

**Study on Assessment of Development
Effectiveness and Financing Method
for BOP Business
Final Report (Summary)**

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Japan International Cooperation Agency (JICA)

**PricewaterhouseCoopers Aarata
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List of abbreviation

ARUN	ARUN LLC.
BCtA	Business Call to Action
BIF	Business Innovation Facility
CDC	Commonwealth Development Corporation
CSR	Corporate Social Responsibility
DFI	Development Finance Institutions
DFID	Department for International Development (UK)
DOTS	Development Outcome Tracking System
EBP	Evidence-Based Practice
F/S	Feasibility Study
FIT	Feed In Tariff
FMO	Financierings-Maatschappij voor Ontwikkelingslanden
GIIN	Global Impact Investing Network
GIIRS	Global Impact Investing Rating System
GP	General Partner
GRI	Global Reporting Initiative
IAP	Innovation Against Poverty
IFC	International Finance Corporation
Impact Programme	Investment Mobilization for Prosperity and Catalytic Transformation (Impact) Programme UK
IRIS	Impact Reporting and Investment Standards
IRR	Internal Rate of Return
JETRO	Japan External Trade Organization
JICA	Japan International Cooperation Agency
LP	Limited Partner
MOP	Middle of the Pyramid
NEF	New Economic Foundation
NGO	Non-Governmental Organization
Norfund	Norwegian Investment Fund for Developing Countries
OECD-DAC	Organisation for Economic Co-operation and Development Development Assistance Committee
PDM	Project Design Matrix
Ph	Phase
PPI	Progress out of Poverty Index
PwC	Pricewaterhouse Coopers
REDF	Roberts Enterprise Development Foundation
ROA	Return on Asset
ROI	Return on Investment
SIDA	Swedish International Development Cooperation Agency
SME	Small and Medium Sized Enterprise
SROI	Social Return on Investment
TA	Technical Assistance
TOP	Top of the Pyramid
USAID	United States Agency for International Development
WBCSD	World Business Council for Sustainable Development

1. Research outline

1.1 Research design

1.1.1 Challenges and objectives

The concept of including the Base of the Pyramid (BOP) as stakeholders in business value chains has been attracting increased attention. This has developed in response to the recognition of the potential of consumer markets in emerging countries, rather than viewing these countries as old recipients. However, the high levels of risk inherent in BOP business can create a barrier to entry for private sector investors looking to start a BOP business using their own funds. To overcome this, research into the use of joint initiatives combining public and private funds at the initial high-risk stage has been performed. For example, in Japan, JICA launched its ‘Preparatory Survey for BOP business promotion’ (BOP F/S) in 2010.

However, in reality there is a significant gap between JICA’s targeted BOP business and the private sector’s strategies and approaches to BOP business, as the private sector generally places greater importance on profitability rather than development impacts. In order to achieve this objective and demonstrate benefits of JICA’s approach to BOP business, it is necessary for JICA to not only formulate development impact indicators and assessment methodologies, but to share information with the private sector to raise awareness of the significance of incorporating development impacts into their business strategies.

One of the most significant challenges for BOP business globally is a shortage of funds available to launch a BOP business. The business entities subject to JICA’s BOP F/S also face the same challenge. Therefore, to facilitate the growth of BOP businesses, it is important for JICA to formulate assessment methodologies and to study and review appropriate financing approaches.

Based on understanding above, following goals have been set for this study.

Goal: Facilitate private sector participation in BOP markets through cooperation with public sector organizations and establish BOP businesses that have both sustainable social returns and sustainable economic returns.

In order to achieve above goals, the following three objectives have been established¹:

- Objective 1: Analyze cases of JICA BOP F/S and identify key success factors in BOP businesses to improve future administration of BOP F/S support.**
- Objective 2: Establish an assessment framework to measure development impact for use by JICA and Japanese companies during BOP F/S and beyond.**
- Objective 3: Define measures to address issues associated with BOP business financing (including developing guidelines for the organization of impact funds and future steps to be taken).**

(* This survey aims to establish indicators for JICA BOP F/S)

¹ 'In this report, financing for BOP business is defined as a part of impact investing, due to the social impacts BOP businesses yield.'

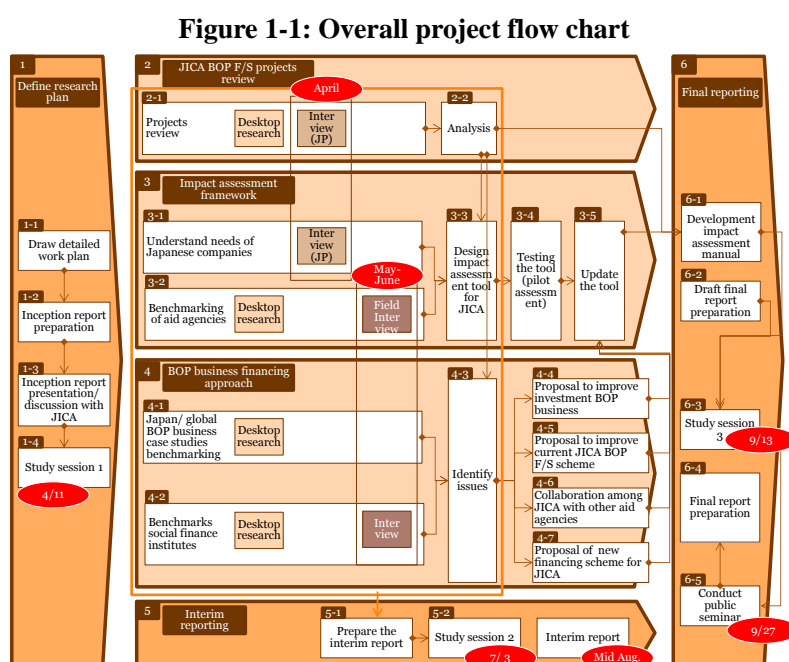
1.1.2 Project flow, goals and scope of the research

(1) Project flow

This research has been performed according to the stages shown in Figure 1-1. The following tasks correspond with the three objectives defined above:

- Objective 1: Review JICA BOP F/S cases.
- Objective 2: Analysis of development impact assessment methods.
- Objective 3: Analysis of financing methods.

* Tasks 1, 5, and 6 mainly relate to planning and reporting.



