

**Pachamama Raymi
(Altitude over 4,400 meter – 14,400 feet)
Pilpichaca – Huaytará – Huancavelica**



**Second report
(period: November 2011- December 2012)
District of Pilpichaca–Department of Huancavelica, Peru**

As planned, a true “social epidemic” was unleashed in the villages of Pilpichaca already during the first year of the project: over 60% of the families of the villages improved their living conditions by adopting several innovations and by investing in their homes and their businesses. All this was promoted by Pachamama Raymi and made possible thanks to the kind donations received from Mr. JacekWaksmundzkifrom Poland and Mr. Carl Greer from the USA.

The following pages describe the “social epidemic” in detail. The description is divided according to the main objectives: improve preventive healthcare, ecological recovery, improve family incomes and reinforce cultural identity and social networks.

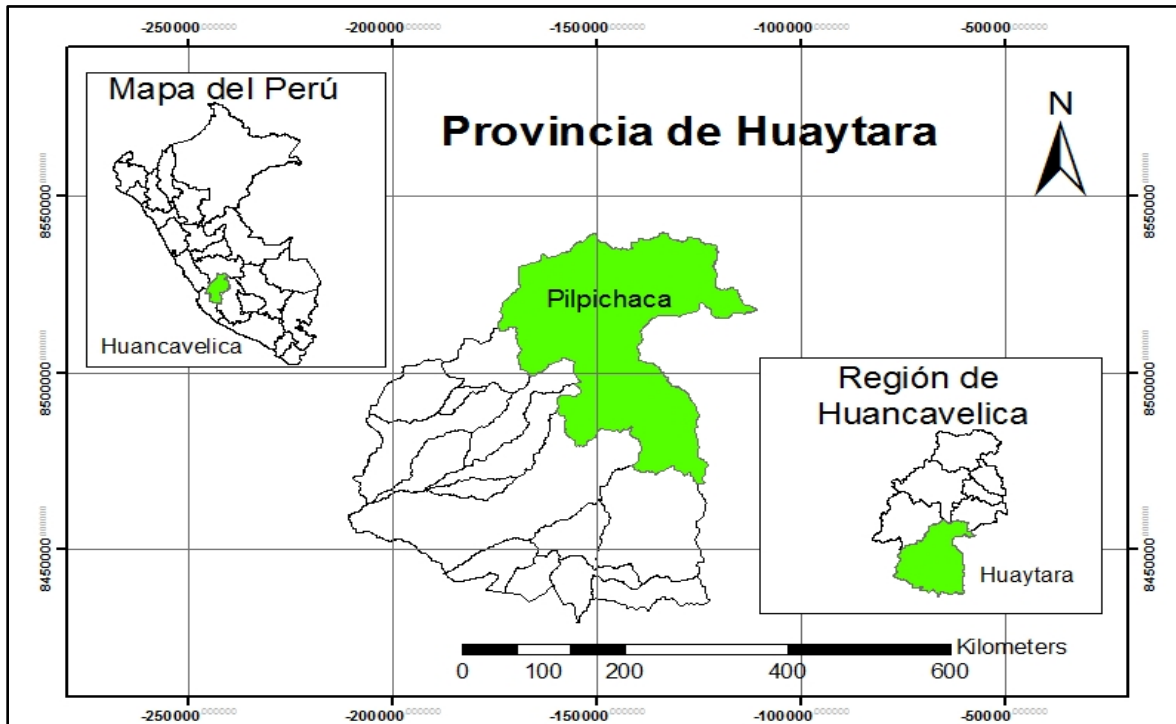
Data for the present report was collected during monitoring of all families and by grading the families at the end of the two contests that lasted 6 months each. The tables presented in the report show numerical information, which is classified and color coded according to three conditions: **Green** represents “good progress”, with over 60% of the families that participated or implemented an innovation; **yellow** represents regular progress (40-60% of the families), and **red** represents results that are too far below our target (less than 40% of the families participated or implemented the innovations). Our lowest target is still about 10 times the target of conventional projects that don’t use the contagious mechanisms that generate social epidemics.

I. Area of influence

Pilpichaca is a district of the province of Huaytará (Department of Huancavelica). It is one of the poorest districts of Peru with 91% of its population living in poverty.

