SUBJECT

NON EXCLUSIVE BUSINESS IN THE PRODUCTIVE AND COMMERCIAL CHAIN OF CAMU CAMU IN THE YARINACOCHA AREA: MANANTAY, UCAYALI REGION

Mr. Fernando Jun Sasagawa

Sanshin Amazon Herbal Science S.R.L.

May 8 2016

BACKGROUND INFORMATION

- Fruit originally from the western Amazon basin
- It is part of the Biodiversity of more than 30,000 species existing in our Amazon
- The plant grows in rainforests that are temporarily flooded from the Amazon (Loreto, San Martin and Ucayali)
- Small tree 3 to 8 meters high
- Size similar to the lemon with 2 to 4 centimeter diameter that weights 5 to 8 grams per fruit
- **Camu camu - Myrciaria dubia**
- Main component of camu camu is Vitamin C; usual concentration varies between 2000 and 3000 mg/100g of pulp (Status, Unripe: fruit that changes color as it matures)

Ascorbic Acid Content

COMPARISON WITH OTHER TROPICAL FRUITS (mg/100 g of pulp)

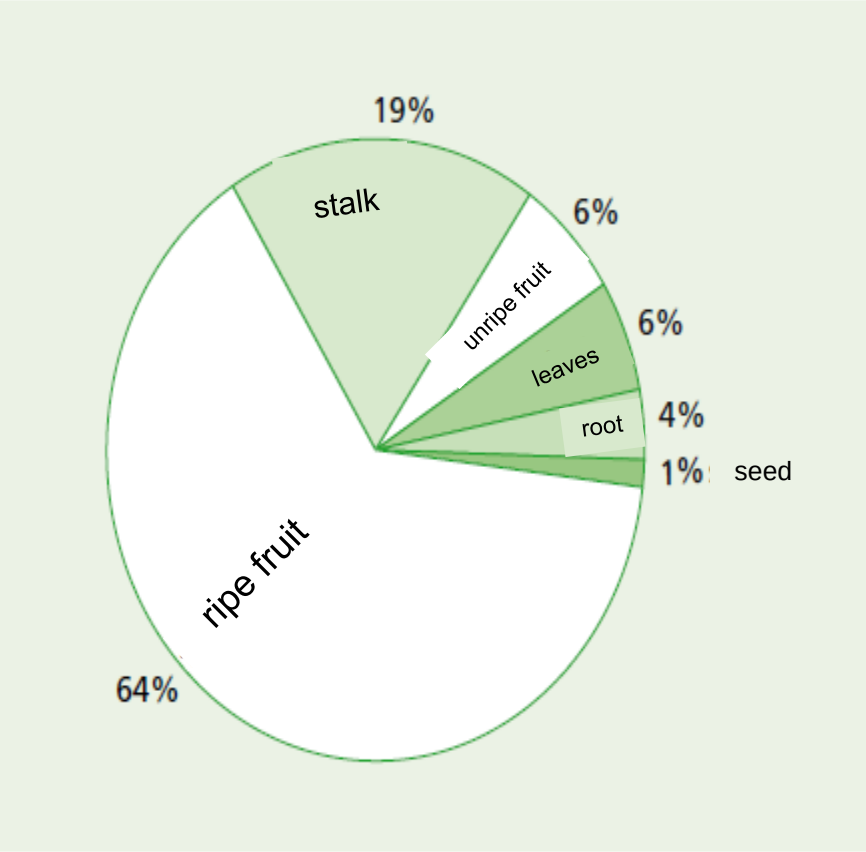
Fruit	Ascorbic Acid	Protein	Carbohydrates
Pineapple	20	0.4	9.8
Passion Fruit (Juice)	22	0.9	15.8
Strawberry	42	0.7	8.9
Lemon (Juice)	44	0.5	9.7
Guava	60	0.5	14.9
Bitter Orange	92	0.6	10.1
Cashew	108	0.8	10.5
(Total) haw	1300	0.7	6.9
Camu camu	2780	0.5	5.9