Source: Prepared by research team

(2) Target and scope of the research

Data collection approaches used in performing tasks 2 to 4 shown in Figure 1-1 involved a combination of (1) desktop research, (2) interviews with related organisations in Japan, and (3) face-to-face meetings with related international organizations (with follow-up by email or telephone as appropriate).

- (1) Desktop research: Worldwide
- (2) Interviews conducted in Japan
 - Completed JICA BOP F/S cases
 - Other Japanese companies that have relevant BOP business experiences
- (3) Interviews with international organizations:
 - Asia (India)
 - North America (Washington, D.C., New York)
 - Europe (the UK, the Netherlands, Belgium, Switzerland, Denmark, Norway, Finland)

* Organizations in Denmark, Norway, and Finland were interviewed by telephone.

2. JICA BOP F/S case review

2.1 Review outline

2.1.1 Overcoming barriers and achieving development impacts

Overcoming operational barriers faced by BOP business owners (e.g. BOP workers' capacity, stable procurement of raw materials, buying capabilities of BOP groups, and distribution of goods/services to local areas) is essential for both successful commercialization of a BOP business and achieving associated development impacts (e.g. improvement in capability, improvement in livelihood/productivity of farmhouses, an increase in access to fundamental services). Figure 2-1 highlights key linkages and barriers between commercialization and the expected development impacts as they apply to BOP business.

This study will focus on issues faced by BOP business in commercialization, how to verify the success of commercialization, and its relationship with development impact. The following hypothesis is adopted and tested in this study: 'the commercialization of BOP businesses will contribute to development impact'.

Figure 2-1: Challenges for commercialization and relationship with the development impact

Category	Challenges in commercialization (examples)	Solution (examples)	Expected development impacts			
			Direct	Indirect	Example	
(1) Resources	a. Human resource	1. Improvement in quality of employees	○		Improvement in vocational training opportunities, wages, and living standards, etc. for BOP	
	b. Material	2. Matching needs and product specifications		○	Improvement in hygienic conditions, nutrition and learning opportunities for BOP groups (development and sales of goods with high potential demand will enable BOP consumers to access goods and services)	
	c. Finance	3. Access to finance		○	Improvement in hygienic conditions, nutrition and food self-sufficiency ratio and development of manufacturing industry (making business entities accessible to finance will enable the businesses develop in the region and then also to bring about development impacts on consumers and contribute to the industrial development in the developing country)	
(2) Value chain	a. Production · procurement	4. Engagement of BOP producers/stable procurement	○		Employment creation, increase in pay and improvement in living standards for BOP farmers, development of primary sector, and improvement in living and productivity in farmers, etc.	
	b. Processing · manufacturing	5. Processing and manufacturing of high good quality and low- cost goods		○	Development of secondary sector, job creation of BOP workers, improvement in employees' job skills, etc.	
	c. Distribution · sales	6. Construction of logistics network for BOP	Facilitate sharing of distribution network		○	Improvement in hygienic conditions, nutrition and learning opportunities for BOP, etc. (improvement in access to services)
			Hub-and-spoke		○	Competence development of micro enterprises, job creation of BOP, improvement in income of micro enterprises, improvement in infrastructure
			Utilize organizations serving as "hub", e.g. schools, hospitals and churches		○	
	7. Development of products for BOP	Organize and utilize users association				
		Mini franchise				
8. Price setting for BOP consumers	Utilize community-based agencies or distributors					
	Utilize unofficial channel					
9. Promotion for BOP market	Organize hard infrastructure in rural areas					
	Sell by sachet, small quantity and measure					
10. Access to finance for BOP	Module					
	Shared access					

Source: Prepared by Research Team based on 'Inclusive Business Models' (2010) published by IFC and knowledge of PwC through BOP business support engagements including Innovations Against Poverty (IAP) of Sweden and BIF of the United Kingdom.

2.1.2 Review targets

(1) Review targets and selection methodology

Of the total number of JICA BOP F/S cases (65 cases¹), those that had been completed as of March 2013 (18 cases) were selected for the analysis. Figure below provides information on the cases analyzed based on A. Enterprise size, B. Geographic region in which business is conducted, C. Industry sector of the proposed business, and D. Phase of business. This information is summarized as follows:

¹ This represents the number of BOP F/S cases selected from one to four application sessions at the time when this survey commenced end of March 2013.

- A. Enterprise size: 8 cases were large enterprises while the remaining 10¹ comprised of small and medium enterprises.
- B. Geographic region: 9 were located in Asia, 8 in Africa, and 1 in Latin America.
- C. Industry sector: 6 companies were in the energy sector, 4 in the health sector, 3 in the water sector, 2 in the food sector and 1 company in each of the consumer goods, infrastructure, and education.
- D. Phase of business²: If the phase of business of each case under the F/S is classified according to four phases (Ph1: technology and product development, Ph2: initial exploration of commercialization, Ph3: empirical experiments and product testing, Ph4: verification of commercial feasibility), 5 cases were at Ph4 only, 5 cases were at Ph3 and 4, and 8 cases were at Ph2 or 3).

(2) Commercial potential of researched cases

An assessment of commercialization potential of the 18 selected cases was performed as part of the review. Of the 18 cases, 7 cases were classified as (1) cases ('commercialized cases'³) that were being commercialized or expected to be commercialized imminently with the remaining 11 classified as (2) cases ('non-commercialized cases') for which commercialization was being delayed or still under consideration. These two cases are defined as follows⁴:

- (1) Cases that were being commercialized or were expected to be commercialized imminently: following completion of the F/S, the decision has been taken to proceed to commercialization or there is a high degree of confidence that a decision to commercialize will be taken in the near future.
- (2) Cases for which commercialization was being delayed or still under consideration: after completion of the F/S, cases where a decision not to commercialize has been taken or where further steps towards commercialization have been suspended or put on hold.

2.1.3 Research and analysis approach

Figure 2-2 shows the research and analysis approach implemented for the 18 cases, which comprised of: (1) inception report reviews, (2) final report reviews, (3) questionnaires, and (4) interviews. We analyzed JICA BOP F/S cases on following criteria: risk factors that suspended/delaying commercialization, essential requirements for commercialization, company size and requirements to achieve development impacts. Based on the results of analysis above, key points have been summarized in two perspectives as follows.

¹ Company size is defined based on the Small and Medium-sized Enterprise Basic Act. If the case involves a consortium of companies, and the consortium includes a large enterprise, it is counted as a large enterprise.

