







Japan International Cooperation Agency

# Operations and Activities in India

2020-2021



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# Foreword

#### Message from the Chief Representative

As the biggest bilateral donor of India, Japan International Cooperation Agency (JICA) has been actively cooperating for economic growth, poverty reduction and environment conservation in the country. This is being done through various forms of assistance including technical cooperation, concessional loan provision, grant finance provision, dispatching experts and volunteers and partnership with the private sector. Over the years, JICA has facilitated development across sectors, including transport, water and sanitation, energy, forestry, agriculture, health, and education, among others.

Home to a billion plus people, India is one of the most rapidly advancing countries in the world with an evident potential to become a global economic powerhouse. With bold economic reforms and policies to alleviate poverty, the Government of India is committed to maintaining the nation's growth trajectory even in the most challenging times.

The COVID-19 pandemic has stirred the socio-economic foundation of the world. India has suffered its share of loss. Our condolences to all those who lost their lives. Since the onset of the crisis in 2020, we have extended emergency assistance to support the Government of India's COVID-19 response. Against the severe spread of the second wave and the shortage of medical oxygen, JICA provided 300 oxygen concentrators under the Emergency Assistance Scheme in May 2021. To support Government of India's efforts to strengthening healthcare system and its social protection policy for vulnerable groups strongly affected by the COVID-19 economic crisis, ODA loans of JPY 80 billion (approximately INR 5,333 Crore) was provided. Our approach has extended to grass root level. In order to raise awareness among 10 Crore people about the hygiene practices for preventing the spread of COVID-19 and other infectious diseases, the Achhi Aadat Campaign was started in January 2021. As the fight against the virus continues, JICA remains committed to extending support to India.

In 2021, among other on-going and newly committed projects, the highlight of JICA's activities in India was the opening of the Varanasi International Cooperation and Convention Centre (VCC), which has been constructed by Japan's Grant Aid as a "symbol of friendship between Japan and India". Furthermore, after a brief break of 18 months due to the pandemic, I am delighted to see that



the first Japan Overseas Cooperation Volunteer (JOCV) has been dispatched to the state of Gujarat in October. India is one of the first countries where the JICA's JOCV program started in 1966 and has been instrumental for accentuating people-to-people exchange and mutual understanding between Japan and India.

As like-minded nations with a keen focus on sustainable development and international peace, the Japan-India relationship has been going strong for the last seven decades. Both governments share the basic values and vision to realize a "Free and Open Indo- Pacific". I am happy to bring to notice that the year 2022 is a milestone year as we mark the 70th anniversary of the establishment of the diplomatic relations between the two countries.

To summarize, this brochure encapsulates details of all JICA operations and activities initiated in India, including the participation of our partners and stakeholders, who, like us, remain committed in making India's development story a true success.

#### **SAITO Mitsunori**

Chief Representative, JICA India Office

### JICA & Official Development Assistance

#### **About JICA**

JICA is an independent administrative institution under the Government of Japan, established with the aim of promoting international cooperation. JICA works as a bridge between Japan and emerging countries, and provides assistance in forms of loan, grant and technical cooperation in an integrated manner so that the developing countries can strengthen their capacities.

#### JICA's Vision: Leading the World with Trust

JICA, with its partners, will take the lead in forging bonds of trust across the world, aspiring for a free, peaceful and prosperous world where people can hope for a better future and explore their diverse potentials. The concept of trust is the backbone of Japan's development cooperation. JICA fosters trust with a range of domestic and international partners by putting themselves in their partners' shoes and thinking with them as equal partners. JICA will explore the diverse potentials of people, countries and private enterprises for a better future. And JICA, with its partners, will create a world where all people and countries are bound together by the trust.

#### What is Official Development Assistance?

Official Development Assistance, ODA, is undertaken by governments or government agencies to promote economic development and welfare in emerging countries. Since 1954, Japan has been providing financial and technical assistance through ODA, and the features of Japanese ODA have been promotion of self-help, sustainable economic growth and human security in emerging countries

#### **ODA Loan**

ODA loans support emerging countries by providing low-interest, long-term and concessional funds to finance their development efforts. ODA loans are normally used for large-scale infrastructure and other forms of development that require substantial funds. ODA loans, which require repayment, promote efficient use of the borrowed funds and appropriate supervision of the project they finance, thereby underpinning emerging countries' ownership in the development process.

#### **Grant Aid**

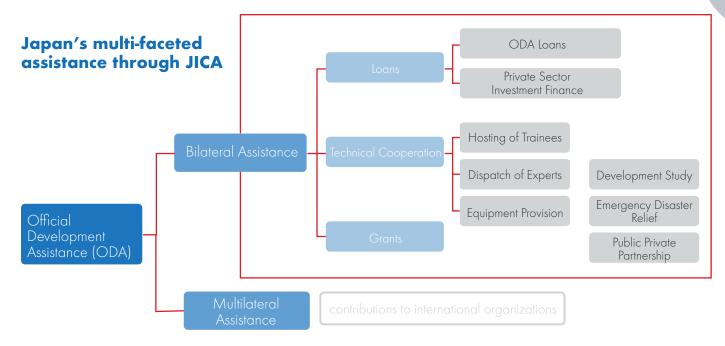
Grant aid is the provision of funds to emerging countries without the obligation for repayment. Grant aid is used for the development of social and economic infrastructure such as for advanced transportation system, primary and secondary education, health and medical care, the environment and other areas.

#### **Technical Cooperation**

For human resource development and the strengthening of administrative systems of emerging countries, technical cooperation is extended. It involves dispatch of experts, provision of necessary equipment and training of personnel from emerging countries in Japan and other countries for co-creation of knowledge. Cooperation plans can be tailored to address a broad range of issues.



Mumbai Trans Harbour Link Bridge connecting Mumbai with Navi Mumbai.





SHG Members making baskets under Poktunga Dehrusahi Van Suraksha Samiti, under Odisha Forestry Sector Development Project Phase-2



Achhi Aadat Campaign Session with Children in Gujrat



JOCV Rugby Coach, Mr.Iwamizu teaching rugby to children of Om Landmark School, Gujrat.

## **JICA & India**



### Japan's partnership with India spans over 60 years.

Japan's ODA to India started in 1958, when a concessionary ODA loan of 18 billion Japanese Yen was extended to supplement the implementation of the 2nd Five-Year Plan, at the request of the then Prime Minister, Jawaharlal Nehru. India was then the first recipient in the world of Japanese ODA loan. Since then, over 6,566 billion Japanese Yen (approximately Rs. 4,37,742 crores) in ODA loans have been committed for development across various sectors. Technical Cooperation with India started in 1966. One of the early instances was establishment of Indo-Japanese Agricultural Extension Centres across the country, in which the Japanese method of paddy cultivation was introduced, and model farms were set up to contribute towards achieving food self-sufficiency in India. Since then, more than 8,400 Indian personnel have participated in training courses in Japan and over 11,700 Japanese experts have come to India to offer their expertise.

Grant aid has also covered various areas in India including construction of International Cooperation and Convention Centre, hospitals and health facilities and providing equipment for educational institutions.

Today, JICA is the world's largest bilateral aid agency and India is its largest development partner.

