

International Seminar

Sharing F-DRR approaches and techniques with developing countries:
Experiences, realities and opportunities of private sectors

SDG Business Support Projects for small and medium enterprises by Japan International Cooperation Agency

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https://www.jica.go.jp/priv_partner/activities/index.htm



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1. Background and Concept

JICA assists and supports developing countries as the **executing agency of Japanese Official Development Assistance (ODA)**.

In accordance with its vision of “Leading the world with trust”, JICA supports **the resolution of issues of developing countries** by using the most suitable tools of **various assistance methods** and a combined regional-, country- and issue-oriented approach.

【Human Security】

Aiming for a society where all people can protect themselves from various threats and live their daily lives in security and with dignity.



People

A society where all can live healthy, safe lives

- Education
- Health
- Social Security



Peace

A peaceful, just society without fear or violence

- State-Building to Prevent the Outbreak and Recurrence of Conflicts
- Governance Support
- Gender Equality and the Empowerment of Women and Girls

【Quality Growth】

Promoting sustainable growth with less disparity and without harming the environment.



Prosperity

A prosperous, sustainable economy at harmony with nature and prepared for promoting social development

- Agricultural and Rural Development
- Private Sector Development
- Urban and Regional Development
- Ensure Access to Affordable and Clean Energy
- Development of Transport Infrastructure



Planet

Care for the Planet

- Environmental Conservation and Management
- Water Resources Management
- Disaster Risk Reduction
- Climate Change

Overview of Operations

JICA uses an array of development assistance schemes to meet the diverse needs of developing countries around the world

Technical Cooperation

JICA's volunteer programs

Citizen Participation

Finance and Investment Cooperation (ODA Loans)

Partnership with Nikkei Communities
in Latin America and the Caribbean

Grants

Emergency Disaster Relief Studies and
Research

Public-Private Partnerships

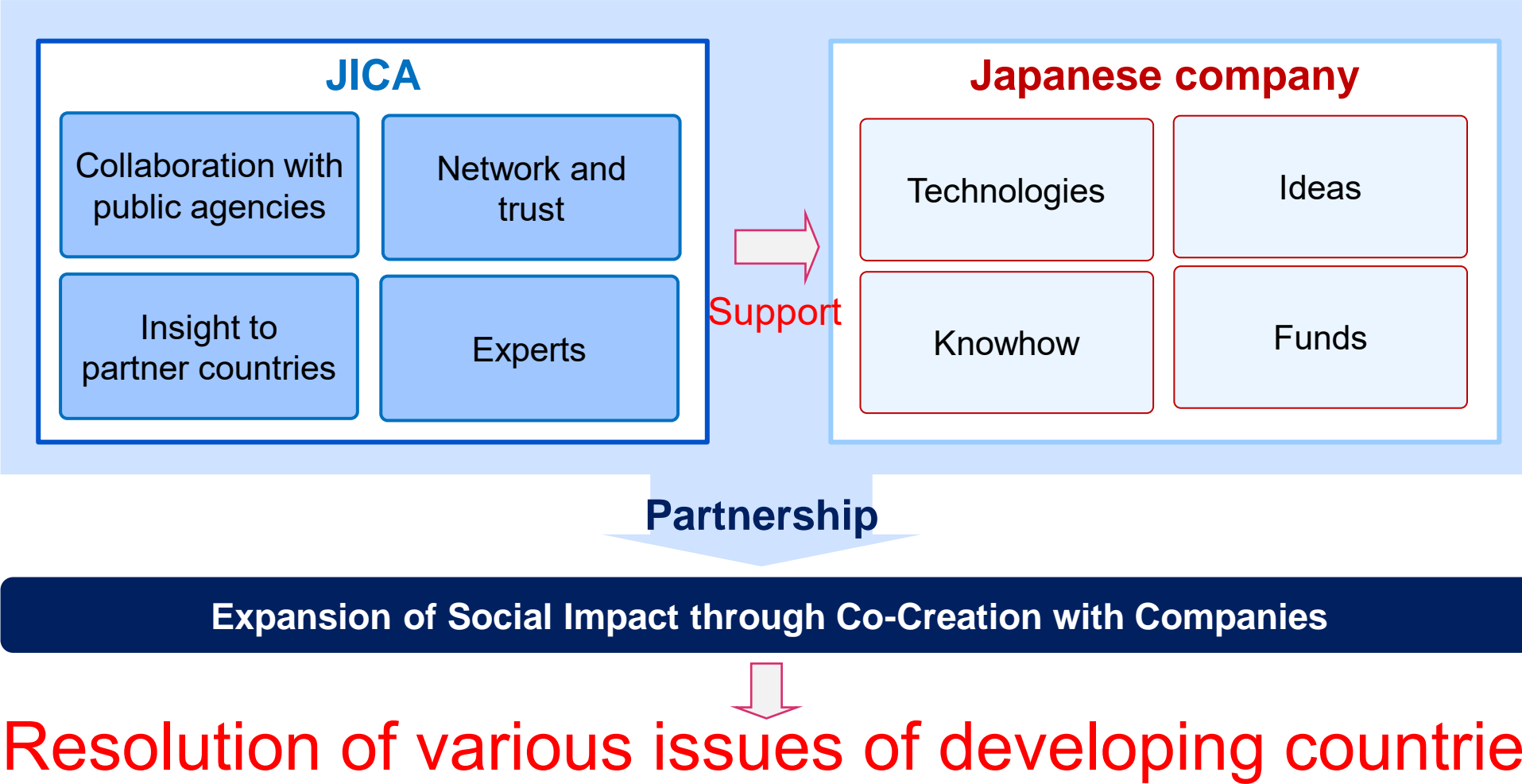
But..... for what ?