Source: Growing Camu Camu in the Peruvian Amazon, TCA, 1996

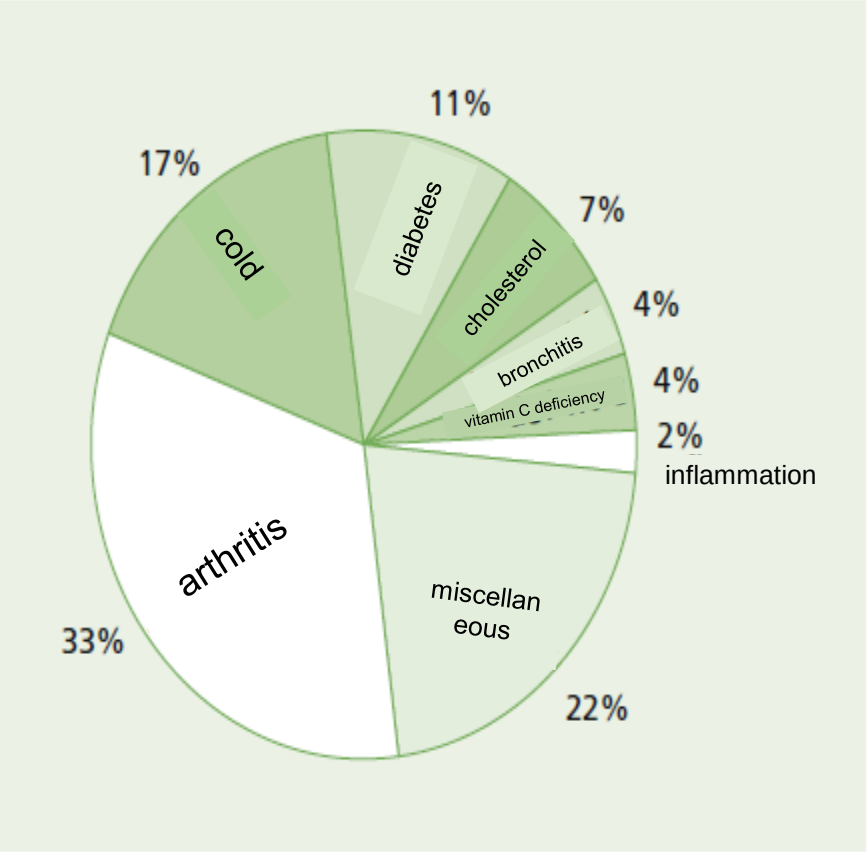
Properties / Benefits

- It contains a large amount of vitamin C, whose antioxidant power helps neutralize the free radicals responsible for the overwhelming number of chronic diseases and the appearance of some carcinogenic tumors, excellent for improving defenses, and protecting ourselves from colds and it helps to lower blood pressure.
- It has iron to avoid anemia, beta-carotene or vitamin A, which helps in good visual and skin health, calcium for growth and development of bones and teeth.
- It is used to treat viral infections, such as Herpes, to treat chronic fatigue, depression, migraines and gingivitis.

Plant Use



Graph 1: **Parts of the plant used**



Graph 2: **Therapeutic applications of camu-camu**

Source: Leisa journal of agroecology • December 2007

RECENT BACKGROUND OF CAMU CAMU IN UCAYALI

- Year 1997 – The first 50 hectares of camu camu were set up for research in the Ucayali Region (managed by IIAP and INIA),
- Year 1998 – GOREU initiated an aggressive campaign to set up new camu camu plantations. Saplings were brought from Loreto (natural stands) Goal: 5000 hectares of camu camu.
- Farmers did not accept them: long vegetative growth period (3 – 5 years) and since it was not known in the sustainable market for this crop.
- When its production began in 2003, only 435 hectares were set up.
- Commercial companies appeared that converted the fruit into pulp for export.

RECENT BACKGROUND OF CAMU CAMU IN UCAYALI

- Japan was the main destination of this product, and in the following years demand was growing, keeping Japan as the main buyer.
- Consequence: price increase of the fruit from S/0.50 in 2003 to S/4.00 in 2007.
- This motivated a lot of farmers to add themselves to the GOREU project and at the end of 2008 there were 2,000 hectares established in the Ucayali Region.
- At the beginning of 2009, the demand lowered considerably and companies quit buying the fruit.

