



## Water Security & Climate Adaptation in Rural India (WASCA)

### Context

According to India's Composite Water Management Index (2018), 600 million people in the country (44 percent of the total population) are suffering from an acute shortage of water. A shrinking and sometimes contaminated water supply, heavy reliance on rainfall and lack of efficient irrigation systems are major problems in rural areas, where almost 70 percent of the Indian population live. India is one of the most affected countries by climate change and occupies sixth place in the Global Climate Risk Index 2018. In this changing climate scenario, water security is therefore a prime concern.

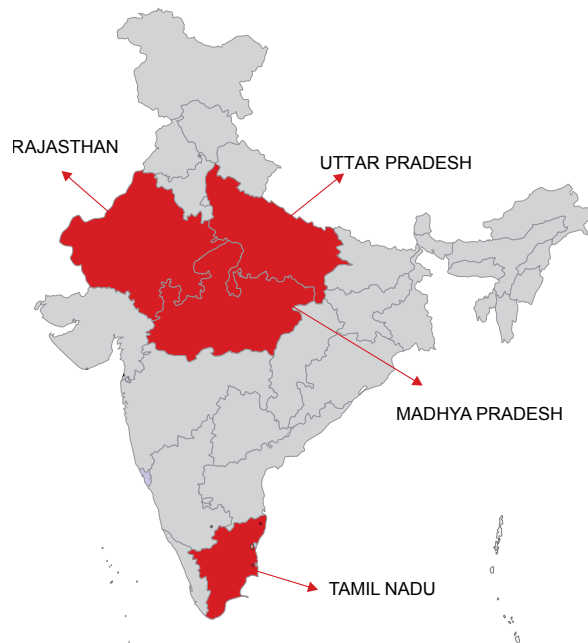
The **Ministry of Rural Development (MoRD)** is the principal partner for most of the development and social programmes in rural India. MoRD is investing Rs 60,000 crores (EUR 7.6 billion) in the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** during 2019-20, thereby making a substantial contribution to rural infrastructure development and rural livelihoods. More than half of the MGNREGA expenditure goes towards sustainable natural resource management including

land and soil development, water harvesting and conservation, and protection against extreme weather events, such as drought and flooding, thus creating significant climate adaptation and mitigation co-benefits.

The **Ministry of Jal Shakti (MoJS)**, newly formed in May 2019, is the nodal ministry for water in India, and now brings all the national agencies working on water including the National Water Mission, Central Water Commission, Central Ground Water Board, River Boards, Department of Drinking Water and Sanitation, etc. under one umbrella. On 1 July 2019, MoJS launched the Jal Shakti Abhiyan (Water Power Campaign) in convergence with MoRD, Ministry of Environment, Forest and Climate Change (MoEFCC) and other ministries.

The German Federal Ministry for Economic Cooperation and Development (BMZ) is one of the largest donors in the water sector, and attaches priority to the human rights-based approach and the Leave No One Behind (LNOB) principle contained in the 2030 agenda.

<b>Project name</b>	<b>Water Security and Climate Adaptation in Rural India</b>
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Rajasthan, Madhya Pradesh, Uttar Pradesh and Tamil Nadu
Lead executing agencies	Ministry of Rural Development; Ministry of Jal Shakti
Lead implementing agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	4/2019 - 3/2022



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## Objective

WASCA (Water Security and Climate Adaptation in Rural India) aims towards **improving rural water resource management with regard to enhance water security and climate adaptation at the national level and in four States namely Rajasthan, Madhya Pradesh, Uttar Pradesh and Tamil Nadu.**

## Mahatma Gandhi National Rural Employment Guarantee Act

**MGNREGA | Key Partner at Ministry of Rural Development**

### Inception

Passed as a law in the **Indian parliament in 2005.**  
 Launched in 2006 in 200 backward districts; scaled-up countrywide by 2008.  
 Operational in 34 out of the 36 states and UTs, **691 of the 712 districts, 6,918 blocks and 262,432 Gram Panchayats.**

### Objective

To enhance **livelihood security** in rural India by providing up to **100 days of guaranteed wage employment** in a year to every rural Indian household whose adult members are willing to do unskilled manual labour.