We have worked in 6 villages from November 2011 until December 2012, with a total population of 210 families. They live in extreme poverty, under extreme conditions, over 4400 meters above sea level (14,400 feet).

Map N° 01, The District of Pilpichaca



II. Monitoring of participation

The population of the villages changed over the course of the first year, from 200 to 210 families. This kind of change reflects migration, which occurs all the time in Pilpichaca. The increase may be the result of improved conditions in the villages.

Average participation was over 60% of all families living in the villages, just barely achieving our target. The maximum participation occurs during the contests; participation decreases towards the end of the contests as some families don't want to be graded because they believe they don't have a chance to win the contest. Participation levels are shown in Graph N° 01 and Table N° 01.

Graph N° 01

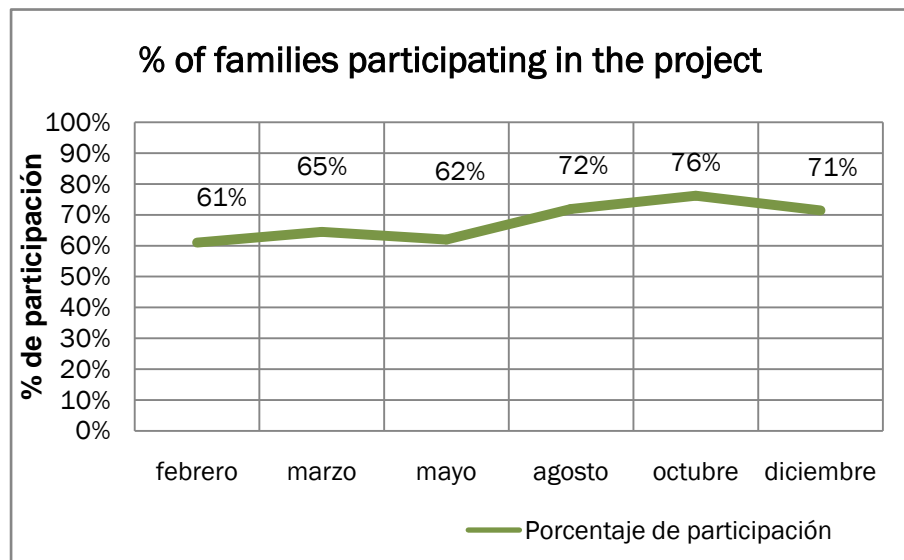


Table N° 01. Monitoring of participation during the first Contest

Village	Total no. of Families	Febuari		March		May	
Ingahuasi	60	23	38%	29	48%	26	43%
Nueva Jerusalén	38	21	55%	21	55%	16	42%
Paria	32	22	69%	22	69%	22	69%
Pelapata Central	45	39	87%	40	89%	45	100%
PelapataSajapi							
Ranrapampa	25	17	68%	17	68%	15	60%
Total	200	122	61%	129	65%	124	62%

Table N° 02. Monitoring of participation during the second Contest

Village	Total no. of Families	August		October		December	
Ingahuasi	60	29	48%	34	57%	32	53%
Nueva Jerusalén	38	29	76%	29	76%	37	97%
Paria	32	23	72%	27	84%	23	72%
Pelapata Central	28	27	96%	28	100%	24	86%
PelapataSajapi	27	26	96%	27	100%	17	63%
Ranrapampa	25	17	68%	15	60%	17	68%
Total	210	122	61%	160	76%	150	71%

III. Achievement of objectives

The results that were obtained during the first year are impressive, both at the family and village level, in spite of the difficulties due to the extreme altitude, cold, and remoteness.

3.1. Objective 1. Improve preventive healthcare

Improvement of preventive health care requires many innovations to be adopted by families and their village organizations. The following paragraphs discuss the innovations which were adopted and implemented most. Examples are the installation of vegetable gardens by the families, improvement of stoves to eliminate smoke from the house, and other improvements of the houses.

a) Vegetable gardens of individual families

Agriculture is severely restricted in all villages, due to the high mountain climate. Still, certain agricultural activities are possible and were undertaken by a majority of families.

At the end of the first contest, 38% of families had a vegetable garden increasing to 57% at the end of the second contest. Such a rapid increase shows that Pachamama Raymi is capable of generating social epidemics.

The vegetable gardens contribute to a better diet of the families, with the production of onions, lettuce, carrots and tomatoes.

