

# AFD AND INDIA Water and Sanitation



114 million EUR of water and sanitation projects financed

### 250+ million EUR total commitments expected by 2024

1 million+ people expected to have access to clean drinking water by 2024

A partner of India since 2008, AFD works in agreement with Indian authorities to promote green and inclusive growth. It operates through soft loans to the State and public enterprises, as well as technical assistance programs.

Since 2012, AFD has been working with the Indian public health, and municipal authorities on preserving the country's water resources while providing accessible, sustainable and reliable water and sanitation services to all.



#WorldInCommon

## OUR ACTION IN India

# Water - A priority area of intervention

Water is one of AFD's priority sectors of intervention around the world. In 2019, the volume of AFD's financing in the water sector stood at  $\in$ 1.3 billion - the highest in its history. Today, AFD's water and sanitation project portfolio represents  $\in$  6.5 billion and focuses on combating the effects of climate change and reducing gender inequalities.

India is home to around 17% of the global population (1.3 billion) while hosting just 4% of the world's freshwater resources. The country's urban population makes up approximately 32% of its total demography and is growing rapidly. Urban centers are expected to grow over the next 20 years increasing from 282 million in 2011 to 590 million in 2030. This will further aggravate the existing challenges of providing access to quality basic services, including drinking water, to urban residents.

The Government of India's National Water Policy highlights the need for improved management of water demand and ensuring maximum efficiency in water supply. The policy also mentions that the lack of trained personnel serves as a constraint to efficient management of water.

This policy is at the core of AFD's actions in India where we aspire to provide high quality services for all including continuous supply of water, prevention of leakages, reducing loss of non-revenue water, improved energy efficiency, as well as better customer service, billing and collection facilities.

AFD is committed to achieving these goals and this commitment is reflected in the objectives of the projects we finance in India.

# Providing access to efficient and sustainable services for all

.....

The provision of sustainable, universally accessible and quality water services is AFD's main area of intervention in the sector in India. AFD finances the construction and rehabilitation of drinking water production and distribution infrastructure with a particular focus on the needs of the most vulnerable populations.

The Indian state of Rajasthan, which makes up 10.4% of India's total surface area, accounts for only 1.2% of the total surface water and 1.7% of the groundwater in the country. In Jodhpur, AFD supports the Public Health Engineering Department (PHED) minimize losses and improve energy efficiency by financing the rehabilitation of the existing infrastructures as well as by replacing the existing electromechanical equipment with energy efficient equipments. In Puducherry, where residents have to deal with salinity ingress and impurities in the current water supply, AFD supports the Public Works Department (PWD) in rehabilitating and modernizing potable water distribution systems in the urban areas of the district.

**B** Preserving resources in a context of climate change

Water resources are particularly vulnerable to the impacts of climate change. India's water reserves and river basins are already stressed due to the increasing demand for water for agriculture and industry, in addition to household water requirements. Increasing urbanization coupled with unseasonal weather conditions like droughts, flooding, and excessive or scant rainfall, put further pressure on these resources. The goal, therefore, is to increase the supply of water while also managing demand.

Through efficient water management, AFD plays a role in mitigating the impacts of climate change. Projects currently being envisaged prioritize energy efficiency measures and leakage detection alongside rationalization of water tariffs in order to permit more judicious use of water.

The use of sustainable sources of water will serve to increase the supply of water and bridge the urban domestic water demand.

# *Supporting public institutions with technical assistance*

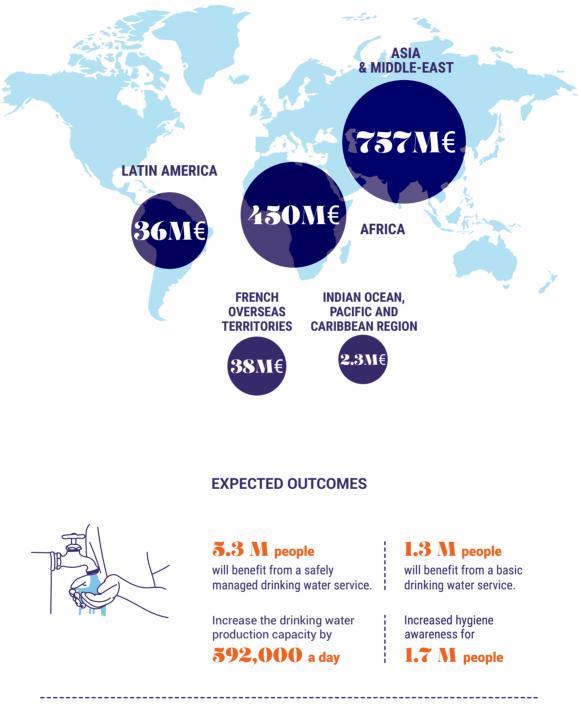
AFD's global water strategy prioritises strengthening national and local governance to ensure sustainable technical and financial management of water resources and services to its populations.

In India, AFD supports institutions at the forefront of service delivery across all tiers of the Government. Our projects, loans and grants often include a component dedicated to technical cooperation.