JICA at a Glance

Overview of JICA's Partnership with Private Sector



JICA has increased the efforts to enhance the partnership with private companies with co-creation, rather than simply ordering the business that align with JICA's priorities and designs as conventional ODA.



Republic of Indonesia. Project Formulation Survey for dissemination of the Real-time Monitoring System using a mobile communication network

SMEs and Counterpart Organization

- Name of SME: Midori Engineering Laboratory Co., Ltd
- Location of SME: Sapporo, Hokkaido Pref., Japan
- Survey Site • Counterpart Organization: Whole country of Indonesia • BPPT (Agency for the Assessment and Application of Technology)

Concerned Development Issues

Climate Change Countermeasures

- Declared the 41% emission reduction target by 2020
 - Target 41% reduction of annual GHG emissions (26% with own efforts plus 15% with international aid)
- Mitigation measures
 - Reducing emissions mainly with prevention of Deforestation and Peat Fires
- Adaptation measures
 - Taking countermeasures focusing on Floods and Droughts

Products and Technologies of SMEs

SESAME System

- Transmit the field data to a remote server via a mobile communication network, enabling Real-time measurement
- Allow connection of a variety and a number of sensors to be used for various data measurement
- Enable the stable measurement and transmission of data even in the field with the Power Saving design
- Offer crisis management functions such as automatic warning messaging on the given conditions

Proposed ODA Projects and Expected Impact

The Project on the establishment of Real-time Telemetry System of field data related to Climate Change with the SESAME system

(Scheme: Pilot survey for disseminating SME's technologies)

- Establish a Real-time Telemetry System of field data related to Climate Change through introduction of the SESAME system
- Implement the activities for various needs of the Participating Organizations based on their own proposals
- Formulate the Indonesia-Japan Consortium for the Participating Organizations to effectively use the data
- Expected Impacts: Contributions to both mitigation and adaptation measures against Climate Change, such as prevention of Peat Fire and early warning of Floods and Droughts

Future Business Development of SMEs

- Establish the local corporation with local partnership to sell SESAME System inclusively of the assembly, installation and maintenance. Promote its localization in the future view to utilize the local parts.
- Enhance the multiplier effects with the ODA project to expand the business also with private companies



Japanese SME produces convenient monitoring system



Real-time Monitoring system of Japanese company can promote Indonesia's climate change mitigation and adaptation effort.

More meteorological data is needed for implementing appropriate climate change countermeasures

Background and Concept | An example

















Business in Indonesia (2016)








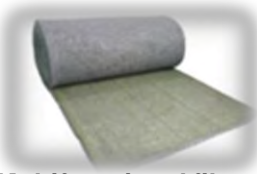



Business in Thailand (2017)

Examples of Products and Technologies That May Help Address Developmental Challenges

Example	Area	Possible application
   CO ₂ emissions monitoring system	Environment and energy	Power generation with renewable energy, composting toilets, rainfall monitoring system, dam management, etc.
  Plastic liquidation unit	Waste treatment	Organic waste treatment, urban waste landfill recovery, medical waste treatment, conversion of plastic waste into fuel, etc.
   Remotely operated excavator	Water purification and treatment	Water quality measuring equipment, water purifiers, filtering units, purification tanks, etc.
   Tools	Vocational training and industrial development	Molding, enhanced product transport, grinders, machine tools, testing and measuring instruments, etc.
   Braille embossing printer	Welfare	Wheelchairs, rehabilitation equipment, nursing equipment, braille mobile terminals, braille printers, etc.

