A CASE STUDY:

Participatory natural resources mapping: A case study of Bhitara Panchayat in Banni grassland, Kachchh (Gujarat)

J.P. SHAH, A.M. PATEL AND P.N. JOSHI

Asian Journal of Environmental Science, (December, 2010) Vol. 5 No. 2: 192-198

SUMMARY

The information of this paper is based on nine months field survey at Bhitara Panchayat villages i.e. Bhitara Mota, Bhitara Nana and Udhma. Organization of series of meetings were held at various levels with local stakeholders and data were collected on natural resources like existing natural resources and their distribution, grassland status with salinity classes, participatory restoration methods and socio-economic status of each family. Based on participatory exercise (or participatory rural appraisal) with various groups, The conclusion was drawn to recommend site specific strategies for conservation and sustainable utilization of natural resources. Overall findings revealed that Jat muslims is the most dominant community in selected Panchayat villages with livestock rearing activities as the main occupation. In addition, local inhabitants were using charcoal as main source of energy to fulfill their daily requirement as well as had also adopted Prosopis-based charcoal making as business to earn surplus money for their livelihood. Natural habitats have been lost through invasion of *Prosopis juliflora* (locally called Ganda Bavar) and had resulted in significant loss of wetland area, degradation of remaining natural resources and a consequent decrease in the diversity of native land use type and species. People admitted that they did not have adequate knowledge of government developmental schemes and programmes so they were not able to avail the full benefits of such programmes. Participatory natural resources mapping supports the sustainable management of natural resources in an ecologically sound and socially sensitive manner. However, the resource use potential of local people has not been planned scientifically for sustainable development of the Banni region. The present study was planned and carried-out in one Panchayat of Banni region to develop an innovative management practice, which supports sustainable use and multiple natural resources benefits.

See end of the article for authors' affiliations

Correspondence to:

J.P. SHAH

Gujarat Institute of Desert Ecology (GUIDE), Bhuj-KACHCHH (GUJARAT) INDIA jhsphd@gmail.com

Shah, J.P., Patel, A.M. and Joshi, P.N. (2010). Participatory natural resources mapping: A case study of Bhitara Panchayat in Banni grassland, Kachchh (Gujarat). *Asian J. Environ. Sci.*, **5**(2): 192-198.

Key words:

Natural Resource, Pastoralist, Livelihood, Participatory exercise, Banni, Kachchh

Received: June, 2010 Accepted: September, 2010

The Banni has an area of 2,617 km² and has 48 villages, which are regulated by 19 Panchayats (local governor's body) under the state administration. Natural resources in Banni areas and particular in selected Panchyat (Bhitara) are multidimensional with crossboundary resources within adjoining villages. These resources provide a range of interrelated environmental functions and socio-economic benefits, which support a variety of livelihood strategies for different stakeholders of the local community. In addition, the socio-economic survey carried-out by Joshi et al. (2009) showed that the Banni communities are highly dependent on the natural grassland for various purposes. In particular, nine woody species were useful for construction of traditional house called Bhunga, 4 for medicine and 22 for

livestock fodder. Today, Prosopis juliflora has become a wide spread species in many parts of Kachchh district especially in the Banni area. Further, Prosopis spread may not be severe when whole Kachchh is considered, but the rate of increase of spread in Banni area was very high. Further, in Kachchh, pressure on existing grasslands are high because an Adult Cattle Unit (ACU) requires 3-4 ha good condition grasslands. However, the available grazing lands in Kachchh district, which includes all categories viz., good, fair, medium and poor condition class is 0.6 ha per ACU suggesting tremendous pressure on grazing lands. The increase in grazing pressure implies a reduction in the production of palatable species and increase the proportion of unpalatable as well as woody species