, now yes	No response	not applicable	No response	not applicable
2.4.2	not applicable	not applicable	not applicable	not applicable	not applicable
2.4.3	not applicable	not applicable	not applicable	not applicable	not applicable
2.4.4	not applicable	not applicable	not applicable	not applicable	not applicable
2.4.6	not applicable	Instalation rights	not applicable	not applicable	Dont know yet
4.2.1	not applicable	apparently no complaints exist	Neighbors spray ractionally, sometimes producing damages	No crops in this zones	not applicable
4.2.2	not applicable	1 beehive very isolated	not applicable	Just once	1 beehive
4.2.3	not applicable	Frosts	Drought	No response	Frosts
4.3.1	not applicable	No response	Ants of varios types (cupl'i, tajy pytal)	not applicable	Ants and croaches
4.4.2	2 familles	3 producers and other not producers	Several neighbors, 3 o 4 realatives	2	3
4.4.3.1	not applicable	Perhaps in Valenzuela.	Asunción & Locally.	not applicable	No response
5.1.1.1	They will have more opportunities for updating and improving production	No response	No response	Everytime he can	No response
5.2.1	Higher support on training, production and marketing	Technical assistance, OK	That people improve ties and training continues	They had better improve, so that the committee could multiply and be strengthened	Better taking care of beehives, and place venoms below to control ants
5.2.2	The group was consolidated and started to have more activities and production	Higher and more diversified production	It brought many innovetions	Tha can become a viable means for living	First approach to beekeeping
5.1.2	I do everything	All together do it	I do everything, children have scare	She is the producer with her children	not applicable

Interviewed Number					
Question Nr.	11	12	13	14	15
6.1.3	not applicable	No	No	Before the husband produced and she sell	not applicable
6.2.1	Improve level of life	President	No response	Anything can not be done individually, over all in joint marketing	Has hope of improving
6.2.2	8 days	15/30 days	8/15 days	Regularly	8/15 days-
6.2.2.1	not applicable	not applicable	Nothing yet	Still not decided	Not yet
6.2.3	5 years	38838	1 año	Almost a year	38838
6.2.4	10	10 + 3 in process	Not sure	Perhaps 7.	10, want to enter 4.
6.2.6	Retired for searching alternatives	4 by study traveling	2, others come and go	People want to see quick results, if not they are disenchanted	2 by moving

Interviewed Number						
Question Nr.	16	17	18	19	20	21
1.1.1	DEAG technicians reported committee existence and I contacted them	Through DEAG	Directly through JICA	Technicians from MAG and JICA	Listen from neighbors and committee members	Through the committee, he lend land so that committee members put their beehives in the premises. Formerly trained by SNPP, but didnt dedicated to production due to scarce time.
1.1.1.1	Individual sale of honey and wax to Ciudad del Este	Wax and 50% of the honey in ASAP. Another 50% of honey sell locally	At local level, among relatives, friends and others	Asunción and CDE	Sell Family members at Asunción, also Locally.	Didn't sell because retrying again.
1.1.1.2	Still did not sell the first harvest. Using center of gathering and storing in JM frutos. Have an own local in DAMA; also through supermarkets in Campo 9.	50% Locally, 50% honey to a laboratory. Does not have wax	In supermarkets in CDE	Asunción and CDE	Sell aFamily members in Asunción, also Locally.	Individually, at local level.
1.1.3.1	Many families already make a living from this, and there are not many job alternatives	Economical income and aquired knowledge	It is an item with interesting perspective for income increase	It is the most important cash activity for the Family	Productivity for the economic result. He likes it, but did many mistakes by not knowing	For income
1.1.4	Cropping, cotton above all	Close a clock repair store	Brick making	Brick making	not applicable	No response
1.2.3	Not being used yet because harvest is delayed for climatic conditions	Once thsi year. Center was recently installed	Center was not used yet	Not used yet	not applicable	Once
1.2.4	Sugar	Sugar	Sugar and wax	Sugar bought with own resources	Not used	Stamped wax and sugar
1.2.5	In town	Locally	Asunción, with own resources	Locally	not applicable	The project provided the stamped wax
1.2.6	Smokers, veils, gloves and hat	Has everything	Gloves, veils, protecting garment	Gloves, veil, smokers	Has a personal equipmente	Beehives, frames, smokers
1.2.7	Buy from Asunción, individually, with own resources	Donated by JICA	Asunción, with own resources, sometimes barging with honey	Asunción, with own resources	Through niece who bought them in Asunción	Made beehives and rise frames with own resources. They did almost everything by themselves ingenously. Gloves and veils they buy
2.1.1	First year increased, but now decreased for climate	30% increase by beekeeping	Income increased for honey that is his only activity currently	By sales of honey, brown propolis, beehives, nucleus and rise frames.	not applicable	Honey
2.1.2	New boxes for beehives	Nº of boxes	not applicable	not applicable	not applicable	not applicable
2.1.3	No	not applicable	not applicable	not applicable	not applicable	not applicable
2.1.4	Family expenditures	Family expenditures	Mostly for food	Food and studies	Foods	Clothes, food and domestic appliances
2.1.5	not applicable	CAH for education	not applicable	Wife health expenditures and education	Education	Education
2.2.1.2	Medicinal prepared artisanally	Wax	Wax for using in own beehives	Brown propolis	not applicable	not applicable
2.2.1.3	honey 9.000.000	honey 5.208.000	honey 1.960.000	honey 8,5 million; brown propolis 0,4 million Gs.	120 liters at 15.000 Gs. per liter.	35 to 40 liters per 15.000 Gs. per liter.
2.2.2	Increased	Same	Same	Increased	Same	Increased
2.2.3	Increased	Increased	Decreased	Decreased	Decreased	Increased (20Kg. Per box).
2.3.1	Management in general	Feeding in winter time; revising every/ 4 days, moving rises; stamped wax	Changing old pannels by new ones, in winter empty frames are taken out leaving the filled ones; Feeding artificially; beehives sheltering for the queen	Pannels rotation; changing queens every two years	Changing queens	Know Management of squares, beehives, future queens, old queens.
2.3.2	Befor extracted honey without operculating well	Cleanliness and odors	Controlling the % of frame operculation	Higher Quality (clenliness by centrifuge extraction)	No response	Natural cycles are respected

