

## **Ex-Ante Evaluation (for Japanese ODA Loan)**

**South Asia Division 1, South Asia Department**

**Japan International Cooperation Agency**

### **1. Name of the Project**

- ( 1 ) Country: India
- ( 2 ) Project: Project for Promoting Start-up and Innovation in Telangana
- ( 3 ) Project Site/ Target Area: Telangana State (Population: about 35.19 million)

Loan Agreement: February 20, 2024

### **2. Background and Necessity of the Project**

- ( 1 ) Current State and Issues of the Private Sector and Priority in India

India has a huge population of over 1.3 billion, with a young demographic composition (average age is 28.7, World Fact Book, 2020) and is currently in a demographic dividend period. The Government of India estimates that approximately 16 million new people will enter the labor market each year (2015-2022), the number of people who wish to work is expected to grow in the future (Ministry of Skill Development and Entrepreneurship, 2015), and the Modi administration has pledged since its inception in 2014 to create 20 million new employment opportunities annually. On the other hand, the number of new employment created between 2011 and 2015 averaged only about 6.6 million per year, and some estimates suggest that the net job growth (jobs created minus jobs lost) over the same period was about 700,000 (McKinsey Global Institute, 2017). The first reason for this is that job creation in the manufacturing and service sectors, which account for more than 80% of real GDP, has been limited (consequently, more than 50% of the employed population is involved in agriculture, which accounts for less than 20% of real GDP (Economic and Social Research Institute, Cabinet Office, the Government of Japan, 2019). The second reason is that only about 1.4% of all firms in the country have 10 or more employees, and the vast majority of firms remain informal microenterprises unregistered with the government, which do not create employment, among other factors (the Government of India, 2016).

In a situation where the creation of job opportunities could not keep up with the annual influx of population into the labor market, the unemployment rate was about 6.1 % in 2017-18, before the spread of the COVID-19, and was particularly high among young people (age 15-29: 17.8 %), highly educated

people (19.8 % for university graduates, 17.2 % for master's degree graduates, 14.6% for doctoral graduates), and high unemployment among women (secondary school graduates and above: 19.8% in urban areas and 17.3% in rural areas) were severe (the Government of India, 2019). Moreover, the unemployment rate worsened to 23.5% in April 2020 largely due to the strict urban lockdowns with the spread of COVID-19, and remains high at 7.8% as of November 2022 (Center for Monitoring Indian Economy Pvt. Ltd, 2022).

The Government of India has positioned job creation as one of its top priorities, and since the Modi administration took office, it has been promoting the “Make in India” policy to boost the manufacturing sector's share of real GDP to 25% by 2022 and to create 100 million new employment opportunities by improving systems to attract foreign investment and developing infrastructure and other business environments. In addition, under the “Startup India” policy for the promotion of micro, small, and medium-sized enterprises (MSMEs), the Government is promoting entrepreneurship among young people and women, encouraging innovation, and supporting business expansion to promote entrepreneurship, growth of MSMEs, and creation of employment opportunities.

The state of Telangana is one of the fastest growing states in India, with per capita income that doubled from 2015 to 2022 (the Government of Telangana, 2022), exceeding the average for all of India, due to aggressive efforts to promote industry in the state, especially in Hyderabad, the state capital where the IT industry and other industries are concentrated. On the other hand, the state faces various social challenges, such as disparities among regions, gender, etc. In particular, unemployment is a serious problem: before the spread of COVID-19, the unemployment rate reached about 7.6% for the entire state (about 6.1% for India as a whole), 9.4% for urban areas, and 6.5% for rural areas. In particular, the unemployment rate among the young population (age 15-29) reached 23.3%, the high unemployment rate among the highly educated (13.0% for university graduates, 27.9% for master's degree graduates, and 22.4% for doctoral graduates), the high unemployment rate among women (secondary school graduates and above: 25.6% in urban areas and 24.6% in rural areas), etc. were as severe as in the whole of India. (Ministry of Statistics and Programme Implementation, 2019) After the spread of COVID-19, the May-August 2020 unemployment rate was 9.3% statewide, 7.4% in urban areas, and 10.1% in rural areas, with a particularly high

unemployment rate of 22.7% in the age group of 20s (Centre for Monitoring Indian Economy, 2020).