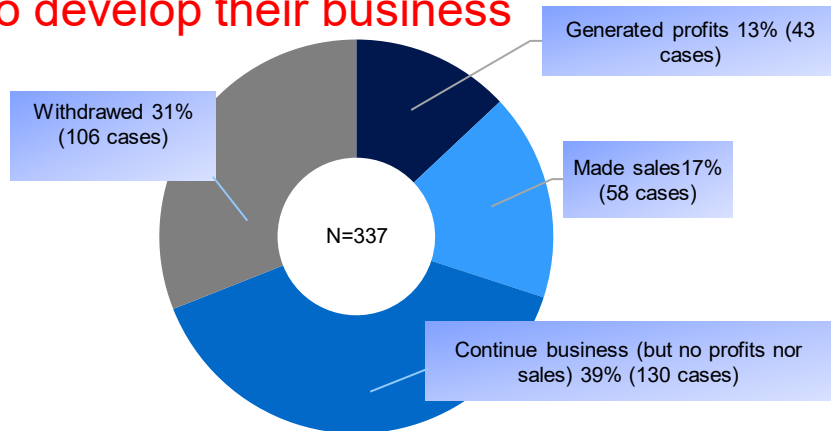
Examples of Products and Technologies That May Help Address Developmental Challenges

Example	Area	Possible application
   Milling machine for long-grain rice	Agriculture	Rice milling machines, greenhouses, irrigation pumps, harvesting and processing machines, etc.
  Total blood bilirubin measuring instrument	Health and medicine	Electronic health records, medical network systems, X-ray diagnosis units, delivery monitoring units, mobile medical devices, etc.
  Science and mathematics learning aids	Education	Voice pens, e-learning systems, science learning aids, scientific experiment kits, etc.
  Multifunctional filter sheets	Disaster preparedness and response	Alarms, provisional lighting, disaster relief equipment, etc.

Background and Concept | Achievements and challenges

Achievements to date

- In the **12 years since the start of the Program, 1,389 projects (including 1,065 small and medium-sized enterprises) have been adopted** (companies in all prefectures have joined the Program).
- Memorandum of Understanding on Business Collaboration and Cooperation with a Total of 56 Regional Financial Institutions Concluded (as of March 2022)
- **70% of companies** that have completed the survey are **continuing to develop their business**

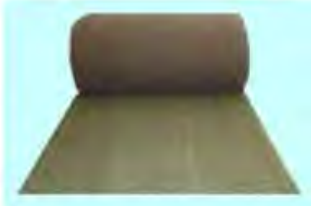


Challenges for the future

- The number of proposals was 173 in the peak fiscal 2019, but due to the impact of the COVID19, the number of proposals decreased to 56 in fiscal 2021.
- Feedbacks from user companies are as follows:
 - ✓ It takes time to conclude a contract with JICA
 - ✓ The burden of settlement procedures is large
 - ✓ More knowledge required for developing business

Adapting to the changes in external environment and addressing challenges above, there is a need to improve JICA's Program

Selected results (support for SMEs throughout the country)



Chugoku Region 67 case
(e.g. Landslide Prevention in Yamaguchi)



Kinki Region
166 case
(e.g. septic tank in Shiga)



Hokkaido Region 42 case(e.g potato Harvester)



Tohoku Region 56 case(e.g Fruit processing)



Kyusyu Region 109 case
(e.g Pollution treatment in Okinawa)



Shikoku Region 57 case
(e.g Shipbuilding Inspection in Ehime)



