Asia-Pacific Regional Workshop on the International Satoyama Initiative Concept

"The management features of Satoyama-like landscapes in I.R.Iran and their benefits for biodiversity conservation and human well-being"

> Hamid Farahani Rad Sustainable Social Development& Environment Consultant 1-3 October 2009 Penang, Malaysia

Overview

1- Traditional Agricultural system

2-Modern Agricultural system

3- Emerging Sustainable Agricultural system

<u>4- Characteristics of the successful management for</u> <u>Satoyama initiative, Iranian case</u>

Traditional Agricultural system in Iran

- Boneh, Harase, Sahra, ...(in desert, mountainous areas, plain, adjacent to rivers, wetlands and marine ecosystems)
- Human Adaptation to Nature- HAN(well-suited with environment)
- Ecological: wise use of resources in farms, gardens, rangelands, forests, marine,...
- Carrying capacity considerations (an ecological resilience)
- Almost no waste, (...,even burning dung and woods as an anti-insect product in the evening)

Traditional Agricultural system

- Irrigation: aqueduct (Ghanat), putting pitcher near the roots of the tree,..
- Social: fitness of social institutions to ecological processes, collective interest, participation even in the feudalistic order, ...
- Spatial distribution of activities followed environmental logic as well

"Modern" agricultural system

- Population growth, segmentation of farms
- Land reform (1963)
- No replacement for traditional management
- Rural –Urban migration
- Green Revolution(Introduction of Chemical fertilizer, Pesticide..)
- Quasi-industrial growth(Imbalanced growth)
- Negative impacts of fertilizer and pesticide on the health of ecosystems and humans

"Modern" agricultural system

- Simplification of agricultural diverse activities
- Biodiversity erosion (increasing vulnerability of fauna and flora, loss of species, genetic loss, <u>reduction of ecological</u> <u>services and goods</u>
- Led to :fading of environmentally adaptable agricultural system

Changes in Science and Politics (adapted from Iverson 1993b)

	Enlightenment Thought	Ecosystem Management
Nature	Domination, mastery	Harmony, synthesis, interrelated
Decision-making	Rigid, chain of command.	Adapted to context of problem, interrelated to other problems.
	Authoritarian: experts and professional opinions were the only ones that counted. Science provides "the answer."	Deliberated: all stakeholders' opinions count. Science provides information. Science alone cannot provide answers.
Institutions:	Hierarchical, top-down bureaucracies.	Adaptive, bottoms-up, open, cooperative
Management:	Centralized or decentralized; rigid, little focus on incentives or innovation.	Interrelated teams, adaptive, much focus on incentives and innovation
Participation	Influence, money	Discursive, deliberation
Ethics	Compartmentalized, interrelationships - minor	Holistic, interrelationships important

Emerging Sustainable Agriculture

- Integrated pest management/farm management
- Health of farmers and consumers(Healthy products)
- Sustainable development and agriculture(farming, forestry, aquaculture, husbandry, ...)
- Growing demand for SD agriculture, still no organized and comprehensive action inside government
- Problematic point: fitness of social institutions to ecological processes
- Small Grant Program as a conceptual framework (pattern) and relatively organized action

4- Attributes of a successful management for Satoyama initiative, Iranian case

4.1.Ecosystems' services and goods (From: MEA)

Mountain

- Food
- Fiber
- Fresh Water
- Erosion control
- Climate regulation
- Recreation and ecotourism
- Aesthetic Values
- Spiritual Values

Rivers and wetlands

- Fresh water
- Food
- Pollution control
- Flood regulation
- Sediment retention and transport
- Disease regulation
- Nutrient cycling
- Recreation and ecotourism
- Aesthetic Values

Forest & woodlands

- Food
- Timber
- Fresh water
- Fuel wood
- Flood regulation
- Disease regulation
- Carbon sequestration
- Local climate regulation
- Medicines
- Recreation
- Aesthetic values
- Spiritual values

Dry lands

- Food
- Fiber
- Fuel wood
- Local climate regulation
- Recreation and ecotourism
- Spiritual values
- Cultural heritage

