

NURTURING INCOME THROUGH THE DEVELOPMENT OF HYACINTH-BASED INITIATIVES (NIDHI)

The challenge

Water hyacinth is an invasive aquatic plant that has rapidly spread across lakes, rivers and canals in more than 15 Indian states. Forming dense floating mats, it blocks waterways, cuts off light and oxygen, and disrupts fisheries, irrigation and navigation. Driven by land-use change, pollution and climate variability, its spread undermines wetland health, reduces biodiversity and contributes to habitat loss for native species.

For communities living around these wetlands, the weed is both an ecological and socio-economic burden. Women, who are often responsible for water collection, small-scale fishing and household care, are particularly affected when access to clean water and fish resources is obstructed. At the same time, most local initiatives that attempt to utilise water hyacinth face major barriers: removal is labour-intensive and seasonal, technical know-how is limited, and market access for hyacinth-based products remains inconsistent.

As a result, large volumes of biomass remain under-used, while rural women and youth continue to have few viable livelihood options. There is a clear need for an approach that simultaneously reduces ecological pressure from water hyacinth, creates dignified income opportunities, and links community-based production with stable, sustainable value chains.

Project name	Nurturing income through the development of hyacinth-based initiatives (NIDHI)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project regions	Jharkhand and Assam
In cooperation with	CEDAR Retail Private Limited
Duration	2025 - 2027 November

Objective

Establish a scalable, socially responsible business model that sources water hyacinth from wetlands, strengthens women's entrepreneurship, and supplies sustainable natural fibres to national and international markets.



Cut stems are sorted and sun-dried by women's groups, turning an invasive plant into natural-fibre raw material.



Community-led removal of water hyacinth from clogged waterways.

Mr Kirtman Awasthi
Project manager
kirtiman.awasthi@giz.de

Approach

The project is implemented as a develoPPP (Public-Private Partnership) between GIZ and Cedar Retail (ESAF Group), in collaboration with local civil society organisations, financial institutions and public agencies across selected Indian states.

Three main output areas define the implementation approach of the project are:

- Enable community-led removal and management of water hyacinth by organising and training local groups, establishing Common Facility Centres (CFCs) as hubs for safe harvesting and fibre processing, and strengthening community ownership and agency over wetland-use practices.
- Nurture women's entrepreneurship by building financial literacy, gender-sensitive community processes and practical business skills, so that women can confidently run and govern water hyacinth-based enterprises.
- Develop and diversify natural fibre markets by linking community producers to stable national and international buyers, expanding into blended natural fibres, and creating pathways to scale the model beyond the initial project sites.

Project contribution to the Agenda 2030



Project implementation states



Figure 1: Project states

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Indo-German Biodiversity Programme
A-2/18, Safdarjung Enclave,
New Delhi-110029, India
T: +91 11 4949 5353
E: biodiv.india@giz.de
W: www.giz.de/india

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Responsible: Mr Ravindra Singh, Director,
Indo-German Biodiversity Programme

On behalf of: Federal Ministry for Economic
Cooperation and Development (BMZ)