Climate Change Resilience and Building Sustainable Communities in Bundelkhand: Power of Information and Knowledge

Bundelkhand comprises seven districts of Uttar Pradesh and seven districts of Madhya Pradesh. The region is vulnerable and backward, relative to other regions in the country. According to the Human Development Report (NITI Aayog 2012), the Bundelkhand region is characterized as having poor human development. Of the 14 districts in Bundelkhand, 10 districts come under the 250 most backward districts of India. The per capita income of the region is almost half as compared to India’s national average.

Furthermore, various natural and human-made factors, including the change in climatic pattern, unsustainable use of natural resources along with several other factors, have turned Bundelkhand slowly into a desertified region. It is currently a semi-arid and mainly rainfed region, which has undulating topography and shallow soils - red and black being saline and porous with only an average rainfall of 750 mm, and is suffering from recurrent droughts (Development Alternatives, 2020). It is highly vulnerable to spatial and temporal climate variability of rainfall and extreme temperatures exhibiting intense solar radiation in the daytime. The rains are erratic and often come in a few heavy storms of short duration resulting in high run-off, instead of replenishing the groundwater.

The local communities in Bundelkhand are primarily engaged in subsistence farming, rearing livestock, poultry farming, and running micro and small enterprises. The local communities mainly depend on groundwater for irrigation and drinking water. The climatic impact in Bundelkhand and the high degree of dependence of the local economy and communities on natural resources including land and water have made the local population highly vulnerable. It is further exacerbated by various gaps in governance, information, and knowledge. For example, farmer suicides due to indebtedness and starvation deaths are serious concerns in the region as there is lack of irrigation facilities to support the agricultural productivity. Some of the factors resulting in indebtedness of the farming community include lack of stable incomes due to crop loss, unsustainable farming and natural resource management practices, lack of access to financial assistance after crop loss, unsustainable financial practices, lack of market linkage and access to minimum support price (MSP), among others. Additionally, seasonal migration for work, extreme forms of malnourishment, low levels of literacy,

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4 Kumar, B. 2022. Bundelkhand farm deaths belie Yogi govt claims on no suicides due to agri distress. Details available at https://www.newslaundry.com/2022/02/26/bundelkhand-farm-deaths-belie-yogi-govt-claims-on-no-suicides-due-to-agri-distress, last accessed on August 31, 2022
small and/or marginal land holdings, insecurity of stable income, limited access to technologies, lack of industrial development and a decent livelihood are some of the key developmental challenges faced by the region. All these challenges are interconnected and largely influenced by the climate vulnerability of the region, inadequate access to basic natural, economic, and financial resources, and lack of access to information on potential solutions and knowledge to deal with problems. As a result, the region has been caught in a ‘low-growth trajectory’ within a ‘low-technology’ and ‘low-surplus’ cycle.5,6

Development Alternatives Initiatives towards Resilient Bundelkhand

To address the increasing levels of land degradation and economic backwardness in Bundelkhand, we initiated several interventions in the region. The interventions revolve around land and water management, afforestation, clean technology-based livelihood options, capacity building of local institutions, enabling communities to fulfil basic needs of drinking water, sanitation, shelter, and energy, supported through enterprise development, and skill development for job creation.7 Our model in this region is based on the principles of initiating community-led action, creating a sense of community ownership of services, and sustainability.

One of our significant interventions in the region is our community radio, known as Radio Bundelkhand. The platform is used to disseminate vital information and knowledge on climate change issues and solutions by acting as a bridge between the communities, local government, and technical experts. The platform has become a catalyst for climate change adaptation in the region, transforming actions and decisions at the grassroots towards a more climate-resilient and sustainable society.

We are also implementing capacity building activities at the grassroots, creating knowledge exchange platforms to strengthen local entrepreneurship, and empowering women entrepreneurs and farming communities. In the process of building resilience against adverse events, expanding livelihood opportunities, and sustaining human well-being in the region, we believe that there should not be one-way communication, but an exchange between multiple stakeholders, thereby creating a multi-dialogue. Hence, our key interventions around the same would be the prime focus in the TARAgram Yatra 2022 in Bundelkhand.

The key areas where the Yatris will work collaboratively to absorb and contribute are as follows:

- Exploring inclusive, participatory, and scalable models and on-ground solutions to disseminate information and develop knowledge for creating climate-resilient, green, and inclusive economy

7 Development Alternatives. 2019. ShubhKal ...building resilience for a brighter tomorrow. New Delhi: Development Alternatives
• Identifying strategies to promote and strengthen actions towards models run by the community and for the community, emphasising on the role of informal local networks

• Deliberating on factors of successes and failures, and co-creating new knowledge – generating ideas for social experimentation

• Discussing – what worked and what did not? – based on the on-ground information and knowledge development initiatives on climate change resilience and greening of enterprises – DA and beyond