Interviewed Number						
Question Nr:	16	17	18	19	20	21
2.4.2	The owner itself do the job. Centrifuge extraction. Bottling and labelling done for sale documentation	Number of harvests duplicated (2 to 4) and the yield per beehive	Production of bee honey	Centrifuge, decanting and bottling	not applicable	Quality control, normal process, desoculator and centrifuge
2.4.3	Up to 3 times weekly during harvest	Every 15 days	n.d.	Till April every 20 days	not applicable	In a normal year, 2 to 3 times.
2.4.4	0.5	Everything	0.3	0.7	not applicable	All
2.4.6	It has to be clean after using. More than 70% of cells must be closed	Take a shower before, put equipment in condition, harvest, not allowed entrance to strangers, nor eating, smoking, lastly clean after finishing use	Maintain Hygiene; work with a partner, disinfect premises	Hygiene and put equipment in place for manipulating beehives, cleaning equipments and local	not applicable	Excellent cleaning
4.2.1	Once died 50% of bees for agrichemicals applied in a soybean or watermelon crop plots	not applicable	not applicable	not applicable	Last year by sunflower plots	not applicable
4.2.2	Destruction for vandalism	Honey theft (2 times)	1 time	1 time	Just 1 time	2 times
4.2.3	Frosts	Too much rains	Too much rains	Too much rains	Rainfall!	Heat and rain excess
4.3.1	not applicable	not applicable	not applicable	not applicable	not applicable	Ants
4.4.2	now almost 20 and perhaps more	There are about 3 interested	5 interested	2	not applicable	2
4.4.3.1	Sell in their own way, perhaps precauriosly	Locally	Deliver to retailers in their own farm	Locally	No response	No response
5.1.1.1	It is very important, always new techniques are learned	For new knowledge	Considers training as very effective, he is applying it	Can appear new techniques in Management	To improve production	No response
5.2.1	Does not know how to improve	Have no suggestions	Standardized beehives provison and improving use of storing centers	A higher frequency technical assistance	not applicable	They should had demostrated higher interest, more dedication
5.2.2	Demand increased because of higher Quality offered	The techniques, use of stamped wax	Production and Quality improved	More production, more Quality	It helps improve production	By the orientation and benefits that can be got.
6.1.2	Family head work alone. Spouse have another activity	Only family head work. Spouse take care of home	Wife participates in marketing	The wife is in Buenos Aires under medical tratment	The family head with a brother, only	Family head, the rest are still students
6.1.3	No	No	Was not modified	No	not applicable	Was substituted by my daughters in photography
6.2.1	Yes	Yes	By family tradition	For mutually helping the associates each other and for progress	No response	No response
6.2.2	Once a month	Once a month	Once a month	Once a month	not applicable	The first Sunday monthly
6.2.2	Not yet	Not yet	Not yet	Nothing for the moment	not applicable	All individual
6.2.3	12 years	26 years	12 years	14 years	not applicable	More than 10 years
6.2.4	17	21	21	10	not applicable	14 older and 7 new
6.2.6	not applicable	1 moved and 2 live far away and cannot assist	3	1 by moving	Dont know. Like the project, want to know how to integrate. He is producing for 6 years	3, but passive associates

Name	Property size in Has.
Surname	Nº de has destined to rent production
Department	Rent items
District	Self-sufficiency items
Quantity of children	Other activities of extra-farm income
On farm Residents	Quantity of beehives at the Project beginning
	Quantity of beehives now

1.1

1.1.1 ¿How did you know about the Project?