#### OPERATIONS IN INDIA (FY 2020/21)

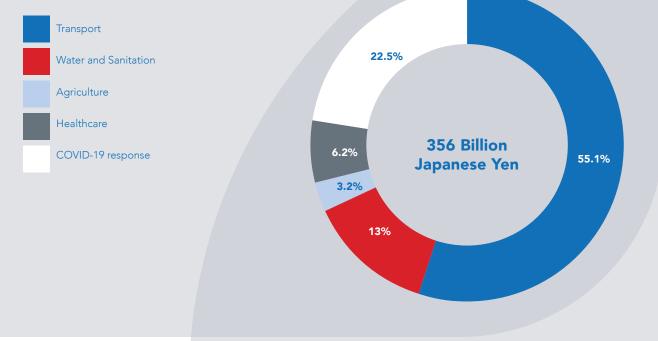
#### **ODA Loan: Technical Cooperation** 356,296 million Yen 102 COMMITMENT INDIANS PARTICIPATED JICA TRAINING 264,560 million Yen DISBURSEMENT JAPANESE EXPERTS DISPATCHED TO INDIA 77 NO. OF ONGOING PROJECTS **Grant Aid: Citizen Participation: Japanese Volunteers: 20** for Japanese language education, special education NO. OF ONGOING and instructor, community development PROJECTS **3 Japanese NGO activities** Working with Indian Partner

### **JICA's Assistance**

TRENDS IN ODA LOAN COMMITMENT FOR THE PAST 10 YEARS (FY 2009/10 - 2020/21)



#### TRENDS IN ODA LOAN COMMITMENT BY SECTOR (FY 2020/21)



# **Ongoing JICA projects**

#### **HIMACHAL PRADESH**

- (T) Project for Crop Diversification in Himachal Pradesh (Phase II)
- (L) Project for Improvement of Himachal Pradesh Forest Ecosystems Management and Livelihoods
- (L) Himachal Pradesh Crop Diversification Promotion Project (Phase II)

#### UTTARAKHAND

- (L) Uttarakhand Forest Resource Management Project
- (T) The Project for Natural Disaster Management in Forest
- Areas in Uttarakhand

#### HARYANA

(L) Haryana Distribution System Upgradation Project

#### DELHI

- (L) Delhi Mass Rapid Transport System Project (Phase 3, 4)
- (L) Delhi Water Supply Improvement Project
   (L) Delhi Eastern Peripheral Expressway Intelligent Transport Systems Installation Project

SIKKIM

Project

(L) Sikkim Biodiversity

Conservation and

Forest Management

(L) Yamuna Action Plan Project (III)

#### RAJASTHAN

- (L) Rajasthan Forestry and Biodiversity Project (Phase 2)
- (L) Rajasthan Rural Water Supply & Fluorosis Mitigation Project(Phase 1,2)
- (L) Rajasthan Water Sector Livelihood Improvement Project

#### **GUJARAT**

- (L) Project for Ecosystem Restoration in Gujarat
- (L) Ahmedabad Metro Project(L) Upgradation of
- E) Upgradation of Environmental Management for Ship ecycling in Gujarat
- (T) The Project for Smart Cities for Emerging Countries based on Sensing, Network and Big Data Analysis of Multimodal Regional Transport System

#### MAHARASHTRA

- (L) Mumbai Trans Harbor Link Project
- (L) Mumbai Metro Line 3 Project(L) Project for Pollution Abatement
- of River Mula-Mutha in Pune
- (L) Project for Pollution Abatement of Nag River in Nagpur

#### GOA

(L) Goa Water Supply and Sewerage Project

#### KARNATAKA

- (L) Bengaluru Water Supply and Sewerage Project (Phase 3)
- (L) Bengaluru Metro Rail Project (Phase 2)
- (G) The Project for Implementation of Advanced Traffic Information and Management System in Core Bengaluru

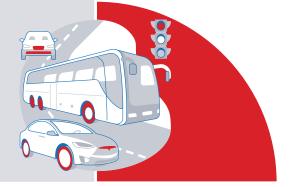
- MADHYA PRADESH
- (L) Transmission System Strengthening Project in Madhya Pradesh
- (L) Madhya Pradesh Rural Water Supply Project

#### TAMIL NADU

- (L) Tamil Nadu Transmission System Improvement Project
- (L) Project for the Construction of Chennai Peripheral Ring Road (Phase1)
- (L) Chennai Metro Project (Phase 1, 2)
- (L) Tamil Nadu Urban Health Care Project
- (L) Project for Installation of Chennai Metropolitan Area Intelligent Transport Systems
- (L) Project for Construction of Chennai Seawater Desalination Plant
   (L) Project for the Setting-up of All India Institute of Medical Sciences Madurai

	<ul> <li>UTTAR PRADESH</li> <li>(L) Agra Water Supply Project</li> <li>(G) The Project for Construction of the International Cooperation and Conversion Varanasi (Phase 1,2)</li> <li>(T) Project for the Comprehensive Improvement of Environment Sanitation</li> </ul>	
	<b>JHARKHAND</b> (L) Jharkhand Horticulture Intensification by Micro Drip Irrigation Project	
	<b>BIHAR</b> (L) Bihar National Highway Improvement Project (Phase 1, 2)	]
	ASSAM (L) Guwahati Water Supply Project (L) Guwahati Sewerage Project	
	NAGALAND (L) Nagaland Forestry Management Project	]
	MIZORAM (T) The Project on Capacity Enhancement for Sustainable Agriculture and In	rrigation Development in Mizoram
	MEGHALAYA (L) Project for Renovation and Modernisation of Umiam-Umtru Stage III Hyd (L) Project for Community-Based Forest Management and Livelihoods Imp	
	<b>TRIPURA</b> (L) The Project for Sustainable Catchment Forest Management	]
	WEST BENGAL <ul> <li>(L) Project for the Construction of Turga Pumped Storage</li> <li>(L) Kolkata East-West Metro Project</li> <li>(L) West Bengal Forest and Biodiversity Conservation Project</li> <li>(L) West Bengal Piped Water Supply Project (Purulia)</li> </ul>	
	ODISHA(L) Odisha Forestry Sector Development Project (Phase 2)(L) Odisha Integrated Sanitation Improvement Project(L) Rengali Irrigation Project (Phase 2)(L) Odisha Transmission System Improvement Project	
(L) Andhra Pradesh & Telanga (L) Campus Development Proj	and Livelihood Improvement Project (Phase 2) na Rural High Voltage Distribution System Project ject of Indian Institute of Technology, Hyderabad (Phase 1,2) hers at IIT Hyderabad to Enhance Network Development with	
ACROSS VARIOUS PA (L) Micro, Small and Medium R (L) Public- Private Partnership (L) Dedicated Freight Corridor (L) Project for Construction of	(T) Technical Cooperation Projects	
<ul> <li>(L) Project for Dairy Development</li> <li>(L) North East Road Network Connectivity Improvement Project (Phase 1-5)</li> <li>(L) Project for the Construction of Training Institute for Mumbai-Ahmedabad High Speed Rail</li> <li>(T) Capacity Development Project for Highways in Mountainous Regions</li> </ul>		(L) Loan (G) Grant Aid
<ul><li>(T) Project on "Champions for</li><li>(T) Project for Capacity Development</li></ul>	Societal Manufacturing (CSM)" opment on Railway Safety	As of July 1, 2022

# Transport



#### **Sector Challenges**

India is a large country, and its transport system is also one of the largest in the world. Its size, however, does not match its efficiency, because a lot of the appropriate infrastructure is lacking. There is great potential for a smooth transport system in India, and JICA's cooperations to the transport sector in the form of ODA loans and Technical Cooperation etc. has been contributing to India's Socio-Economic Development.

#### **Overview of Japan's Cooperation**

Japan has been contributing to India's transport sector for about four decades now. Its major focus is on enhancing connectivity between areas in the country, rural as well as urban. The Western Dedicated Freight Corridor Project and metro projects in various cities are examples of major contributions to India's transport infrastructure. JICA supports various aspects of transport, such as formulation of masterplan, assistance for the introduction of related technologies, construction of roads, bridges, railways, metros, and more.