With this background, the Government of Telangana has positioned the creation of employment opportunities as one of its top priorities (the Government of Telangana, 2014). In the “Telangana State Industrial Policy 2014” formulated immediately after the establishment of the state, the state government set the promotion of industry, particularly in the manufacturing sector, as an area of focus, especially the promotion of MSMEs, and set out to develop a foundation for growth that will contribute to the sustainable development of the industry. In addition, in the “Telangana State Innovation Policy 2016” formulated in 2016, the state government stated its support for identifying new startups and other growth companies and developing them into small, medium, and large enterprises. The government's “Social Innovation Policy 2020” and “Grassroots Innovation Policy 2016” also aim to promote innovation that contributes to solving social problems, and to promote inclusive initiatives so that women, rural areas, and farming villages benefit widely, in addition to promoting the development of the above-mentioned growth infrastructure.

Under these policies, the state government, in cooperation with universities, research institutes, and enterprises in the state, has made concrete efforts such as establishing India's largest incubation facility and its operating agency “T-Hub (Technology Hub),” which supports startup development as a state agency, “T-Works,” a prototype manufacturing facility for startups in the manufacturing industry, “We-Hub,” an institution to support women entrepreneurs, and “Telangana State Innovation Cell (TSIC),” an institution to promote innovation policies. As a result, a “startup ecosystem” is being formed around Hyderabad, where entrepreneurs, startup supporters, companies, universities, research institutions, financial institutions, and public organizations are connected to create a series of startups, which in turn attract excellent human resources, technology, and funds to continue developing, and a cumulative total of over 6,600 startup companies have been created (Telangana Today, 2022).

The state government intends to continue to promote entrepreneurship and develop the basis for corporate growth as a measure for job creation and industrial promotion. On the other hand, the state government recognizes the following issues: the lack of facilities to support the rapid increase in the

number of startups, the lack of funding for startups especially in the early stages of business, and the need to find entrepreneurs and create an ecosystem for startups in rural areas outside of the capital city of Hyderabad.

Following the startup support policies of the Government of India and the Government of Telangana, the “Project for Promoting Start-up and Innovation in Telangana” (hereinafter referred to as “the Project”) aims to raise the quality of human resources by widely strengthening the capacity of a diverse range of people, including youth, women, and people living in rural areas, so that they can start their own businesses or be employed by companies and become innovators in the process. At the same time, for entrepreneurs with high growth potential, the Project will provide advisory support for startup and business expansion, development of facilities to serve as activity centers, and other necessary support at each stage of business growth, including the provision of grants at each stage from startup to commercialization. This will create an environment in which startups can emerge and grow into small and then medium enterprises, creating direct and indirect employment and stimulating industry. For these reasons, this is positioned as an important project in India's private sector development.

( 2 ) Japan's and JICA's Policy Cooperation and Operations in the Private Sector

Country Assistance Policy for India (March 2016), formulated by the Government of Japan, identifies “Strengthening Industrial Competitiveness” as one of the priority areas and states that Japan will support the creation of new jobs for the young productive population, increase productivity by enhancing the technological foundation of the economy, and contribute to strengthening industrial human resource development in such areas as business management and practical skills. JICA's Country Analysis Paper on India (March 2018) positions the development of highly productive industries as one of the main development issues, and analyzes the need to improve the investment environment in terms of both infrastructure and human resources development for these industries. The Project is consistent with these policies and analysis. The JICA Global Agenda for Private Sector Development also includes the goals of “fostering competitive entrepreneurs and businesses” and “improving the outer environment and access to finance and markets to enable private sector companies to grow” as its objectives, with “fostering entrepreneurs and businesses” as a key initiative to achieve these goals. As the Cluster Strategy in the JICA's Global Agenda, “Support for Building a Start-

up Ecosystem for Innovation Creation” is a core focus, and this Project is in line with these goals and initiatives, especially since it can contribute to the development of “talents and human resources (entrepreneurs and employees)” that make up the startup ecosystem.

In addition, this Project will contribute to “Multi-layered Connectivity,” one of the Pillars of the Free and Open Indo-Pacific Partnership (FOIP), from the perspective of promoting multi-layered connectivity through support for startups and other enterprises in Japan and India.