1.1.1.1 ¿Where did you sell before the honey and/or derivatives?

1.1.1.2 ¿Where do you sell currently?

1.1.2 Requested technical support on beekeeping before coming the Project
YES NO

1.1.3 Do you consider this activity as important?
YES NO

1.1.3.1 ¿Why?

1.1.4 ¿Did you leave another item production to switch to beekeeping?
YES NO ¿Which?

1.2

1.2.1 Do you consider that have acquired new production techniques and management?
YES NO

1.2.2 Are you satisfied with the new acquired techniques?
YES NO

1.2.3 With what frequency do you utilize the center of gathering and storing?

1.2.4 ¿Which inputs do you frequently need for beekeeping production?

1.2.5 ¿From where did you acquired them? Or ¿How do you get them?

1.2.6 ¿Which implements you require frequently for beekeeping production?

1.2.7 ¿From where you buy them? Or ¿How do you get them?

2.1

2.1.1 From the beginning of this Project up to now your incomes have increased
YES NO ¿Which?

2.1.2 You have been able to invest the money in acquiring new goods
YES NO ¿Which?

2.1.3 You have introduced improvements in your house since the beginning of the Project
YES NO ¿Which?

2.1.4 ¿Have you purchase more food, garments, domestic appliances, faro tools, in the last years in relation to others?
YES NO ¿Which?

2.1.5 ¿Have you paid a debt, health expenses, recreation expenses, aided relatives, on education, etc.
YES NO ¿Which?

2.2

2.2.1 Apart from honey, do you produce another type of beekeeping product
YES NO

2.2.1.2 If responded YES, ¿Which?

2.2.1.3 Please detail the quantity sold of each product and their prices

2.2.2 The sale price for the products has: (specify the prices if possible)
Increase Decrease Maintained

2.2.3 The production volume has: (specify Kg. /beehive)
Increase Decrease

2.3

2.3.1 Cite the learned techniques that have been adopted for production

2.3.2 Do you consider that the production quality have improved by applying these techniques
YES NO ¿How?

2.3.3 ¿Have these techniques helped you to produce a higher quantity?
YES NO

2.3.4 ¿Does these techniques helped you to produce a more variety of products?
YES NO

2.4

2.4.1 Do you count on a gathering and storing center (installed by the Project) in this zone
YES NO

2.4.2 ¿What processing tasks you do in the center of gathering and storing?

2.4.3 With what frequency you send your production to the center of gathering and storing

2.4.4 ¿What percentage of your production you send to the center of gathering and storing?

2.4.5 ¿Does the center of storing count on a set of rules for using it?
YES NO

2.4.6 Mention some of those rules for using it

4.2

4.2.1 Have been affected the bees by agricchemicals
YES NO Explain

4.2.2 Have you suffered a theft of your beekeeping products or beehives
YES NO Frequency

4.2.3 ¿Have you experienced a drought, flooding, rainfall excess or another climatic event that could have affected your beekeeping production?
YES NO ¿Which?

4.3

4.3.1 Did you perceived an increase in flies or other insects?
YES NO ¿Which?

4.3.2 Did you perceive an improvement in crop production due to better pollination?
YES NO

4.3.3 A neighbor have complained of bee attacks
YES NO

4.4 A neighbor has manifested interest in the Project
YES NO

4.4.1 ¿How many?

4.3.6 Do you know of some neighbor (unrelated to the Project) who had acquired beehives recently?
YES NO

4.3.6.1 If responded YES, ¿Where did they market their production? (If they do it)

4.3.7 Have you shared the learned techniques learned in the Project with your neighbors
YES NO

5.1

5.1.1 Are you satisfied with the Project?
YES NO

5.1.1.1 If responded YES, are you well disposed to invest in the future for continuing receiving the training?
YES NO ¿Why?

5.2

5.2.1 ¿What could be improved in this Project?

5.2.2 ¿What the Project has changed your viewpoint about beekeeping?

6.1

6.1.2 ¿What has been the gender roles in the process of production and marketing?

6.1.3 The participation in this Project have modified some of these roles, responded YES, could you specify which ones

6.2

6.2.1 Are you a member of some committee?
YES NO ¿Why?

6.2.2 If responded YES, ¿With what frequency the committee meets?

6.2.2.1 ¿What percentage of your production did you commercialize with your committee?

6.2.3 ¿How long ago the committee has been created?

6.2.4 ¿How many associates count on the committee?

6.2.5 In the last year new associates have been incorporated

YES NO

6.2.6 In the last year some associates have left the committee

YES NO ¿Why?

Study: Project of Beekeeping Diversification for Extension and Improvement of Propolis and Pollen Quality in Paraguay

Guide for interviewing for the Asociación de Apicultores del Paraguay (Beekeepers Association of Paraguay).

