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Policy Brief

'REMNANTS OF THE LOST RIVER': DOCUMENTING THE CULTURAL LANDSCAPE AND ECOLOGICAL HERITAGE OF RIVER SARASWATI IN SIDDHPUR

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POLICY BRIEF

Towards a New Life

The case study establishes and justifies the need for and potential of the revival of the Saraswati in the town of Siddhpur. Although the future of Siddhpur and its possible revitalisation requires detailed study, what remains obvious and avoidable are the issues that must be addressed in any case. The major issues highlighted in the case study act as a barrier to the town's further development and functioning. As a result, the policy brief examines the issues at hand as well as the policy initiatives taken or required to address these challenges. It also highlights and points out certain gaps and missing links that have yet to be noticed and investigated by authorities, before any possible steps in the direction of river revival or revitalisation can be taken.

KEY ANALYSIS

1 - Awareness and Initiatives

The town's river is almost a lost cause. The lack of initiatives and local participation has buried the issues even further. People in the town have a basic understanding of the river ecosystem and its cultural significance or history, and no efforts have been made to raise awareness or educate people about it. Until now, there has been no recognition of the river as an ecological or cultural heritage of the town, and no policy frameworks for its conservation have been developed. A few activists are now raising their voices in support of the concerns, but with no help from the general public or non-governmental organisations.

Non-governmental Organisations (NGOs) and civil society organisations are widely acknowledged as important organisational means for ensuring security. Public participation and involvement of such organisations can help engage and unite the people of the town for a common cause. Ideas and references could be drawn from cases of river awareness campaigns conducted by organisations in Delhi, Maharashtra, and Kerala.

2 - Dealing with pollutions, trash disposal and encroachments

Despite repeated warnings from the Supreme Court, local authorities have failed to limit pollution and industrial dumping in rivers. Pollution is also caused by a lack of public sanitation and waste management at events such as the Kartik Mela and major public events held near the river bed. People and temples dump waste into the river bed due to a lack of checks and regulations for religious activities.

Slum encroachment has also created unsanitary conditions for the river bed. The town lacks waste management infrastructure such as sewage treatment plants, garbage dumping yards, and solid waste management treatment plants, making waste management difficult. Lack of



agricultural regulations has also resulted in people misusing the river basin for agricultural purposes and polluting the riverbed with chemical pesticides.

3 - The natural ways of River Rejuvenation and the barriers towards it.

One of the primary reasons for the river basin's inability to hold water for an extended period of time is its small catchment area and shallow water body depth. Because rainfall in the region is relatively low, natural methods of water conservation and ensuring groundwater recharge can help conserve water for longer periods of time. Artificial methods of diverting water from other rivers, such as those used in Siddhpur, are not sustainable or long-term. Natural recharge systems must be developed while also ensuring soil conservation and the development of natural vegetation.

River ecology conservation is an environmental approach to river bed development that includes increasing water recharge potentials, reducing river pollution, conserving natural green areas around rivers, and developing new green areas with an emphasis on improving the quality of the built environment. It is a holistic conservation plan that could be implemented to ensure the ecological preservation of rivers and their biodiversities.

4 - The Cultural and Recreational Tangents

The restoration of the river ecosystem will not only benefit the river's ecological utility, but will also contribute to the beautification of the riverfront. Maintaining water quality is critical for improving the riverfront's visual appeal. This will assist the river in hosting macro and micro habitats for a diverse range of biodiversity. As a result, there is enormous potential for research and scientific activities along the river banks, such as bird-watching, insect trails, and herpetology studies. The preservation of ghats, historical monuments, and gardens is critical, and their design should be environmentally friendly.

In a context like Siddhpur, the religious and cultural Tangent plays an important role in shaping the river's image. Such a factor must also be included in order to hold public sentiments and incorporate local community beliefs and lifestyles. Elements and principles of urban design must also be considered in order to create an inclusive urban space that aids in placemaking.

5 - Upcoming Development Approach

Siddhpur, as a developing town, will experience rapid development in the near future. The town's current master plan does not adequately address the river and its future.

The Zonal Development Plan for the River Flowing Through the City is prepared to address objectives such as water supply augmentation, pollution abatement, land utilisation/management, eco-friendly development, and so on, and it takes into account the development going on around the river banks..