### ( 3 ) Other Donors’ Activities

The World Bank (WB), in its India Country Partnership Framework (2018-2022), has identified the need for both quantitative and qualitative expansion of employment and investment in human capital, and is implementing the MSME Growth Innovation and Inclusive Finance Project (2015-2019) and the Technology Center Systems Project (2014-2020) to promote vocational training for MSMEs across India. The WB is also providing Emergency Assistance Loans (2020-) to financially support MSMEs that have been economically impacted by the spread of the COVID-19. The Asian Development Bank (ADB) pointed out in its India Country Partnership Strategy (2018-2022) the need to strengthen the capacity and increase the productivity of the growing working population. The ADB is implementing the “Expanding Micro, Small, Medium-Sized Enterprise Lending Project” (2019-), which provides financial services to MSMEs throughout India, the “Skills Development Project” (2022-), which provides technical assistance in vocational education and training in some states (excluding Telangana), and the “ADB Ventures”, a startup support program for Southeast and South Asia. The German International Development Cooperation (GIZ) is implementing programs to support women entrepreneurs in several states, including Telangana.

## **3. Project Description**

### ( 1 ) Project Description

- ① Project Objective: The objective of this Project is to discover potential entrepreneurs including women and rural ones, promote entrepreneurship and support business expansion of MSMEs by conducting Capacity Building, Infrastructure, Finance and Market Creation subprojects for entrepreneurs and MSMEs, thereby contribute to create inclusive employment opportunities and promote sustainable industrial development in the Telangana State.

② Project Components: The Project will be implemented in four components (a) to (d) below under the supervision of the executing agency (Information Technology, Electronics and Communications Department, The Government of Telangana) for each of the three enterprise growth stages (“Finding Entrepreneurs,” “Support for Startups and Commercialization,” and “Support for Business Expansion”). The T-Hub, T-Works, We-Hub, TSIC, and other organizations under the Government of Telangana will implement subprojects under the supervision of the executing agency to provide support to entrepreneurs and startup companies, etc. After the Project Management Unit (PMU) selects and reviews the basic subproject plans submitted by the executing agency, the Project Supervisory Unit (PSU), in which state government officials and JICA participate, will approve and review the plans. In addition, consulting services will be provided to support the overall implementation of the Project and to strengthen the startup support capacity of the executing agency.

(a) Strengthening entrepreneurial and business capacity: awareness-raising and educational programs to promote the spirit of entrepreneurship and the foundations for innovation, programs to identify and support entrepreneurs in local cities and for women, support for product prototyping and service development, support for developing marketing strategies, and various types of support for fundraising, etc

(b) Infrastructure development: Establishment of facilities to serve as bases for innovation development for startup companies, etc., and for small and medium-sized companies that have successfully expanded their businesses.

(c) Commercialization support: Financial support for entrepreneurs and companies by state government agencies.

(d) Business and market creation: Present the social challenges facing the state government, solicit solutions from startups, etc., and commission the demonstration and implementation of the solutions, etc.

(e) Consultation services (support for supervising project implementation, support for environmental and social considerations, and strengthening the capacity of state government to support startups) (shortlist method)

③ Project Beneficiaries (Target Groups): Entrepreneurs and small and micro business stakeholders, including women and rural residents, targeted by each subproject

( 2 ) Estimated Project Cost

27,902 million yen (Japanese ODA loan: 23,697 million yen)

( 3 ) Schedule (Cooperation Period)

September/2023-September/2029 (72 months) Completion of all the activities (September 2029) will be considered as the completion of the Project. However, the detailed schedule within the same period will be finalized after each subproject is selected (1-2 years after the start of the Project).

( 4 ) Project Implementation Structure

1) Borrower: President of India

2) Guarantor: N/A

3) Executing Agency: Information Technology, Electronics and Communications Department, the Government of Telangana (hereinafter referred to as ITE&CD)

4) Operation and maintenance system: ITE&CD and each of the subproject executing agencies under ITE&CD have implemented similar startup support and innovation promotion projects in the past, and any issues have not been found in their technical and financial capacity to implement these projects. In implementing these projects, a Project Supervisory Unit (PSU) will be established within ITE&CD to make decisions on important matters related to the projects and to supervise the entire Project. A Project Management Unit (PMU) will be established under the PSU to manage the subprojects on a day-to-day basis, including subproject review, bid evaluation approval, expenditure approval, progress management, and monitoring. In addition, the ODA loans consultant will provide operational supervision support to the PMU and PSU as needed. For the facilities to be developed under the Project, the subproject executing agencies will be responsible for operation and maintenance of each facility during and after the completion of the Project. Other components will be continued by the subproject executing agencies or transferred to the private sector, etc. The selection of subprojects will be conducted in two stages. The first stage is based on the following criteria: conformity with the sector strategy of the subproject, conformity with the Project matrix, not falling under Environmental Category A of the "JICA Guidelines for Environmental and Social Considerations" (issued in April 2010), no possibility of diversion to military technology, etc. The second stage is based on feasibility of the project (growth and revenue forecast, cost, schedule, etc.)

