



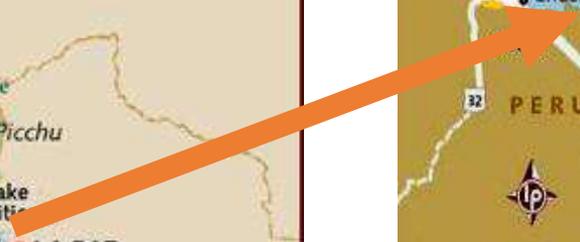
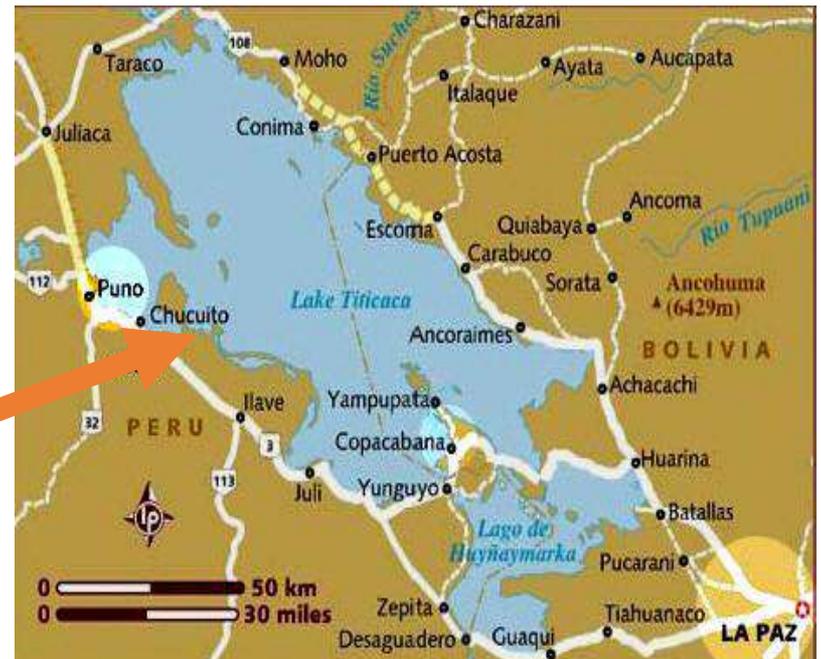
# Piscifactorías De Los Andes S.A.

Grupo **Abaco**



[https://www.youtube.com/watch?v=qKD\\_QOKMEAE](https://www.youtube.com/watch?v=qKD_QOKMEAE)

- *Rainbow Trout (*Oncorhynchus mykiss*) Farming since 1,978*
- *Where are our Operations?*



## WHERE WE ARE

*\*Lake Titikaka, located in Puno Region at 14,000 feet above sea level.*

*\*Population 1.2 M*

*\*Main Economical Activities: Mining, Tourism, Agriculture and Animal Farming (Very low Scale)*



## WHERE WE ARE



- **Main Characteristics:**

- **Big Scale Operations**
- **2,019 Offer Capacity: “3,500 Ton Gross Weight Combo”**
- **Fresh and Frozen Processing ( Now in 3 Sites)**
- **Daily Harvesting.**
- **Strict quality standards**



## FARMING

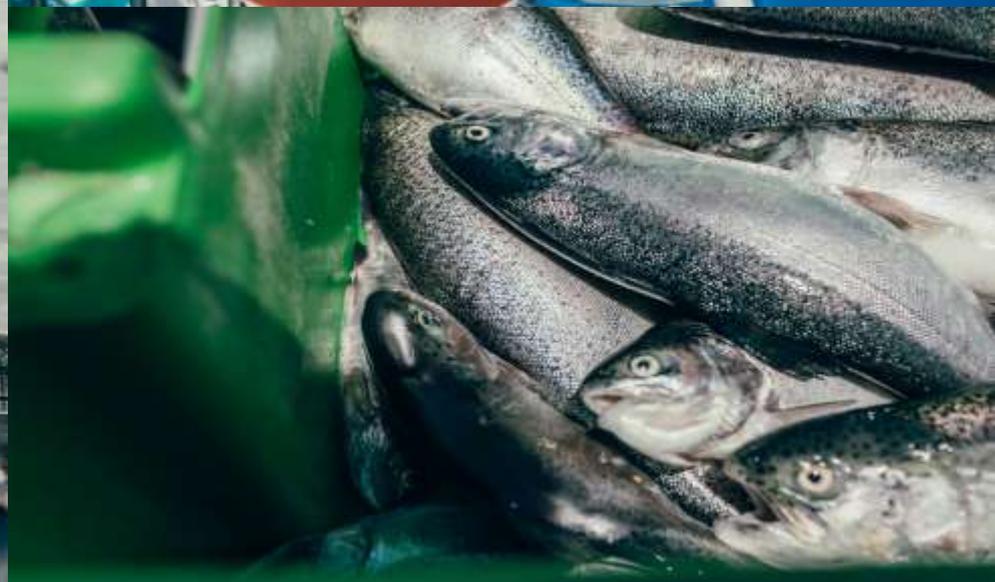


- Farming Time: 10 – 12 months and 14 – 16 months.
- Harvest Target: 600 gr. and 1,600 gr. Gross
- Absence of Antibiotics.
- Daily Harvest
- BAP Certified Farm



- Harvest and Processing Every day.
- High Quality Standards
- Very delicate Trimming (By hand)

## FARMING



PROCESSING



•Piscis main Criteria:

The piscis logo is centered within a dark blue rectangular box. The logo consists of the word "piscis" in white lowercase letters, with a blue wave and a red dot below it.