Table N° 03
Vegetable gardens of individual families

Village	1er Contest			2do Contest		
	Total no. of Families	Families	%	Total no. of Families	Families	%
Ingahuasi	60	27	45%	60	30	50%
Nueva Jerusalén	38	12	32%	38	30	79%
Paria	32	11	34%	32	15	47%
Pelapata Central	45	20	48%	28	17	61%
PelapataSajapi				27	13	48%
Ranrapampa	25	5	20%	25	14	56%
Total	200	75	38%	210	119	57%

Most families of the villages of Ingahuasi and Nuevo Jerusalén have greenhouses for vegetable production, which were installed about two years ago by the institution Fé y Alegría (Faith and Joy, a Catholic NGO, which was only there to build the greenhouses). However, people needed to learn to grow vegetables, which is why Pachamama Raymi included training in growing crops in and outside greenhouses.

In other villages vegetable production is outdoors, on small plots protected against the wind with various materials, including straw, etc.



Greenhouse in the Village of Nueva Jerusalén constructed by the NGO Fé y Alegría (Faith and Joy)



Greenhouse Village of Pelapata, constructed by the NGO Fé y Alegría (Faith and Joy)

b) Improved stoves and bedrooms

In general, housing conditions in the villages were desperate: a hut without a chimney is the very small kitchens people normally had. These huts have thatched roofs, which are damaged by the soot of the open fire on which people prepare their food. The smoke affects the health of the whole family.

Another desperate but very frequent situation was found where all family members slept all together on the floor in one overcrowded room. Incest is frequent.

All houses required new kitchens, improved fireplaces with chimneys and separate bedrooms for parents, daughters and sons. This was the first innovation that needed to be implemented by the families. It required a tremendous investment and effort by the families. They got inspired mainly through the study tours to other villages, where they could see possible models for improved stoves and the idea of having separate bedrooms.

Table N° 04
Improved stoves

Village	1st Contest			2nd Contest		
	Total no. of Families	Familias	%	Total no. of Families	Familias	%
Ingahuasi	60	28	47%	60	29	48%
Nueva Jerusalén	38	16	42%	38	18	47%
Paria	32	16	50%	32	18	56%
Pelapata Central	45	33	79%	28	21	75%
Pelapata Sajapi				27	16	59%
Ranrapampa	25	14	56%	25	15	60%
Total	200	107	54%	210	117	56%

At the end of the first contest, 54% of the families already had an improved stove in their kitchen; at the end of the second contest this percentage had increased to 56%.

The Municipality of Pilpichaca had planned to implement a project for 50 improved stoves, which wasn't enough, as there are over 200 families. The Coordinator of Pachamama Raymi, Elias Guzman Yapura, reached an agreement with the municipality to increase the number of beneficiaries of the project, though it wasn't possible to increase the budget. As a result, 117 families now have smoke free kitchens (56% of the total population).

Separate bedrooms were achieved in 59% of all households.

Table N° 5
Home improvement: Separate Rooms

Village	1stContest			2ndContest		
	Total no. of Families	Families that built separate rooms for children	%	Total no. of Families	Families that built separate rooms for children	%
Ingahuasi	60	23	38%	60	32	53%
Nueva Jerusalén	38	16	42%	38	24	63%
Paria	32	22	69%	32	17	53%
Pelapata Central	45	43	96%	28	21	75%
PelapataSajapi				27	14	52%
Ranrapampa	25	13	52%	25	15	60%
Total Pilpichaca	200	117	59%	210	123	59%

c) Latrines

The construction and proper use of latrines contribute to reduce diarrhea and parasites. At the beginning of the first contest there were about 15 latrines in the village of Nueva Jerusalen (built by Caritas), but these weren't being used and were found in a dilapidated condition. At the end of the first contest, 52% of the families had built latrines in all villages. This percentage increased to 64% at the end of the second contest. All these latrines were used and were built with local materials, with stone or adobe walls and thatched roofs.



A latrine built by a project typically costs about US\$ 400. Mobilizing and motivating people to build their own latrines could thus be valued at this amount. The total number of latrines built was 135, which would be equivalent to US\$ 54,000. The total budget for the Pilpichaca project was US\$ 85,000. This means that only in latrines the population contributed 63% of that amount!