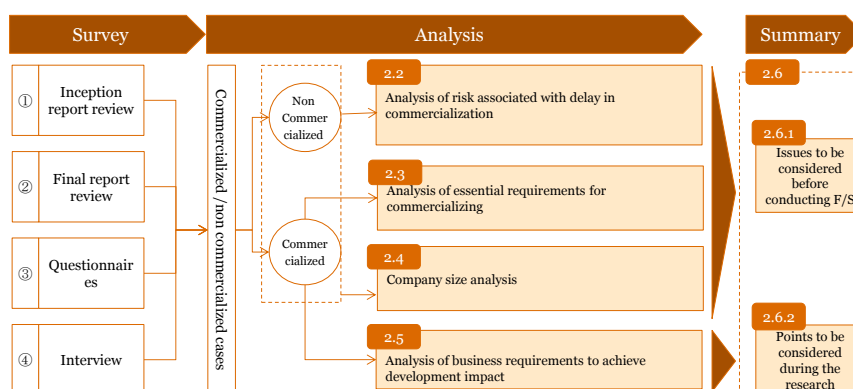
² The classification by phase of business was used for this analysis, since private companies frequently use this classification for the F/S purposes.

³ In this report, companies classified as (1) are called 'commercialized companies' and those of (2) are called 'non-commercialized companies'

⁴ JICA adopts a different classification approach for internal purposes, using a three category system: 'commercialization phase,' 'commercialization under investigation,' and 'commercialization currently difficult to achieve'. Of these, 'commercialization phase' cases were categorized as (1) for the purposes of this review, with 'commercialization currently difficult to achieve' cases classified as category (2). Based on the results of interviews conducted during this research, cases classified as 'commercialization under investigation' according to JICA's internal approach were re-classified based on the results of interviews performed.

- 1.) factors to be taken into consideration before starting the F/S
- 2.) points to be considered during conducting the F/S

Figure 2-2: Research/analysis approach



Source: Prepared by research team

2.2 Analysis of risk associated with delay in commercialization

2.2.1 Factors to take into consideration before conducting F/S

Through the analysis of non-commercialized cases, issues considered to be preventing the commercialization of BOP business were identified. Factors included were those that could objectively be identified from the analysis of the inception and final reports on BOP F/S cases. Additionally, when selecting risk factors, emphasis was placed on those that could be identified prior to the F/S. Factors were classified into three levels: killing factors, high risk factors, and risk factors, based on the frequency of occurrence in non-commercialized cases. Factors with a frequency of occurrence of 90% or above were classified as killing factors, those with a frequency of occurrence between 80% and 90% were classified as high risk factors with those between 50% and 80% classified as risk factors.

Figure 2-3: List of risk factors associated with delaying in commercialization

		Risk factors for non commercialization	
Planning of business proposal	1.1 Business model	a	· Low correlation between core business and proposed business
		b	· 'Dependent' model where business relies greatly on partners, BOP entrepreneurs, and sales channels in the target country.
		c	· Less profitable as the focus is only on BOP (TOP, MOP is not focused)
		d	· Business model requires completely new and complex role of the BOP · Pricing and regulation become barriers to commercialization as the products/services explored are considered to be that of public service.
	1.2 Survey design and structure	a	· All elements required for commercialization are not covered in the survey/process is not based on hypotheses verification.
	1.3 Pre survey	a	· Possibility of obtaining license and approval from the country of operation has not been confirmed in advance.
		b	· Basic information on competition, markets, needs, and infrastructure has not been gathered in advance.
	1.4 Technology/product standards	a	· Technology is inappropriate for local conditions.
		b	· Product specifications/price is inappropriate for BOP business.

Source: Prepared by research team

* 1.1 (b) represent a business model depending entirely on behavior of buyers without any plan for required supports and investments by candidate entities in the cases where the key factor for commercialization is to develop business with the aid of purchasers (corporate and people).

Figure 2-4: Factors by level of risk associated with delay in commercialization

Risk factor delays commercialization		Commercialized						Delay in commercialization						Commercialized delay in commercialization %						
		A	B	C	D	E	F	G	H	I	J	K	L		M	N	O	P	Q	R
Killing factors	• Technology is inappropriate for local conditions.									✓	✓					✓	✓			100~90%
High risk factors	• Pricing and regulation become barriers to commercialization as the products/services explored are considered to be that of public service.				✓						✓			✓	✓	✓		✓		90~80%
Risk factors	• Less correlation between core business and proposed business	✓	✓	✓					✓	✓			✓	✓	✓	✓	✓	✓		80~50%
	• Possibility of obtaining license and approval from the country of operation is not been confirmed in advance		✓	✓							✓						✓	✓		
	• Basic information on competition, markets, needs, and infrastructure has not been gathered in advance	✓	✓		✓	✓				✓			✓	✓	✓	✓	✓	✓		
	• Product specifications/price is inappropriate for BOP business.				✓				✓	✓							✓	✓		
	• 'Dependent' model where business relies greatly on partners, BOP entrepreneurs, and sales channels in the target country.	✓	✓	✓					✓	✓						✓	✓	✓		
	• Less profitable as the focus is on only on BOP (TOP, MOP is not focused)	✓			✓								✓			✓				
	• Business model requires completely new and complex role of the BOP				✓				✓	✓		✓								
	• All elements required for commercialization is not covered in the survey/process is not based on hypotheses verification.			✓	✓										✓		✓			

Source: Prepared by research team

2.3 Analysis of essential requirements for commercialization

2.3.1 Analysis of essential requirements for commercialization

The preceding section analyzed factors to be taken into consideration before conducting the F/S. The focus of this section is the identification of three ‘essential requirements for commercializing companies’, which commercialized cases achieved but non-commercialized cases failed to meet.