River zonal development plans ensure that areas near the river basin are protected from encroachment and unwanted activities, and that governing bodies are involved from the start. These river zonal developments are guided by regulations and frameworks established ahead of time to regulate development and maintain river banks.

Adoption of approaches such as the Urban River Management Plan works at both the city and river levels to improve river health by addressing issues in urban areas. The river cities must adopt an Urban River Management Plan (URMP) to manage the rivers within their reach. The URMP framework is built on three pillars of sustainable development: the environmental, the economic, and the social. As a result, the URMP activities are expected to be environmentally responsible, economically beneficial, and socially inclusive. The URMP focuses on the river-city relationship in a broader sense, which can aid in long-term river management.

RECOMMENDATIONS AND SUGGESTIONS

- Public awareness campaigns and initiatives to increase river literacy, encourage mass
 participation, and build pressure on local governments that have successfully avoided
 dealing with the issues. Under the capable guidance of certain non-profit organisations,
 mass participation will also highlight the issue in print and digital media to bring in higher
 authorities to assist local governing bodies in framing effective policy frameworks.
- Acknowledgement of the River Saraswati as part of the town's environmental and cultural heritage through policy frameworks and interactive audio-visual workshops, public campaigns, and education drives to ensure general public education and awareness of town and state.
- Encouraging public participation through initiatives such as awareness campaigns, cleanliness drives, heritage walks, and volunteer sessions at local schools and educational institutions.
- Development of waste management and sanitation infrastructure for the town, as well as regulation of proper sanitation practices in riverbed areas to ensure pollution control.
- Development of regulations prohibiting industries and religious institutions from dumping any type of waste onto or near the river bed. Incentives and CSR initiatives are being used to engage industries in the river conservation drive. Farmers will be encouraged to use organic farming practices, which will reduce surface runoff of chemicals and effluents used in farming into the riverbed.
- Policy and infrastructure development for wastewater recycling and reuse to alleviate the burden on groundwater and river basins.
- Inclusion of policies and plans such as river ecology conservation plans, urban river management plans, river zonal development plans, and so on to ensure the river's long-term development and management after rejuvenation.



• Highlight the need for river centric master planning, and urban river management and planning for upcoming planning and development initiatives taken for the town.

STRATEGIES: DESIGN AND LANDSCAPE BASED

- Development of natural and man-made catchment areas at the river course level, as part of a larger catchment area strategy, to ensure rainwater harvesting and ground water recharge throughout the river, thus maintaining flow.
- Approaches to afforestation and soil conservation to be used in landscaping and river basin and embankment development.
- Emphasis on natural solutions for riverfront development.
- Watershed management, the construction of small check-dams along the catchment area, scientific assessment of the quantum of environmental flow in each river stretch, the rejuvenation of lakes and wetlands along the river basin, and other landscape strategies widely used for river revivals and rejuvenation can be adopted as appropriate.
- Inclusive design approach for the creation of urban recreational spaces. Study of cultural landscapes and sensitization towards the image of the river and city must also be incorporated into the design and planning of urban infrastructure of the river.
- Concept of placemaking can be used to design urban spaces in city and river banks.

CONCLUSIVE REMARK

The river's revitalization will have a profound cultural and ecological impact and restore the town's former splendour. It will not only improve the lives of the people in the town, but also lead to the town's social and economic development. This revival can result in the town's sustainable revitalization by preserving its cultural identity, restoring its ecology, and maximising its tourism potential.

BIBLIOGRAPHY

- Ministry of housing and urban affairs. (2021). River centric urban planning guidelines. https://www. mohua.gov.in/upload/uploadfiles/files/RCUP%20Guidelines.pdf
- Patel Vraj M, J. G. (2021). Restoration of Indian River. INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT).
- Subramani, K. (2017). Copying nature is the only way to revive our rivers. Down to Earth. https://www.downtoearth.org.in/blog/water/copying-nature-is-the-only-way-to-revive-ourrivers-57442
- Urban River management Plan. (2020). A strategic framework for managing urban rivers stretches in Ganga river basin. National institute of urban affairs.

