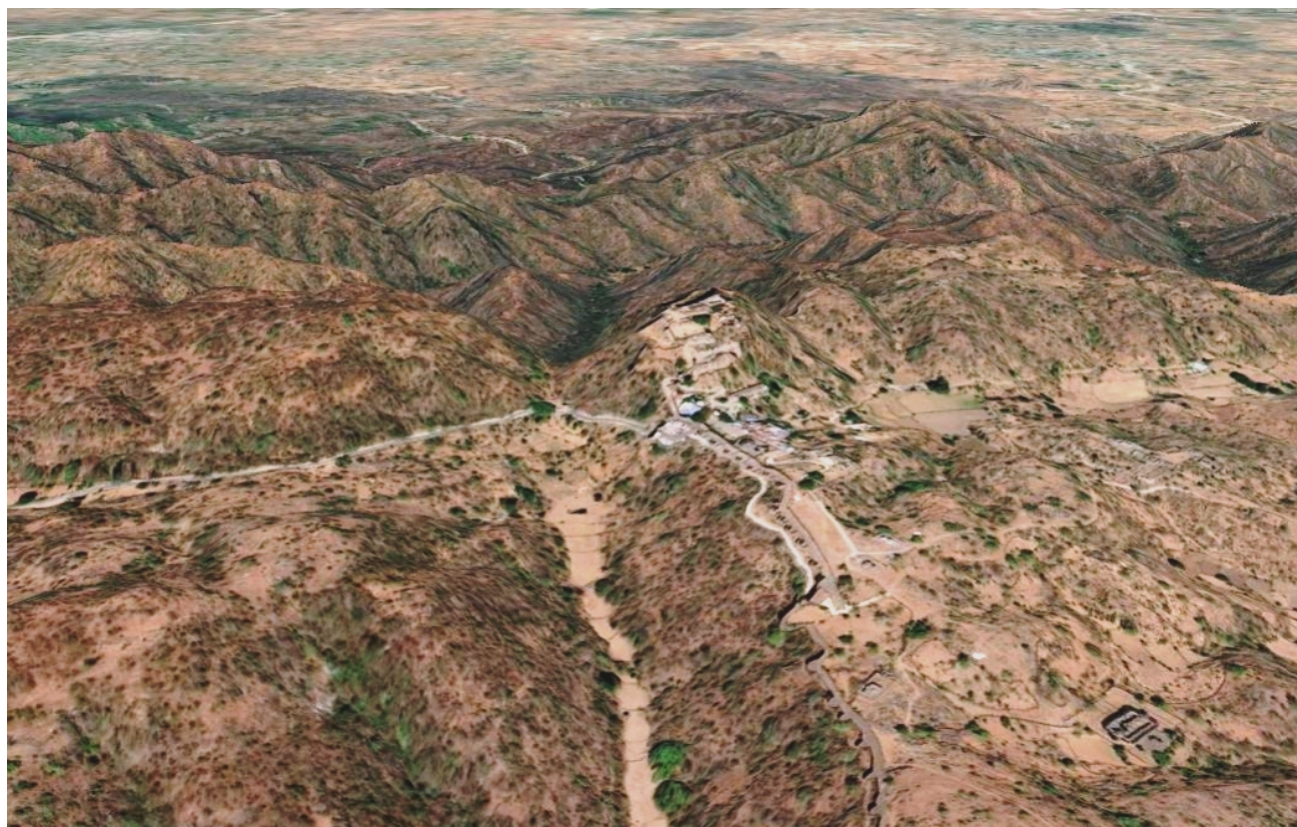


# **The Relevance of the Ecosystems Approach for Sustainable Livelihoods**

**A Plea for Community Ecosystem Evaluation methods: Case studies from Rajasthan, Gujarat, Maharashtra and elsewhere**



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## **BACKGROUND:**

While India only has 2.4% of the world's land area, it is home to 8.1% of the world's Biodiversity and a whopping 33% of the endemic flowering plants are found in India. The reason for this is not hard to find as the climate ranges from close to the Equatorial at the southern tip and Temperate in the Himalayas with a rapidly changing marine coastline due to the proximity of the Sahyadri Mountain ranges in the Konkan region of the country. However, 10% of the wild flora and 20% of its mammals are threatened. The development plans have consistently ignored the relevance of the livelihoods and culture based on these variations and current plans for Industrialization, Infrastructure development, coastline development, harvesting of coal, hydro power and renewable energy ignores the significance of the historical traditional knowledge gained over centuries.