Marine

- Food
- Climate regulation
- Nutrient cycling
- Recreation

Coastal

- Food
- Fiber
- Timber
- Fuel
- Climate regulation
- Waste processing
- Nutrient cycling
- Storm and wave protection
- Recreation and ecotourism
- Aesthetic values

Cultivated

- Food
- Fiber
- Fresh water
- Dyes
- Timber
- BioFuel
- Pest regulation
- Medicines
- Nutrient cycling
- Aesthetic values
- Cultural heritage

4.2. Attributes of Small Grant Program concept and Satoyama initiative

Attributes of the organized management

- Small Grant Program / Global Environmental Facility
- 7 years
- All stakeholders are Iranian
- Cost effectiveness (regarding both governmental and UN MSP/FSP)
- Promotion of multi stakeholders participation
- New methodology different (action research)from conventional procedure
- Many of the countries of the region involve in SGP

Iranian SGP Staff



Impacts

- Change of development attitude among stakeholders (NGOs' and GO's experts, academicians)
- Enabling local communities
 - Access to different layers of societies
 - Government increasing acceptance of SGP methodology
- Linkage of global concerns with wide local activities

Impacts

- Cost effectiveness (regarding both governmental and UN MSP/FSP)
- Support GEF MSP/FSP
- Growing cooperation and coordination of government with GEF/SGP
- Increasing credibility of GEF/SGP among governmental Ministries and offices
- Growing socio-economic impacts of the projects

Knowledge products and services in 7 years

- <u>Traditional knowledge;(combining with science)</u>
- Thesis;
- Books: About 60 in 7 years
- Booklets;
- Reports;
- Newsletters;
- Films;
- Workshops and FDGs(on capacitydevelopment)
- University course(Action research); It has started recently in Tehran university;
- Technical knowledge(handbook);
- Projects websites;



Peoples Participation for Plant Modiversity Protection in Central Zagros Region

تاستان 83

برنامه عمران سازمان ملل متحد(UNDP) تسهيلات محيطزيست جهاني (GEF) برنامه كمكهاي كوچك (SGP)



جمعیت حمایت از منابعطبیعی و محیطزیست (پیام سبز)



بسمه تعالى



Rehabilitation and conservation management of rangelands with Gavan Gazan plant









Identification and introduction of touristic potentials to develop agro-tourism in Khafr area (Zagros mountain)

با حمایت: دفتر برنامه عمران، صندوق کمکهای کوچک سازمان ملل متحد و محیط زیست جهانی







زمستان 1384 - تابستان 1386





Plan for the Land



Project: Sustainable development fund, Obato's rangeland sustainable (participatory) management In Kurdestan province 2008

پروژه:

مديريت تلفيقي درجنگل هاي خزري شمال با مشاركت مردم محلي

Incorporated management in the Caspian forests through local community participation

> IRA-G52-2003-032(IRA98G52)

Project Name: Pilot Project for Rehabilitation of Marine Resources of the Persian Gulf in Salakh Region (Qeshm Island)

Project No. IRA-G52-2002-005(IRA98G52)

Participation of local fishermen

The structures are built by the villagers of Salakh and they are in the form of pyramids made of reinforced concrete. The three surfaces of the pyramids are made separately and then carried onto their dhows where they are fitted together to make the pyramid structure.









Recommendations for promotion of Satoyama Initiative Concept

- Regarding climate change impacts on health of ecosystems and human(food and health), effective policies and actions should be taken seriously
- Using existing mechanisms (Sustainable development principle)
- SGP is a paradigm, mostly based on the experiences of developing countries
- Existing SGP/GEF program will be ended in few years but the conceptual framework and methodology can be sustained
- It is vital to sustain the nature of stewardship in this model

Recommendations for promotion of Satoyama Initiative Concept

- Formulation of strategy and action plan for capacity development along with project implementation on the rehabilitation of traditional agricultural knowledge in company with scientific findings, in the region
- Support and promotion of satoyama-like initiative based on the SGP model by CBD

From medium term SGP to long term Satoyama initiative