#### **Figures at a Glance**



JICA facilitated construction for approx. 670 km of metro rail network across 6 cities



Facilitated National Highway work across India, including 4-laning of roads in several states



70+ ODA Loans, 2 Grant Aid and 24 Technical Cooperations have been extended for India's transport sector



Western Dedicated Freight Corridor (DFC) Project links industrial, commercial areas and harbours between Delhi and Mumbai.

#### **Example of JICA's Support**

JICA is supporting the development of the Delhi Metro. It is the first rail-based system in the world to claim Carbon Credits for its Regenerative -Braking and Modal Shift Projects. All stations opened so far in Phase-3 have been rated as 'Platinum' by the Indian Green Building Council for adherence to Green Building norms.

Delhi Metro has introduced "Women-only car" to every Delhi metro lines since 2010 so that women can commute to workplace with comfortable environment.

JICA is also supporting the development of the Chennai Metro Rail Project, which has recently completed its Phase 1 Extension. The GHG reduction by this project is approximately 60,000 tCO2 per year.

This is an important urban development project towards creating sustainable and eco-friendly urban infrastructure in a large and densely populated metropolis like Chennai. The Phase 2 of the project is also under way.

#### Achievements

- Supporting metro projects in various metropolitan cities in India, including Delhi, Chennai, Ahmedabad, Mumbai, Kolkata and Bengaluru, to help ease traffic congestion and also promote the use of clean, safe, fast and sustainable public transport
- Contributions to India's railway sector, such as Dedicated Freight Corridor between Delhi and Mumbai, Mumbai-Ahmedabad High Speed Rail Project etc. This will make interstate travel much faster and sustainable. Much needed improved connectivity in Northeastern India via construction of

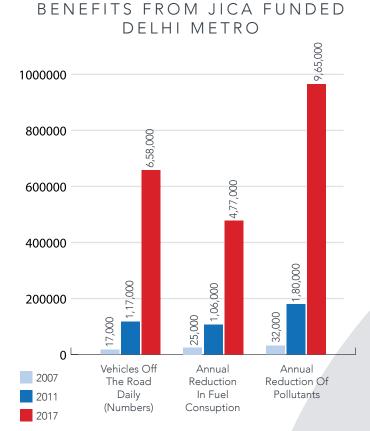
National Highway 208 (NH208) in Tripura, and that of India's longest river bridge, Dhubri-Phulbari Bridge, connecting Meghalaya and Assam, are among the several other roadways projects in the country

#### **JICA's Strategy for Future**

JICA aims to construct efficient traffic systems to meet increasing traffic demands, mitigating traffic congestion, thereby reducing pollution and mitigating greenhouse gas emission. JICA has been proactively supporting metro systems in Chennai, Mumbai, Delhi, Bengaluru, Kolkata, and Ahmedabad to install a smart way of mobility in the country. JICA's cooperation to develop the state-of-the-art Mumbai-Ahmedabad high speed rail project, is one of the examples of JICA's vision for the transportation sector in India. Similarly, JICA has been promoting intelligent Transport Systems in big cities such as Delhi and Bengaluru to improve travel speed and reduce traffic congestion.



Delhi Eastern Peripheral Expressway (EPE) Intelligent Transport System (ITS) Control Centre.





Railway Safety Technical Cooperation Project

Mumbai Trans Harbour Link Bridge connecting Mumbai with Navi Mumbai.



# Water & Sanitation



#### **Sector Challenges**

In India, water problem is very critical. Nearly half the country's population faces high-to-extreme water stress and about 200,000 die each year due to inadequate access to safe water. Diversified threats of water shortage and contamination of the resources are the core challenges.

#### **Overview of Japan's Cooperation**

JICA's assistance for the development of water and sanitation sector in India is noted as one of the largest amongst all the bilateral and multilateral development partners in India.

JICA showcases the latest technologies in water treatment plant, equitable and continuous water supply distribution systems, sewage treatment plants, rehabilitation of old sewerage systems, SCADA, GIC/MIC latest strategies in non-revenue water reduction systems, effective public outreach programs, creation of water and sanitation entities responsible for efficient service deliveries to the public in addition to the municipal reforms.



Safe Water Distributions point enabled by JICA's project Hogenakkal Water Supply and Fluorosis Mitigation Project

#### **Example of JICA's Support**

Water Supply: Safe and reliable water supply in Agra, Safe water after tackling fluorosis aspect widely distributed in Nagaur, Rajasthan and Hogenakkal, Rajasthan, Jaipur Water Supply Project are some of the examples of JICA's support.

Sanitation: Ganga and Yamuna Action Plan Project, supported by JICA aims to augment sewage treatment capacity by constructing and renovating sewage treatment plants (STP) and sewer lines for improved sanitary conditions of the dependent communities. The STPs are expected to treat the sewage generated for over 15 million people. Another important project. Another important example of JICA's support is the "Pollution Abatement of River Mula-Mutha in Pune" that aims to



Figures at a Glance

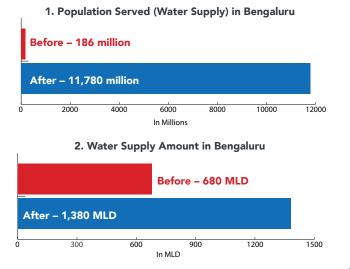
JICA has given 37 ODA Loans, 4 Grant Aids and 12 Technical Cooperation Projects.



Water supply has catered to approximately 30 million people and 15 million people have received access to sanitation.

Japan's support consists of ODA loans of over 797 billion Japanese Yen (approximately INR 53,000 crore).

#### IMPACT OF BENGALURU WATER SUPPLY AND SEWERAGE PROJECT (PHASE 1 & 2)



improve the water quality in the Mula, Mutha and Mula-Mutha rivers by augmenting sewage collection systems and sewage treatment facilities in PMC area.

JICA recently commenced the "Achhi Aadat Campaign" to sensitize people for appropriate handwashing and other hygiene practices. Utilizing donated products by Japanese private companies like SATO Tap by Lixil , JICA is reaching out to the targeted children to sensitize "Good habits" to protect them from viruses that cause infectious diseases including the COVID-19. It enables washing hands up to 8-10 times in just 1 litre of water, which is especially a boon to low-income families.

#### Achievements

- Priority to benefit the masses of the country: Projects are implemented in major cities, such as Delhi, Bengaluru, Chennai, Agra, Varanasi, Jaipur, Pune, Nagpur by improving water and sewerage infrastructure with advance technologies such as desalination water plant or ozonation water purification system
- Capacity development of Local government officials for effective O&M: JICA supports the capacity development of officials in charge of water sector projects. In order to raise the financial sustainability of water corporations, renewal of water pipes/ meters and installment of SCADA/GIS system are implemented for non-revenue water reduction in Delhi, Goa, Jaipur and Bengaluru
- Rejuvenation of rivers: Assistances for rejuvenation of Ganga River, Yamuna River, other rivers and lakes have been initiated over the last 20 years. The Projects aim to improve the water quality of the water bodies by augmenting sewerage collection and treatment capacity with the construction of the sewerage system, STPs and pumping stations etc. Under Yamuna Action Plan Project (III), the largest STPs in India, with the capacity of treating 564 Million Litter per Day, is under construction.
- Inclusive development: JICA supports social development activities, such as construction of community toilets, reflecting the voices of the communities and promoting social awareness.