Name: Bernardo Agüero

Position: President of the "Asociación de Apicultores del Paraguay" (Beekeepers Association of Paraguay)

TEL of contact:

Characterization of Internal Market

1. # estimated Beehives total in the country

40.000

2. # estimated beekeeping producers in the country

5.500

3. Characteristics of the producers

Small producers

3.1 Average Number of Beehives per producer.

An approximate average of beehives between 5-30

4. National Volume of Production

800 Tons

4.1 Kg. /year average per producer

The production level is highly variable but on average it is 20Kg por beehive and those that better produce reach 45Kg

5. Main producing zones

The main producing zones with mecanic harvesting are:

Ñeembucu

Itapúa

Caaguazú

Chaco

5.1 ¿which are the better fitted zones in the country, for beekeeping?

Ñeembucu

Itapúa

Caaguazú

Chaco

6. ¿How the productive chain is constituted in Paraguay?

Producer- Wholesale merchant, fixed or itinerant - Packers

7¿Who are the main inputs suppliers in the country?

Apicultura FI

Dulzura saludable

Agro Luz

A high part is of national reproduction such as stamped wax/ beehives/ excluding screen / suppliers (of three types Borman, Doolittle y Alexander.), crowbars, universal tweezers, pollen trap, protection garments, smokers, extractors and filters, decanters and isoperculators.

Perspectives on international trade:

1. How do you perceive the evolution of Paraguayan Honey production in the last years:
2. With regard to quality and price

The price quotation in Paraguay is more expensive in 20 to 30 US\$ cents per Kilogram. This is a time for exporting; there exist Honey that is not collected for different reasons but especially due to high prices.

Another quality problem is that in Paraguay there is a great diversity of colors, since some honey lots are very dark. There should be a production zoning according to colors of honey or in the contrary mixed them and so obtaining an uniform color. The harvesting seasons also have their influence.

The best quality of natural Honey is found in the lower Chaco region (the whole Department of Villa Hayes), giving the *Caranday* palm a very clear honey. Also Ñeembucú and the river zones. In the zones of extensive cropping, the best zones are those with sunflower plantations as well as Rapeseed (Misiones, Pedro Juan Caballero) where the honey is very clear and well quoted.

- a) With regard to yields and viability for the producers

The yields are highly varied because of lack of professionalism. The beekeeping is a complement, there is a lack of persistent revisions. At the country level the number of beekeepers increased but yield are not accompanying. The beekeepers that attend their own beehives obtain good yields, being fundamental the regular controls. For a good part of the beekeepers the beehives practically maintain themselves alone.

Considering the International Market, ¿What trends do you perceive? with regard to:
The market show a trend to continue paying 1,2 USD per Kg. excepting the honey with ecological certification (in Paraguay *Altrivida* have certificates, and *Ecoser*)

- a) Main consumer Countries or Markets

The main consuming countries are: Germany, Italy, USA, etc.

Evolution of regional supply (MERCOSUR)

- b) Emerging markets for derivative products.

3. What are the main constrictions for the Paraguayan Honey competitiveness in the international market?.

Soil degradation, for example in Ñeembucú the acidity affect the Honey, it should be necessary to apply liming to lower acidity.

The handling is not professional, low production is a result of management.

The lack of infrastructure for harvesting and storing

The quantity of bees in the rearing chamber and the queen position.

The cultural aspect, the beekeepers are here more a collector than a producer.

4. Which are the comparative advantages that the national honey production counts with in comparison to other countries?

The good producing zones, lots of bees in the forest (denoting lack of management). Current moment should be taken advantage of because the larger merchants are diversifying their purchases. The complementarities with livestock rearing, considering that hay and rapeseed are very good for bees for passing the winter season.

Other topics:

The topic of internal market management that has become an oligopolium; there are three that reach agreement to buy honey at 5000 Gs. per Kg. and pay up to 7000 Kg as a maximum. The Association has a rather a gremial function, but in this case it is deeply involved in the selling bussiness trying to raise prices a little.

Entrevistado N um.	DATOS			
	0.1	0.2	0.3	0.4
1	Oscar Agustín	López Britos	D.E.A.G San Pedro	San Estanislao
2	Francisco Victiano	Olmedo Flecha	D.E.A.G Paraguarí	Sapukai
3	Juan Carlos	Morínigo	DEAG- Caacupe	Atyra- Carumbey
4	Julio César	Balbuena	DEAG- Dpto. Pecuario	San Lorenzo
5	Juan Oscar	Ortellado Almada	DEAG- Caaguazú	Juan M. Frutos
6	Mario	Quiñónez	DIPA - Subsecretaría de Ganadería	San Lorenzo
	Carlos	Gómez	DIPA - Subsecretaría de Ganadería	San Lorenzo
	Carlos	Escobar	DIPA - Subsecretaría de Ganadería	San Lorenzo

