

DCED 2022/2023 Annual Meeting Day 3: Member Updates

JICA

(Japan International Cooperation Agency) Toru HOMMA Yuka ASAKAWA

Friday, June 10, 2022 @Cambridge, UK



- 1. JICA's basic approach and priorities for Private Sector Development
- 2. Latest activities
- a) Project NINJA (<u>Next</u> <u>In</u>novation with <u>Ja</u>pan)

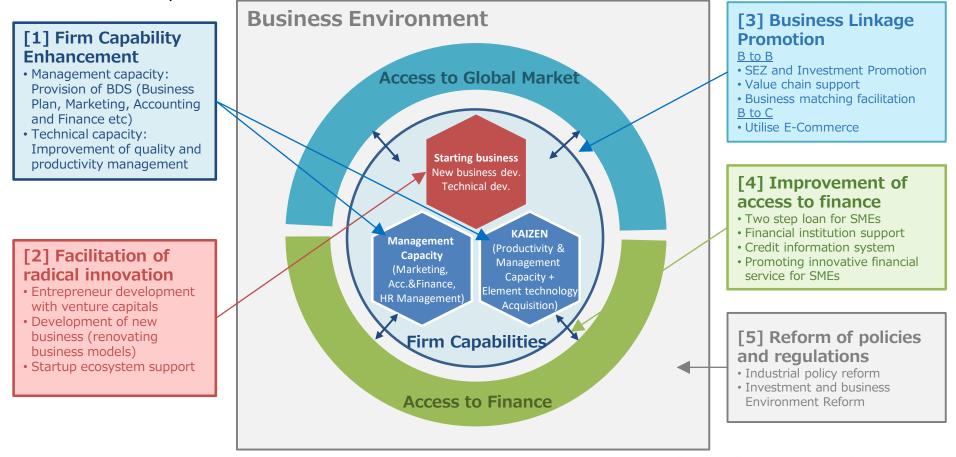
1

b) Survey on Smart Manufacturing



1-1. JICA's Basic Approach to Private Sector Development

- Emphasis on <u>enhancement of firm capabilities [1] [2]</u>, while <u>promoting business linkages [3]</u> including global value chain participation and <u>improving access to finance [4]</u>, along with the support for <u>development of policies and regulations [5]</u> as business environment reform.
- Leverage existing knowledge and experiences, new technologies and know-how's to promote innovative cooperation.





1-2. JICA's priorities for Private Sector Development

Africa Kaizen Initiative

Improve business competitiveness and production management through *Kaizen* (quality/productivity improvement) approach



Region-wide 10-year initiative led together with AUDA-NEPAD (2017-2027)

Promotion of Investment and Industries in Asia

Holistic support in (i) attracting FDI through business environment reform, (ii) capacity building for local businesses through industrial development strategies, and (iii) in creating business linkages

Support for Entrepreneurs to Create Business Innovation

Project NINJA (Next Innovation with Japan)

Support for startups which contribute to solving social challenges through innovation



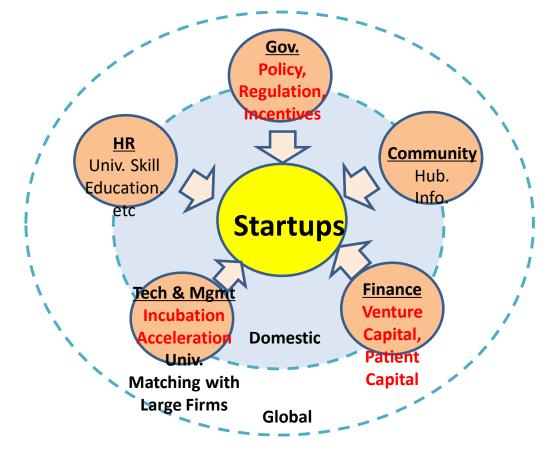


(Case) Bangladesh Project for Promoting Investment and Enhancing Industrial Competitiveness



