

Open innovation in Manufacturing industry in Peru

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Patricia Quiroz
Pontificia Universidad Católica del Perú
cpquiroz@pucp.edu.pe

Context

- Economic Growth
- Jobs Creation
- Innovation
- Industry Developing
- Poverty Alleviation
- Stake Holder Returns



Context

- Environmental Degradation
- Forest and Biodiversity loss
- Displacement of native people
- Land Acquisition
- Corruption



Perú

– GDP

Peru's GDP increased by 6.9% (2013).

The GDP over 2014 reached 2.35%.

– **Economy mainly based on natural resources**

- Products: Gold, silver, fish, agriculture.
- Mining, manufacturing, construction sectors leading the growing of the economy

– **Environmental and social issues are very important specially in provinces.**

Perú

- In order to economic growth, it is required the diversification of the economy.
- Levels of investment in Research & Development is very low (0.15% of GDP) compared with Chile 0.65% and Mexico 0.43%.
- Firm's innovations consist basically of incremental changes.
- R&D investment is prohibitive (financial and human capital needed).

Perú

- The Peruvian government has a long term plan to promote the innovation in the manufacturing sector.
- The following programs are:
 - FINCYT (Fund for Innovation, Science and Technology)
 - FIDECOM (Fund for R&D of Competitiveness)
- These programs finance technological innovation projects in businesses and research projects in universities and promote of highly qualified human capital.

Preservation of brown algae (Macrocystitis spp)



- Traditionally, there was an exploitation of this resource and exported as a raw material.
- Government financed the innovation of the joint of an enterprise and an university in order to cultivate this resource and produce fertilizers and food for shrimps with added value.
- Through a sustainability approach: the community, the environment and the enterprise become to win.

Native plants for cosmetic use



Validation of characteristics of Andean and amazonic plants:

- Cat's claw
- Yacon
- Maca (Ginseng Péruvien)
- Camu camu
- Achiote
- Purple corn

Results>

Production of cosmetic and antiage products

Standardized production of specialty coffee



- Organic
- Trade fair
- Standard of SCAA

Spirulina (microalga)



- ✓ Production and comercialization of spirulina in the south of Peru
- ✓ Dietary suplement

Perú

- The results of the programs are:
 - 200 projects –enterprises and 100 projects-universities.
 - The strengthen of the human resources involved training, scholarships, and technological missions.
 - There are more than ten applications for patents.
- The effort of the promotion of the innovation must be continue.