Adaptation to Climate changes through traditional knowledge in the Andes

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Bhutan+10 Conference,
Thimpu, 2012
Some facts about Peru

• **Population:** 25 million habitants by 2012. Around 68% of the population lives in urban areas, mainly in the capital (Lima has 7.5 million, over 1/3 of the total population). In the Andes, the cultural and social differences enhance the complexity and vulnerability of the population.

• **Agriculture:** Agriculture in Perú involves 23.3% of the national active population, including agriculture, livestock, forestry and hunting, y el 65% of the rural active population. It generates a total of $ 1,800 Million USD and 4.7% of the national Gross Internal Production.

• **Forestry:** Peru has the second larger extension of amazon forest in Latin America, representing a higher potential for mitigation of environmental impact, and are important source of natural resources and environmental services. Peru has 13% of the tropical amazon forests and has over 70 million Ha. of forests. Peruvian forests has a large population of trees, over 2,500 species per Ha.

• **Mining:** Perú is a mining country mainly due to its mountains. The Andes span across 3,000 Km from North to South. It is the first producer of gold, zinc, lead and tin in Latin America, and the second silver producer in the world.

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Sunimarca: Geographic Location

- Sunimarca is a community located in the highest and poorest southern Andes of Peru, in Puno, at 4,100 m.a.s.l. It belongs to the hydrographical basin of the Ramis river, tributary to the Titicaca lake, the highest in the world.
- This community is a valuable repository of a millenarian culture, and traditional knowledge which allows them to live in harmony with their environment.
- Most communities are organized in associations led by women, who preserve the biodiversity of cultivars still unknown for the rest of the world.
Social Organization

- Despite of its isolation & survival problems, the community still keeps its quechua culture alive, rich in traditions and knowledge.
- Their social organization is based on a shared leadership practicing solidarity, subsidiarity and resource sharing principles. The land is a communal property.
- Their livestock include ovine and alpacas, their wool is used by women to weave fiber to keep warm in the cold winter. Minimum temperatures can reach -15 C in winter between July/August.
Living conditions and social exclusion

- Women and men from Sunimarca, dedicate to farming and homemade processing products
- They cultivate their Andean crops without any use of chemicals, they know to dye naturally alpaca fiber to make their own articles, making ropes and other accessories for daily use and to sell them in local markets
- They know how to use the nutritional and properties of their local products and medicinal plants. They know a number of ancestral techniques to diminish the risk of the harsh climate variability and prevent diseases of plants and animals.
- However, the biggest problem of this Andean community is that during 500 years and even nowadays, they suffer from social, political and economic exclusion. During 1980 decade, they lived under systematic aggression from the terrorist subversion and the national army.