One of the difficulties to generalize this innovation is the mobility of families. Some family members, sometimes whole families, move periodically with their herds to other grazing areas, living there in other huts. Those huts offer miserable living conditions, and don't have a latrine yet.

Table N° 06
Construction and use of latrines

Village	1stContest			2ndContest		
	Total no. of Families	Families	%	Total no. of Families	Families	%
Ingahuasi	60	25	42%	60	31	52%
Nueva Jerusalén	38	21	55%	38	34	89%
Paria	32	16	50%	32	16	50%
Pelapata Central	45	32	76%	28	21	75%
PelapataSajapi				27	16	59%
Ranrapampa	25	8	32%	25	17	68%
Total	200	102	52%	210	135	64%

Table No. 04 shows the number and percentage of families who built latrines during the two contests. In the first contest, families of the villages of Ranrapampa and Ingahuasi had little progress if compared to the others, but the families of these villages had improved during the second contest. The village of Nueva Jerusalén even achieved that 89% of its families build and makes use of a latrine.

d) Preventive Health Care and the National Health Services

Preventive health care is also improved through frequent health checks and visits to the health center of the National Health Services. Access to these services was very limited. That's why the Rules and Regulations of the contests include several criteria about this issue, to motivate people to make use of these services, particularly children and pregnant women, etc.

At the end of the second contest, 66% of all families had the cards and booklets in good order, in which the National Health Service regularly registers weight and height of the children, conditions of pregnant women and/or family planning cards.

At the end of the second contest, 67% of all families are affiliated with Integrated Health System (SIS). This is a national health insurance for the poor. Also 60% of all families have a first aid kit with generic drugs and bandages.

Correct preparation and storage of drinking water is promoted through the contests. About 51% of the families had good scores on this issue at the end of the first contest, increasing to 67% of households in the second contest.

At the end of the second contest, 59% of the families dewormed their domestic animals while 53% of all families had taken anti-parasitic drugs to control infestation with internal parasites in children and adults.

Table N° 07
Preventive Health Care indicators

Innovations	1st Contest			2nd Contest		
	Total no. Of Families	Families	% of families	Total no. Of Families	Families	% of families
Availability and hygiene of drinking water	200	102	51%	210	141	67%
Control of parasites in domestic animals	200	44	22%	210	124	59%
Parasite treatment in children and adults	200	98	49%	210	111	53%
Control of weight and height of children; regular checks of pregnant women/family planning.	200	96	48%	210	139	66%
Affiliation to Insurance	200	104	52%	210	141	67%
First aid kit	200	96	48%	210	126	60%

e) Home improvement

Home improvement is one of the more visible improvements: improvements include plastering the walls with mud, and painting them with different colors of clay. Quite a few families added new rooms and houses. Housing conditions were very critical at the beginning of project. Most families only had small huts with stone walls and thatched roofs. On average, a family had three of such small, overcrowded, huts.



Improved home in the village of Pelapata Sajapi



Improved home in the village of Pelapata Central

Inspired by the first contest, 42% of families plastered the inner and outer walls of their rooms with mud and 40% of families painted and ornamented their homes. The percentages increased by the end of the second contest to 55% and 52% respectively.

Table N° 8
Plastering walls of houses

Village	1st Contest			2nd Contest		
	Total no. of Families	Familias	%	Total no. of Families	Familias	%
Ingahuasi	60	15	25%	60	29	48%
Nueva Jerusalén	38	16	42%	38	33	87%
Paria	32	22	69%	32	21	70%
Pelapata Central	45	36	80%	28	11	39%
PelapataSajapi				27	7	26%
Ranrapampa	25	15	60%	25	14	60%
Total Pilpichaca	200	104	52%	210	115	55%

Tale N° 9
Painting of houses

Village	1st Contest			2nd Contest		
	Total no. of Families	Familias	%	Total no. of Families	Familias	%
Ingahuasi	60	8	13%	60	27	45%
Nueva Jerusalén	38	16	42%	38	29	76%
Paria	32	22	69%	32	20	63%
Pelapata Central	45	18	40%	28	11	39%
PelapataSajapi				27	9	33%
Ranrapampa	25	15	60%	25	14	56%
Total Pilpichaca	200	79	40%	210	110	52%

Home improvement includes the order and cleanliness of the homes, building closets or scaffolds to keep and store clothes, building cupboards or shelves for, plates, cookware, etc.