#### **JICA's Strategy for Future**

Due to acute shortage of water in the country, JICA recognizes the critical need for supplying safe drinking and equitable water to the people. JICA aims to seek innovative solutions in order to diversify water sources in the country, such as rainwater harvesting and reuse of treated water. In addition, Technical Cooperation Project for proper classification, treatment, disposal and recycling of sludge is currently under preparation. Furthermore, JICA has initiated the survey to improve effectiveness of the operation coverage on water and sanitation situation in informal settlements for inclusiveness of all.



Water Treatment Plant under the Agra Water Supply Project

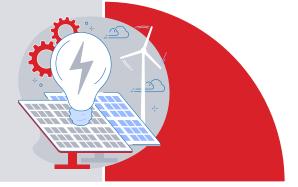


Rajasthan Rural Water Supply and Fluorosis Mitigation Project



Conserving the holy river Ganga through river purification technologies under the Ganga Action Plan

# Energy



#### **Sector Challenges**

Population growth in a country demands power. Though India has surplus energy, it does not have the means to harvest it. More than 25% of energy is lost in transition, resulting in wastage of the precious resource.

Another crucial challenge faced across the globe is climate change. Several countries have lately announced strong commitments to reduce carbon emissions dramatically, with the goal of reaching "net zero" in the following years. The phrase is quickly becoming a global rallying wave, with many people citing it as a critical step in successfully combating climate change it is causing.

Due to the inadequate quality of resources and the growing demand for renewable energy, imports account for most of the energy consumption. As a result, JICA's assistance in the sector is critical for efficiently and effectively cultivating and distributing power.

#### **Overview of Japan's Cooperation**

JICA India supports clean energy projects, in India to protect and preserve the environment. JICA has invested more than 1,559 billion Japanese Yen [approximately 104,000 crores] as loans since 1958/59 to safeguard energy availability in India.

JICA has supported energy projects across states like Andhra Pradesh, Haryana, Madhya Pradesh, Tamil Nadu, Odisha, Meghalaya, West Bengal, Telangana and many more

#### **Figures at a Glance**



Currently, a total of 11.8 GW projects covering wind, solar, thermal, hydro, Cogen and storage, have been successfully undertaken with support from JICA



JICA signed a Loan Agreement for a maximum amount of JPY 10 billion with Tata Cleantech Capital Limited (TCCL) to support India to reduce the emission of greenhouse gas through private sector investment finance



A worker working on Energy Efficient Corrugation Machine under SIDBI.

#### **Example of JICA's Support**

JICA signed a Loan Agreement for a maximum amount of JPY 10 billion with Tata Cleantech Capital Limited (TCCL) to offer loans to businesses across India that focus on renewable energy generation, electric vehicles (EV) as well as energy efficiency following the Green Loan Principles.

It will help TCCL in mitigating the impact of climate change by offering green finance and will also contribute to Sustainable Development Goals - 7 and 13.

JICA also signed a LA amounting of JPY 5,497 million to improve the power shortage of Meghalaya by renovation, modernizing and upgrading the Umiam - Umtru Stage -III Hydroelectric Power Station, and thereby contributing to the industrial development and living standard improvement in the state.

Another loan of JPY 29,442 million for Turga Pumped Storage (I) project was signed. The same shall contribute to solve the major difficulties in renewable energy concerning the present practice of real time management which can not sufficiently handle the large-scale uncertainties, by improving the power supply stability.

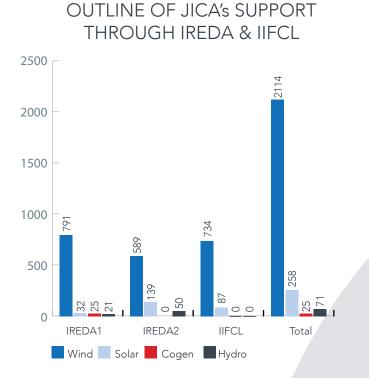
Additionally, to support India in taking ahead and achieving the targets set under its electricity plan, JICA Energy Expert was appointed at Central Electricity Authority (CEA) in November 2021. JICA Energy expert was agreed under the Joint Statement of 10th Japan-India Energy Dialogue. Through this technical cooperation, he will be supporting CEA to propose, implement and enhance the policy/projects from NEP and to strengthen the execution capacity in the CEA and other organizations.

#### **Achievements**

- JICA has funded IREDA, through which 39 projects of solar PV, wind and small hydro have been supported
- Japan's expertise in developing renewable energy structures has been facilitating India's development in a sustainable and energy-efficient manner, reducing pollution from non-renewable energy sources

#### **JICA's Strategy for Future**

JICA recognizes the need for robust growth in the energy sector in a sustainable manner. It aims to promote modernization of energy sector in India through renewable energy and improving energy efficiency. JICA's vision is in line with the Government of India's 'Vision 2022'. JICA will also continue supporting the sector by strengthening of transmission, distribution lines and so on. JICA aims to additionally support India in coping with the dramatic changes in the energy sector and transition to a safe and sustainable energy future, and aid in the critical restoration of nature.





Govindpalli Sub Station-2 under Odisha Transmission System Improvement Project.



Renewable energy projects like wind power funded by IREDA in Rajasthan

Renewable energy projects like solar power supported under JICA's credit line to IREDA in Rajsthan.



# Forestry



#### **Sector Challenges**

The livelihood of most inhabitants in rural and tribal areas are heavily dependent directly or indirectly upon forest resources. They largely live off the land, putting undue pressure on the natural forests around them. This has led to degradation of forests and depletion of forest resources across the country. JICA's support in the sector helps in upgradation and renovation of these forest lands, thereby improving forest resources.

In addition, India is under constant threat of climate change and its negative impact, leading to heat waves, deterioration in agriculture, droughts, cyclones, unseasonal rains, floods, deforestation and so on. These not only affect the livelihood of people and cause displacement of households, but also harm the ecosystems and biodiversity. JICA also extends its support for mitigation and adaptation to climate change and biodiversity conservation.

#### **Overview of Japan's Cooperation**

Japan's support to India consists of ODA loans of 294 billion Japanese Yen (approximately Rs 20,000 crore) since 1991 towards the forestry and Natural Resources Management sector.

Under JICA's supported projects, plantation and regeneration activities, including soil and moisture conservation, have covered over 2 million hectares across India including Gujarat, Haryana, Himachal Pradesh, Karnataka, Tamil Nadu, Nagaland, Odisha, Sikkim,

#### Figures at a Glance



Afforestation activities under JICA supported projects have covered over 3 million hectares across 15 states

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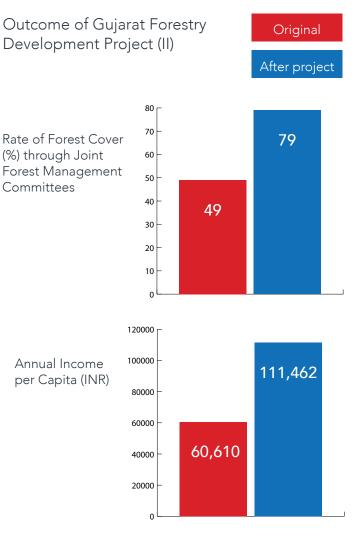
JICA has supported 31 forestry and natural resource management projects in India

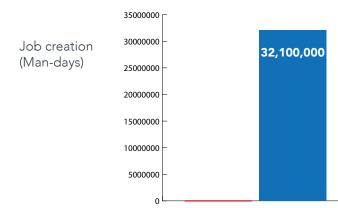
62

Over 18,500 Joint Forest Management (JFM) committees and 25,000 Self-Help Groups (SHGs) have been formed under JICA projects Rajasthan, Uttarakhand, West Bengal, Punjab, Uttar Pradesh, Tripura and Meghalaya.

