

Collaboration with *The Nature Conservancy (TNC)*

Project Name/Title: Identifying riparian restoration opportunities along river Narmada in Harda and Hoshangabad Districts in view of climate change

Name of the Implementing Institution	<p>Additional Information on the contact detail:</p> <p>Project in-charge: Commissioner, Narmadapuram Division Coordinator, SKMCCC, EPCO</p> <p>Start and close date: 1 year, November 2017 – October 2018</p>
Name of the Executing Institution	<p>Additional Information on the contact detail:</p> <p>Project in-charge: Mr. Dhaval Negandhi, TNC</p> <p>Start and close date: 1 year, November 2017 – October 2018</p>
Details of Project	<ul style="list-style-type: none">● Project partners -<ol style="list-style-type: none">1. Office of the Divisional Commissioner, Namadapuram Division, Government of Madhya Pradesh● Project objectives-<p>Demonstrate the value of implementing Development by Design (DbD) to Madhya Pradesh government in achieving their development and environmental objectives by</p><ul style="list-style-type: none">- executing a return on investment (ROI) analysis for riparian restoration efforts along 200-km of river Narmada- partnering with the district government to ensure that the ROI analysis is informing their restoration efforts- piloting high ROI conservation interventions● Project baseline-<p>Narmada is the largest west flowing river in India and unlike other major Indian rivers, is largely rainfed. The river basin is home to a wide variety of animal, bird and plant species, many of which are critically endangered. The river is also the main source of water for drinking, irrigation and hydropower in central India and holds cultural, spiritual and economic significance for the people.</p><p>Degradation of its catchment and riparian zones has resulted in reduced water quality from Class A to Class B making it unfit for drinking without conventional treatment. This has affected the diversity and population of native fish found in the river. Only 42 of the 77 fish species that existed four decades ago can now be found in the river. More than 200 of</p>

	<p>the 500 plant species that once thrived along the river are either not found or are endangered. While protected areas exist on either side of the river, little connectivity, if at all, exists for movement of wildlife. Reduced water quality is also impacting human health and is increasing costs for water utilities downstream.</p> <p>● Project expected outputs/deliverables-</p> <ul style="list-style-type: none"> - Scientific ROI analysis along 200-km of river Narmada to map areas for implementing conservation interventions to meet government objectives - An inventory of native vegetation found along riparian areas of Narmada. - A pilot riparian restoration project implemented by TNC and EPCO - A plan highlighting opportunities for the government to leverage public and private funding to maximize restoration impact
<p>Project Relevance</p>	<p>The quality and quantity of water in rivers across India has declined dramatically in the past several decades but there is now an emerging consciousness to reverse this trend. The Prime Minister of India has launched a program to clean River Ganga and recently, the Government of Madhya Pradesh has initiated a program named Narmada Seva Mission to revive the river Narmada. The later has emerged as a movement which has received unprecedented support from all sections of the society and is transitioning from plan to action on ground. This is thus an opportune time to influence the way conservation of Narmada river is carried out.</p>
<p>Project Summary / Abstract</p>	<p>The Nature Conservancy and EPCO has received support from government partners, including the government administration in two districts through which the river flows to support the movement for reviving riparian areas along river Narmada. At the request of our partners, we are performing a Return on Investment analysis to identify conservation activities that will effectively meet the government's objectives (on biodiversity, hydrology and livelihoods). We will develop an inventory of native riparian vegetation to aid public and private efforts to conserve the river health. We will execute a pilot project to demonstrate the effectiveness of riparian restoration and also support the district governments in leveraging public and private funding to maximize restoration impact.</p>
<p>Project methodology, work plan</p>	<p>The methodology of the project included following:-</p> <ol style="list-style-type: none"> 1) Consultations with important stakeholders, including workshops and key informant interviews 2) Survey to identify natural vegetation along riparian areas of Narmada 3) Compiling GIS datasets and performing Return on Investment analysis in Resource Investment Optimization System (RIOS) software to prepare map of suitable conservation interventions. 4) Prepare proposal for seeking funding from public and private sources
<p>Project Implementation results</p>	<p>Development of vegetation list and map of suitable conservation interventions will help in:-</p> <ol style="list-style-type: none"> 1) Identification and implementation of cost-effective conservation strategies to improve health of river Narmada 2) Build adaptive capacity and resilience of socioecological systems

Project benefits	<ul style="list-style-type: none"> ● Improved river health of Narmada ● Improved benefits for wildlife and freshwater biodiversity ● Benefits to stakeholders – augmentation of livelihoods, enhanced adaptive capacity to climate change
Project long term climate benefits	Improving river health is fundamental to building adaptive capacity and resilience of socioecological systems to increasing impacts of climate change.
Project Sustainability	The project findings will be made public and which TNC and EPCO will continue supporting the project based on funding availability, we will make efforts to ensure that the findings continue to inform conservation interventions across public and private institutions.