3.2. Objective 2: Ecological Recovery

Over 90% of the Peruvian Andes is severely degraded, largely due to a grazing practice known as “free grazing”. The animals, with or without herdsman, can go and graze where they please. Animals eat what they like. This means that all plants that are too hard, too bitter or too spiny to be eaten, grow, flower and multiply, while edible plants are systematically prevented from doing so.

Edible plants grow fast and can produce a lot of organic matter that is incorporated into the soil. Soil cover with very few plants with such properties means that the grazelandslose organic matter and become infertile and unproductive. The soil loses organic matter, sending CO₂ into the atmosphere. Loosing organic matter also means that the soil becomes less permeable to water, so more and more rainwater will be lost as run-off.

Soil cover degradation and soil degradation are intimately linked. But so is reclamation of soil and soil cover. The mechanisms that lead to a loss of fertility, organic matter, permeability and productivity, can be reversed by simply changing grazing practices.

A very compelling illustration of these mechanisms, and their importance for the world, are shown by Allan Savory: See:

http://www.ted.com/talks/allan_savory_how_to_green_the_world_s_deserts_and_reverse_climate_change.html

a) Organized grazing

Scarcity of fodder (grass) is the main constraint to improving livestock production and productivity. This scarcity is caused by free grazing, which is the dominant grazing practice all over the world.

The adoption of an adequate system of orderly and rotational grazing increases the availability of edible grass species. All villages have agreed to change their grazing practices. These agreements are formally sealed in their Minutes Book, detailing rotational grazing rules and areas where grazing is totally prohibited, as well as norms and sanctions for violators. Each family now manages between 0.5 and three hectares (1- 7 acres). They have closed off these areas with walls, made from stones or other materials that are available in the area.

Teofilo Mesaraymi Angulo
Village of Paria

"...I have enclosed more than one hectare, divided into four fields, the first is natural grass, in the second and third I have sown oats, and the fourth has natural grass. The soil is completely bare outside of my fence. This closure is only about four months old now, but the natural grass has grown very well inside it. I am thinking about expanding these enclosed fields. This grass is reserved for the months of August and September, when the grass is very scarce..."



Another agreement that had immediate results was the removal of horses. These animals deplete the natural pastures. A lot less horses are needed since the construction of the road, but people still kept their horses, under the most deplorable conditions. We were successful in promoting the reduction of horses. At the end of the second contest, only two families continued having some horses.



Almost all families gave up the idea of having a horse.

b) Cultivation of natural and exotic grass

The harvest of natural pasture seed has been the innovation that attracted most attention and curiosity. Each family began experimenting with different grass seeds which they could harvest inside their own village but also elsewhere, finding other grass species while traveling to other places. At the end of the second contest, the new enclosures had different grass species, which people now want to transplant or seed on completely bare areas.

Exotic grasses were sown on a smaller scale because the seeds need to be bought by the families with their own resources. However their introduction was equally relevant. Only few species are fit for the extreme climatic conditions of the villages. Oats, dactyles and phalaris were sown. Phalaris had good results in all villages, growing to over two feet tall on average. It can be multiplied easily through cuttings, which people are doing extending the areas with phalaris.



Exotic grasses in the village of Ingahuasi

c) Production of organic fertilizers

The production and use of organic fertilizers contribute to the production of vegetables and grasses in general. People noticed the results, which are clearly visible in the growth of vegetables and (exotic) grasses such as phalaris, oats, among others.



About 37% of the families produce and use organic fertilizer, especially compost and humus. They are produced using simple “containers” made from mud and stone. There are limitations due to the extreme cold which hinders the reproduction of the worms.

Table N° 10
Production and use of organic fertilizers

Village	Total no. of Families	Families	%
Ingahuasi	60	27	45%
Nueva Jerusalén	38	6	16%
Paria	32	13	41%
Pelapata Central	28	12	43%
Pelapata Sajapi	27	9	33%
Ranrapampa	25	11	44%
Total general	210	78	37%

d) Water management

Water availability is a problem during the dry season making proper utilization and management of this resource critical.

The peer-learning has achieved one of its objectives, achieving learning plus creative innovation, as is the case of Mr. Froilan Huaman who saw a simple sprinkler system in Cusco, and made one himself from recycled materials.