RECENT BACKGROUND OF CAMU CAU IN UCAYALI

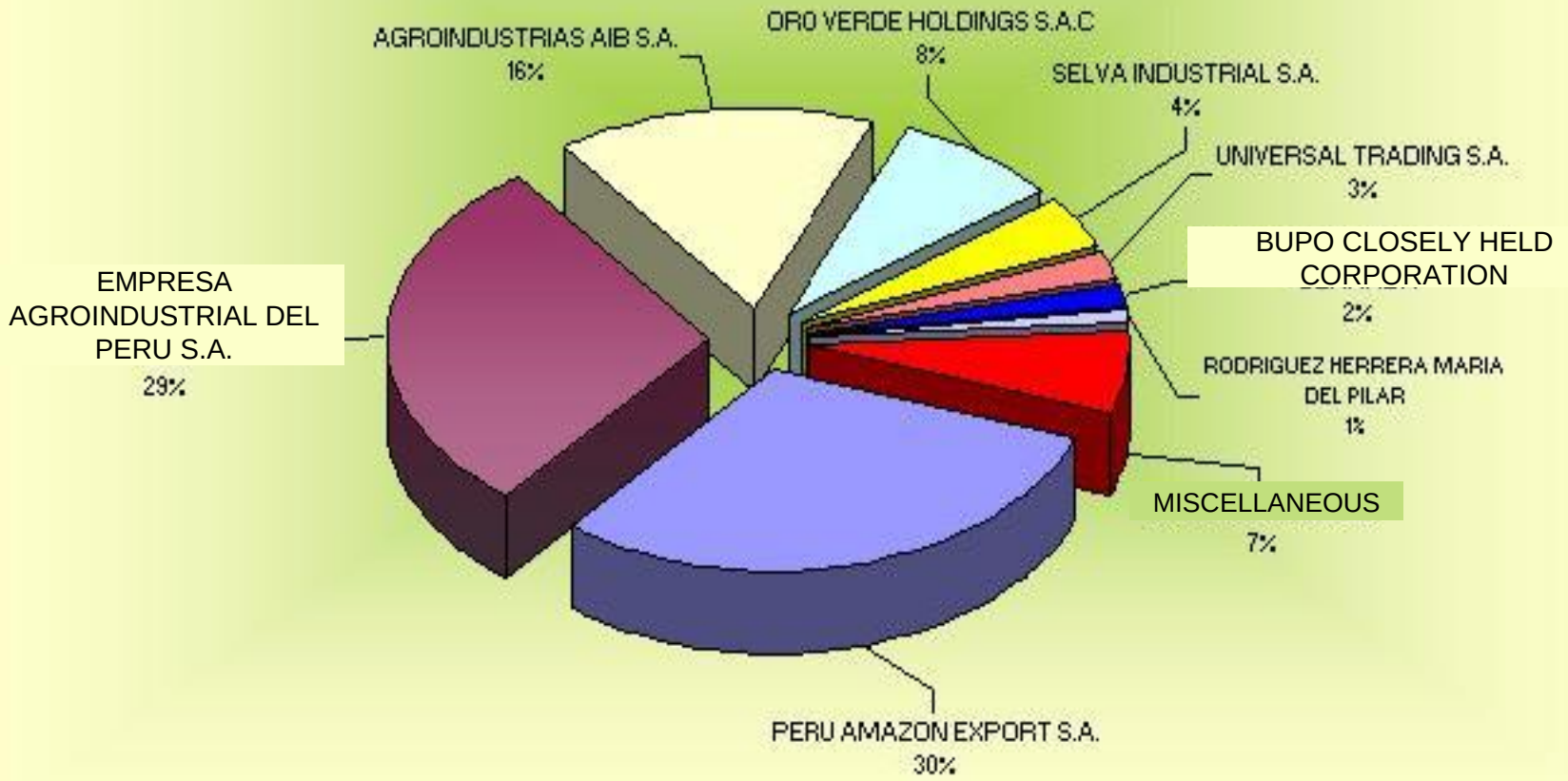
- Japan, which is where the main demand was for the fruit, quit buying it because of quality, thus closing this important market.
- Fall in the fruit price to 2003 levels.
- Many farmers abandoned their plantations and worked in other activities. Many hectares were lost.
- Absence of Companies in which the product was in demand from 2009 to the present has been the status quo.

EXPORT DEVELOPMENT OF CAMU-CAU ACCORDING TO THE MAIN COUNTRIES OF DESTINTION (UP TO 2009)

	2005	2006	2007	2008	2009
United States	94.705,30	242.529,55	209.676,38	270.905,78	259.555,29
Japan	737.933,62	1.626.880,57	3.816.186,21	926.884,26	249.358,48
Canada	2.599,12	21.784,80	43.993,60	52.372,00	79.537,40
Australia	578,50	0,00	3.366,00	6.872,75	21.179,00
United Kingdom	982,40	7.315,40	8.325,00	16.265,00	20.697,00
France	1,00	10,30	0,00	0,00	12.010,10
Germany	1.066,10	1.003,50	24,96	69,45	7.025,60
Philippines	0,00	0,00	0,00	0,00	3.612,46
The Netherlands	40.975,00	87.636,27	855.968,30	481.604,40	3.193,65
Switzerland	4.900,00	4.595,00	1.980,00	168,04	1.980,00
South Korea	0,00	0,00	0,00	0,00	1.925,00

Source: SUNAT [Translator: Peruvian IRS]

Peru
Exports of Camu-Camu and its derivatives according to an exporting companies
2006



Source: Biocomercio Perú – PROMPEX / SUNAT

Preparation: SIFORESTAL – FOCAL BOSQUES

INTERVENTION OF SANSHIN AND SOCIAL RESPONSIBILITY

- It is in this context in which the Japanese Entrepreneur arrived in the Ucayali Region of Peru, engaged in the marketing in his Country of natural health products.
- He was searching new products, and getting involved with the farmers, and he identified himself with the problems they had in marketing the product.
- He decided to install a Plant in the area to industrially work camu-camu.

INSTALLATION OF THE PROCESSING PLANT OF INDIGENOUS PRODUCTS

- **Creation:** 06 - 09 - 2012
- **View:** Be an innovative and leading company, specializing in the natural processing of indigenous products, contributing to preserving the sustainable growth of bio-commerce, successfully meeting the needs of the most demanding clients and offering new development alternatives and images of Peru.
- **Mission:** Offer social wellbeing through the development of healthy, first-class products, creating new product alternatives in the health and food industries, guaranteeing our products through accredited certifications and committed to promote the sustainable development of bio-commerce and the improvement of quality of life of the participants in the value chain.