#### **Example of JICA's Support**

Gujarat Forestry Development Project (II) (2007-2017) by JICA has facilitated sustainable forest resource management across the state, restoring degraded forests and improving the income level of the villagers. Through Forestry projects in India, JICA has been assisting in improvement of the livelihood of forest-dependent communities. Members of Self-Help Groups (SHGs), largely composed of women, have been benefiting by having access to microcredit and capacity development in Income Generation Activities such as management skills, processing of agricultural products and production of handicrafts.





#### Achievements

- Under the Sikkim Biodiversity Conservation and Forest Management Projects focused on biodiversity conservation, Khangchendzonga was inscribed to the UNESCO World Heritage Sites list in 2016, becoming the first "Mixed Heritage" site of India
- Odisha Forestry Sector Development Project phase 1 was successfully implemented and after its success, the Government of Odisha replicated a similar programme and introduced it as "AMA Jangala Yojana"
- JICA assisted project for 'Capacity Development for Forest Management and Personnel Training' has received the National Award for Excellence in Training at the inaugural National Symposium on Excellence in Training (NSET)

#### **JICA's Strategy for Future**

JICA aims to introduce state-of-the-art solutions for afforestation/regeneration activities in forest areas as well as activities for biodiversity conservation and mitigation and adaptation to climate change. In the foreseeable future, JICA aims to pursue projects focusing on climate change mitigation, adaption and technology upgradation, which will protect and enhance India's natural resources and biodiversity. In order to accelerate these, JICA will continue providing ODA loans and technical support in the forestry sector.



SHG Members making baskets under Poktunga Dehrusahi Van Suraksha Samiti- Odisha Forestry Sector Development Project Phase-2



Tree Plants of Melia Dubia under Tamil Nadu Biodiversity Greening project



Vedanthangal Bird Sanctuary Maintained by JICA supported Tamil Nadu Biodiversity Conservation and Greening Project

# Agriculture



#### Sector Challenges

India employs more than half of its workforce in the agricultural sector, but as small and marginal farmers dominate the sector, India's yield level remains 30-50% lower than that of other progressive countries. A major concern is also that the agriculture value chain from production stage to the markets is not developed in an integrated manner, holding down the selling of produce.

Crops see a huge fluctuation in prices during seasonal changes and there are no solid provisions in place for monitoring and supporting farmers. JICA's support aims to enhance farmers' income by developing infrastructures and capacity building across the value chain.

#### **Overview of Japan's Cooperation**

JICA has extended an official development assistance (ODA) Loan of JPY 221.4 billion (approximately INR 15,000 Crore) towards the Agriculture Sector since 1988.

JICA is supporting agricultural projects across Himachal Pradesh, Mizoram, Odisha, Rajasthan, Jharkhand and Andhra Pradesh.

#### **Example of JICA's Support**

Department of Agriculture, Govt. of HP has implemented Himachal Pradesh Crop Diversification Project (Phase 1) with JICA's assistance, and promoted sustainable crop diversification to high value crops and increasing the

#### **Figures at a Glance**



20 ODA loans, 14 Grant Aids and 17 Technical Cooperation's have been offered to the agricultural sector

Under JICA assisted projects, irrigated area has increased by more than 933,000 Hectares

JICA ass

JICA assisted projects aim to support more than 114,000 farmer households

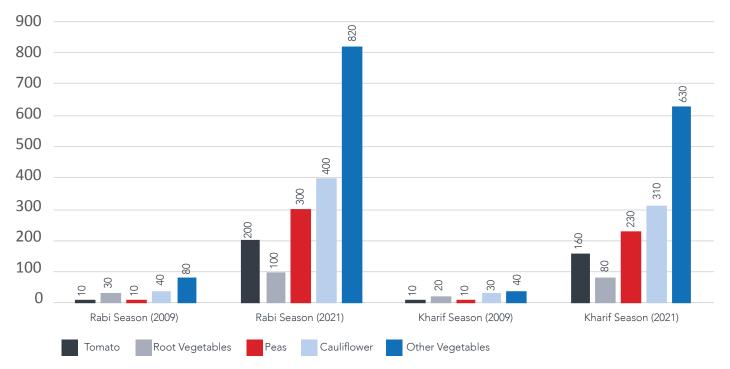
farmers' income. The project increased the vegetable cultivation area by almost 10 times, and gross annual average farm income (Rs./Ha) from 55,000 (2009) to 240,120 (2021).

#### Achievements

- The Jharkhand Horticulture Intensification by Micro Drip Irrigation (MDI) Project with an aim to promote empowerment of women, has supported installation of 12,010 MDI system by women farmers, and in total 22,987 women farmers have registered for installation till today
- The Rengali Irrigation Project (Phase 2) is developing irrigation systems to increase agriculture production, and the command area of 9,558 Ha has been created against the project target of 39,416 Ha
- Govt. of Rajasthan has amended the Participatory Irrigation Act to enable women to participate in water management. The voter list of WUA elections has been updated to include women and till date. 139 women representatives have been co-opted in the management committee of WUA, in accordance with the amended Act. Additionally, 210 women wings have also been formed in 65 sub-projects

#### **JICA's Strategy for Future**

JICA's initiatives in the agriculture sector are intended to contribute to poverty reduction in India through improvement of agriculture productivity, strengthening irrigation infrastructure, institution and capacity building of farming community, strengthening of agriculture value chain and promotion of new technologies. JICA intends to focus on promotion of various livelihood activities including non-farm livelihood for small and marginal farmers. Promotion of sustainable climate resilient agriculture is also an integral part of JICA's strategy for India's agriculture sector.



#### Vegetable Cultivated Area (Ha) of Himachal Pradesh Crop Diversification Promotion Project The vegetable cultivation has increased significantly over the years.



Field Visit of Himachal Pradesh Crop Diversification Project and JICA Technical Cooperation Project Officers.



Farmer with his agriculture produce under the Himachal Pradesh Crop Diversification Project Phase-1



Woman farmer with her harvest of strawberries under Jharkhand Micro Drip Irrigation Horticulture Project

### Human Resource Development



#### **Sector Challenges**

Development of human resources should be nurtured to match the pace and scale of population increase in India, to help maintain and accelerate economic growth in industrial and commercial fields. In addition to providing contemporary education and skills for the youth for enhanced career opportunities, there is an increasing need for developing higher education institutions in the areas of science and technology to address needs of the industrial sector and society, through technical innovation. Capacity development of senior and middle managers in the manufacturing sector is also needed for accelerating growth of this sector, which has remained flat for several decades at around 15% of Gross Domestic Product (GDP).

#### **Overview of Japan's Cooperation**

JICA has extended 31 billion Japanese Yen, (approximately INR 2000 Crore) (ODA Loan: 23 billion Japanese Yen, Grant Aid: 7.8 billion Japanese Yen) since 1988/89 towards the sector. JICA has also contributed towards this sector through various technical cooperation projects of providing training to human resource in manufacturing sector and enhancement of academic and industrial collaboration between India and Japan.

#### **Example of JICA's Support**

The Senior Managers Course is implemented under JICA's technical cooperation projects since 2007 with an aim to foster visionary leaders with the right mindset and skills to contribute both to the industry and society. The 11-month managerial training course for senior executives, includes a weeklong learning visit to Japan. Participants learn practical skills to identify latent needs, forecast future

#### **Figures at a Glance**



136 Indian Institute of Technology Hyderabad (IITH) graduates granted scholarship to study in Japan

Seven joint research conducted, and 271 faculties and researchers visited between Japan and India through JICA's technical cooperation project with IITH



Students from Japan and India are promoting academic collaboration of both countries at IITH

challenges and external events, and motivate people in their organization, etc. This course, along with the Middle Manager Course, provided under the projects, has trained a total of 1,225 visionary leaders in Indian manufacturing sector, over the past 13 years.