<Objective>

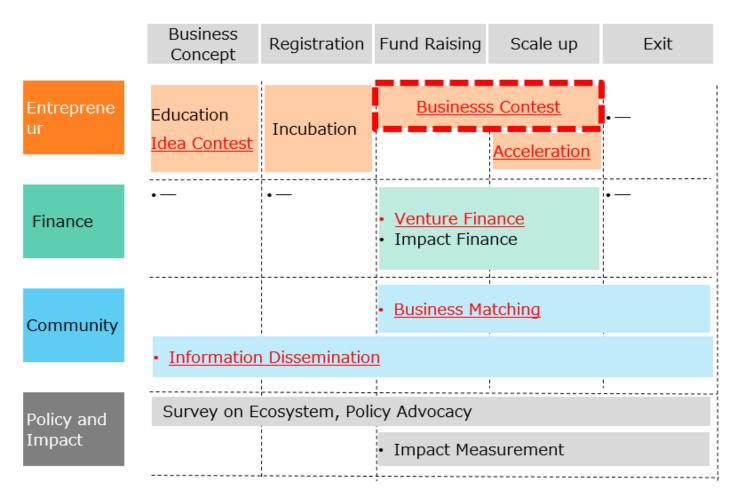
To support Developing Start-up Ecosystem





Project NINJA (Next Innovation with Japan)

<Framework>



6



(Case) NINJA Business Plan Competition in Response to COVID-19

- Called for proposal in 19 Countries
- Received 2,713 proposals
- Selected 69 Excellent proposals and made contract for POC.
- Conducted Grand Finale with 10 Startups

https://www.jica.go.jp/english/news/field/2020/20210226_01.html







b) Survey on Smart Manufacturing

"Data Collection Survey on Upgrading Manufacturing Industry Using the Latest Technology"

- Objectives:
 - Assess and analyze the impact of new technologies on the industry development
 - Focused on manufacturing industry

Simply, watch the trend of 4th Industry Revolution (4IR)

Target countries

Desk research: 5 middle to advanced countries Field survey: 5 ASEAN countries

Output

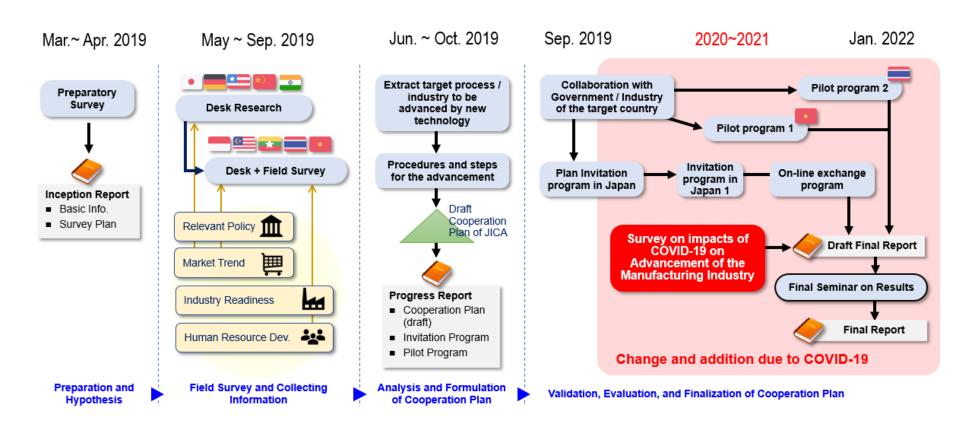
Recommendations to future cooperation of JICA in industry development promotion