( 5 ) Collaboration and Sharing of Roles with Other Donor:

1) Japan's Activities: With regard to Japan-India corporate collaboration, it is

planned to share information and consult with the Japan External Trade Organization (JETRO), the Embassy of India in Tokyo, and other organizations.

2) Other Donors' Activities: Implement projects in collaboration with startup ecosystem related companies and organizations in and outside the state, including incubators, accelerators and other entrepreneurship support organizations that provide support for entrepreneurship and business expansion, educational and research institutions, financial institutions, corporations, NGOs, etc.

#### (6) Environmental and Social Consideration

① Category: FI

② Reason for Categorization: This Project cannot identify subprojects before JICA's loan approval under the "JICA Guidelines for Environmental and Social Considerations" (issued in January 2022), and such subprojects are expected to have environmental impacts

③ Other/Monitoring: Under this Project, ITE & CD, the executing agency, with the assistance of the Japanese ODA Loan consultant hired under the ODA loan project, will classify subprojects into categories based on India's domestic legal system and JICA Guidelines for Environmental and Social Considerations, and the necessary measures will be taken for the relevant category. Subprojects will not include Category A projects.

#### (7) Cross-Sectoral Issues

① Climate change response: Projects contributing to climate change mitigation may be selected for sub-projects during project implementation process.

② Poverty measures and considerations: the Government of Telangana is emphasizing the creation of employment opportunities for young people and others who are staying in rural villages due to lack of attractive job opportunities in rural and regional areas. In the sub-projects of this Project, it has been agreed with the executing agency to conduct programs such as "awareness-raising and education" and "finding entrepreneurs" to foster entrepreneurship and innovation among the residents of local cities and rural areas.

③ Measures against AIDS/HIV and other infectious diseases : The infrastructure support subprojects may include projects where workers are concentrated at one construction site for long periods of time. An agreement to execute HIV/AIDS prevention measures such as condom usage promotion and HIV prevention education during the construction period for all relevant workers,



including drivers entering and leaving the construction site has been reached with the executing agency.

- ④ Consideration for the disabilities: In the infrastructure development sub-projects, the accessibility of the office environment and the procurement of equipment that is easy to use for the hearing/visually impaired will be provided when supporting the growth of small and micro enterprises and the development of innovation development centers. In addition, when implementing programs for entrepreneurs and micro and small businesses, it has been agreed with the executing agency to provide reasonable accommodations for entrepreneurs and/or business owners with disabilities, such as ensuring opportunities for participation, information security, and safety.

( 8 ) Gender Categor:【Gender Project】 ■GI (S) Gender Informed (Significant)  
<Details of Activities/ Reason for Categorization>

Through discussions with the executing agency, gender-based issues were identified. It is because this Project includes a plan to implement human resource development for entrepreneurs and small and micro enterprises, and to find and support entrepreneurs, including women and local residents who start their own businesses. The number of women participating in human resource development and the number of women-owned businesses participating in the subprojects are set as indicators. For these reasons, the Project is classified as a “gender activity integration project”.

( 9 ) Other Important Issues: the Government of Telangana plans to utilize the startup ecosystem that will be strengthened through this Project to support Japanese companies entering the Indian market and to strengthen ties with Indian companies and research institutions. Specifically, the state government is considering seamless support from conception to commercialization of new businesses in India through collaboration among institutions that comprise startup ecosystem in Telangana, primarily targeting Japanese startup companies interested in finding commercial opportunities in solving India's social issues.

#### **4. Target Outcomes**

( 1 ) Quantitative Effects

Outcomes (Operation and Effect Indicators): Targets will be set at the stage when all subprojects are selected (assuming 1-2 years from the start of the Project).