ANSWERS	INTERVIEWED N°					
	1	2	3	4	5	6
1.2	They have knowledge in the DEAG, there were 2-3 events in the DEAG of San Lorenzo	Along the use of the honey. The other products, almost anything. Young queens prepare to sell.	Without knowledge of the plan, alone they were requested to advise the group	No	He didn't participate, began in September with responsibility of the storing center.	It was not carried out, because necessary implements are not possessed, pollen trap was not bought. One cannot see what area it is the best without those equipment.
1.3	Most were beekeepers, 1-2 beehives with rustic handling	They were former students of the local SNPP. In 2 opportunities, 40 people of both sexes were qualified in beekeeping in Cerro Koku. It was carried out a survey of producing beekeepers. In IX Dept. the storing center was made. The presence of Chirca species is very important for the production of green propolis in Koku s Tuj á. Acahay place was preferred, but later they changed for suggestions of MAG. There is a lot of natural honeybee vegetation.	Cordillera - Pollen and propolis through the chirca plant. They saw other places like Eusebio Ayala. The election was made because the committee was already constituted.	That they have beekeeping knowledge and be in productive activity. That they formed Committees.	They selected for Caaguazú and Villa San Juan, a president of the FNC (small farmers organization) rejected the aid, the Committee members wanted to work with IRC (MAG-BIRF) already having more than 100 beehive boxes, they contacted (MAG) and the project came out.	That they are beekeepers with some knowledge and with beehives. That they are integrated in Committees of scarce economic resources close to a base of the DEAG or DIPA with communal land available.
1.4	Yes	Yes, they came closer to the MAG asking on the project. Requirement previous organization. Most are young.	Yes	Yes	Yes	Yes
1.5	They didn't have participation in the analysis of alternative. It was modified the office of the DEAG for installing a new storing center, but does not know more	Gifts are not rejected. Model was presented to the authorities, because the young are very limited in means. Municipality bought land and it donated the property title to the committee.	Use of an initial infrastructure, as well as of the implements, materials were provided by a previous project (IRC).	That it is of easy access, place near to the Committees.	Office of DEAG with large property, part of the work was already built, it was invested less, it already had water and electricity. It requires surveillance.	That the committees are near the Center of Storing or of a base of the DEAG or DIPA.
1.6	The Mr. Espinola offered to be counterpart of Dr. Matsuo in the committee. Then he was transferred.	It was not made at the beginning. It was not designated anybody, just verbally 1 month ago but without stable commitment. It should be designated the terms that should take the responsibility. They go each 8 days routinely.	Cordillera. Selected the experience in the beekeeping work inside the facility that was attended by the DEAG. The assistance is offered according to the time availability.	The expert of the JICA went selecting the places to be included in the project and then the technicians were affected.	Vidal Rojas from Caaguazú was trained, but he had many responsibilities, he was a member beekeeper of the Committee and he was interested. He accepted to be taken charge of the storing center, which is a lot of commitment.	It was looked for that basically they have beekeeping knowledge, that the topic interests them and that they are natives of the place.
2.1	Yes, they received training. The new technician just now will receive the training. There are good trainers from the IRC. Those of JICA were very good and practical.	Base technician of the DEAG didn't receive specific training, those producers of the committee yes. DIPA specialist attended 2 times alone, then they have not returned. The producers claim more assistance and permanency.	Training of the SNPP. A training of a month of duration (Dec-2006)	The training was satisfactory for both.	He has 4 beehive drawers and is enthusiastic, the theoretical training arrived together with practical, periodic visits every 15 days, Engineer Matsuo accompanied by Engineers from DIPA. This is one of the best communities.	It was a complete training for the beekeepers but not for the base technicians because the appointments were very late; the 25, 27 and 28 of February was completed the training of base technicians.
ANSWERS	INTERVIEWED N°					
1	2	3	4	5	6	
2.2	No, but yes the productivity increased	Just now they will have the 1st harvest. The previous producers to the project hope to improve thanks to the received trainings.	No, the problem that is presented to the producers is the one of waiting to 100% of the covering for the harvest. They do it from necessity of the revenues.	He cannot answer because there still was not production.	This year it lowered the volume for rain excess, they produce honey and stamped wax. They should improve the quality of the honey, other products for seen for another stage.	It has been improved the volume of production of bee honey notably, wax that ends up stamping, red propolis, it didn't seize pollen and very little green propolis.
2.3	Yes, in winter time. Protection of the cold with plastic bag and feeding. It was adapted for beekeeping.	They are convinced that should produce this. They have hope.	Yes they adopted, the technique of the stamped wax and of the weekly control, as well as the artificial feeding with sugar.	Groups that have assimilated exist and others that need more control and that they are demanded accomplishment.	They changed the beehive drawers, the square frames and the change is appreciated.	They have improved and adapted the techniques imparted in the trainings, but it is necessary the pursuit on the part of the technicians from DEAG.
2.3.1	Does not know	Propolis. Source plants chirca (supposedly it flourishes 2 times a year) 1Kg / beehive drawer per year at 300 USD per year. Some demonstrations were made. It lacks pursuit and direction.	They didn't think about it yet	In Sapucal, it is found a minimum production of green propolis, but it lacks to be strengthened and to work more.	The beehive drawers were taken for propolis but it resulted brown, not green (only in Sapucal and Alto Paraná), they have chirca, but they take propolis out of Sapirangy plant (See Nicano Martínez case, has chirca, but it doesn't result like one walls).	Pollen, is null for lacking the pollen trap and for the undefining of the target area in Pie. Hayes. A small quantity of green propolis was gotten in Sapucal, and this could not continue for climatic factors and some producer weaknesses.
2.4	Not applicable	According to the cronogram, very advanced. Many the interested youths, but the committee is closed. The change of authorities of the property will be carried out in March.	In the planes, they provided the materials and the architect's visited. The land is in a fiscal property and the change of authorities of the property transfer it was already requested from INDETER	No	They already have a gathering and storing center	It depends on JICA definition