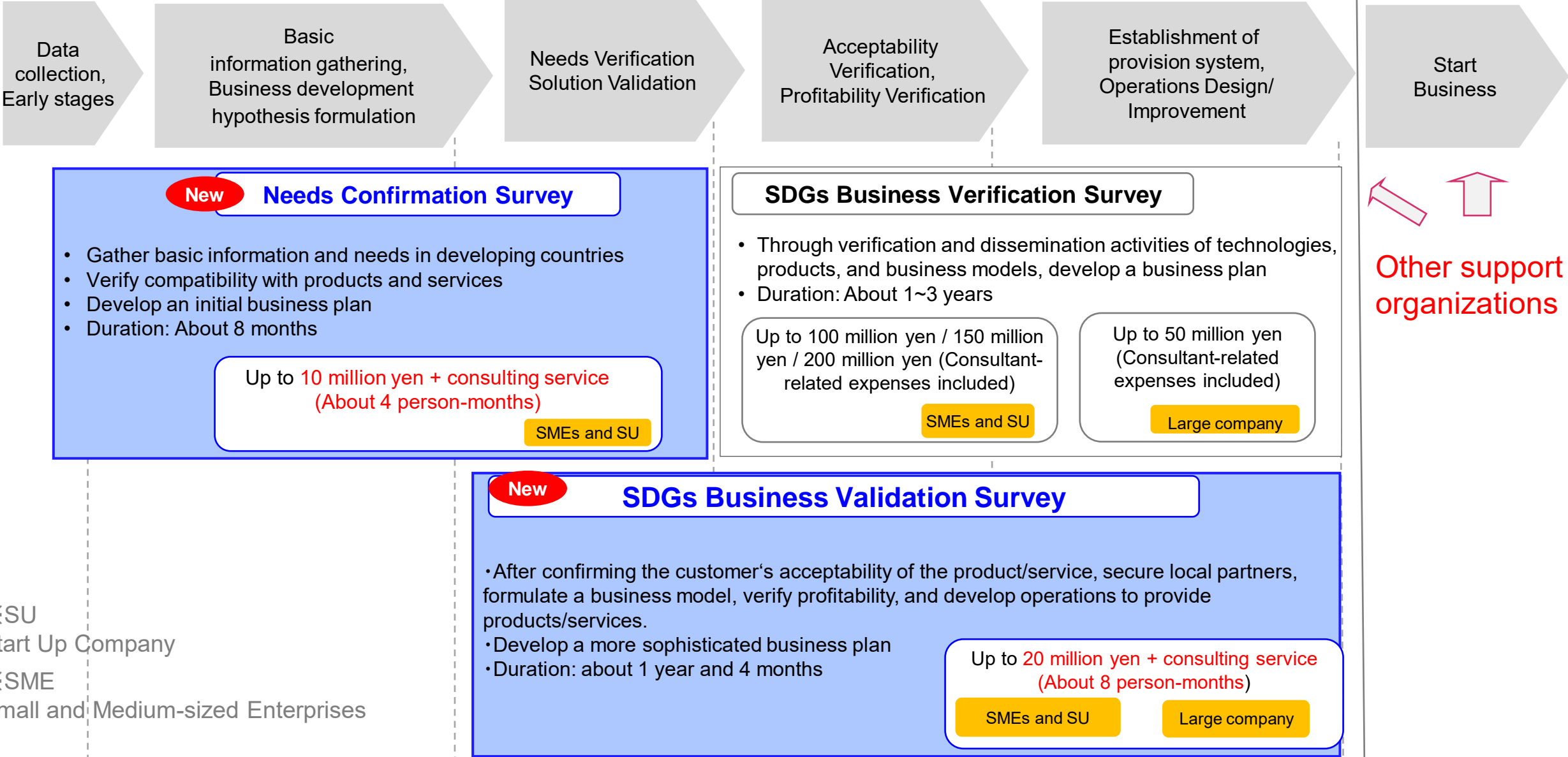
Chubu Region 188 case
(e.g Tea Ingredient meter in Shizuoka)



Kanto Region 380 case
(e.g Underground tunneling in Tokyo)