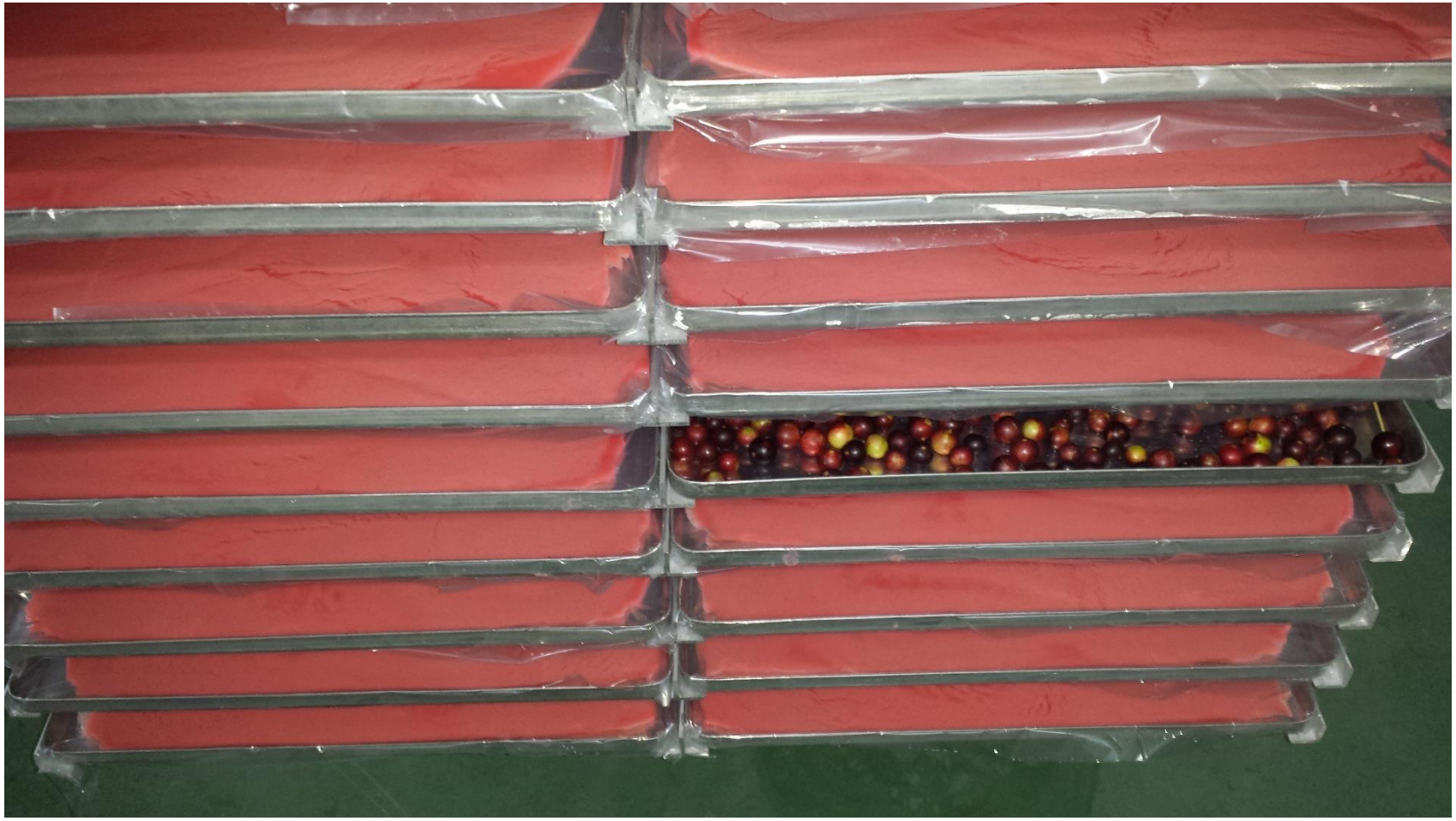
INSTALLATION OF THE PROCESSING PLANT OF INDIGENOUS PRODUCTS

- Plant Construction in August 2012 (built area 2000 m^2) finishing its provision of equipment, end of 2014.
- It has machines equipped with avant-garde technology: Two freeze-drying pieces of equipment with a capacity of 500kg per batch, in the final process of which a product is obtained, when compared to other dehydration processes, retains a greater number of the fruit properties and whose organoleptic characteristics, such as shape, color, flavor and aroma are maintained very similar to the natural fruit.