### Coverage

**128.5 million households** including 256 million workers registered.  
**30.85%** of India's rural population; 21% of India's total population.  
 2.68 billion person days generated in 2018-19; **53% by women.**  
**400,000 admin + technical workforce.**

### Expenditure

~ **USD 75.57 billion since 2006. USD 8.3 billion for Financial Year 2019-20** alone; Average wage rate of USD 2.49/ day.  
**Mission Water Conservation** in 2169 water-stressed blocks.  
**Jal Shakti Abhiyan** in 1,593 water-stressed Blocks.  
 Thrust to spend 65% expenditure on water-related works.

## National Water Mission

**NWM | Key Partner at Ministry of Jal Shakti**

One of the 8 missions under India's **National Action Plan for Climate Change (NAPCC)**. **Launched in 2014**, the main objective of NWM is "conservation of water, minimising wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management".

➤ **Comprehensive water database** in public domain and assessment of the impact of climate change on water resource.

➤ **Promotion of citizen and state actions** for water conservation, augmentation and preservation.

➤ Focused attention to **vulnerable areas** including over-exploited areas.

➤ Increasing **water use efficiency** by 20%.

➤ Promotion of basin level **integrated water resources management (WASCA Outcome Area).**

## Approach

Given the context above, **the core problem statement** that WASCA seeks to address is:

**The planning, financing and implementation mechanisms developed in the field of rural water resource management and climate change adaptation are not sufficiently coordinated and translated into effective dissemination strategies.**

Together with MoRD and MoJS, WASCA aims to achieve the following three outputs:

The project strengthens the knowledge and capacity of public and private institutions, as well as of stakeholders at different levels, to plan and implement integrated water resource management. Parallel to this, the project will promote collaboration between various government departments and other stakeholders to improve the financing of climate-adapted water security. To do so, holistic pilot measures at sub-basin level will be taken up in selected districts, and successful approaches will be scaled-up at the state and national levels. In addition, given the private sector footprint in water, greater cooperation with them is envisaged to leverage public-private financing and improve sustainable practices for local water security.






**Output 1:** Improve **strategy development (planning and financing mechanisms)** for integrated and climate-adapted management of water resources in rural areas.

**Output 2:** Promote **demonstrations** on climate-adapted approaches on integrated management of water resources at local level.

**Output 3:** Strengthen **private sector cooperation** for integrated and climate-adapted management of water resources at state and local levels.



## Evolving WASCA Project Strategy: Key Principles

 <p><b>Use of technology</b></p>	 <p><b>Integrated Water Resource Management IWRM approach</b></p>	 <p><b>Pilot demonstration at sub-basin level</b></p>	 <p><b>Convergent planning and implementation</b></p>	 <p><b>Capacity building</b></p>
<p>Localising digital water tools and technologies including remote sensing and GIS data, capacity building instruments for improving water resource management.</p>	<p>Promoting the coordinated development and management of water, land and related resources in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.</p> <p><small>(UN Water definition also adopted in NWM mission document)</small></p>	<p>Sub-basin as unit of intervention for piloting innovative approaches for enhancing conservation, conjunctive use and management of ground water and surface water resources.</p>	<p>Bringing together various departments contributing towards water resource development at state, district and sub-basin level for multi-stakeholder approach in planning and implementing IWRM.</p>	<p>Online and offline capacity building and handholding support to all relevant stakeholders at different stages of planning, implementation and sustainable maintenance thereafter.</p>

## Contribution to International & National Agreements on Water and Climate Action



WASCA contributes to the Sustainable Development Goals (SDGs); **SDG 1:** No Poverty, **SDG 2:** Zero Hunger, **SDG 6:** Clean Water and Sanitation, and **SDG 13:** Climate Action. With its focus on water-related climate action and integrated water resource management (IWRM), the project significantly contributes towards **SDG 6.5** for ensuring efficient, sustainable, and inclusive water outcomes.

Implementation of WASCA will also support the **National Water Mission**, one of the eight

missions under the **Indian National Action Plan for Climate Change (NAPCC)** to better achieve their objective of promoting basin level IWRM. Through improving water efficiency in agriculture, allied sectors and industries, waste water management, ecosystem development and disaster risk reduction, WASCA will contribute to meeting the adaption goals of India's Nationally Determined Contributions (NDC).

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

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Design/ Printed by Mensa Design Pvt. Ltd., New Delhi

**GIZ is responsible for the content of this publication.**

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

As at August, 2019