2. Overview of the scheme

Overview of SDGs Business supporting Survey



※SU
Start Up Company

※SME
Small and Medium-sized Enterprises

Overview of the scheme

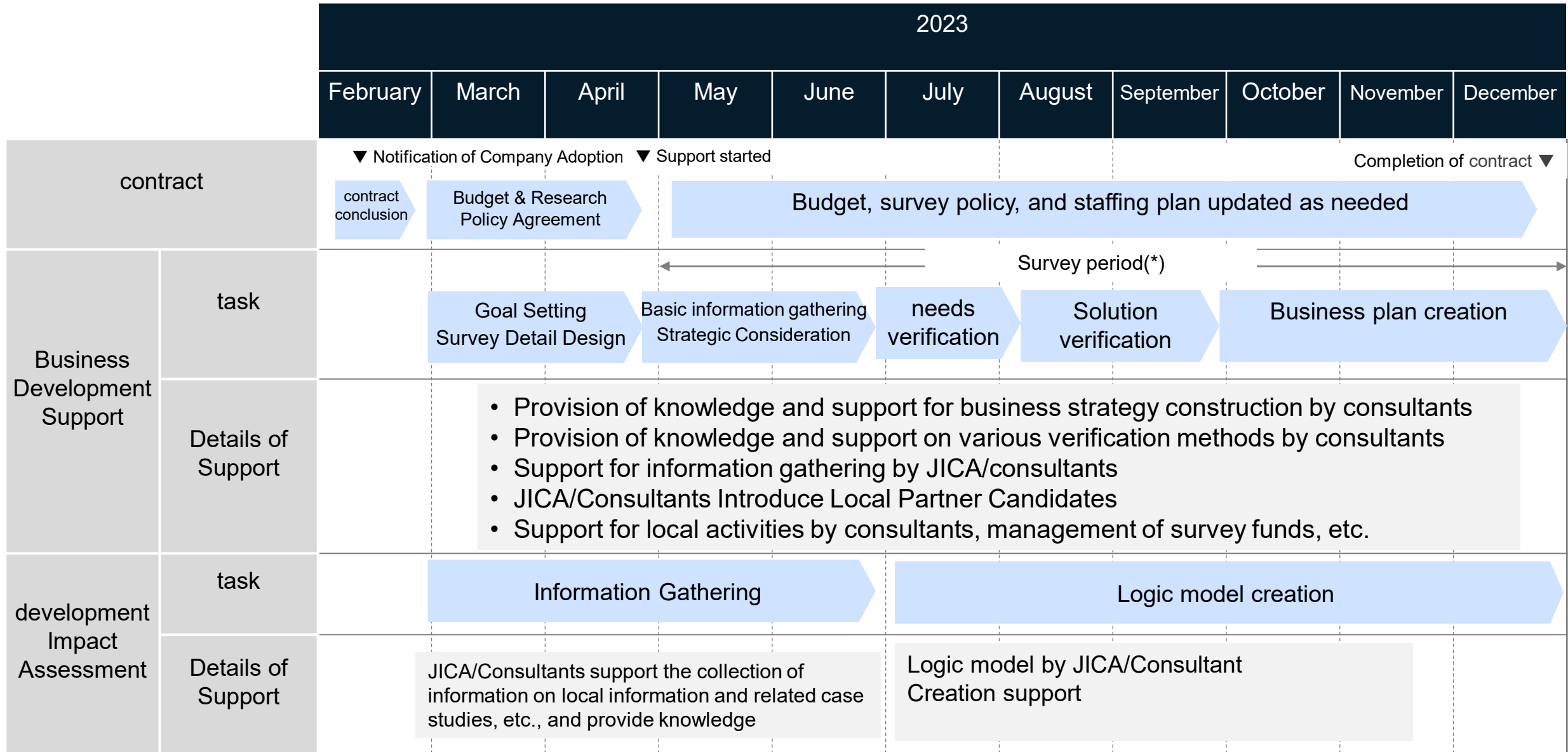
Needs Confirmation Survey

- Gather basic information and needs in developing countries
- Verify compatibility with products and services
- Develop an initial business plan
- Duration: About 8 months

Up to 10 million yen
+ consulting service (About 4 person-months)

