

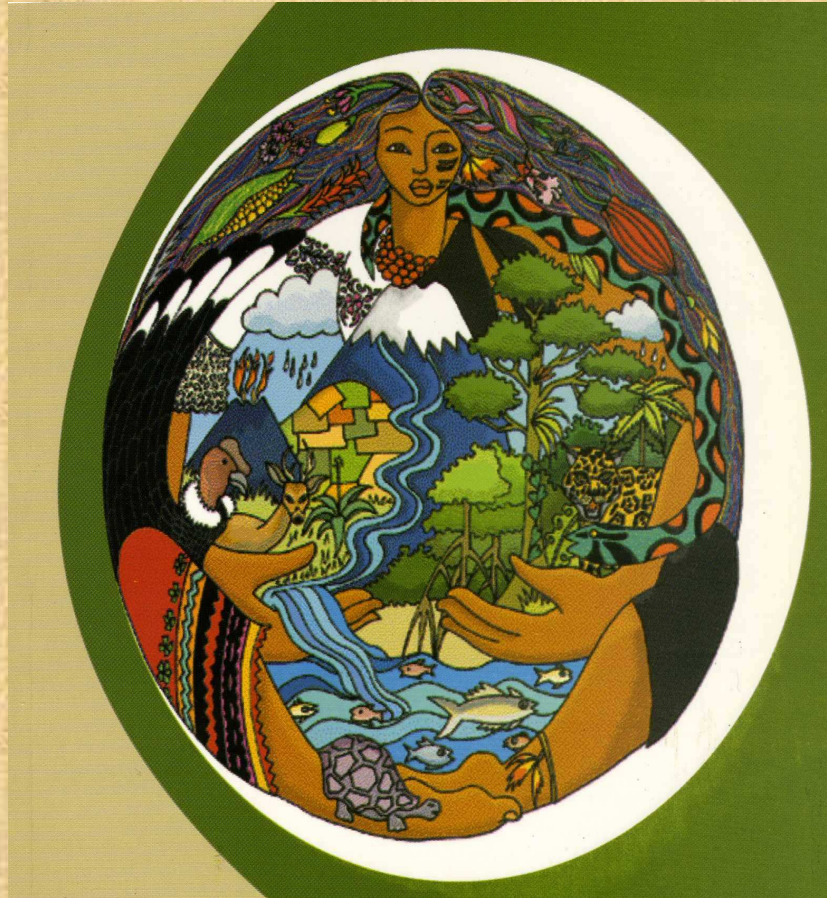
**Biodiversity, Customary  
Sustainable Use and Poverty  
Alleviation**

Prepared by

Yolanda Teran Maigua, RIMB

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# What Biodiversity is?



# Biodiversity includes:

- The term does not exist in our language (*Kawsay*)
  - Mother Earth and man
  - Natural resources, ecosystems and all beings
  - Everything is related and inter-connected
  - Traditional knowledge
  - Life and culture is linked to land and territory
  - Indigenous Peoples are the guardians of biodiversity
- 
- *“For Indigenous Peoples from Ecuador, the **Pachamama** (Mother Earth) is the mother who gives the life to men, animals, plants and the nature. She is the principal base for the development of life and culture. “...The land is our mother, she is not merchandise, she is the integral part of our life, and she is our past, present and future...”.  
(Personal Communication, CONAIE, June 24, 1996)*

# Customary Sustainable Use

**Kichwa Epistemology** includes entire systems of knowledge and relationships with the cosmos, with us and with the environment. Indigenous Epistemology refers to our cultures, worldviews, times, languages, stories, spiritualities and our places in the cosmos (Cajete, 2000, Mamani, 2008, Montaluisa, 1988, Ramirez, 2008, Wilson, 2008).