Figure 2-5: Essential requirements for commercialization

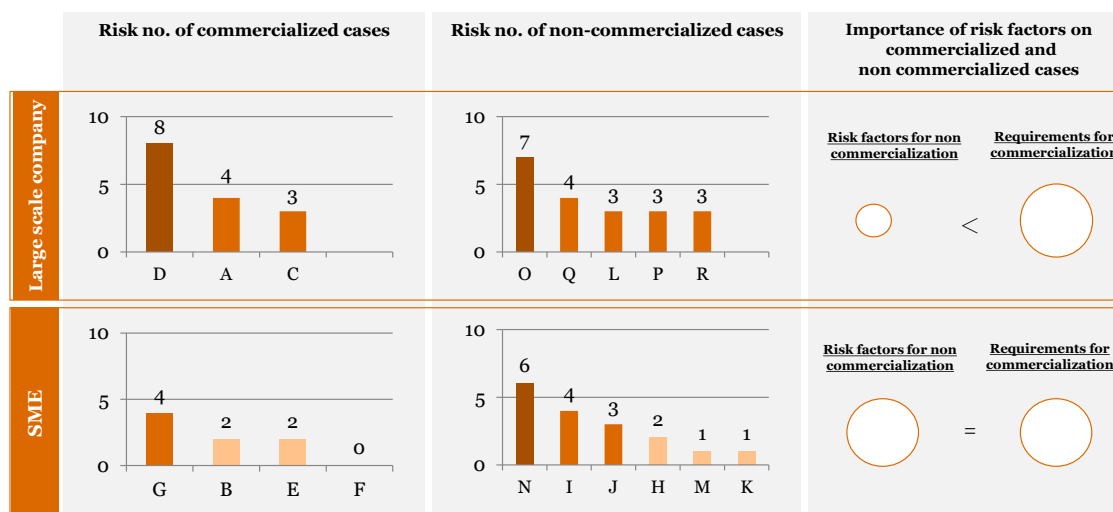
Essential requirements for commercialization of the company (Commercialization requirements)		Cases surveyed																	
		Commercialized						Non commercialized											
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Strategy/commitment of the company	1. Proposed business has a clear position in the company's overall strategy.	✓	✓	✓	✓	✓	✓	✓											✓
	2. Company's management is strongly committed to commercialization.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓				✓
Local network	3. Strong local network.		✓	✓		✓	✓	✓			✓			✓			✓	✓	✓

Source: Prepared by research team

2.4 Company size analysis

Trends in success or delay in commercialization according to company size were analyzed alongside the risk factors; (killing factors, high risk factors and risk factors) in order to identify key success factors. Despite the existence of underlying non-commercialization risks, if certain factors required to achieve commercialization are accomplished, large corporations are able to overcome risks and achieve commercialization. However in case of SMEs, although factors for commercialization are met, if risk factors are high, they still encounter difficulties in overcoming risks to achieve commercialization. Within the cases reviewed, there were some cases which had progressed to commercialization despite the presence of several risk factors. Comparative analysis of these cases indicated that small and medium size companies had a smaller number of risk factors to address compared to larger companies. This suggests that, in the case of small and medium companies, consideration should be given to the total number of risk factors and the extent to which these risks can be effectively mitigated.

Figure 2-6: Essential requirements for commercialization



Source: Prepared by research team

2.5 Analysis of business requirements to achieve development impacts

2.5.1 Summary of analysis

The 18 F/S cases were analyzed from the perspective of the points explained below.

A. Analysis on commercialized cases (see 2.5.2)

- A1. What kinds of barriers were experienced and what responses were taken to overcome them?
- A2. What kinds of actions could be implemented to increase the potential development impacts?

B. Analysis on non-commercialized cases (see 2.5.3)

- B1. What kinds of barriers were experienced and what were the available responses to overcome them?

As shown in Figure 2-1, responses taken to operational barriers to commercialization have the potential to bring about a broad range of direct and indirect benefits. These include improvements in vocational training opportunities, increases in wages, living standards and sanitary conditions, nutritional and learning improvements, and promotion of local manufacturing and primary industries.

2.5.2 Analysis of commercialized cases

(1) Barriers encountered and responses

Analysis of the commercialized cases from the perspective of A1 (What kinds of barriers were experienced and what responses were taken to overcome them?) highlighted the following common themes which were identified in 3 or more of the cases analyzed:

- (i) Developing products in line with local conditions, without relying solely on technology

【JICA BOP F/S case example】

✓ Company D, a manufacturer and distributor of a water purification system, developed a product tailored for local demand by maximizing the use of local materials, maintaining simple technical features and keeping the retail price low. Company B also partners with local vendors to install the product.

- (ii) Utilizing community-based agencies or distributors, schools, hospitals, churches and other organizations to act as a ‘hub’ when establishing distribution networks to BOP.

【JICA BOP F/S case example】

✓ Company C, a manufacturer and distributor of mosquitos nets, engaged with the BOP community through demonstration sessions in churches. It also conducted door-to-door sales to promote products.

- (iii) Pricing goods and services appropriate to BOP using the concept described in the ‘whole pyramid approach’.¹

【JICA BOP F/S case example】

✓ Company A, which plans to manufacture and sell solar lanterns, positioned its BOP-focused lantern and battery products as part of its overall strategy of marketing high-end electrical products in the country.

(2) Measures to further increase development impacts

Analysis of commercialized cases from the perspective of A2 (‘what kinds of actions were implemented to increase the potential development impacts?’) did not identify any common themes. The following are notable examples of actions identified:

- (i) Providing employees with training and capacity building in order to improve the capability of the local production and sales structure.

【JICA BOP F/S case example】

✓ Company C, a manufacturer and distributor of mosquitos nets, conducted a survey which identified that the additional medical benefits of the product were not effectively communicated to consumers. The company subsequently enhanced the effectiveness of its local distribution network by providing training and capacity building for employees. It also achieved additional social impact by promoting other activities which protect against malaria.

- (ii) Establishing a stable raw material procurement system involving BOP producer(s) by using different approaches, including for example entering into direct contracts with producer(s), guarantees of minimum purchase quantity, transparent pricing, competitive price setting

¹ Whole pyramid approach represents a development and sales strategy of goods and services covering TOP, MOP and BOP in the regional business area.

(comparison of competing products) and establishing producer associations.

[JICA BOP F/S case example]

✓ Company F, a manufacturer and distributor of non-perishable food, stopped procuring local tomatoes due to concerns over quality and cost. The company decided that it was not effective to produce tomato puree through direct contracts with local tomato producers. However, it might have been able to improve development outcomes for BOP farmers if it had collaborated with other projects run by JICA or other international organizations which could have addressed their concerns e.g. by training local farmers to improve quality.

(iii) Facilitating the BOP groups' access to goods and services by sharing distribution networks and using existing organizations that can serve as a 'hub' (schools, hospitals and churches, etc.) in order to establish a distribution network for BOP products and services.

[JICA BOP F/S case example]

✓ Company A, as described previously, sell products and services through local distributors and agencies. However, they could further expand by utilizing potential "hubs" (such as schools and hospitals) to build out their distribution network.