Froilan Huamani Mendoza
Village of Nueva Jerusalén

“...I had to use my brain to improve these pastures. I build a sprinkler system using just a disposable bottle and a few feet of hose. I made a small dam using water from a spring, so I'm taking the water through the hose and here I have enough pressure for the sprinkler...”

e) Forestation

Progress in forestry is very small, mainly limited by the extreme climate of the high mountains. But we can report the installation of two village tree nurseries, one in the village of Ranrapampa with a production 15,000 pine trees, which will be planted at the beginning of the following rainy season. The second tree nursery in the village of Pelapata has a production of 3000 queuña cuttings. Queuña is a native tree capable of withstanding the extreme temperatures of the altitude.

The project promoted family tree nurseries with an average of 150 trees, pine and queuña, like the one shown in the video of the Demetrio Ordoñez family, who managed the installation of 228 trees ⁽¹⁾.



Village tree nursery of Ranrapampa



Preparation of cuttings of queuña
 Village of Nueva Jerusalén

¹<http://pachamamaraymi.org/videoes-visita-a-la-casa-de-demetrio-orgonez-lang-es>

3.3 Objective 3: Economic Recovery

The main economic activities of the families were strengthened to improve their economy. During the first contest raising alpacas was strengthened with the aid of an expert alpaca farmer from Cusco. For the second contest, trainings were extended to five productive projects. These are included in the Rules and Regulations as “potential businesses” that the family can choose to develop. The Rules and Regulations include:

- Production of Guinea Pigs
- Production of Trout
- Raising Alpacas
- Production of dried meat (Jerky)
- Production of handicrafts

The number of families that inscribed in each of the categories of family business varied. Early on during the second contest, several families tried to develop up to four of the mentioned businesses. However in the course of the second contest, most families dedicated themselves to one or two businesses, primarily raising alpacas and production of trout.

The following tables show the number of participating families and two indicators for the family businesses are: **Average implementation**, which shows the percentage of the innovations that were implemented. **Average grade** is the average grade in a range of 0 to 10, which reflects the quality of the implementation of the innovations.

a) Raising Alpacas

Raising alpacas is the main source of income and food for the families. The innovations that are promoted by the project improve production and productivity of the alpacas. These include innovations such as proper selection of animals for breeding, elimination of unproductive animals; building breeding pens, monitoring of animal health, among others.

At the end of the second contest 112 families (53% of the total number of families in Pilpichaca) consider that their main activity –business– is raising alpacas. They implemented an average of 66% of the innovations promoted by the project. The average score on these innovations is 5.3, which reflects that there is still scope to improve the quality of the implementation of the innovations to improve breeding alpacas.

TableN° 11
Crianza de Alpacas

Village	Number of families	Average innovations implemented ALPACAS	Average grade ALPACAS
Ingahuasi	28	84%	5.2
Nueva Jerusalén	25	43%	4.2
Paría	22	66%	5.7
Pelapata Central	19	65%	5.6
Pelapata Sajapi	8	69%	6.1
Ranrapampa	10	69%	6.0
Total Pilpichaca	112	66%	5.3

b) Production of trout

Raising trout was promoted from the second contest, in all six villages, generating a lot of excitement. The families immediately began digging the ponds and build the other facilities that are needed.

A total of 38,000 trout fry was given to 52 families who built a total of 72 ponds in 6 villages. Several families bought a total of 15,800 fry with their own money (data as per December 2012, see Table 09). It is expected that starting from March, one of the goals of this activity will begin to show: improve the family diet and reduce malnutrition of mainly infants. Trout is also a business, so it is expected that trout will be sold too.

Table N° 12
Trout Fry

Village	Number of families	Number of fishponds	Number of fishfry	
			Bought and distributed by Pachamama Raymi	Bought by Families
Ingahuasi	5	6	1,300	0
Nueva Jerusalén	19	27	16,400	0
Paría	5	5	1,200	0
Pelapata Central	9	13	7,000	5,300
Pelapata Sajapi	8	10	6,100	10,500
Ranrapata	6	11	6,000	0
Totals	52	72	38,000	15,800

To motivate, guide and train people in raising trout, farmers from Pilpichaca made two study tours to the district of Ocongata in the Department of Cusco, visiting the fish farm of the Javier Huillca family, a very experienced trout farmer (Mr. Carl Greer visited this family).