SUZUKI

FREEZE-DRYING EQUIPMENT

PULP PREPARATION BEFORE DRY-FREEZING



DRY-FREEZE PRODUCT

COLD STORE - 25°C

COLD STORE - 25°C

STOCKPILING OF FRUIT

STOCKPILING OF FRUIT

STOCKPILING OF FRUIT

STOCKPILING OF FRUIT

FRUIT SELECTION

PULPING LINE PROCESSING

PULPING PROCESSING

CAMU CAMU PULP

EQUIPMENT SPRAYER

SPRAYED PRODUCT

CURRENT ACTUAL SITUATION OF CAMU CAMU PRODUCTION

District	Nº of Producers	CCPP - farmhouses	Hectares in Production	Hectares in Growth	TOTAL
YARINACOCHA	423	San Juan	145,00	50,00	195,00
		Santa Rosa	26,00	20,00	46,00
		11 de Agosto	27,50	17,00	44,50
		Nueva Luz de Fátima	16,50	10,50	27,00
		Mariscal Sucre	6,50	1,50	8,00
		Leoncio Prado	17,00	10,50	27,50
		Pueblo Libre	13,50	9,00	22,50
		Pueblo Nuevo	26,00	21,50	47,50
		Bellavista	16,50	4,00	20,50
		Dos de Mayo	6,50	3,50	10,00
		Señor de los Milagros	9,00	5,00	14,00
		Padre Bernardo	40,00	21,00	61,00
		Esperanza de Panaillo	61,50	45,00	106,50
		Siete de Junio	64,75	63,45	128,20
		San Jose	12,00	8,00	20,00
		San Pablo	25,00	12,00	37,00
CALLERIA	25	Pacacocha	40,00	10,00	50,00
MANANTAY	64	Pucallpillo	203,00	40,00	243,00
	10	Ega	50,00		50,00
TOTAL	522		806,25	351,95	1158,20

Source: **TDR prepared by the Regional Agricultural Administration**
DPCA / AGRARIAN MAIN OFFICES/OASI2015

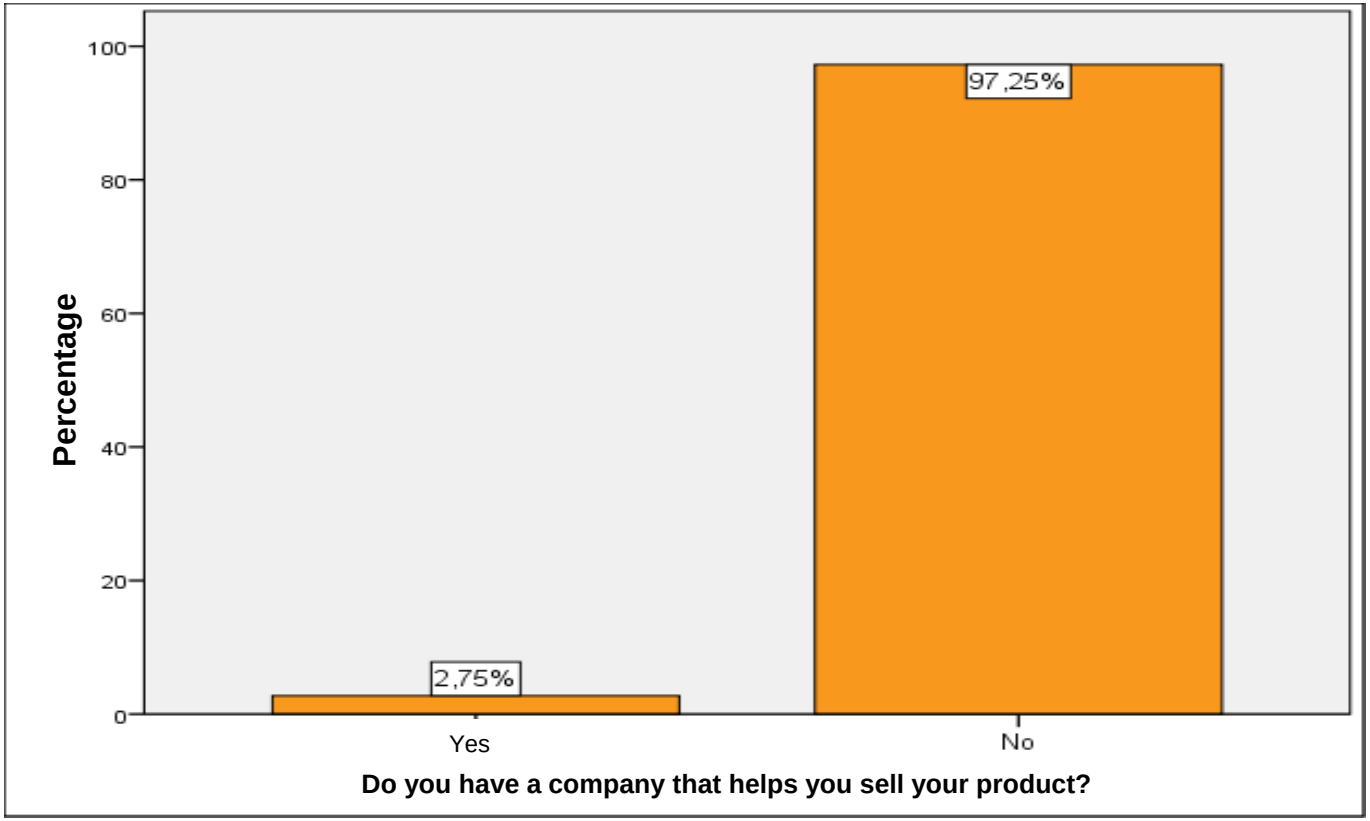
CURRENT ACTUAL SITUATION OF CAMU CAMU

According to the data of the regional Agricultural Administration and the previous chart, camu camu production in the Ucayali region in 2015 was 2,015.25 MT.
If we remove the 50% that was lost because of lack of demand and plagues, we could say that the net production was 1,007.125 MT.