(iv) Adopting BOP pricing strategies using the concepts of the 'whole pyramid approach' or 'step-by-step' pricing model with the aim of improving the BOP groups' access to goods and services.

(v) Facilitating BOP groups' access to goods and services through financing mechanisms, for example, a combination of in-kind working capital loan, ownership-transfer lease, lease finance, and warehouse finance

[JICA BOP F/S case example]

✓ Company E, a manufacturer and distributor of wheelchairs, identified through a survey that it could not compete with competitors on price. It subsequently narrowed its target customers to innovative medical educational and research institutes, and launched a rental service for used wheelchairs to enhance its price competitiveness. However, the company could improve overall profitability whilst utilizing local production and distribution if it also produced high-end products for the MOP and TOP. It could also consider combining its rental model with ownership-transfer lease or lease finance models.

2.5.3 Analysis of non-commercialized cases

Analysis of the cases that did not proceed to commercialization identified the lack of BOP purchasing power as recurring theme. Out of the non-commercialized cases, approaches that could be implemented to overcome this barrier applicable to 3 or more cases are:

- (i) Adopt pricing strategies appropriate to the BOP market, for example payment on installment, a pay per use system, a 'whole pyramid approach' or 'step-by-step' pricing model, etc.
- (ii) Facilitate BOP group access for the purchase of goods and services through financing mechanisms, for example a combination of in-kind working capital loan, ownership-transfer lease, lease finance, and warehouse financing.

[JICA BOP F/S case example]

✓ Company I, a manufacturer and distributor of simplified solid polymer fuel cell power plants, changed product specifications to source materials from the local market in order to reduce the cost of production. Even though the price was still high for BOP entrepreneurs, the company lowered the financial burden for BOP buyers by introducing various financial options, including payment installments, rental, or a combination of either with an ownership-transfer lease or lease finance, etc.

✓ Company O, a manufacturer and distributor of water purification equipment, identified difficulties due to the low willingness of residents to pay for water. The company could achieve profitability if it also targeted the MOP and TOP. A step-by-step pricing approach, depending on the quantity of water used, could transfer some costs from the BOP to the MOP and TOP.

2.6 Summary

2.6.1 Factors to take into consideration before conducting the F/S

Two key factors identified as being essential requirements to consider at the proposal review stage are (i) resolving any technical issue that may be a core component of the proposed BOP business at an early stage and (ii) for products that are, by nature, perceived as public goods (e.g. water treatment clarification technology), companies should take steps to understand potential pricing restrictions (such as regulatory controls on pricing), the feasibility of contracting with the assumed buyer (e.g. a public-sector organization) and the buyer's willingness to pay. In addition, consideration should be given to (iii) whether the proposed BOP business has a good strategic fit within the proposing company's overall business strategy, the company's management is strongly committed to BOP commercialization and whether the company has a strong local network. In case of SMEs, additional consideration should be given to the total number of potential risk factors and appropriate mitigation strategies, as these are identified as being associated with the potential risk in commercialization.

Figure 2-7: Summary of points to be considered before conducting the F/S

Before conducting the F/S	
(1)	Understand the risk of incompatible technology in advance, by gathering basic information before conducting the F/S.
(2)	Beneficiary's willingness to pay where there is a heightened perception that products/services are the responsibility of the public domain, price regulation, and the potential of reaching agreements among government institutes should be confirmed in advance.
(3)	Proposed business should be clearly positioned with the company's overall strategy, strong commitments at the senior management level, and active engagement with the local network.
(4)	In case of SME, in addition to (4)above, SME should check whether there are any risks that would lead to non commercialization and assess how to deal with each risk factor.

Source: Prepared by research team

Figure 2-8: Risk factors associated with delay in commercialization that should be considered before conducting the F/S

Business model	<ul style="list-style-type: none"> •Lack/low correlation between core business and proposed business •'Dependent' model where business relies greatly on partners, BOP entrepreneurs, and sales channels in the target country. •Less profitable as the focus is on BOP (TOP, MOP is not a focal point) •Business model is completely new and demands a complex role from the BOP
Research design structure	<ul style="list-style-type: none"> •All elements required for commercialization are not covered in the survey /process is not based on hypotheses verification.
Pre research	<ul style="list-style-type: none"> •Possibility of obtaining license and approval from the target country has not been confirmed in advance. •Basic information on competition, markets, needs, and infrastructure has not been gathered in advance.
Technology/product standards	<ul style="list-style-type: none"> •Product specifications/price are inappropriate for BOP business.

Source: Prepared by research team

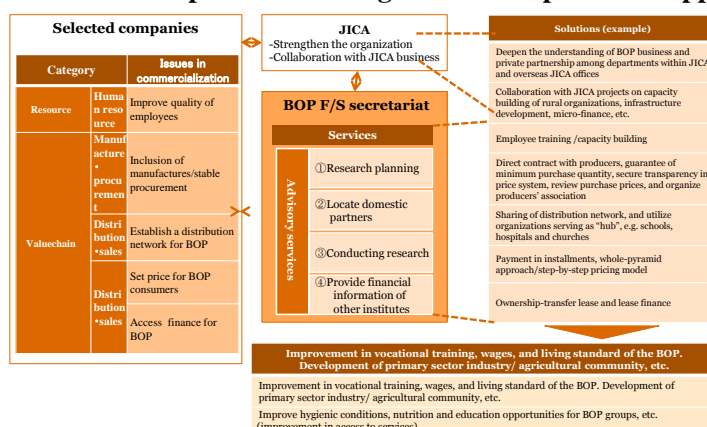
2.6.2 Points to be considered during the F/S (business requirements for achievement of development impacts)

Companies selected for conducting JICA BOP F/S are expected to face various barriers in particular to BOP businesses. Overcoming these barriers may require innovative measures that are not typically found in traditional business models. Adoption of such measures is likely to facilitate the commercialization of BOP businesses and also trigger development impacts. In particular, consideration should be given to measures relating to organizational aspects of the business (human resources, goods and capital) as well as individual project operations (production/procurement, processing/manufacturing, and sales/distribution). When considering appropriate measures, businesses can refer to successful examples of BOP businesses both in Japan and globally.

