

Participatory Planning Approach for Sustainability of The Desert Regions Forest Planting In the North East Of Iran, Sarayan

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Abstract

One of the most vulnerable and fragile areas in terms of ecological and socio-economic is desert. The uncontrolled exploitation of natural resources in the desert areas in most of developing countries is caused progress of desert areas and instability of rural settlements and destruction of vegetation. Participatory planning approach is essential to achieve stability in rural areas. Villagers will guarantee in participatory planning in partnership with sustainable use of renewable resources. In this paper, using Haloxylon forest planting method and modeling participatory planning in the Sarayan area is a successful experience of the desert regions sustainability in the East of Iran. This successful experience can be executed in other developing countries with the same ecological and socio-economic situation.

Keywords: participatory planning, desertification, sustainable development, Sarayan, Iran

Introduction

Wind erosion and desertification in arid and semi-arid regions is the main problem in the process of sustainable development in these areas. In this connection, in addition to combating and controlling wind erosion, the prevention of economic risks, the planting of forests is considered as source of production and supply of fodder and fuel for the desert dwellers. The sustainability of forest resources in dry areas requires efficient management practices that protect and develop these valuable resources, affecting their quality of living and promoting social and economic system as well as provide beneficiaries. Hence, management and exploitation of forests must comply with the principles of sustainable development.

The results of these studies show a pattern of rules and principles of operation of forest planting in desert areas using participatory planning approach.

Methods

The study area, Three castle Sarayan, is about 3.19177 hectare area located in the south of the Sarayan city between 58° 6' to 58° 28' longitude and 33° 37' to 33° 47' latitude the North East of Iran. Absolute minimum temperature is 28.4 °C and a maximum of about 39°C. The average relative humidity is 38%. Due to the high desert region is a range of factors. With less than 10 mm of rainfall during the summer months it considered dry climate. Average annual rainfall is 156 mm and evapotranspiration range of approximately 9 times the average annual rainfall.

Results

Sustainability in the region has been achieved through forest planting desert plants like Haloxylon. In this connection, to set the scenario for the planting of forest management capabilities in the region, economic, social, cultural and environmental constraints have been considered. The negotiation and consultation with local leaders and learning from experienced managers was conducted. The scenario of forest planting have been developed in 5 sections in the form of project management, reform; revival, protection and sustainable use and in two long-term and short-term projects are divided.

To institutionalize the participatory, different theories and strategies of rural development is organized by scholars. One of the practical methods is P.R.A. (Participatory Rural Appraisal).

This set of approaches, methods and behaviors are varied. Thus, local people through this method, promote their livelihoods and its ability to reflect the realities of life. On the other hand, the assessment of operations is done based

on enhancing planning, conservation of natural resources (forests). This methods is the tool of communicate a coherent, comprehensive and dynamic between executives and owners of local development, the desert dwellers at low levels. In this proposed structure, the rural population will help to local managers and experts thorough their local leader in order to assess the project design. And then, these projects are monitored and controlled by Executive Committee, or in other words, managers and experts in the area. And finally the acceptable projects from economic - technical point of view will be sent for provincial and regional managers. Provincial Committee of experts with expertise in the Steering Committee reviewed and assessed the project and guarantee its performance.

The following projects have been planned in order to institutionalize sustainable desert:

A. managerial projects

- Auditing pastures and identify beneficiaries concerned
- Equipping wells ruined and planting
- Creating a cooperative range of management and forest exploitation
- The establishment of agricultural cooperatives

B. Reforming projects

- Implementation of educational management for Haloxylon by cutting branches, dry up
- Implementation of the project and distribution of cut trees after the implementation of farm management plains HALOXYLON
- Implementation of projects in regions plantation cultivation areas without coverage

C. Rehabilitation projects

- precipitation with drilling project
- irrigation planted seedlings Haloxylon and Askembyl
- intercropping of black Haloxylon and triplex lentiviral Formmys

D. Supporting Projects operations include rivers - integrating land - pressurized irrigation and construction carminative live the principles of machines

- Operation of waste water for agricultural use seasonal and construction principles of soil and water carminative
- carminative and F. Protection projects
- Protection and management of the project
- Balance of livestock and rangeland projects
- Irrigated forage production project
- Implementation of pilot projects to convert traditional livestock
- Large industrial livestock projects
- Natural forest park project
- Agricultural construction of farms

Conclusion

In order to planning appropriate and comprehensive and sustainable desert areas, the planting of forests for sustainable rural settlements through the planning is involved. The participatory approach villagers involved in thinking and planning to project implementation and monitoring and evaluation. This project can be executed in other developing countries with arid and semiarid areas and the same social and ecological conditions of Iran.

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