# Kichwa Epistemology

## Andean Universe



## Cycles of Life and Agriculture



# Indigenous Cycles

## Life cycle

- a. Marriage
- b. Birth
- c. Growing up
- d. Maturity
- e. Elderly

## Agro-ecological Cycle

- a. Land preparation
- b. Planting
- c. Growing plants
- d. Spring time
- e. Harvesting

Resource: *Ñucanchic Yachai*,  
Equipo de Educación de la CONAIE, 1990  
Yolanda Terán, Secretaría Técnica del CDPIE.

# Kichwa Ceremonies

**Pawkar Raymi Ceremony (Imbabura Province, 2009). From: Otavalos on Line**



**Inti Raymi Ceremony**



# Indigenous Peoples Permaculture

## Platforms and terraces

### Kichwa Permaculture

It cared about designing ecological human habitats and food production systems. It was about land use and community movements building which strived for the harmonious integration of human dwellings, microclimate, annual and perennial plants, animals, soils, and water into stable, productive communities.

The focus was not on these elements themselves, but rather on the relationships created among them by the way we placed them in the landscape (Suquilanda, 1990).

Ecuadorian Indigenous Peoples organized the landscape in a colorful and beautiful way. They used a variety of plants and trees to shade houses and animals, as wind curtains, as forage for animals, and as wood. The Indigenous permaculture provided a safe environment for plants, animals, men and Mother Earth.





# Type of Cultivations

- Intercalated or associated:
- Furrows of maize and beans mixed with potatoes; between furrows there might be some with *quinua*. The *chocho* (small cereal) was planted around the whole area as a protector and insects repellent. In the associated cultivation two or more species were cultivated at the same time and in the same space.
- The most popular associations were: maize with climbing beans; maize intercalated with lima beans; maize intercalated with peas; maize associated with beans and *achogcha* (vegetable); maize associated with *chocho* (cereal); maize intercalated with *quinua* (cereal); maize associated with beans, lima beans, *quinua*, pumpkin, *zambo* (type of squash) and *chocho*; potatoes with maize; potatoes with *quinua* and potatoes with lima beans.

# Associated Cultivations

Through the associated cultivation, the land was able to retain the necessary elements for a good production avoiding the impoverishment of the soil with mono cultivations.

Leguminous plants, for instance, improved land production because they provided the nitrogen to fertilize it. Beans, a nitrogen producer, were planted in association with maize, which needed nitrogen.

Maize

took the nitrogen from the beans. The associated cultivations allowed the Indigenous Peoples to have a varied diet almost throughout the whole year. Agriculture production was the highest with the crop rotation.

# Positive Achievements in Agriculture

- Intensive agriculture in the highlands was done up to 3,200 meters above sea level. The area between 3,200 and 4,200 meters were left free from cultivation but covered with cold weather plants.
- Walls and ditches were constructed to set borders for properties. They also served to manage water flow from rain and used as barriers for wind and erosion.
- Channels for water were constructed and water distribution was done from remote distances.
- Several trees were planted and kept as forest in the cordillera flanks and on land at 3,200 meters above sea level. The trees were planted around the house to provide shade, fruits and food for cattle.
- There was sufficient food for all the Indigenous Peoples. The exchange of products was active and the relations for reciprocity were maintained.
- Indigenous Peoples worked together for the collective well- being of man, Mother Earth, and all her beings.
- This holistic integration that existed between man and *Pachamama*, between man and agriculture, and between the land and its care was broken due to a new perspective and interests brought by the Spanish conquerors.

# Indigenous Peoples and Poverty

- What is the meaning of poverty?
- Were we poor or we became poor?
- Spanish conquest
- Republican times
- Contemporary socio-economic circumstances
- Migration
- Forced displacement
- Urban vs. rural
- Western development vs. Mother Earth and community well being