Javier Huillca expert trout farmer, training families in the village of Nueva Jerusalén

Raising trout in the village of Pelapata Central

Javier Huillca, our expert trout farmer, traveled to Pilpichaca to train farmers in situ, strengthen the peer learning experience. He shared his expertise and guided all families that had started a trout farm.

At the end of the second contest, only 29 out of 52 families that had received trout fry wanted their trout farm to be graded as their main business. This means that 23 families with fish ponds and trout fry do not consider this activity as their main business; for them, raising alpacas is still their main activity. Not really surprising, of course.

The grading of the trout business shows that on average, 73% of the promoted innovations for raising trout were implemented, ranging from proper water intake constructions, to construction and maintenance of the fish ponds, monitoring and recording of feeding the fry, among others. However, the quality of adoption of these innovations received a score of 5.6 on a scale of 0 to 10. Still much improvement is needed.

TableN° 13
Raising trout

Village	Number of Families	Average innovations implemented TRO UT	Average grade TROUT
Ingahuasi	1	87%	3.0
Nueva Jerusalén	9	86%	6.8
Paria	1	70%	5.6
Pelapata Central	4	52%	5.3
Pelapata Sajapi	9	66%	5.1
Ranrapampa	5	80%	5.1
Total Pilpichaca	29	73%	5.6

c) Raising Guinea Pigs

Weather conditions in the area are not favorable for breeding guinea pigs. However, in the villages of Ingahuasi, Nueva Jerusalén and Pelapata there are three families raising guinea

pigs, initially in precarious conditions, but they were improved, with the help and guidance of our field staff.



d) Production of dried meat

Production of dried meat (jerky) of alpaca meat is a possible business that could increase family incomes. During the second contest people received training and were motivated to produce dried meat. The interest of the families wasn't too great because of the uncertainties of the market for this product.

e) Production of handicrafts

The vast majority of families are artisans by tradition. For their own use, they produce textiles, clothes such as caps, scarves, pants, blankets and utensils or tools, including ropes, slings, and bags, among others.

We were not able to achieve an acceptable level of sales of these handicrafts. Better marketing efforts are needed. Opportunities are limited by accessibility and the remoteness of the villages.



Production of handicrafts

f) Agricultural and handicraft Fairs

The board of jurors is the authority responsible for developing and ensuring the transparency of the contests. Each village chose two jurors per contest. The jurors are leaders who promote the development of their villages.

During the first contest, the Board of jurors was chaired by Mr. Valerio Taype Ramos. The Board organized the first Agricultural and Handicraft Fair of Pilpichaca, in the village of Paria. The aim of the fair was to promote and recognize the best alpaca and handicraft producers of the area.



**Mr. Valerio Taype Ramos
Chairman of the Board of Jurors of
the first contest**

"... Today was the first Agricultural and handicraft Fair. As chairman of the Board of Jurors it is my responsibility to organize the closing of the first contest and the first fair. That's why I called on the jurors and the representatives of the villages to work as a team. I've also invited the district authorities.

The most important part of the Fair has been the examination of the alpacas by expert judges. The best alpacas were classified and awarded in eight categories.

The best alpaca farmers of the five villages have brought their alpacas to compete. It is the first time that we have such a fair in our area. It is a great experience for us. We know that things must improve!

The next fair will be better! We will make a great fair and we will improve the selection of the alpacas... "

At the end of the second contest the new board of jurors organized the second agricultural handicraft fair. This time it was held in the Nuevo Jerusalén. It was organized with the awards ceremony and closing of the second contest.

As expected, most people were interested in the alpaca contest of the fair. It was a great fair with a very large number and several categories of alpacas in contest.



Prize award ceremony for the best alpaca producers.

3.3. Objective 3: Reinforce Cultural identity and Social Networks

The contests between the villages strengthen village organizations, improving their administration and management. All villages managed to sort and organize their documents, their minute books, and the registration of their members, among others.

The meetings improved, where decisions had to be made about how to manage the villages, the grass lands, etc. Participation in the meetings increased due to the need to have agreements within the villages and this is motivated by benefits that such decisions bring, such as agreements about grazing management and disposal of horses.