#### Achievements

- JICA's technical cooperation project to enhance the research network between IITH and first-rate higher education institutions/ industrial clusters of Japan successfully completed and new project documents were signed in July 2021. The new project aims to establish a sustainable platform for academic and industrial collaboration between India and Japan at IITH.
- JICA's ODA loan for IITH is facilitating development of infrastructure including International Guest House, Sports and Cultural Complex, Knowledge Centre (Library), Research Centre Complex, Technology Incubation Park, Convention Village, etc. and procurement of research equipment.
- JICA's assistance to the Indira Gandhi Open University (IGNOU) has facilitated upgradation of equipment for satellite broadcasting, from standard definition to high definition. As satellite broadcasting forms integral part of IGNOU teaching, this is benefiting several thousand students across India.
- The Champions for Societal Manufacturing (CSM) Project has led to a number of successes across

development of new products, new markets, new business processes and new business models, through training of over 5,000 executives to serve as visionary leaders of Indian manufacturing.

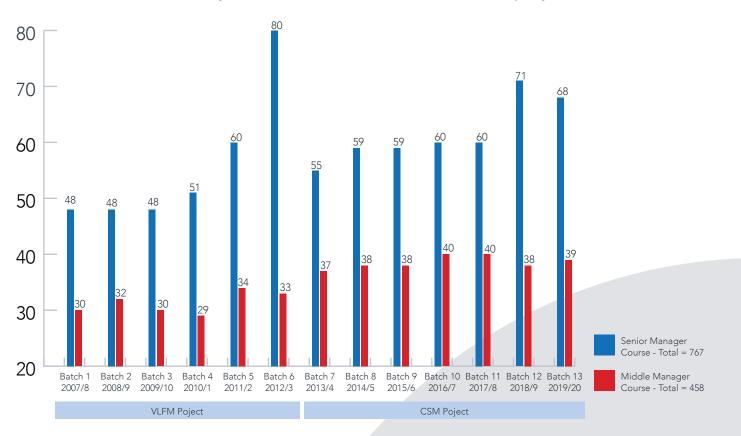
#### **JICA's Strategy for Future**

JICA's support to India cuts across various areas of human resource development that contribute to the economic and social development of the country. JICA aims to empower the young talent of India, to learn from Japan's techniques and find innovative solutions.

# IT-H & ITSEV INTERNATIONAL WORKSHOP

Test-run of electric three-wheelers as part of activities supported by JICA's SMEs Feasibility Survey at IITH

#### More than 1,200 visionary leaders trained under VLFM/CSM projects





Participants of CSM project exchanging their idea after the Japan visit



A lecture conducted by Japanese teacher at IITH

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# Health



#### **Sector Challenges**

India's health sector has faced challenges of severe underfunding and the inadequacies of its health infrastructure. It has especially been brought to light during the COVID-19 pandemic. With a mere 1.26% of India's budget spent on healthcare and the increasing expenditure of public for healthcare needs, India's health sector is in need for funding and enhancement of infrastructure. Support in the form of grants and ODA loans from JICA are vital to India's health sector and keeping its key health indicators in check.

#### **Overview of Japan's Cooperation**

JICA is assisting in the provision of quality healthcare services to socially vulnerable groups. Official Development Assistance loans of 98.3 billion Japanese Yen, approximately INR 6500 crore have been extended since 1995/96. JICA has Health Projects in Tamil Nadu, Odisha and the Northeast, amongst other states.

#### **Example of JICA's Support**

During FY 2020-21, JICA extended ODA loan to Government of India for the setting up of All India Institute for Medical Sciences (AIIMS) in Madurai. Through this loan, amounting to JPY 22,788 million, JICA is supporting the Ministry of Health and Family Welfare in the development of infrastructure of AIIMS Madurai with provision of high-end equipment for hospital, educational institution and research work. Besides the above loan, JICA is also providing country focused training through a four-year technical cooperation project to medical personnel of

#### **Figures at a Glance**



Totally, 3 ODA Loans, 8 Grant Aids and 4 Technical Cooperation's have been extended for the sector in India



Every day, approximately 1,500 patients visit the JICA supported OPD in Institute of Child Health and Children hospital in Tamil Nadu, scaling up access to quality healthcare for all, especially to the underprivileged, who have been bereft of such services.



Child Being Treated in the Emergency Ward of Institute of Child Health (ICH)

AIIMS across India for strengthening capacities related to specific areas like hospital management, oncology etc.

JICA also extended a technical cooperation project to the state of Tamil Nadu for improving the capacities of state level medical personnel for management of Non-Communicable Diseases.

#### Achievements

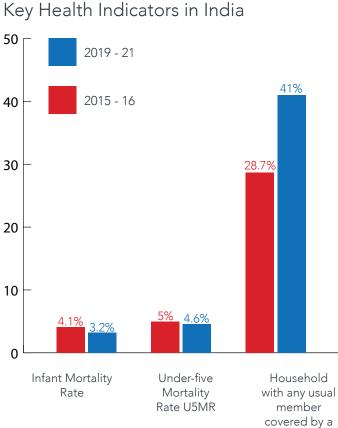
- 1 ODA loan extended for COVID-19 Crisis Response between FY2020 and FY2021 of approximately JPY 50 billion Yen (approximately INR 3,500 crore) to support Government of India's Prime Minister Ayushmaan Bharat Health Infrastructure Mission Programme (PM-ABHIM) to strengthen the public healthcare
- JICA supported India during the COVID-19 pandemic in the form of an ODA loan for crisis response. JICA also gifted India 300 oxygen concentrators during the surge of its second wave of COVID-19
- JICA had been implementing the survey for researching the impact of COVID-19 such us the intervention research on tele-consultation within the primary health care, medical healthcare workers (MHWs), woman frontline health workers, persons with disabilities, children labor, etc.
- JICA has played an instrumental role in providing better access to innovative healthcare services in urban areas and promoting a healthy lifestyle in the state of Tamil Nadu

#### **JICA's Strategy for Future**

The healthcare sector in India is booming and JICA believes that the three core areas that need to be addressed on priority are: 1) Controlling infectious diseases, 2) Controlling infant and maternal mortality rate and 3) Providing easy access to health care facilities for the underprivileged. To ensure the overall development of health care in India, JICA is working towards promoting excellence in training the medical staff, providing equipment to hospitals and strengthening capacity of human resources with the focus on Non-Communicable Diseases.



Doctor Treating the Patient in OPD-5 of the Institute of Child Healthcare (ICH)



health scheme or health insurance



JICA supported the Polio Eradication Program in India and contributed in making India Polio free since 6 years now



300 Oxygen Concentrators delivered to India from Japan as a part of Emergency Assistance to support India fight against the second wave of COVID-19.



### Volunteers



Japan Overseas Cooperation Volunteers (JOCV) promote international cooperation through the sharing of knowledge, experience, and work as a bridge between the people of India and Japan.

#### About the JOCV and SV Programme

The JOCV Programs support a wide range of activities by Japanese citizens who intend to cooperate in the economic and social-development sector as well as in the reconstruction of emerging countries. Through such activities, the JOCVs can not only contribute to the development of the recipient countries but also gain valuable experience in terms of international goodwill, mutual understanding and they are also able to widen their international perspectives. The JICA Volunteer activities have earned high acclaim from the recipient countries and are also being praised in Japan. The JICA Volunteers possess backgrounds, knowledge and experience related to the requirements of the recipient countries. They live and work together with the local communities, speak their local languages and carry out activities with emphasis on self-reliant efforts and fostering mutual understanding. "Together with the local community" is the motto of JICA Volunteer programs.