AFD also offers technical assistance to the Ministry of Housing and Urban Development in order to facilitate their support to national urban water programmes and transition to a 24/7 water supply.

### OUR KEY FIGURES

### **OUR GLOBAL COMMITMENTS IN 2019**





**1.3 M people** will benefit from a safely managed sanitation service. **1.4 M people** will benefit from a basic sanitation service.

## INDIA

Water management: A fresh start in Jodhpur



The project aims to increase capacity, expand coverage and optimise Jodhpur's water supply infrastructure through an approach that focuses on energy and water savings as well as improve living conditions of the people.

### BACKGROUND

Jodhpur is the second largest city in the State of Rajasthan. As the gateway to the Thar Desert, the city has very little surface water of its own. Climate change is likely to put more strain on already scare resources.

Rapid population growth, combined with a lack of adequate water infrastructure, had an adverse impact on the city's water services and on the quality of life of its inhabitants. There were also significant water and energy loss.

This project, implemented by the Public Health Engineering Department (PHED), with assistance from AFD, aims to extend and improve the service performance, based on redeveloped and lower-carbon infrastructure.

### **DESCRIPTION**

AFD's financing has been undertaken in two phases during the period 2012-2019. The project aims to develop a sustainable drinking water system and to improve energy efficiency through the rehabilitation of the existing infrastructures as well as the replacement of electromechanical equipment.

It also extends the service to new users of this rapidly growing city and improves the technical performance of the service and the network.

Finally, the project will improve system performance through development of appropriate information systems, reduction of non-revenue water in select zones, and the control of energy consumption. Measures have been initiated to promote the use of additional alternative water resources (rainwater, groundwater, wastewater).

### **IMPACTS**

- Supply Augmentation and Coverage Expansion: More than 3,00,000 people in Jodhpur are benefitting from clean, domestic water from 90 MLD Surpura Water Treatment Plant | Another 3,00,000+ people are likely to be benefitted through 90+ MLD from other WTPs (Takhtsagar and Chopsani) | Rain Water harvesting potential of an estimated of 25 Million Cubic Feet created.
- Energy optimization: Average annual savings of INR 37 Million from power conservation. Additional energy savings through replacement of old pumps from pumping stations.
- Service Infrastructure Improvements: Creation of new service infrastructure such as 300+ km of pipelines and overhead storage reservoirs has helped improve tail-end pressure, as well as reduction of leakages and pollution.



## INDIA

Improving water supply and services in Puducherry



AFD is supporting the Union Territory of Puducherry to provide urban residents with adequate, safe and reliable domestic water by augmenting water supply, modernizing its infrastructure and providing technical assistance to Puducherry's Public Works Department.

#### BACKGROUND

The District of Puducherry is one of the four unconnected regions of the Union Territory of Puducherry. With a population of approximately 1 million, its residents are predominantly dependent on ground water as a source of reliable domestic water supply. However, its proximity to the sea (Bay of Bengal) has led to salinity ingress over the years, and residents have to deal with high levels of impurities in the available water supply.

The goal of this project is to provide a reliable, equitable and quality domestic water supply to urban areas in the Puducherry district.

### DESCRIPTION

AFD is providing 65 million euros of financial and technical assistance to support Puducherry's Public Works Department (PWD) to bridge the urban domestic water demand. Under this project, 108 MLD of water will be drawn from 84 borewells in the rural area of Puducherry situated approximately 12 km from the sea coast, while supporting source sustainability.

Funding will cover three components under this project -

- Augmenting water supply sources and increasing coverage area with new infrastructure.
- Rehabilitating and modernizing potable water distribution systems in the urban areas of the district.
- Long-term technical assistance (TA) to the PWD for overall performance improvement of water services.

Based on the success of this phase, two more subsequent phases (totaling 200 million euros) may be envisaged for the Union Territory.

#### **IMPACTS**

- Benefits to the local population by providing better quality and reliable supply of water.
- Increase in water supply by 108 MLD which will enable PWD to meet future water demand.
- Rehabilitating, upgrading and/or replacing of key water supply infrastructure leading to reduced non-revenue water loss, and sustainability of infrastructure.
- Improving management of the infrastructure and customer-related services within the command area.

	<b>Country</b> India
9	Location Puducherry
	Sectors Water and Sanitation
ę	<b>Financing tool</b> Sovereign loan
	Amount financing 65M€ (Phase I)
	<b>Funding duration</b> 5 Years
	Beneficiaries Govt. of Puducherry
	Project start date June 2017

## OTHER PROJECTS



NEW PROJECT WATER AND SANITATION - MOROCCO

Conserving Morocco's water resources

With over half of the world's crude phosphate reserves, Morocco is the world's third largest producer of phosphates. As a result, the Cherifian Office for Phosphates (OCP) plays an important economic and social role in the country, especially in mining and industrial port regions.

The OCP has set an objective to increase its crude phosphate production from 28 to 47 million tons by 2020. It aims to achieve this while also eliminating the impact on water resources, - a resolution that is laid out in Morocco's National Water Strategy.

