

## **I.A.1 Benchmarking Patterns of Sustainability: Reversing the Downward Spiral of Resources**

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Development Alternatives research program on structural and institutional transformation processes towards Sustainable Development was funded by the Swiss National Science foundation. The first phase of this research collaboration project aimed to contribute to a better understanding of the implications of sustainable development on consumption patterns, energy demand and carbon emissions. The respective changes in the economic structures from macro-level down to the micro level have been turned as structural transformation. “Which framework conditions set society could contribute significantly to accelerating the mitigation of green house gas emissions through development and dissemination of low input technologies?” This is one of the key questions investigated under the macro-level research module of the project in its second phase.

Bundelkhand region in Central India is a microcosm of the national rural economy. The whole region comprises of nine districts spanning the states of Uttar Pradesh and Madhya Pradesh. In this region a sample representative cluster was selected under the structural transformation project phase 3. Over a period of time the general quality of life resource conditions and economic opportunities, have rapidly deteriorated. The productivity of land and livelihoods has been irretrievably lost. Land degradation resulting in a downward spiralling of resource conditions and opportunities for sustainable livelihoods.

The analysis suggests that micro level initiatives to rebuilt economic assets having a direct impact on livelihoods are required. The sustainability of such interventions requires the understanding of the resource base, the energy use patterns and technology as the medium of transformation. The relationships strongly influence shelter patterns and diversity of livelihood and shelter trends. An effort has been made to do a benchmarking of segments within the region to assess evidence of sustainable practices within the region. The benchmarking exercise has resulted in the methodology to assess the impact of any intervention and to define where the interventions permit diversity in the micro-region. Income generating livelihoods, shelter availability and local food-security are the essential factors of concern.

The study, to be precise, seeks to develop a methodology for characterizing indicators of sustainability for microregion in a developing country and to connect it internationally. It does so in the context of a resource scarce cluster of villages which are being jacked up economically with local participation and without disrupting the naturally inherent sustainability of the subsistence economies.