JICA also has the potential to play a significant role in supporting businesses in overcoming the barriers faced in BOP markets. For example, it might be possible for JICA to organize a team in the BOP F/S secretariat that can assume a central role in helping businesses achieve both development impacts and business profitability. Measures that could be adopted include providing (i) support in formulating BOP market research planning, (ii) support in finding local partners, (iii) support in conducting BOP market research, and (iv) information on available financing options. Specifically, since there are many companies currently facing barriers in price-setting for BOP consumers or experiencing difficulties in gaining access to finance for BOP(s), consideration should be given to appropriate steps to support business on addressing these issues.

Additionally, it is essential for JICA to have a process to share information regarding the barriers faced by business enterprises in relation to BOP markets. JICA should adopt a proactive approach to support business (including improving the understanding among private corporations of BOP business approaches used by JICA’s domestic office and other departments) through its organizational structure by actively encouraging collaboration between other projects at JICA (e.g. infrastructure development, capacity building of farmers’ associations, and collaboration with MFIs).

Figure 2-9: Points to keep in mind during the F/S and potential support of JICA



Source: Prepared by research team

3. Development impact assessment methods

3.1 Scope of this research

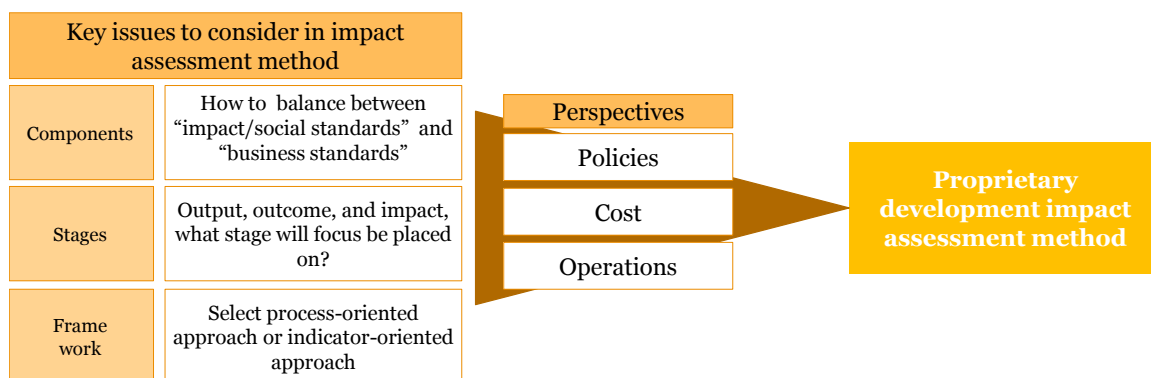
This research is being conducted to raise attention regarding the lack of “easy-to-use” assessment methods for a BOP F/S project that also have the potential to be used as investment rating criteria for impact investments. The purposes of conducting a development impact assessment are primarily to (1) promote accountability in development assistance, (2) use the resulting data in the operational aspects of business including management, CSR, and public relations, and (3) use the data to allow investors to rate an impact investment. In section 4.2, information was collected regarding existing assessment methods related to items (1)–(3). In considering requirements to be taken into consideration when creating a draft method, attention was primarily given to items (2) and (3). When considering the scope of the method, particular attention was given to results from the baseline surveys and development impact assessment indicators contained in JICA’s BOP F/S survey. Consideration was also given to the potential of using the method as a platform for conducting assessments on F/S projects have reached the commercialization stage and are active business entities.

3.2 Global trends and existing assessment methods

3.2.1 Summary

Analysis of the development impact assessment methods used by development assistance organizations and global private sector impact funds was conducted from three perspectives: (1) the components in development impact assessments, (2) the stages of the development impact assessment process, and (3) approach for development impact assessment methods.

Figure 3-1: Points extracted from global trends for creating a draft method



Source: Prepared by research team

3.2.2 Development impact assessment methods surveyed¹

This research focused on the analysis of development impact assessment methodologies, in particular those relating to business, and was carried out using a combination of desktop research and face-to-face interviews. Below is a list of the existing methodologies assessed in this research.

Figure 3-2: List of development impact assessment methods survey2

#	Impact assessment method	Organization
1	Impact Reporting and Investment Standards (IRIS)	Global Impact Investing Network (GIIN)
2	Global Reporting Initiative Guideline	Global Reporting Initiative (GRI)
3	Global Impact Investing Rating System (GIIRS)	GIIRS members
4	Measuring Value of BCtA Initiative, A Result Reporting Framework	Business Call to Action (BCtA)
5	Development Outcome Tracking Systems (DOTS)	International Financial Corporation (IFC)
6	Measuring Impact Framework	World Business Council on Sustainable Development (WBCSD)
7	Poverty Footprint Framework	Oxfam
8	Baseline Form for new projects	DFID Business Innovation Facility (BIF)
9	Social Return on Investment (SROI)	Roberts Enterprise Development Foundation (REDF), New Economic Foundation (NEF)
10	Progress out of Poverty Index (PPI)	Grameen Foundation

Source: Prepared by research team, based on information on each organization's website.

3.2.3 Analysis of existing development impact assessment methods

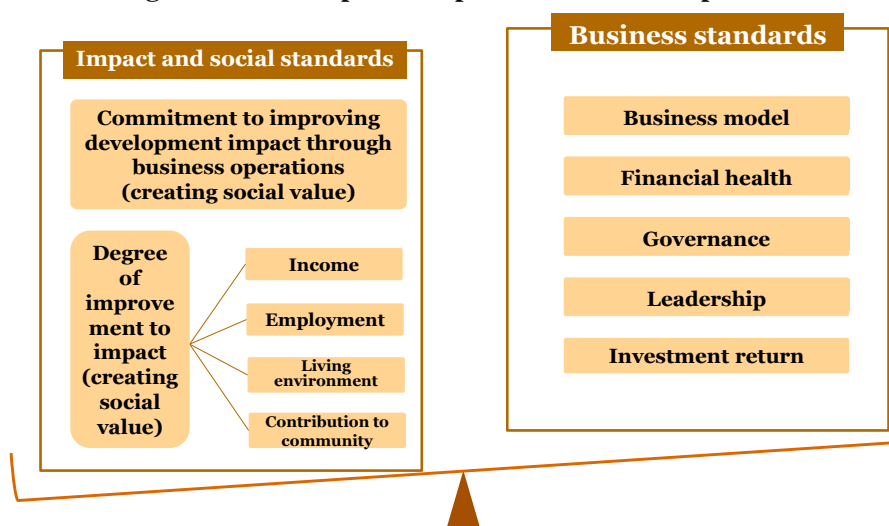
(1) Development impact assessment method components

Based on findings of this research, the main components of development impact assessment methodologies were categorized into development impact/social standards and business standards. The key elements in both development impact and social standards are: a commitment to improving development impact through business operation (creating social value), and the associated social benefits (income, employment, living environment, contribution to the local community, etc.). Business standards, in most cases, comprise a mix of financial and non-financial components (business model, governance, leadership, etc.).