3.1	Not applicable	They have info that exists but just limited. There is not permanent coordination with the DIPA	Do not know	Do not know	Do not know	No, it lacks the provision of new tools contemplated in the ACPan, but it was carried out a general maintenance of the existing one.
3.2	No	To qualify in social reorganizing requested by young. Another request was for training in commercialization	There were not activities outside of the program. There are activities that have not been developed as for example bottling and labeled.	Do not know	Tank for water was not foreseen (2000 liters). Also other infrastructure details, like closing among rooms at the center, to avoid contamination and higher security.	Publication of a book (Beekeeping Handbook - Nelson Matsuo), donation of beehives and tools to Committees of scarce resources; sugar, stamped wax, motorcycle-chart purchase, to negotiate and to get a sale position in the main supply market (Asuncion).
3.3	For the follow up Yes. But there is not technical counterpart specialized with permanency.	In Sapukal there are 3 Veterinaries but they are in all the programs.	It would lack a more regular accompaniment of a permanent technician	They are enough	No, the extensionists were trained just in September, now it is necessary to give them follow up. They already have regulations, but the producers should know that the infrastructure inside the local belong to the DEAG, for using the local they should communicate and to coordinate previously with those people from Extension. But the producers feel as owners.	On behalf of the DIPAMAG, it was enough.
INTERVIEWED NH						
ANSWERS	1	2	3	4	5	6
3.4	At committee level it is not known. It was the storing center that it was completely equipped.	Beehive drawers yes, but equipment Not. Youths they have shame of requesting all that they need to the Japanese, they improvise with handmade, rustic tools.	The tools were previously provided by IRC and they are enough, the problem is the on inputs like for example wax	It is enough	Yes, they received beehive boxes, stamped wax, sugar in winter with training about enough winter feeding.	For the beekeeping laboratory, it was not enough, but yes it was it for the storing centers.
3.5	No, for the location, a little far from the committee. 2-5 km They need to transport the beehives.	The center of gathering is OK. Excellent	It will be carried out an amplification of the original infrastructure provided by IRC	It was adequate	Yes, spectacular. Recently installed and tools of first quality. White boots, protective garments, gloves, very good ones. Also for processing and packing.	They lack some smaller adaptations, as perimeter fencing.
4.1	No, on the contrary, that of IRC continued with less components	No. It will strengthen the beekeeping activity and improve the general situation of the area.	All projects generates conflict. The topic of the resources administration is the most frequent. Here there is not regulation of use for the local. Importance of having clear rules.	No	There is not conflict with the other non partners beekeepers, they are given the Regulation if they want to enter, they should accept it and contribute fractionally up to 100 thousands Gs if they are of the same district. The beehive drawers should be standard ones and those that doesn't meet conditions they won't use the storing center.	No
4.2	Well, at the beginning the Engineer Espinola wanted to integrate other groups of beekeepers in an Association of Beekeepers. The Initiative didn't prosper for the Transfer of the technician from DEAG	No problem. He goes straight to the point. There are good principles. Good acceptance. Very appreciated.	Many producers are wanting to enter	They were satisfied with the diffusion.	Wide diffusion, a lot of participation in the inauguration and demonstration of the process, coming even from Argentina. Cooperative Menonites already visited this experience.	In medium form, in multiplier effects.
5.1	The control of quality, and maintenance is made, but becomes more difficult for specialist's lacking	Later on in the room of the center of gathering and storing under construction yet. Also, to equip the center.	No answer	No	They have everything, even special containers, quality meters, but there is not even enough volume. It remains a of 5% from each partner's production. They have labels at committee level.	There is the technical plan, but the economic resources are scarce.
5.2	No, there are not profound modifications of the location. Improve the parcels of Sesame	Perhaps not. The Project will take care of those details. DEAG, that there is not negative environmental neither social impact. Now they are taken rather to the rear of the parcels, trying to get them away from the population as possible.	There are not waste or residuals production.	No, because the received orientation is for not affecting the environment, including they were qualified on the knowledge of some regulations for the beekeeping.	There is not, on the contrary better pollination in the crops, in the city yes one can see the neighbors.	No, because the beekeeping is an activity that conserves and/or it improves the environment.