#### **Salient Features of JICA Volunteers**

- They are dispatched based on the requests from the recipient countries
- They have a voluntary mind and possess technical skills and practical experience
- They develop work plans with their local counterparts, which reflect the needs and interests of the counterparts
- They work together with the local communities at the grassroot level

#### **JOCV** in India

In India, the JOCV Programme commenced in 1966. From the time of commencement till the present time, over 200 volunteers have been dispatched across India in various fields such as education including Japanese languages, health, agriculture, community development, sports, empowerment for disabilities etc. Before the Covid-19 pandemic, 20 JOCVs were working across India. However, the deployment of JOCV had been suspended world-wide due to the pandemic, including India. The programme resumed for India in October 2021 with the arrival of 1 JOCV (Rugby Coach) to a school in Gandhinagar, Gujarat. For FY 2022, a few more JOCVs are expected to arrive in the country.

#### JOCV - Post Covid-19

JICA continues to nurture the JOCV programme for the further promotion of international cooperation through the sharing of knowledge and experience, and peopleto-people exchange between India and Japan. To mark the upcoming 70th anniversary of India-Japan diplomatic relations in India in 2022, JICA is aiming to retrieve the number of volunteers to pre-Covid levels to further enhance the people-to-people exchange between the two nations.



JOCV working as a swimming coach at Odisha Govt. Sports Department



JOCV working as a Japanese language teacher in SRM University Chennai



JOCV Rugby Coach teaching rugby to children of Om Landmark School, Gujrat.

### Knowledge Co-Creation Programs

Knowledge Co-Creation contributes to human resource development utilizing Japan's technology, skills & knowledge.

### About JICA KNOWLEDGE CO-CREATION PROGRAMS (KCCP)

JICA's Knowledge Co-Creation Programs are a form of technical cooperation that JICA implements in Japan and other countries.

Japan has formed its social system and organizational structure in such a way that it is called the "Japanese model". If "seeing is believing", then experiencing is understanding.

By participating in JICA's KCC programs in Japan, people from emerging countries experience a situation surrounded by the Japanese society and Japanese organizations, where they can discuss the circumstances in their home countries and develop an understanding of the social conditions and values which are quite different from their own.

In addition to providing unique knowledge to personnel, this sort of technical cooperation stimulates people to make their own decisions, which is a crucial element for human resource development along with other assistance schemes. JICA's Knowledge Co-Creation programs are therefore a major component of Japan's international cooperation programs, receiving nearly 10,000 participants each year from all over the world until last year. In 2021, due to the impact of COVID-19, JICA conducted six online KCC programs in India.

Majority of the participation was from governmental or public organisations. However, there have also been participants from non-governmental organizations (NGOs) and private companies.

Japan has enlisted cooperation from a wide range of levels including government, universities, companies and NGOs, creating a system capable of responding to any sort of need for advanced technology to expertise in revitalising villages. In terms of scale and available resources, there is no other program in the world which can be compared to the JICA's Knowledge Co-Creation Programs.

JICA's Knowledge Co-Creation programs is a form of Technical Cooperation which shares Japan's experiences with other developing countries.



Country Focused Training Course in Plant Maintenance Engineering



Country Focused Training Course in Plant Maintenance Engineering

# JICA Partnership Program



Partnership program is a form of technical cooperation formulated and implemented by Japanese NGOs, Japanese local governments, and Japanese universities

#### About JICA Partnership Program (JPP)

Recognizing the growing importance of civil societies international cooperation, the JICA Partnership in Program (JPP) was introduced in 2002. The program supports implementation of projects formulated by Japanese NGOs, Japanese local governments and Japanese universities ("Partners in Japan") to utilize their accumulated knowledge and experience in activities for emerging countries. JPP projects aim to meet diverse needs of emerging countries and to strengthen collaboration between communities in both emerging countries and Japan. In India, JPP has started in 2004 and various projects have been implemented in the fields of Agriculture, Rural development, Health, Women's empowerment and Tourism to contribute towards social and economic development at the grassroots level.

JICA implements JPPs in collaboration with Partners in Japan to empower the community and the people of India.



NGO-IWVS has been running `Ananda Hospital in Kushinagar village in UP, providing basic essential treatment to villagers and implementing outreach activities for prevention of diabetes & good nutrition.



Kibi International University / Junsei Educational Institution is supporting the National AIDS Research Institute (NARI) in Pune to introduce MCP (Matricellular Protein) measurement at ART (Anti-Retrovirus Therapy) Centres. A technician is conducting lab tests at NARI.



Imaginus has partnered with an Indian NGO to support street children, providing non-formal education classes with a children-centric approach in West Bengal



A health care worker at Aundh ART centre, Pune, monitors the health conditions of a patient.

# **Other Projects**



#### Achhi Aadat Campaign (AAC)

The Achhi Aadat (Good Habit) Campaign was launched on National Cleanliness Day 2021 to raise awareness among 10 Crore people about the importance of hygiene practices for preventing the spread of COVID-19 and other infectious diseases. The campaign is to introduce an easy and practical approach to the hygiene and sanitation issues by promoting handwashing, nail hygiene and other hygiene practices such as wearing mask in a correct way in the pandemic situation.

In partnership with many Japanese companies, cleanliness products including nail cutters, reusable masks and a handwashing station "SATO Tap" were distributed in schools and communities in 15 states and Delhi NCR. The campaign promoted special COVID-19 related episodes



Raising awareness among children on good hygiene practices through the Achhi Aadat Campaign.



Information Education Communication (IEC) Materials used under the Achhi Aadat Campaign

of motion comic of a popular Japanese manga "Cells at Work" and videos collaborating with two Japanese characters, Kumamon and Hello Kitty to spread the messages of cleanliness and hygiene practices in the country.

The campaign has been successful in fostering cleanliness and hygiene mind among children and they will continue "Achhi Aadat" as their life-long practices to protect not only themselves but also people around them such as family and friends. Contribution to India's Prime Minister Atmanirbhar Swasth Bharat Yojana (PM-ASBY) programme to strengthen the public healthcare system was one of the many key achievements under this campaign.

### Private Sector Investment and Finance (PSIF) scheme

JICA India has been partnering with the Government of India and various state governments for poverty alleviation, investment promotion as well as for infrastructure development for over six decades.



Female customers receiving loans from a NBFC financed by NAC

In line with Government of India's strategies, JICA intends to expand its areas of support to include private sector development through the "Private Sector Investment and Finance (PSIF) scheme" to provide debt, equity to private projects and companies.

As of now, there are 6 projects of PSIF scheme in India as followings.:

- 1. Support for Micro, Small, and Medium Enterprises (Loan to Mahindra and Mahindra Financial Services Limited)
- 2. Project for Affordable Housing Finance for Low Income Households (Loan to PNB Housing Finance Limited)
- **3. Climate Change Management Project** (Loan to Tata Cleantech Capital Limited)
- 4. Financial Inclusion for Women Project (Loan to Nothern Arc Limited)
- 5. Supporting Indian DX startups (Fund Investment to Rebright Partners IV)
- 6. Investment to Impact Fund (Fund Investment to Neev Fund II)



Investee Company of Neev Fund (II) : Pollution control devices on diesel gensets

#### Tsunagaru Lab



JICA India established the "Sustainable Development Goals (SDGs) Business Co-Creation Lab - Tsunagaru Lab -" in June 2020 to promote partnership between Japanese companies and Indian social enterprises. The lab serves as a collaboration platform to help address social and developmental challenges in sectors such as healthcare, education, agriculture, waste and energy, among others. Additionally, the partnership between Japanese companies with unique technology and Indian social enterprises will enable them to approach the last one mile, which has not been easy to do so far, and will provide products and services that are appropriate for India, potentially creating a new business model.