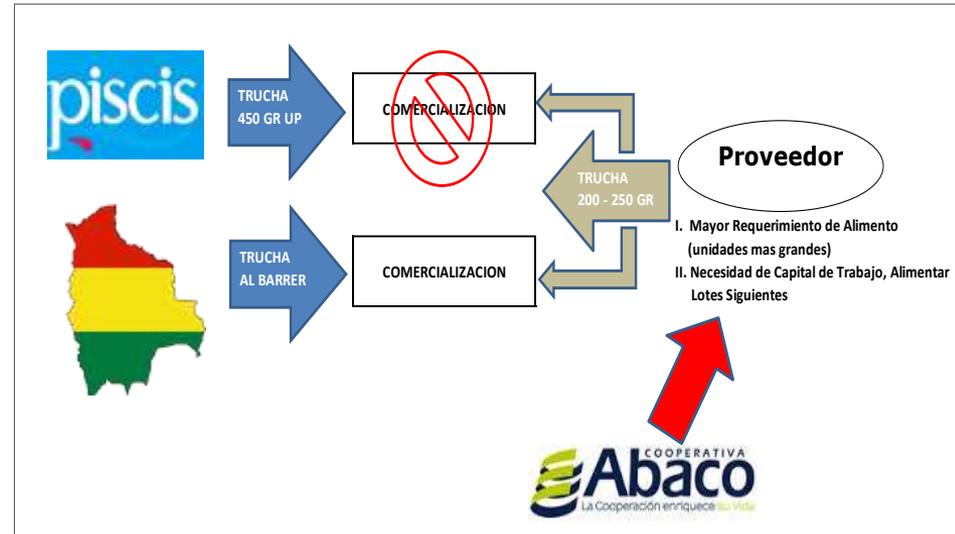
Development  
of the  
Peruvian  
Trout Cluster

Social  
Responsability

Environmental  
Responsability

## Development of the Cluster

### Pre - 2014 Main Situation



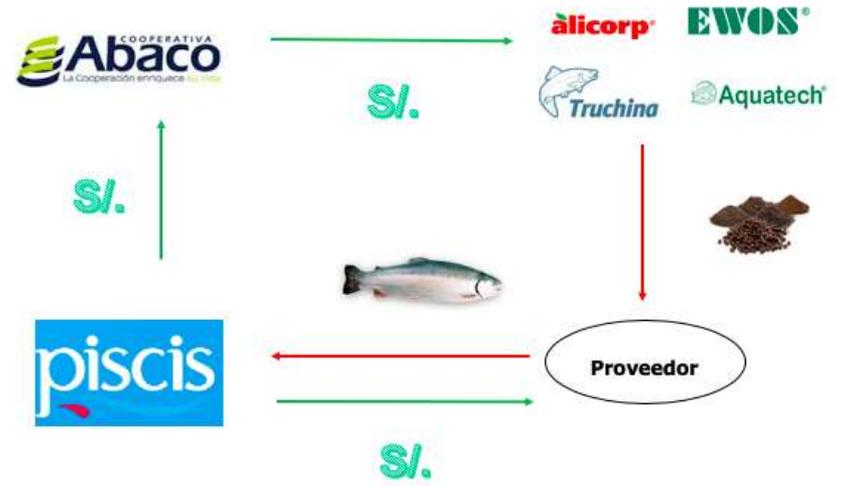
## The Proposal



Peso Prom: 200 gr  
 Unidades: 30,000  
 Biomasa: **6,000 Kg**  
 P.V. x Kg: S/. 11.00  
 Venta: **S/. 66,000**

Peso Prom: 450 gr  
 Unidades: 27,000  
 Biomasa: **12,150 Kg**  
 P.V. x Kg: S/. 10.50  
 Venta: **S/. 127,575**

Biomasa a crecer:	6,150 Kg
fc:	1.4
Alimento Requerido:	8,610 Kg
Precio Alimento x Kg:	S/. 5.59
Desembolso Requerido:	S/. 48,130
Ingreso Adicional	S/. 61,575
Devolucion Prestamo	S/. 48,130
Intereses Aprox	S/. 2,076.84
<b>Ingreso Neto Adicional</b>	<b>S/. 11,368</b>



## The Results



- 300 Tons Gross Purchases by the end of 2,015
- 1,300 Tons Gross in Top Quality “Piscis Standards” Purchases by the end of 2,018 with a value of S/.12.5 M
- Destination: Local and Export
- Adeuqtion to Peruvian SUNAT (Peruvian IRS).



- 120 women working in Processing Plant in Puno, with exceeding labor mandatory legal requirements.
- 40 people of the Charcas Community in the Farm, with exceeding labor mandatory labor legal requirements.
- Health Local Community Center Support.
- Animal Protein Support for Social Small Dining Centers (Children and Elderly).

Main environmental Impact from Aquaculture???????

How to Measure it???

How to reduce it???



# What else can we implement???? UMIGARDEN by UMITRON



1 Install UmiGarden to Cage  
Make User account



2 Easy for remote feeding  
Timer feeding for daily operation



3 Saving All Data by One account  
Adjusting feeding cost by Data



### UMIGARDEN SYSTEM IMPLEMENTATION IN PISCIS FARM:

- First Aquaculture pilot in America, and first pilot in trout in the world.
- IoT based Technology.
- Japanese tech.42 months duration, Cost USD 1M ( BID = USD 0.5 M / Piscis Abaco = USD 0.25 M / Umitron = USD 0.25 M).
- Sharing the results and the technology in other LAC countries..



## What are we getting



1. BAP Certification (Best Aquaculture Practices)
2. GMP (Good Manufacture Practices Cert.)
3. Approved Biosecurity Plan implemented
4. Third party Audit HACCP.
5. GFSI - SQF Level II (Tacna Facility)
6. ASC Cert. (Coming this year...)





## MAIN MARKETS