The people are more optimistic about the future of their villages and they now have some planning in place, making maps depicting different aspects of their village. Such maps are visible in almost every home and in also made for the whole village.



*Plan for the Development of one family
Teófilo Mezaraymi*



*Plan for the Development of Nueva Jerusalem
The President of the village.*

Social networks are strengthened through exchanges that take place between villages. For example, the jurors visit other villages to grade families and by doing so establish a network between families and villages. Also the fairs and the organization of Jurors improve the networks between the villages.

Study tours contribute as motivators for adoption for innovations. People learn more than the innovations the project was promoting. During the two competitions two regional study tours were organized to the districts of Ocongate, Ccarhuayo and Kunturkanki in Cusco.

In both trips, 18 people participated, mainly jurors. They visited families and villages that had already adopted the many innovations promoted by Pachamama Raymi.



**Amalgio Galves Angulo
Comunidad de Paria**

"...I traveled to Cusco with a study tour. I've been to Sicuani and Kunturkanki. I remember that we visited the house of Mr. Honorato in one of the villages of Kunturkanki. His house was really neat. After seeing that, I have improved my house. I have copied the model of the kitchen and the stove. The trip was long; it took thirty hours to get to Kunturkanki.

When I returned from the study tour I shared everything with my neighbors in my village, I explained to everybody what I had seen in those villages. Many have improved according to what I told them. As I have been the one who has participated in the study tour, I am very worried that I will fail to improve my home enough. It is possible that my neighbors do not believe what I told them. That's why I have to keep getting better..."

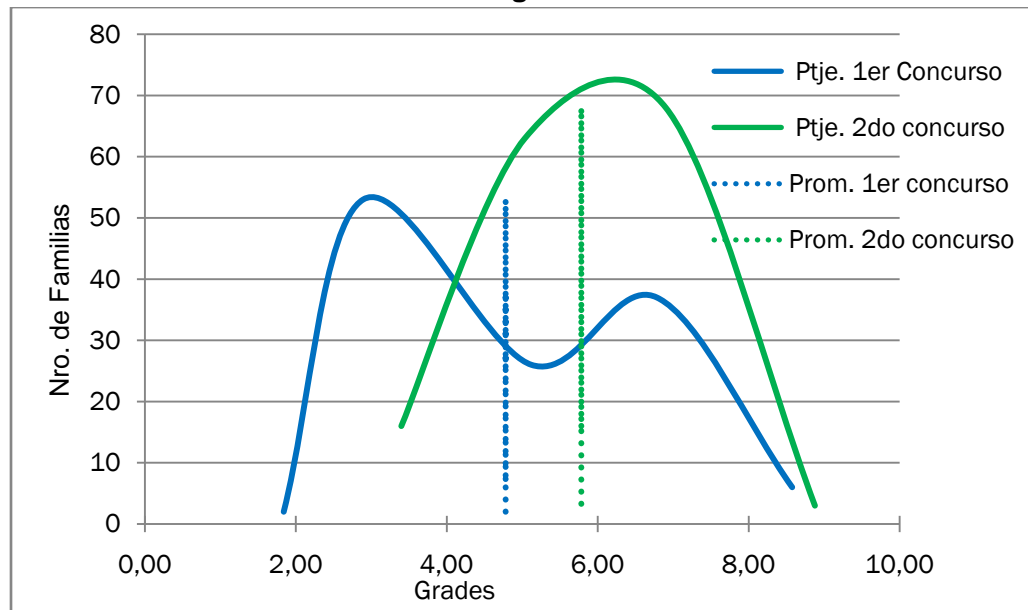
IV. Speed of progress

Figure No. 02 shows the distribution of the grades obtained during the two contests. The vertical lines depict the overall average. The average for the second contest is one point higher than the average grade for the first contest. This shows that the families in the villages improved very fast.

During the first contest the 124 families that participated achieved an averaging grade of 4.7 on a scale of 0-10. The second competition had a total participation of 150 families with an average grade of 5.7.

In the first contest the grades of the families appear to be divided into two groups (showing up as bumps in the graph). Many families are below average and a small group is above average. However the second contest shows a normal bell-shape distribution, and a tendency towards higher grades. It shows that progress has become a social epidemic.

Figure N° 02
Distribution of grades of the contests



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