For Start Up Company and Small and Medium-sized Enterprises

Model schedule: Needs Confirmation Survey



Overview of the scheme

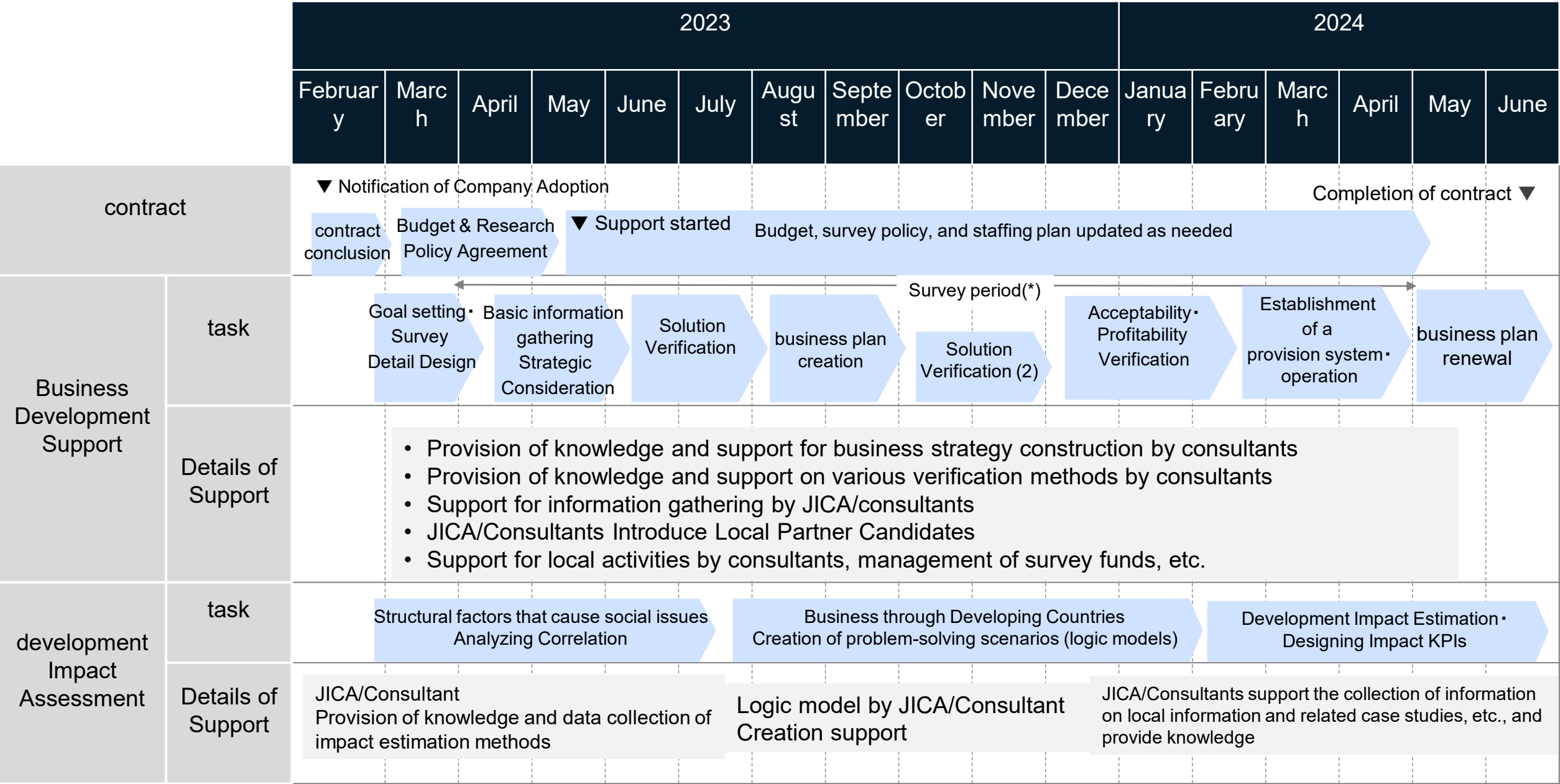
SDGs Business Validation Survey

- After confirming the customer's acceptability of the product/service, **secure local partners, formulate a business model, verify profitability, and develop operations to provide products/services.**
- Develop a more sophisticated **business plan**
- Duration: **about 1 year and 4 months**

**Up to 20 million yen
+ consulting service (About 8 person-months)**

For **Start Up Company, Small and Medium-sized Enterprises**
and **Large Company**

Model Schedule: SDGs Business Validation Survey

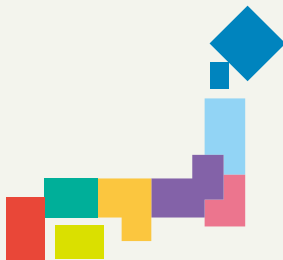


There are



96

Overseas offices
(as of July 1, 2020)



14

domestic offices
(as of July 1, 2020)



1,929

Staff members
(as of July 1, 2020)



150

developing countries and
regions that received
assistance
(during fiscal year 2019)

Merits to use the scheme

1



JICA's Trust and Network Utilization

Users can conduct surveys with utilizing the trust that JICA has built up with developing countries.