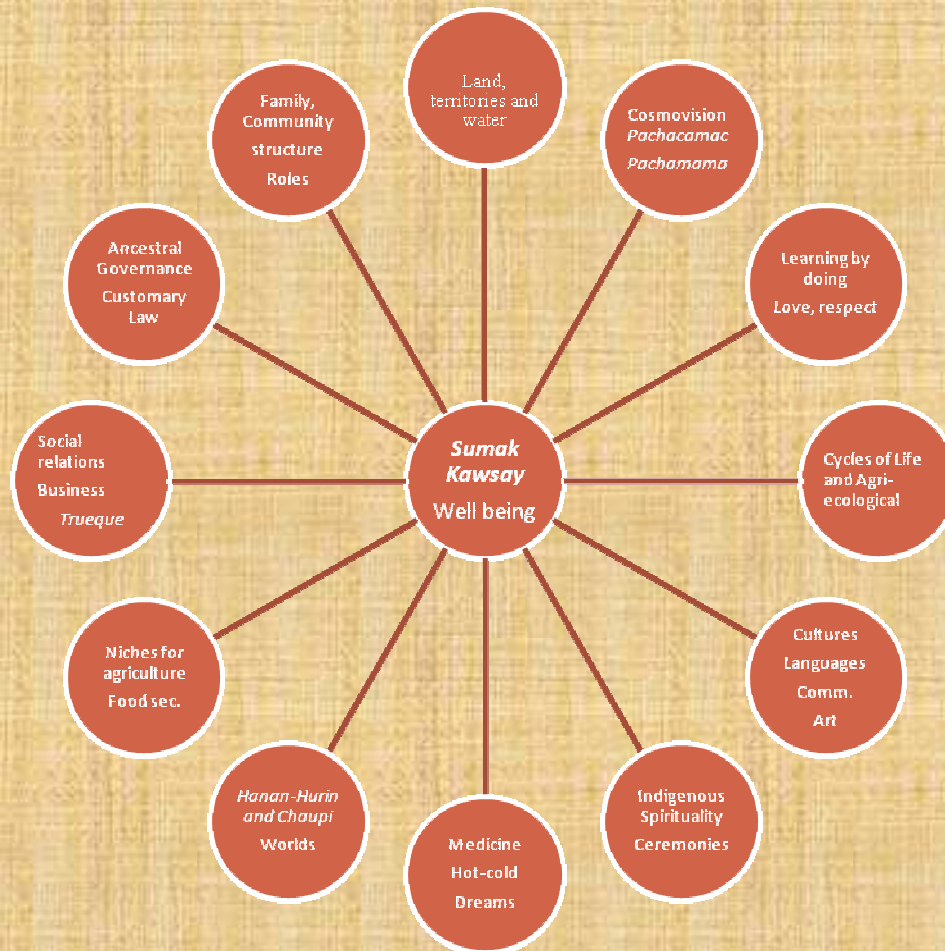
# Indigenous Peoples and Poverty

- New development:
- Dams, mining, extractive and lumber industries, mono plantations, etc.
- Man life and culture (languages, spirituality) destruction
- Mother Earth and ecosystems destruction
- Natural equilibrium and harmony destruction
- Put man in poverty and extreme poverty
- Food insecurity, hanger, lack of basic needs
- Individualism vs. collectivism

# Indigenous Peoples and Poverty Alleviation

- A sustainable development with identity to brake the vicious circle of poverty
- Recover the balance between man and Mother Earth
- Maintain the sacred circle flowing with harmony
- Practice the ancestral values and social relationships to get the well being of Mother Earth and man
- A new economic model of development more humanistic (man the center)
- Full and effective participation of Indigenous Peoples, including women
- Respect and use the ancestral knowledge and ways of being of Indigenous Peoples
- Ensure the basic needs and respect the human rights of Indigenous Peoples (PIC, self determination, sovereignty...)
- Combine the ancestral and modern knowledge in an appropriate manner
- Follow the natural laws of life
- Use the natural resources with care
- Listen the elders and the Mother Earth
- Practice a renovated interculturality
- Care for the whole humanity and the coming generations

# Kichwa *Sumak Kawsay*



# Thanks

- To: CBD Secretariat
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- Andes Chinchasuyo, Ecuador