20% of the production is reduced because of climatic factors, plague raids and diseases, and the remaining 30% because of the lack of demand.

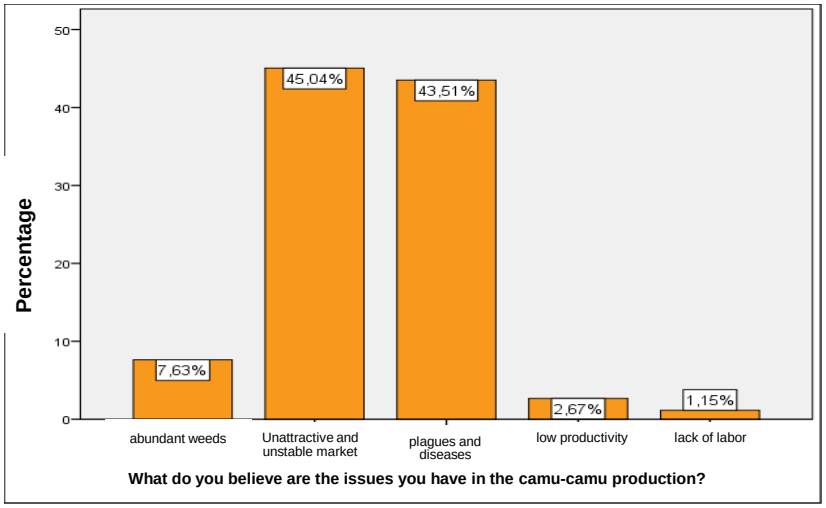
We would be able to summarize the producers' perspectives with regard to the crop's future in the following chart prepared by the regional Agricultural Administration of Ucayali