Indicator	Baseline (Actual values in 2023)	Target(2031) (2 years after subprojects' completion)
Number of participants in the Project's entrepreneurial and enterprise capacity building subprojects (cumulative)	0	To be set when all subprojects are selected
of which, Number of female participants (cumulative)	0	
of which, Number of participants in the rural areas (cumulative total)	0	
Number of users of facilities and other infrastructure developed under the Project (cumulative total)	0	
Number of companies that have raised Series A (Note 1) funds from private investors, etc. after receiving commercialization support services in this Project (cumulative total)	0	
Number of participants in business and market creation subprojects (cumulative)	0	
Number of companies that participated in or used subprojects of this Project (cumulative total)	0	
of which, Number of women-owned enterprises (cumulative total) (Note 2)	0	
of which, Number of companies that have grown to medium size (cumulative total) (Note 3)	0	

(Note 1) The first stage of funding for startups is the "seed round," in which companies raise funds during the prototyping and planning stages of their products and services. Next is the "Series A" stage, in which companies seek to raise a larger amount of money to bring their product or service to market and establish a business model. The amount of Series A funding varies from tens of millions of yen to over 1 billion yen.

(Note 2) Women-owned companies are defined as (a) a woman serves as CEO or (b) women own 51% or more of the shares.

(Note 3) A medium-sized company is defined as one that meets two or more of the following

three criteria: (a) 50-300 employees, (b) total assets of US\$3-15 million, and (c) annual sales of US\$3-15 million.

( 2 ) Qualitative Effects: Expand and strengthen the startup ecosystem in Telangana, promote the presence of Indian and foreign companies in Telangana, promote employment of youth, the highly educated and women and reduce the unemployment rate, etc.

( 3 ) Internal Rates of Return: Financial and economic internal rates of return are not calculated because subprojects cannot be identified in advance.

## **5. External Factors and Risk Control**

( 1 ) Preconditions: None

( 2 ) External Factors: None

## **6. Lessons Learned from Past Projects**

The results of the ex-post evaluation of the “Micro Enterprise Assistance Project” (evaluation year: 2016), an ODA loan to the Arab Republic of Egypt, and others indicate that, in addition to the financial services provided by the executing agency and the intermediary lender, a combination of non-financial services, such as training in marketing and accounting management, could contribute to increasing project effectiveness. The results of the ex-post evaluation of the technical cooperation project “Training Program for Development of Women Small-Scale Entrepreneurs” (evaluation year: 2001) for Malaysia showed that it is important to obtain support not only from universities as implementing agencies, but also from governmental agencies and NGOs involved in training activities, and that the establishment of a feedback system for the training program is important to improve the quality of the training program.

Recognizing that a wide range of business management know-how, including startup planning, business planning, financing, marketing, and organizational management, is essential for entrepreneurs and microenterprises to grow and expand, the Project plans to implement both financial and non-financial programs, such as entrepreneurial and business capacity building and commercialization support, and will secure the necessary resources for these programs. Specifically, the Project will collaborate with a variety of stakeholders, including relevant state government departments, entrepreneurship support organizations, educational and research institutions, private enterprises, and NGOs, to ensure that the program is operated effectively. In the operation of subprojects, the feedback

system from participants, etc. should be established to provide a framework that encourages subproject executing agencies (the business incubation and innovation support organizations such as T-Hub, T-Works, We-Hub, TSIC, etc. under the umbrella of ITE&CD) to continuously improve their services.

## **7. Evaluation Results**

The objective of this Project is to discover potential entrepreneurs including women and rural ones, promote entrepreneurship and support business expansion of MSMEs by conducting Capacity Building, Infrastructure, Finance and Market Creation subprojects for entrepreneurs and MSMEs, thereby contribute to create inclusive employment opportunities and promote sustainable industrial development in the Telangana State. This is in line with the development agenda and policies of India, as well as the cooperation policies and analysis of Japan and JICA. This Project is also considered to contribute to Goal 8 of the SDGs, “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and Goal 9, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”; therefore, there is a strong need to support the implementation of this Project.

## **8. Plan for Future Evaluation**

( 1 ) Indicators to be Used:

As described in Section 4 (1) to (3).

( 2 ) Future Evaluation Schedule

Ex-post evaluation: 2 years after project completion

END

Appendix: Map of Project for Promoting Start-up and Innovation in Telangana

**Map: Project for Promoting Start-up and Innovation in Telangana**



Source: Created by JICA