AFD is supporting OCP in realising this goal by optimizing consumption, mobilizing nonconventional resources (desalination, reuse of treated wastewater) and conserving subsurface resources (reducing dependence on aquifers by shifting to water supplied by existing dams).

The project components include working on wastewater treatment plants, seawater desalination units and water supplied by existing dams. The project is expected to lead to more effective management of water resources and a consequent reduction in the country's water stress (currently Morocco's water resources are less than 750 m<sup>3</sup> per person which is below the water shortage threshold). The project is also expected to lead to the creation of employment as 80% of production will be carried out on local sites. Finally, by stopping withdrawals from aquifers, the project will also lead to a reduction in environmental risks. THAILAND LAOS CAMBODIA SOUTH CHINA SEA

NEW PROJECT

 $\bigcirc$ 

### WATER AND SANITATION - CAMBODIA

Promoting access to drinking water in the Phnom Pehn urban area

In Cambodia, less than 50% of urban residents have access to potable water. The situation is much better in Phnom Penh with a remarkable coverage rate of 85% of the central districts

For over 15 years, AFD has been supporting the Phnom Penh Water Supply Authority (PPWSA) improve access to water for populations in the city, particularly those living in outlying neighbourhoods.

In order to support Phnom Penh's rapidly growing population, PPWSA is working to increase water production and expand the existing network to reach households in peripheral neighbourhoods many of which do not have access to water.

Since 2003, with AFD's support, PPWSA has increased water production by 325,000 m<sup>3</sup> a day, extended its network by over 825km and created over 200,000 new connections. A technical assistance component in this project has enabled PPWSA to strengthen its technical and financial performance and thereby improve the quality of service provided to its subscribers. Today, over a million people benefit from a water connection at home and PPWSA is one of the best-performing companies in the region.



### WATER AND SANITATION - BANGLADESH

### Securing and sustainably managing Dhaka's drinking water supply

The Dhaka Water and Sewerage Authority (DWASA) has two drinking water treatment plants in Saidabad which are currently supplied by the Shitalakshya River. However, the river's increasing pollution means that raw water may soon become unsuitable for drinking water treatment. DWASA also needs to increase it production and expand its production area to be able to cater to the growing city's water needs.

The Saidabad-3 project aims at doubling the current site's production capacity by commissioning a new unit supplying 450,000 m<sup>3</sup> per day. The increased water production will connect 2 million inhabitants to the drinking water network.

The project will also install a water intake and pumping station on the Meghna River, 30 km from Dhaka. This river will supply raw water to the three Saidabad units, providing Dhaka's population with a new source of surface water and reducing its dependence on ground water. An environmental management plan will ensure the preservation of the river's water quality.

This highly ambitious project is one of the largest water treatment infrastructures in the world funded by European cooperation. AFD is the lead financial partner, in partnership with KfW and EIB. LEBANON MEDITERRANEAN ISRAEL SAUDI ARABIA RED SEA

### NEW PROJECT WATER AND SANITATION – JORDAN Financing access to water for refugees

Water scarcity is a major barrier to Jordan's development. Aquifers in the northern Governorates are exploited beyond their potential for sustainable renewal. As Jordan takes in refugees from Syria, there is an everincreasing demand for water, which has exacerbated this overexploitation and contributed to the deterioration in the service. This is likely to cause tensions between refugee and host populations.

The project aims to address this situation by meeting the increase in demand related to population growth, reducing the overexploitation of groundwater aquifers and preparing transboundary water transfers in the context of regional agreements for exchanges of water and the Red Sea-Dead Sea project.

AFD is supporting the project of the Hashemite Kingdom of Jordan, alongside the European Investment Bank and the European Union, via a grant from the NIF (Neighbourhood Investment Facility), which covers 38% of the total project cost of EUR 91m.

The project involves increasing the amount of water transferred to the northern Governorates by extending the Disi pipeline, which supplies water to Amman, Zarqa and the Mafraq Governorate. For the Governates of Irbid, Ajloun and Jerash, the project will abstract and treat an additional volume of water from the King Abdullah Canal, which gathers water from the Yarmouk River and highlands and from Lake Tiberias. The project will consequently withdraw 30 million m<sup>3</sup> of raw water a year in the Jordan Valley.







AFD is an inclusive public financial institution and the main actor in France's development policy. It makes commitments to projects that genuinely improve the everyday lives of people, in developing and emerging countries and in the French overseas territories.

AFD works in many sectors – energy, health, biodiversity, water, digital technologies, training – and supports the transition to a safer, more equitable and more sustainable world: a world in common. Its action is fully in line with the Sustainable Development Goals (SDGs).

Through its network of 85 agencies, AFD operates in 115 countries and is currently supporting over 4,000 development projects. In 2018, it earmarked EUR 11.4bn to finance these projects.

### AGENCE FRANÇAISE DE DÉVELOPPEMENT (AFD) - INDIA

112 Malcha Marg, Chanakyapuri, New Delhi 110021, INDIA Tel: + 91 11 4279 3700 afdnewdelhi@afd.fr Website: india.afd.fr

Facebook: @AFDOfficiel

🍯 Twitter: @AFD\_en

#WorldInCommon