- Users can access wider local partners which private companies can hardly reach.
- **JICA can introduce key local partners such as central governments, local governments, industry groups, etc.**

2



Professional Business Advisory

Users will get professional advisory from experienced consultants.

- Get professional advisories for commercialization in developing countries
- In support of JICA and consultants, scenario for solving problems in developing countries (Logic model) can be formulated

3



Corporate Recognition Improvement

By disseminating the results with JICA, users will have wider recognition both domestically and internationally.

- As a result of the survey, **JICA helps dissemination of the realized** business development and development impact creation **both domestically and internationally.**
- It is expected to expand domestic and overseas partners and improve corporate recognition.

シンポジウム	
国際協力による海外市場への展開	
2015.12.09	
日時	2015年12月9日（水）14:00~16:30（開場13:30）
場所	セントラル札幌ビル（札幌市北区北15条西2丁目）
主催	主催：北海道大学公共政策大学院公共政策学研究所／協賛：行政法人国際協力機構（JICA）北海道支所 後援：経済産業省北海道支庁振興、農水産省北海道振興、北海道新聞社、協力：日本貿易振興機構（ジェトロ）北海道貿易情報センター、中小企業基盤整備機構北海道本部、北海道、札幌支所、道庁北海道会議
プログラム	
【第1部】	
基調講演1	「人口減少時代における地域経済戦略」 小堀悠二（北海道大学公共政策大学院特任教授）
基調講演2	「脱熊企業：新たな国際協力の担い手」 松本正樹（JICA北海道所長）
【第2部】	
/パネディスカッション「道内中小企業による海外展開の課題と可能性」	
事例紹介1	日東建設（株）久保栄樹 取締役部長
事例紹介2	㈱ みどり工学研究所 豊永孝二 CEO代表
事例紹介3	㈱ レアックス 成田昌幸 取締役企画営業本部長
討論	コーディネーター：小堀悠二特任教授、パネリスト：西本英夫（北大公共政策大学院専任講師、事例紹介者3）



23 岡田通文氏(活動枠組み委員会)
コンサルタントのみどり工学研
(セサミ)」を紹介する。セサ
ミ入...

独立行政法人 国際協力機構 | Japan International Cooperation Agency

3. Examples

Development Issues Concerned in Infrastructure development and Disaster Prevention Sector

- Increased demand for technologies effective in preventing and protecting erosion of road slopes and other slopes that occur as a result of road construction and other infrastructure projects
- Increased demand for technologies to effectively prevent sediment disasters caused by frequent heavy rains and larger typhoons due to global warming
- Increased demand for stable slope revegetation technology as an alternative to conventional coconut matting and hydroseeding

Products/Technologies of the Company

- Erosion control mat (Takino Filter SP type) with erosion control function by high rainwater drainage function, mainly consisting of non-woven fabric (web) with extremely high porosity and flexibility made of polyester, to which seeds, fertilizers, and soil amendments are attached to add "greening function".
- Easy installation by human labor without the need for heavy machinery or plant equipment

Survey Outline

- Survey Duration : October 18, 2022 ~ February 14, 2025
- Country/Area : All of the Philippines
- Name of Counterpart : Bureau of Research and Standards, Department of Public Works and Highways (DPWH-BRS)
- Survey Overview : This is SDGs Business Verification Survey with the Private Sector for Erosion Control and Vegetation Mat for Slope Protection concerning the technology transfer to local government agencies based on an innovative technology that can simultaneously and easily realize soil erosion prevention and planned vegetation of slopes. The project aims to obtain a Certificate of Conditional Approval to Use the Product in DPWH Projects of slope protection mats as public works materials during the project. After this project, we aim to obtain Department Order (DO), expand nationwide sales of the product and thereby contribute to the reduction of sediment disaster risks occurred in slopes of the Philippines.



Takino Filter MF type

How to Approach to the Development Issues

- Business strategy in target countries: use as public works materials for road construction and other infrastructure projects based on the issuance of DO by the Department of Public Works and Highways (DPWH) and publication in the Blue Book
- Clients: DPWH's 16 Regional Offices and 183 District Engineering Offices, Department of Environment and Natural Resources, local governments, private companies, etc.
- Profit structure: Local production and distributor sales by local business partner companies

Expected Impact in the Country

- Realization of effective and efficient erosion control and greening of slopes in bare land such as road slopes occurred as a result of infrastructure development projects
- Reduction of the risk of sediment disasters caused by frequent heavy rains and larger typhoons
- Positive effects on the local economy accompanying with the increase in demand for local materials such as coco peat and other local materials and employment

Feasibility Survey for the introduction of the initial fire extinguishing technology on forest fire suppression.