## **HYPOTHESIS:**

When applying community ecosystems approach to valuation of the Natural Resources, Institute for Ecology and Livelihood Action (IELA) and Habitat Ecological Trust have observed that due to destruction of the traditional value placed by communities on the ecosystem and its services, there is destruction of the Habitat and consequent loss of biodiversity and ecosystem services from the Habitat. Some examples of the same are as follows

- a. Increasing cost of agricultural production on one hand and large scale burning of rice straw in Punjab, Haryana and Uttar Pradesh impacting Delhi and other regions as well. On the other hand input-output driven commercial agriculture has resulted in changes in the fertility pattern and cancer on a large scale. The 'cancer train' from Bhatinda (Punjab) to Bikaner (Rajasthan) is a case in point.
- b. Destruction of forests, grasslands, wetlands and other ecosystems as can be seen in Rajasthan and elsewhere.
- c. Ignoring the relevance of mountain ecosystems and its role in river ecology as can be seen in the Himalaya, Aravali, Satpuda and Western Ghats mountain regions.
- d. In relation to tourism, our experience of Udaipur and Goa indicate that a much larger population is being supported, due to the larger transient populations being present for large parts of the year. Both regions have to depend heavily on imported food and other natural resources as well, while simultaneously exporting their own. How these processes are impacting the livelihood, culture and ecology of these regions are being studied.

Considering the potential of the Biodiversity Act 2002, The Forest Rights Act 2006, National Employment Guarantee Act 2005, Institute for Ecology and Livelihood Action (IELA) and Habitat Ecological Trust have been working closely with tribals, pastoralists, fishers, small farmers and wage labour originating from the village on the relevance of the ecosystems approach for sustainable Development across the country. The approach has taken different shapes. In some of the wild life sanctuaries of Rajasthan, the Right to Information Act has been used to ensure that the human rights of forest dwelling communities are highlighted and protected. In Jharkhand in collaboration with Jharkhand Mazdoor Kisan Union, legal

protection is being provided to local communities against misuse of the Forest Conservation Act 1927, in violation of community rights under FRA. In Gujarat in collaboration with Adivasi Jan Utthan Trust an attempt has been made to activate traditional knowledge and culture through the formation of a local Federation named 'Fenai Mata Rewakhand Jaiv Shristi Mandal'. This approach has been replicated in different forms elsewhere in nearby Madhya Pradesh and Maharashtra, North Gujarat, Rajasthan and Uttarakhand, The two approaches namely struggle for human rights of Forest dwellers and revival of the traditional knowledge and culture have helped in giving shape to Adivasi Bharat Mahasabha (Unity Forum) having member organisations in over fifteen States of the country.

The COVID pandemic put this approach to the test and helped sharpen the work of decentralised governance using principles of relative autonomy on one hand and collective action on the other. Following the pandemic, with the help of Society for Promotion of Wastelands Development and Prayatana Samiti, IELA organised a workshop at Udaipur on the relevance of the Ecosystems approach for Sustainable Governance - Case Study of Mahi River Basin, Aravalis and other case studies.

[http://ielaind.org/wp-content/uploads/2017/05/Workshop-Report\\_Final\\_SPWD\\_IELA\\_PS.pdf](http://ielaind.org/wp-content/uploads/2017/05/Workshop-Report_Final_SPWD_IELA_PS.pdf)

<http://ielaind.org/wp-content/uploads/2017/05/Summary-Way-forward.pdf>

The two urls above give the proceeding, summary and way forward. In short they underline how the current social safety nets in place can be creatively used to find answers to the questions we seek.