Survey on Smart Manufacturing

<Overall flow and activities>



Findings: Survey on Smart Manufacturing

<Observation of Manufacturing Sector in surveyed countries>

- Large gap in quality control and production management capabilities
 - Between local companies that are capable of suppling parts to Japanese companies (Tier 2/3) and those that are not.
- The need for digitalization has been recognized, but
 - The cost for digitalization is high (or at least is believed to be high)
 - Lack of IT human resources
 - ICT engineers typically don't want to work in manufacturing industry
 - Or, they simply don't know where to start
- Necessity of network
 - Information sharing with supply chain companies is recognized as an issue. → Potential needs

10

Findings: Survey on Smart Manufacturing

<Data-driven manufacturing is NOT perceived as "necessary">

<u>Reasons</u>

- Need for mass production is still overwhelming (i.e., once production facilities are set up and adjusted, they can be used for a long time)
- 2. They are sufficiently profitable, and the management has little awareness of reform. They do not even record data at all, but are not particularly troubled. (e.g. local SMEs)
- 3. Productivity improvement has been sufficiently achieved through manual "Kaizen" activities, which repeats the process of data acquisition, analysis, judgment, and reflection in an *analog* manner.

(e.g. Japanese companies, etc.)

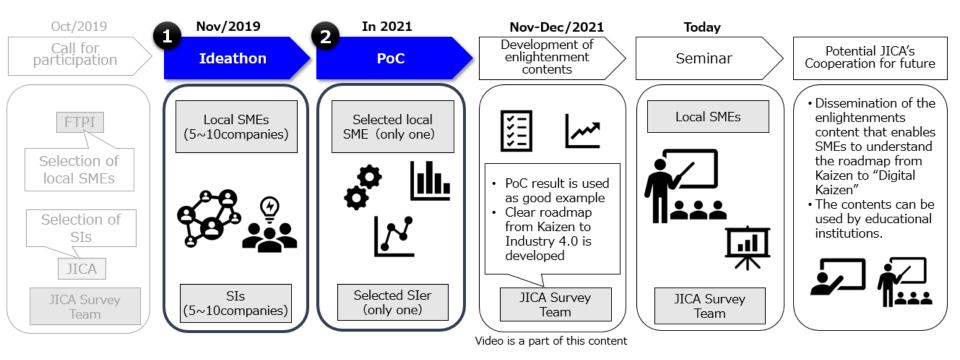
Findings: Survey on Smart Manufacturing

<<u>Real situation of Slers in surveyed countries></u>

- Local SIer does not have correct understanding of manufacturing
 - Lack of "experiences", not just "domain knowledge"
 - Tends to recommend ready-made solutions (such as ERP) just for offices
 - There are still huge demands for "office" digitalization
 - Some provides IoT "add-ins" to the ERP at manufacturing site, but they are primitive
- Foreign Sler (from Japan, US, Germany, etc.) provides dedicated solutions for manufacturing site
 - But they tend to be expensive and target bigger companies
- Very few solutions available for manufacturing SMEs



Pilot Program in Thailand





Results of Pilot Program in Thailand

- **Digital x Kaizen** brings:
- ✓ Accelerating Kaizen activities: Easier and more accurate implementation
- Obtaining effects earlier: Start small and accelerate gradually with its benefits
- ✓ Improving human resources: Appropriate re-training and re-allocation
- Changes in SME managements' mind: Identify actual issues and make quick decisions



- 4IR "theories" and "concepts" are already enough

 Like readiness assessment, strategy for promoting 4IR, etc.
- Next step would be "Let's try" and "See for yourself"
 - Big companies are OK They have already started
 - Real support for starting 4IR in SMEs are needed
- Need for policies to encourage SMEs to engage in 4IR
 - Awareness raising programs for <u>SME management</u>
 - Be sure to deliver message of "small start" "see for yourself"
 - Subsidy support for:
 - DIY workshop for small factories (If not try it, you don't know it)
 - 2. Matching with Slers (who can really deliver smart manufacturing solutions) Japan International Cooperation Agency



Final Report is available online; <u>https://libopac.jica.go.jp/images/repor</u> <u>t/1000047154.pdf</u>

16



Thank you for your kind attention!!