Entrevistado Nú m.		DATA												
01	02	03	04	05	06	07	08	09	10	11	12	13		
1	Francisca Isidora	Martínez Barreto	Cordillera	Atyra	0	5	0.5	0	0	Manioc, Beans, corn	Money transfers from 2 persons from Asuncion	10 Beehives	3 Beehives	
2	Emilio	Jimenez Martinez	Cordillera	Atyra	2	4	2	0	0	Manioc, Beans, corn	Once a week	10 Beehives	10 Beehives	
3	Julio	Miranda Roa	San Pedro	Santani	2	4	10	0	2	peanuts, corn.	Professor.	1 beehive bo	1 beehive (trial)	
4	Alberto	Miranda Roa	San Pedro	Santani	5	7	20	6	4	Manioc, corn, peanuts, Beans.	Professor, sale, mason.	2 beehive bo	8 Beehives	
5	Basilio	Miranda Raimondi	San Pedro	Santani	6	1	20	3.5	2	Manioc, corn, peanuts, Beans, pineapple.	No	3 beehive bo	10 Beehives	
6	Bernardo	Miranda	San Pedro	Santani	3	5	20	5	1	Manioc, corn, Beans, Sugarcane	Masonry	3 Beehives	15 Beehives	
7	Migdonio	Benitez Miranda	San Pedro	Santani	7	8	10	3	3	corn, Manioc, Beans, peanuts.	No	4 Beehives	16 Beehives	
8	Estanislaio	Fernández Giménez	Cordillera	Atyra	4	6	360 m2	0	0	peanuts, corn.	House builder	10 Beehives	10 Beehives	
9	Eulalio	Ibarra Giménez	Cordillera	Atyra	0	6	3	0	0	Manioc, Beans, corn	Professor and occasional work	10 Beehives	7 Beehives	
10	María Emma	Molina	Cordillera	Atyra	6	4	1	0	0	Manioc, corn, peanuts.	Physiotherapist	2 Beehives	5 Beehives	
11	Milciades	Vera	Paraguari	Sapucai	5	5	0.5	0	0	Manioc, corn, Beans.	Foundation Tawara rendá.	8 Beehives	39 Beehives	
12	Heitorodoro	Torres Espinola	Paraguari	Sapucai	5	5	20	3	1	Beans, Manioc, corn, peanuts.		2 Beehives	8 Beehives	
13	Gloria Mercedes	Ferrariño de Díaz	Paraguari	Sapucai	2	4	100x30mts. + 5 Has. Apart	2	0	Beans, Manioc, corn, pineapple.	Retail market, market store.	3 Beehives	8 Beehives	
14	Juan Pablo	Contera	Paraguari	Sapucai	0	3 young members	1	1	0	Beans, corn, Manioc.	Hired by Foundation Tacuara	0 Beehives	Just those from the committee	
15	Cesar Raul	Cristaldo	Caaguazú	JM Frutos	3	5	50	0	0	Manioc, Beans, peanuts, corn	Proprietary of a Pharmacy	10 Beehives	30 Beehives	
16	Eugenio	Gauto	Caaguazú	JM Frutos	2	2	1	0	0	0	Clock repairing	15 Beehives	22 Beehives	
17	Miguel Angel	Estigarribia	Caaguazú	JM Frutos	6	2	2	0	0	0	Brick making	15 Beehives	35 Beehives	
18	Ovidio	Gauto	Caaguazú	JM Frutos	10	3	0.082	0	0	0	Beehive maker and made nucleus for beehive	22 Beehives	30 Beehives	
19	Pedro Carlos	Madsen Gauto	Caaguazú	JM Frutos	6	4	104	No response	0	Manioc, corn.	Carpenter, logger	19 Beehives	19 Beehives	
20	Francisco Anuncio	Vera Silvero	Caaguazú	JM Frutos	6	3	5	2	4	peanuts, Beans, peanuts, Manioc, vegetables.	Photographer	2 Beehives	9 Beehives	