¹ Definition of impact assessment varies among institutions, agencies, organizations and corporations (i.e. social performance measurement methodology, development impact measurement and assessment method, development impact measurement framework). For this section, the research team uses the term "development impact assessment method" and the term covers the process of screening, examination, reporting and assessment.

² A comprehensive list of the structure and indicators for development impact assessment methods is in Appendix 6-1-7.

Figure 3-3: Development impact assessment components

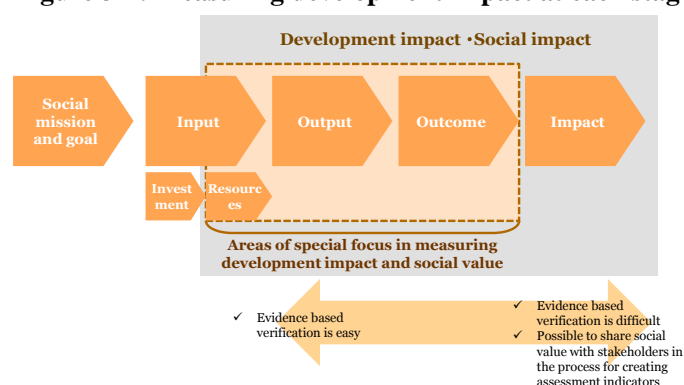


Source: ARUN¹ “ARUN Investment evaluation report: Sahakreas CEDAC organic rice business assessment (internal report, 2012) and analysis of this research by the research team.

(2) Stages in development impact assessment methods

In general, development impact assessments are conducted at each stage of the business development process to assess outputs, outcomes, and impact. In many cases, methods used to measure outputs involve the use of indicators to make a comparison between inputs and outputs. Implementation of a process to index and document data allows objective assessments to be made. However, when it comes to assessing outcomes and impacts, a longer period of time is typically necessary to make this assessment as impacts usually take time to manifest. A comprehensive assessment process is required to be implemented as objective assessment includes steps such as multiple parameter analysis of the data and assessment of secondary impacts. Evidence indicates that the process to verify the correlation between outcome vs input / output is difficult meaning that the significance of measuring impact is subject to debate.

Figure 3-4: Measuring development impact at each stage



Source: Prepared by research team

¹ Japanese social investment platform (established in 2009) which invests in entrepreneurs and social enterprises in developing countries. Details can be found at www.arunllc.jp. ARUN researches and analyzes development impact assessment methods (social assessment methods) and carries out the application and verifications of its social performance measurement in the form of interviews and workshop sessions with investees and their stakeholders. .

n the majority of cases, analysis of the stages at which development impact is assessed and measured (using input vs output approaches) first requires a group of indicators to be established followed by the collection of appropriate data for the selected indicators. A typical example of this approach in practice is The Impact Reporting and Investment Standards (IRIS). For methods focused on assessing impact, the quantitative and qualitative data collected is subject to a comprehensive assessment process, and the development impact at the time of input measured over a long period of time. Particular emphasis is given to the correlation between the goals and budget of each organization and the stage of the development impact.

(3) Approach for development impact assessment methods

Existing development impact assessment methodologies can be largely categorized into two approaches: (1) the indicator-oriented approach, and (2) the process-oriented approach.

Figure 3-5: Categorizing the approach for development impact assessment methods

	Indicator-oriented approach	Process-oriented approach
Summary	<ul style="list-style-type: none"> • Fill in by collecting necessary information and data in accordance with the preset items • The structure differs on the developer or user given that indicators are designed and established by the developer based on goals for each field, issue, sector, etc. 	<ul style="list-style-type: none"> • Assessment indicators are derived by focusing the strengths of the investment target company and for each stage of growth, and not restricted to preset indicators. • Instead of the process to set indicators and data collection process, focus is on having the investment manager guide the process via visits and interviews with local companies, to alleviate the burden placed on the investment target company • Company deepens its understanding of the development impact it generates by going through the process to set indicators
Example	<p><u>Development Outcome Tracking System (DOTS)</u></p> <ul style="list-style-type: none"> • Impact to (1) income, (2) economic profit for the host country, (3) contribution to the environment and social value, and (4) private-sector development (assessment carried out in line with the project cycle) 	<p><u>Measuring Impact Framework(WBCSD)</u></p> <ul style="list-style-type: none"> • The company is expected to decide on the scope of the assessment, analyze the direct/indirect impacts and development impact, and utilizes the results in management decisions. No specific indicators provided but assessment mainly focuses on corporate & environmental management, supply of infrastructure, goods, and services, employment and R&D, local procurement, and tax payments.
	<ul style="list-style-type: none"> ✓ Uniform comparison possible ✓ Low investment cost ✓ High cost for the investment target company 	<ul style="list-style-type: none"> ✓ Possible to evaluate also factoring in the actual conditions of each company ✓ High investment cost ✓ Low cost for the investment target company

Source: Prepared by research team, based on research materials and analysis results

3.3 JICA's perspective on establishing development impact assessment methods

3.3.1 Current status of JICA's BOP business development impact assessment

There is the general expectation that development assistance organizations should implement development projects in a highly effective manner. To accomplish this, there is an increasing use of (1) strict assessments, (2) the promotion of Evidence-Based Practice (EBP), (3) impact assessments, and (4) enforcing Management for Development Results¹. These measures are closely related to the development impacts arising from business operations. JICA has been in the process of developing reference standard indicators² based on development issues and creating indicators that will allow objective and far-reaching assessments to be implemented.

The current project assessment criteria used by JICA is based on the OECD-DAC (Organization for Economic Co-operation and Development Directorate) five criteria for assessment (relevance, effectiveness, efficiency, impact, and sustainability), which are used by development assistance organizations globally.

In addition to the OECD-DAC criteria, a framework employed for assessing a single project is the Project Design Matrix (PDM) which is widely used for assessing development projects. PDM is a chart that maps the cycle of a development assistance project from planning to implementation to assessment. The objective is not only to assess a project but to support operational management.