Up until December 2021, over 600 Indian enterprises and 80Japanese companies have been listed as participants under the Tsunagaru LAB's efforts to provide information on Indian social enterprises and support business matching. In FY2021, 9 webinars have been conducted to introduce efforts of companies to address social issues in India and good examples of corporate partnerships in Japan and India.

#### Varanasi International Cooperation and Convention Centre (VCC)

The Varanasi International Cooperation and Convention Centre (VCC) was conceptualized by the Government of India in the city of Varanasi, Uttar Pradesh (UP) as a core base for cultural and artistic activities and the promotion of people-to-people exchange. Japan has supported the project through its Grant Aid as a "symbol of friendship between Japan and India". Prime Minister Modi has named the VCC "Rudraksh" as he wishes to make it a symbol of wisdom.

VCC has a Main Hall with a seating capacity of 1,200 persons and the latest state of art Stage for the Performances, lights and sound equipment. The construction of the VCC demonstrates the most sophisticated technology including energy conservation and appealing aesthetics and experience of Japanese companies.

It is hoped that the VCC will serve as a base for promoting people-to-people and cultural exchanges between India and the rest of the world, and further develop India through the promotion of the tourism sector, trade development and business promotion by utilizing this VCC.

Rudraksh was inaugurated by Hon'ble Prime Minister of India Shri Narendra Modi, Hon'ble Chief Minister of Uttar Pradesh Mr. Yogi Adityanath, H.E. the Governor of Uttar Pradesh, Mrs. Anandiben Patel and other dignitaries from India, and H.E. the Ambassador of Japan to India Mr. SUZUKI Satoshi, then Chief Representative of JICA India Mr. MATSUMOTO Katsuo, and other officials from Japan. The video message from Hon'ble Prime Minister of Japan H.E. Mr. SUGA Yoshihide was streamed as the congratulatory message from Japan.



Varanasi International Cooperation & Convention Centre, named "Rudraksh"

### **Japanese Assistance to INDIA: Timeline**

#### **1958**

First ODA loan to India to support 2nd 5-Year Plan.

#### 1966

First Technical Cooperation toIndia, for paddy cultivation. First Japan Overseas Cooperation Volunteers.

#### **1981**

First Loan to agriculture sector, for fertilizer project at Hazira, Gujarat.

#### **1982**

First Loan to transport sector, for Bombay suburban railway modernization.

#### **1988**

First assistance (grant aid) to education sector, for upgrading broadcast equipment at Indira Gandhi National Open University (IGNOU) Delhi.

First loan for energy saving, in Micro, Small & Medium Enterprises (MSMEs). Seven loan commitments made subsequently to continue this assistance until 2019.

First load for irrigation for71 km canal development at Upper Kolab, Odisha.



#### 1991

Emergency loan to mitigate economic crisis.

First loan to forestry sector, for afforestation along Indira Gandhi canal, Rajasthan.

First assistance (Technical Cooperation) for silkfarming in Karnataka, Tamil Nadu, Andhra Pradesh & Telangana. This assistance continued till 2015.



#### 1992

First loan to Yamuna Action Plan (YAP), for sewage treatment capacity augmentation. Two loan commitments made subsequently to continue this assistance until 2017.

#### 1995

First assistance (grand aid) to health sector, for improving medical equipment at Karawati Saran Children's hospital, Delhi.

#### 1997

First loan to Delhi Metro, 13 loan commitments made subsequently for development of 306 km of this metro.



Courtesy: Shinichi Kuno

#### 2005

First loan for Ganga Action Plan at Varanasi.

#### 2006

Loan for rural electrification in Andhra Pradesh, Telangana, Madhya Pradesh & Maharashtra.

First loan to Bangalore Metro. Two loan commitments made subsequently for development of 60km of this metro.

Resumption of Japanese Overseas Cooperation Volunteers program.



#### 2007

Start of technical cooperation for Visionary Leaders for Manufacturing (VLFM) project, to strengthen Indian manufacturing sector.

#### 2008

First Ioan to Chennai Metro. Three Ioan commitments made subsequently for development of 46km of this metro.

First loan to Kolkata East West Metro for development of 27km of this metro.

Loan for reducing dependence on fluorosis causing groundwater in Tamil Nadu





First loan for dedicated railway freight corridor between Delhi& Mumbai. Three loan commitments made subsequently for development of 1,500 km of this corridor.

#### 2011

First loan for development of renewable energy source. A loan commitment made subsequently to continue this assistance till 2020.

#### 2013

Loan for Tamil Nadu Investment Promotion Program to improve investment climate in Tamil Nadu.

Start of study for Intelligent Transport System in Bengaluru & Mysore.

Expansion of VLFM to Champions for Societal manufacturing (CSM) project.



#### 2014

Loan & technical cooperation for development of Indian Institute of Technology Hyderabad.

Loan for development of Mumbai Metro Line III.

#### 2015

Preparation of Master Plan for Chennai- Bengaluru Industrial Corridor.

#### 2016

First time Senior Volunteers (SV) were dispatched to India as Japanese Language Teachers.

Loan agreements signed for various projects such as Chennai Metro Project (IV) and Ahmedabad Metro Project (I).

JICA signed agreements with the Government of India to provide Official Development Assistance (ODA) loan for various projects such as the development of the metro rail system n Ahmedabad, Gujarat and Chennai, Tamil Nadu.

Signing the Memorandum for the General Consultancy of the Mumbai – Ahmedabad High speed railway Construction Project.



#### 2017

Loan Agreement signed with the Mumbai Metropolitan Region Development Authority (MMRDA) to implement the Trans-Harbour Link Project in Mumbai.

Loan Agreement to provide Assistance for the North-East Road Network Connectivity Improvement Project (Phase1).

#### 2018

Loan Agreement signed with the Department of Economic Affair (DEA), Ministry of Finance, Government of India for the Mumbai – Ahmedabad High-Speed Tail Project.

#### 2019

Loan Agreement signed with the Department of Economic Affair (DEA), Ministry of Finance, Government of India for "Program for Japan-India Cooperation Actions towards Sustainable Development Goals in India" to help India's policy actions on the Sustainable Development Goals (SDGs).

#### 2020

Signed nine Loan Agreements with the Government of India to Strengthen India-Japan Relationship

#### 2021

Seven Loan Agreements signed with the Indian government to deepen the India - Japan relationship



# References

### Water and Sanitation

#### Composite Water Management Index (June 2018) NITI AAYOG

nitigov.in/writereaddata/files/document\_ publicadon/2018-05-18-Water-Index-ReporivS8compressed.pdf

### Healthcare

#### Executive Summary Census India (2016)

http://www.censusindia.g.inivitaLstatistics/SRS\_ Report\_2016/4.Executive\_Summary\_2016.pdf

#### National Family Health Survey (NFHS-5) 2019-21

India.pdf (rchiips.org)

### Transportation

#### India Transport Report - Moving India to 2032 Planning Commission

http://planningcommission.nic.in/reports/genrep/ NTDPC\_VoL01.pdf

### Energy

#### Power Sector Analysis Report

https://www.equitymaster.com/research-it/sector-info/ power/Power-Sector-Analysis-Report.asp

### Agriculture

#### Doubling Farmers' Income (2017)

https://www.niti.gov.in/writereaddata/files/document\_ publication/DOUBLING%20FARMERS%20INCOME.pdf

### Forestry

### Forest, People and Profit net equations for sustainability Planning Commission

http://planningcommission.nic.in/reports/articles/ ncsxnalartpcb.pdf

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