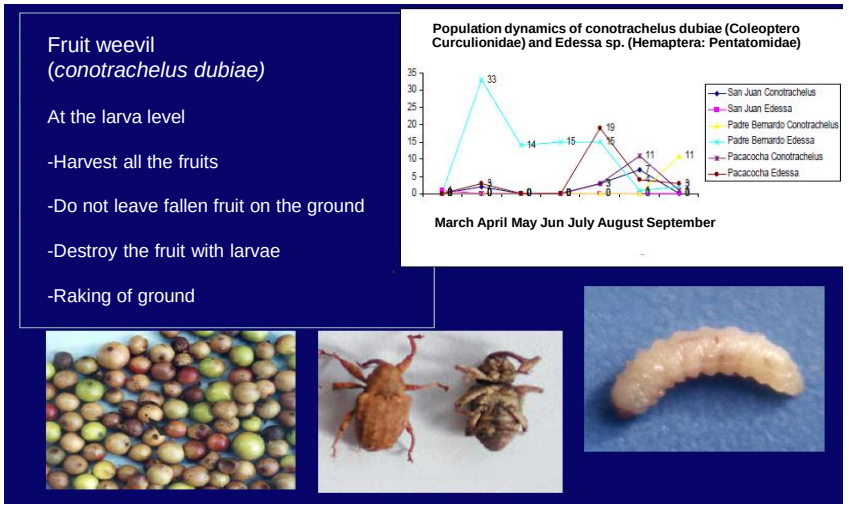
Companies supporting the producer

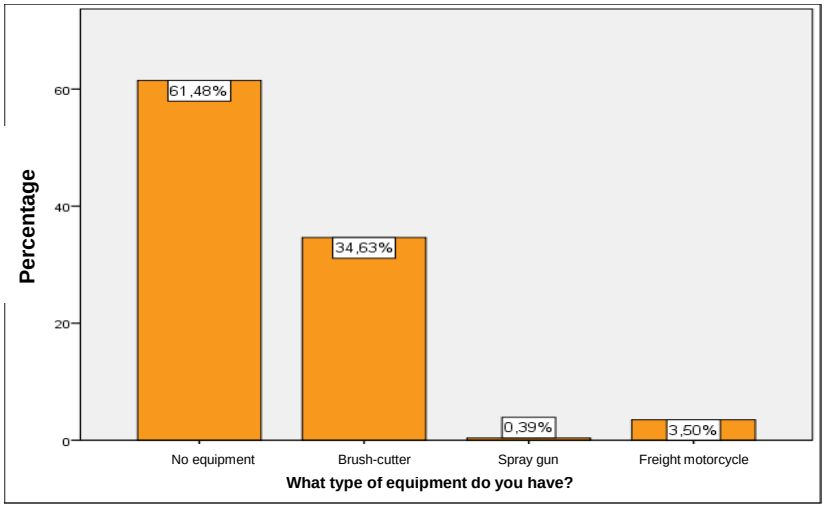


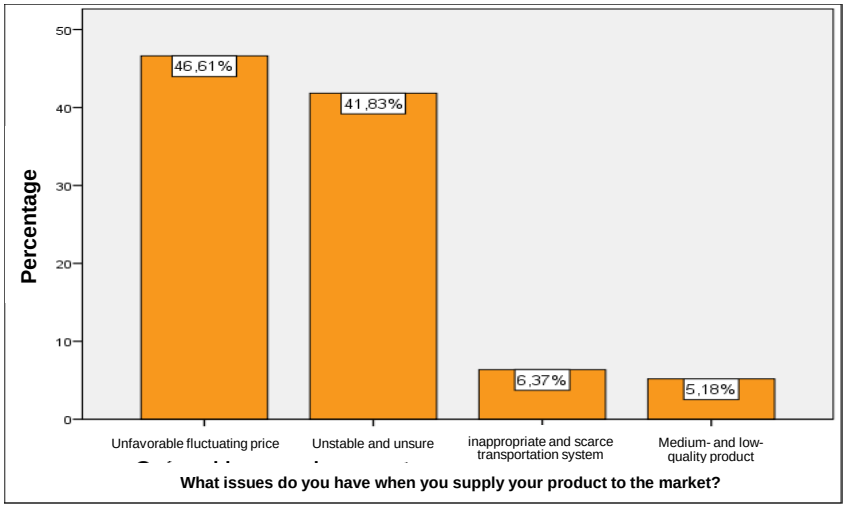
Source: **TDR prepared by the Regional Agricultural Administration**
DPCA / AGRARIAN MAIN OFFICES/OASI2015