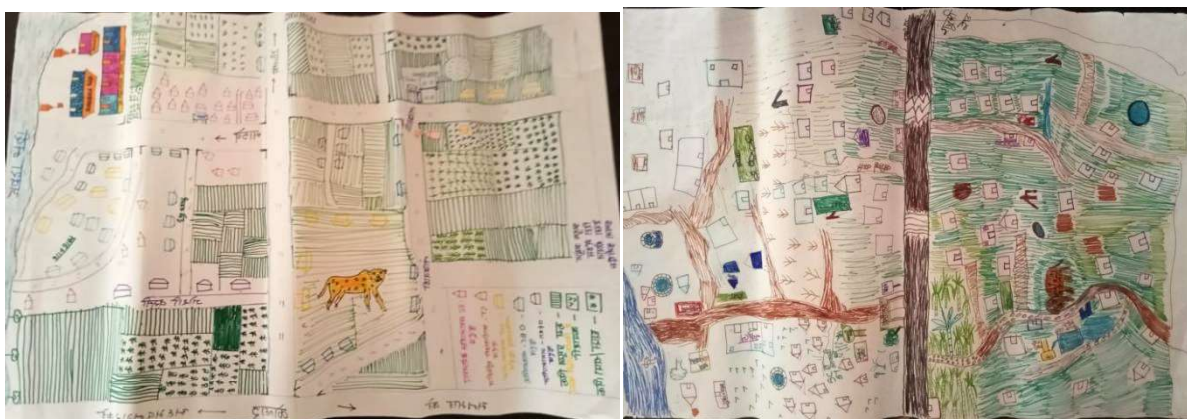
### **PRELIMINARY TESTING:**

These two workshops have been followed by a dialogue with communities in Rajasthan and across the country as well. Taking advantage of COP 27 held at Egypt and exercise ADvocal done by children with the help of PRATYeK, an exercise was conducted with children in Chhota Udepur to see how much they understood and engaged with their local ecosystem. <http://ielaind.org/wp-content/uploads/2017/05/Report-of-UPR-pocess-in-Chhota-Udepur-for-COP-27-in-Egypt.pdf>

This exercise done on a trial basis made it clear that with the help of International frameworks for Child Rights, Climate Change and protection of the world's biodiversity it was possible to develop modules that could be used in different ecosystems to progressively educate children about the relationship between their rights and the ecosystems in which they live. Discussions are going on as to how the workshop on the relevance of ecosystems in Rajasthan can help to educate children of Rajasthan in a manner similar to the process in Chhota Udepur.

Separately a case is being made as to how this understanding can be used for ecosystem valuation using Millennium Assessment tools for multi layering, establishment of key drivers of change. This has become important due to the relevance of women to give shape to the concern for nutrition, health and overall well being and sustainable livelihoods. This approach is being systematically tested in collaboration with Ashankur in Srirampur Taluka of Ahmednagar District.





Village map of Mandve: Two Perspectives on the land use and ecology and relevance for livelihoods

The perspective of the first map dominantly relates to the current patriarchal dominated and market oriented society. The second one relates more to the co-relation between the natural resources, ecological issues in the region and its relation to the economic status of different communities. The common element in both maps is the following sharp questions

- a. The focus on sugarcane, cotton and grass to the exclusion of food-grains which are mostly being purchased from the market.
- b. The issue of wildlife animal conflict, with leopards being found in the sugarcane fields.
- c. Issues related to health due to poor water quality and possible impacts related to the nature of nutrition available to the people. This aspect however needs further investigation.

The training following the issue emerging from the preliminary Eco-assessment explained how to examine the biodiversity and understand its relevance for ecology, livelihoods and sustainable development. Further details will be available in the report of the training programme. As part of the training programme, a participatory approach to valuation of the Eco-systems is in the process of being developed. How the current valuation methods of local communities have resulted in mono-cropping, loss of biodiversity, issues related to human, animal and soil health also became clear.

### **ACTION PLAN:**

An action plan in the States of Gujarat, Rajasthan and Maharashtra is slowly emerging. In Gujarat and Maharashtra. In Gujarat a plan is being made as to how children can be involved in ecosystems assessments starting with their own village relating this to the larger issues in Fenai Mata Revkhand region, is being worked out in collaboration with Adivasi Jan Utthan Trust. In Rajasthan, how the ecosystems perspective that emerged in the September workshop can be taken to the children of the State is being discussed with different organisations working with children in the State. In Ashankur, the module for ecosystem valuation being jointly worked out in the training will be field tested in Mandve over the next three months. The process emerging with women and children in Mandve will be extended to other villages as well.

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