ANSWERS	INTERVIEWED:-									
	1	2	3	4	5	6	7	8	9	10
1.1.2	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
1.1.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1.1.4	No	Yes	No	No	Yes	Yes	Yes	No	No	Yes
1.2.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1.2.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.1.1	No applicable, still dont sell	No	No applicable	Yes	Yes	Yes	Yes	Yes	No	No
2.1.2	No applicable	Yes	No applicable	Yes	Yes	Yes	Yes	No	No	No
2.1.3	No applicable	Yes	No applicable	No response	No	No	No	No	No	No
2.1.4	No applicable	No	No applicable	Yes	No	Yes	Yes	No	No	No
2.1.5	No applicable	Yes	No applicable	Yes	No	Yes	Yes	No	No	No
2.2.1	No	No	No	No	No	No	No	No	No	No
2.3.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.3.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Still Dont know	Yes
2.3.4	No	No	No	No	Yes	No	No	No	No	No
2.4.1	No	Yes	No applicable	Yes	Yes	Yes	Yes	No	No	No
2.4.5	No applicable	No	No applicable	Yes	No	Yes	Yes	No	No applicable	No
4.2.1	No	No	Yes	No	No	No	No	No	No	No
4.2.2	Yes	No	No	No	No	Yes	No	No	Yes	No
4.2.3	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
4.3.1	No	No	No	No	No	No	No	No	No	No
4.3.2	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
4.3.3	No	No	No	No	No	No	No	No	No	No
4.4.1	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.4.3	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
4.4.4	No	Yes	No applicable	Yes	Yes	Yes	No	Yes	No	Yes
5.1.1	Yes	Yes	No applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.1.1.1	Yes	Yes	No applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.2.1	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.2.5	Yes	Yes	No applicable	No	No	No	No	Yes	Yes	Yes
6.2.6	Yes	Yes	No applicable	Yes	Yes	Yes	No	Yes	Yes	Yes

RESPUESTAS	ENTREVISTADO NÚM:									
	11	12	13	14	15	16	17	18	19	20
1.1.2	Sí	No	No	Sí	Sí	Sí	Sí	Sí	No	No
1.1.3	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
1.1.4	No	No	No	No aplicable	Sí	Sí	Sí	Sí	No	No
1.2.1	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
1.2.2	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	No	Sí
2.1.1	No	Sí	Sí	No aplicable	Sí	Sí	No	No	No	No
2.1.2	No	Sí	No aplicable	No aplicable	Sí	Sí	No	No	No	No
2.1.3	No aplicable	Sí	No aplicable	No aplicable	No	No	No	Sí	No	Sí
2.1.4	No aplicable	Sí	No aplicable	No aplicable	Sí	Sí	No	Sí	Sí	Sí
2.1.5	No aplicable	Sí	No aplicable	No aplicable	No	Sí	No	Sí	Sí	No
2.2.1	Sí	Sí	No	No	Sí	Sí	Sí	Sí	No	Sí
2.3.2	Sí	No	Sí	No aplicable	Sí	Sí	Sí	Sí	Sí	Sí
2.3.3	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
2.3.4	Sí	No	Sí	Sí	Sí	Sí	No	Sí	Sí	No
2.4.1	Sí	No	Aún no	Sí	Sí	Sí	Sí	Sí	No	Sí
2.4.5	Sí	No sabe	Sí	Sí	Sí	Sí	Sí	Sí	No aplicable	Sí
4.2.1	No responde	Sí	No	No	Sí	No	No	No	Sí	No
4.2.2	Sí	No	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
4.2.3	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
4.3.1	No	Sí	No	Sí	No	No	No	No	No	Sí
4.3.2	No percibe	No	No sabe	No aplicable	no	No	No	No	No	No
4.3.3	No	No	No	No (éi Sí)	no	No	Sí	Sí	No responde	Sí
4.4.1	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	No	No
4.4.3	No	Sí	No	No	No	Sí	Sí	Sí	No	No
4.4.4	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
5.1.1	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
5.1.1.1	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí
6.2.1	Sí	Sí	Sí	Sí	Sí	Sí	Sí	Sí	No	Sí
6.2.5	No responde	No	Sí	No responde	Sí	Sí	Sí	Sí	No sabe	Sí
6.2.6	Sí	Sí	Sí	Sí	no	Sí	Sí	Sí	No sabe	Sí

Name

Surname

Department in which he serves as technical assistant

District in which he serves as technical assistant

1

1.2 The plan of Integral Management for Diversification of Beekeeping in Paraguay was elaborated

1.3 On the basis of what criteria the producers were selected?

1.4 The enrollment has been voluntary

1.5 What criteria of selection have been used for the selection of the gathering and storing premises?

1.6 How the base technicians and extensionists of DEAG were selected?

2

2.1 How do you consider the training of the model beekeepers and base Technicians were?

2.2 The supply of beekeeping products provided by the beneficiaries of the project has been enlarged?

2.3 Have the beekeepers adopted the spread productive techniques during the project?

2.3.1 How goes on the production of green propolis the pollen?

2.4 How goes on the management for the centers of gathering and storing adjustment at Prest. Hayes, Acahay and Atyrá?

3

3.1 The beekeeping laboratory of MAG was strengthened?

3.2 Do You know which was the number of non planned activities that were done?

3.3 The provision of Human Resources was sufficient

3.4 The provisions of equipment and inputs were sufficient

3.4 It has it been adequate the infrastructure?

4

4.1 Do you consider that the project could or it can be a cause for conflicts?

4.2 Which was the real scope of the project diffusion on the beneficiary population?

5

5.1 A plan of maintenance for the laboratory equipment exists to strengthen in the future the quality control of beekeeping products

5.2 Do you consider that the innovations introduced by the beekeepers after receiving formation form the project could have had a negative impact on the environment, Why?