Major issues in production



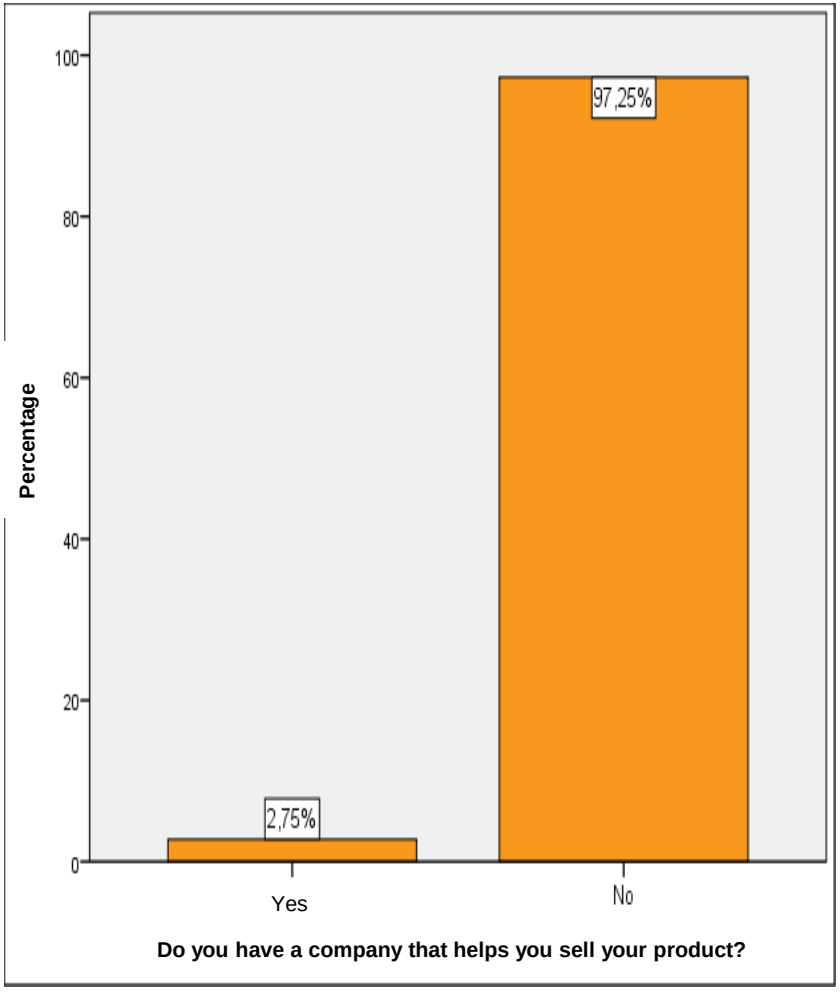


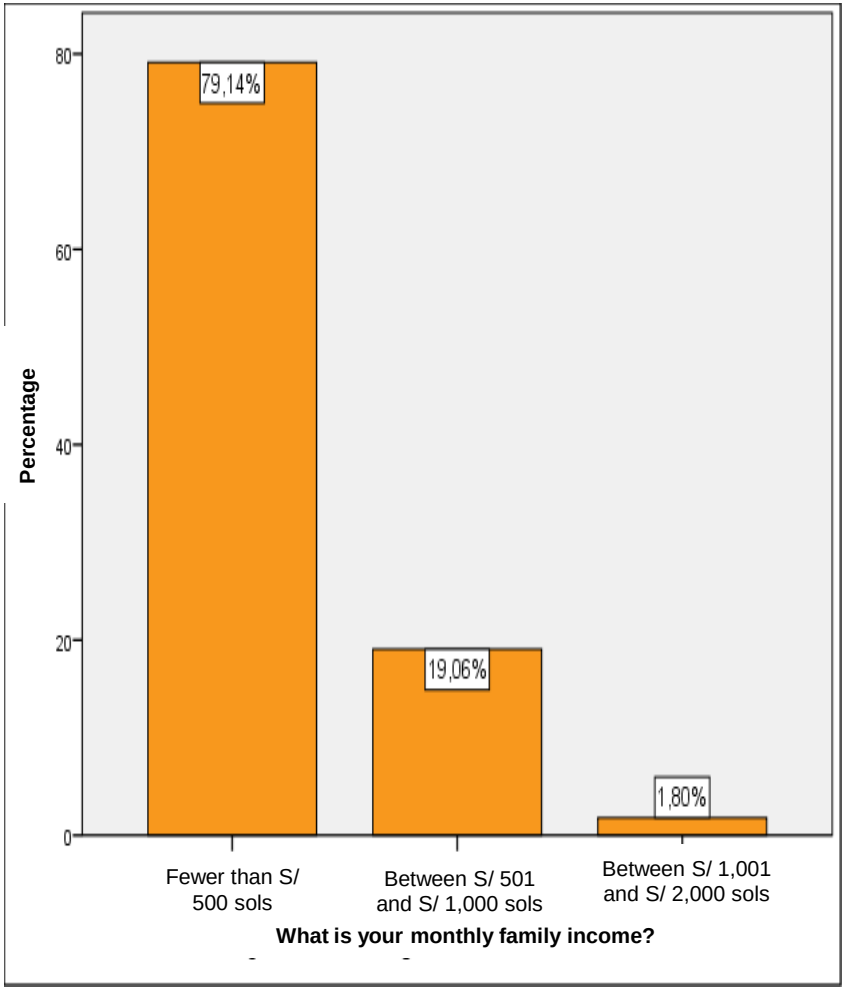




Source: **TDR prepared by the Regional Agricultural Administration**
DPCA / AGRARIAN MAIN OFFICES / OAS12015

Major issues in production





Source: **TDR prepared by the Regional Agricultural Administration DPCA / AGRARIAN MAIN OFFICES/OASI2015**

SUMMARIZING:

- Lack of demand of the product in the market, both domestically and internationally, consequently caused the following situations:
- The resounding fall in the price to S/0.50/kg
- A complex scenario, large number of small unconnected producers and weak associations.
- 95% of the buyers are intermediaries, and would set the prices according to the fruit supply.
- Low demand of companies established in the region.

ALTERNATIVE SOLUTION

The set up of the large-capacity processing Plant operating from the Company SANSHIN AMAZON HERBAL SCIENCE S.R.L. was the:

- Answer of the farmers' ongoing and desperate requests of finding a stable and sustainable market in time with fair prices for their products.
- Price standardization, with which it was successful in substantially improving income to the year 2015 from S/ 2,400.00 yearly (S/200.00 monthly) to S/ 9,600.00 yearly (S/800.00 monthly).
- In the medium term (3-6 years) with the increase of productivity, it is expected to reach S/ 19,200 (S/ 1,600 monthly).
- With this income the farmer would not be forced to concurrently look for another job to add to his income and allow him to keep his home and abandon his crops. He would be able to engage fulltime in his fields of crops and improve their productivity and give his family a better quality of life.

CONCLUSION

- By standardizing prices we get a substantial improvement in their income.
- We are partially successful in getting the producers to avoid using intermediaries to place their products and slowly eliminate this eternal vicious cycle (Producer-Intermediary-end Buyer)
- By guaranteeing the demand, we are successful at getting the producers, through their own initiative, together with GOREU (Regional Government of Ucayali) work on the search of a solution to prevent the problem of plagues and avoid the loss of 20% of the production.

- We are successful in motivating producers to get back their trust in their crops, giving them more time, investment and effort in the search of being more competitive every day.
- Commit GOREU to the role incumbent upon it to promote the sewing of the latter and of searching to grow an improved plant that emphasizes improvement in productivity, and always training and guiding producers in access to the technological advances of the sector, to create technical agriculture, that humanized the fieldwork and makes available prepared and strong human capital to deal with the market demands and so their products are more competitive every day.


ThAnk you