SMEs and Counterpart Organization

- Name of SME : SHABONDAMA SOAP CO., LTD.
- Location of SME : Fukuoka Pref., Japan
- Survey Site • Counterpart Organization : Palangkaraya Kalimantan Tengah • Ministry of Environment and Forestry



石けん系泡消火

Soap Based
Class A Foam



Concerned Development Issues

- Insufficient stock management of the fire extinguishing agent.
- Adverse impact of the petroleum-based fire extinguishing agent on natural .

Products and Technologies of SMEs

< Key characteristics of "Soap Based Class A Foam" developed by SHABONDAMA SOAP>

- Extinguishable with less water (lower extinguishing cost)
- Significant reduction in environmental load
- Fewer burdens and risks on fire fighters
- Prevention for reignition

Proposed ODA Projects and Expected Impact

- Then, technical instruction related to the proper usage of the fire extinguishing agent in communities will also be provided for forest conservation areas such as Parangkaraya city and Kubu Raya prefecture, etc.
- Prospect of business expansion: Local manufacturing base of the foam agent is developed to establish a system for local production and distribution.
- Expected outcomes: (a) It is able to improve efficiency of fire fighting by reducing the amount of water used to counterparts. (b) It is able to extinguish the fire using soap-based fire extinguishing environmental friendly.

SMEs and Counterpart Organization

- Name of SME : Moriya Co., Ltd. ■ Location of SME : Miyagi Pref., Japan
- Survey Site / Counterpart Organization : Ulaanbaatar, Khovsgol prefecture, Tuv prefecture, Selenge prefecture, Bulgan prefecture / Forest Policy Coordination Bureau, Ministry of Environment and Tourism, Khovsgol prefecture



Concerned Development Issues

In Mongolia, the withering damage to forests has increased, and according to the statistics of the Ministry of Environment and Tourism of the Forest Policy Coordination Bureau of Mongolia, 407 million tons of dead forest trees out of 1.2 billion tons of forest material have been left uncut. It caused a forest fire and hindered reforestation.

Products and Technologies of SMEs

Wood pellets: General household products (product name Moermin, diameter 6 mm, length 15-20 mm, moisture content 8%) and biomass power plant products (diameter 8 mm, length 15-20 mm).
Charcoal: Produced and commercialized by extracting only carbon by applying heat to wood.

Proposed ODA Projects and Expected Impact

Moriya Co., Ltd. will survey legal, social and economic conditions necessary for commercialization of ODA for effective utilization of underutilized forest resources, which the Mongolian government has set as a development issue, through project survey, and it will build a cooperative relationship between counterparts in Mongolia and local companies. In addition, it will propose and support technologies and commercialization know-how that can be effectively used for unutilized forest resources in Mongolia, assuming dissemination and demonstration projects. This is expected to have the effect of building and expanding the cooperative relationship between Japan and Mongolia in this field.

Business development of Japanese SMEs

It establishes a local subsidiary in Mongolia to locally produce and sell wood pellets and charcoal to expand business. For Mongolia, it is possible to generate profits by cutting and transporting dead trees, manufacturing proposed products, hiring local workers, exporting to Japan, and selling in Mongolia. It will create a new businesses.

4. Application and screening schedule etc.

Eligible Countries, Target Fields, and Application Schedule

■ Eligible Countries

In principle, ODA target countries where JICA's overseas bases (overseas offices and branch offices) are located

■ Target Fields

No special restrictions

■ Application and Screening Schedule (in case of FY2022)



Photo courtesy of Kenshiro Imamura/JICA



■ (*1) We strongly recommend applying companies to consult with JICA domestic offices about the planned details of your application before the start of this public notice.

■ An advance announcement will be made on the JICA website regarding the public notice.

■ The same application and screening schedule above is applied with SDGs business verification survey as well, while it may take longer time to start the survey of this scheme after contract negotiations and the relevant coordination including minutes conclusion with partner countries (if necessary).

Thank you

https://www.jica.go.jp/priv_partner/activities/index.htm