As with other JICA projects, JICA's BOP F/S projects are using the PDM approach on a trial basis. Baseline data is gathered prior to establishing the business, with progress monitored during and after the project. The change is assessed against set indicators. To assess general development projects, excluding BOP projects, the five OECD-DAC criteria—relevance, effectiveness, efficiency, impact, and sustainability—are employed. For BOP projects, it is essential to consider creating suitable criteria that take into account the unique attributes of the BOP business in question.

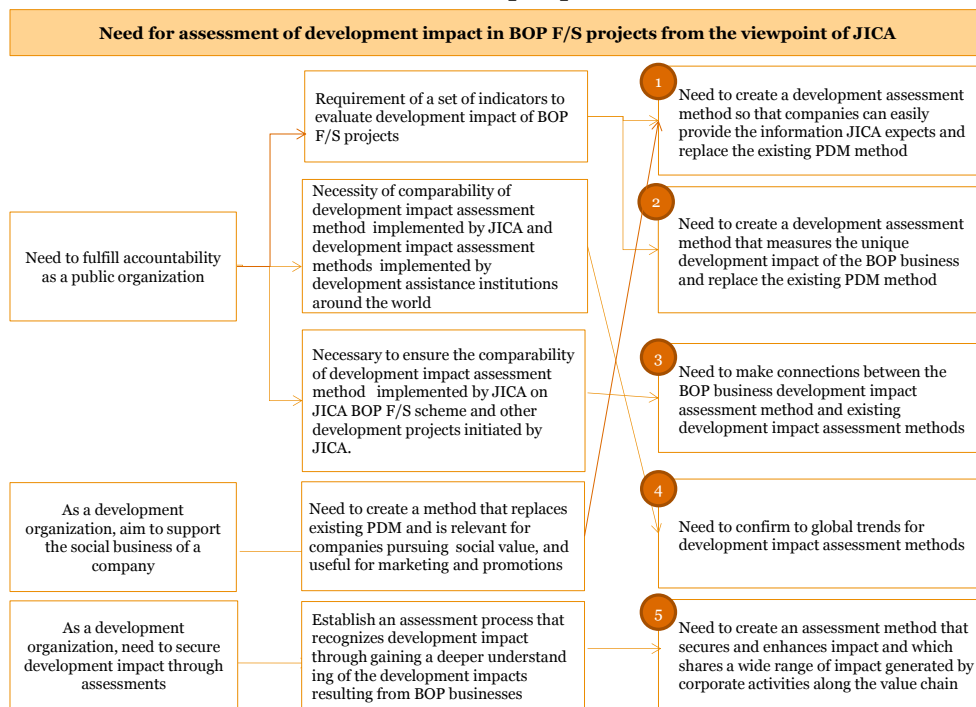
¹ Evaluation Department, OECD (2012). New JICA Guidelines for Project Evaluation, 1st edition

² Evaluation Department, OECD (2013). Example of standard indicators for development issues: grant aid
http://www.mofa.go.jp/mofaj/gaiko/oda/about/kaikaku/tekisei_k/pdfs/08_guideline.pdf

3.3.2 JICA's perspective on the need to assess the development impact of BOP F/S projects

JICA, (I) as a public organization, is required to accurately assess the development impact of the projects it is undertaking and to fulfill its accountability obligations. This also holds true for BOP F/S projects. In addition, (II) as a development assistance organization, it is obliged to support a company's social value creation and (III) needs to ensure the development impact in BOP business projects. From JICA's perspective, the following five points are summarized as key requirements for the assessment of the development impact of BOP F/S projects.

Figure 3-6: Necessity of assessing development impacts of BOP F/S projects from JICA's perspective

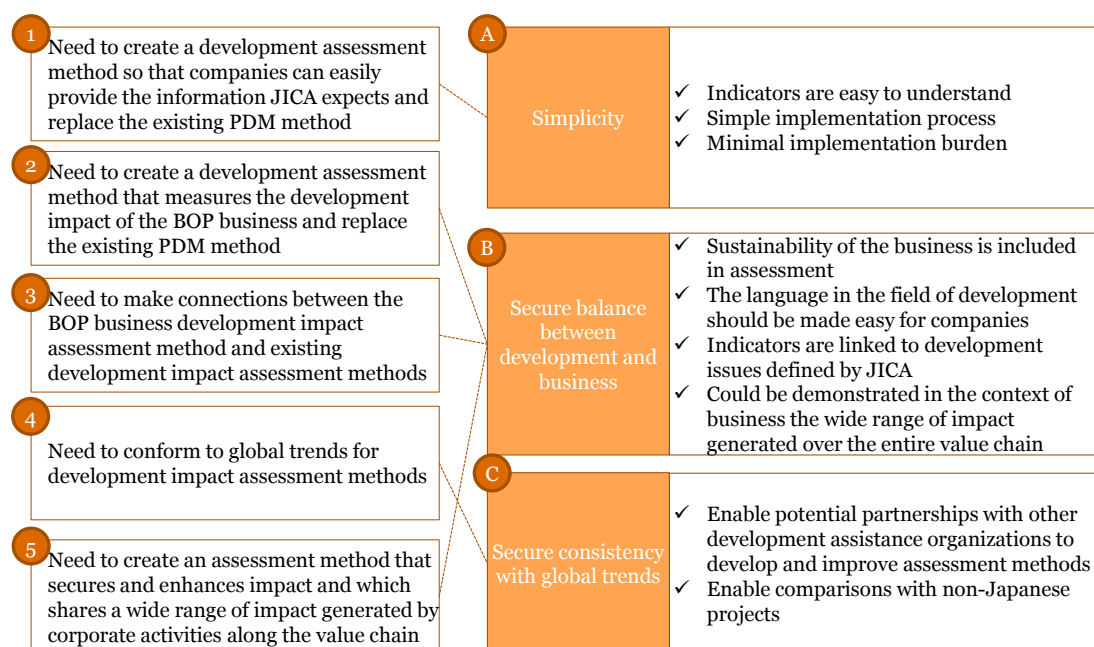


Source: Prepared by research team

3.3.3 Key criteria in drafting development impact assessment method for JICA BOP F/S

Based on the above, three key criteria for JICA when drafting a method are: (A) simplicity, (B) securing a balance between development objectives and business, and (C) ensuring consistency with global trends.

Figure 3-7: Key criteria in drafting development impact assessment method for JICA BOP F/S



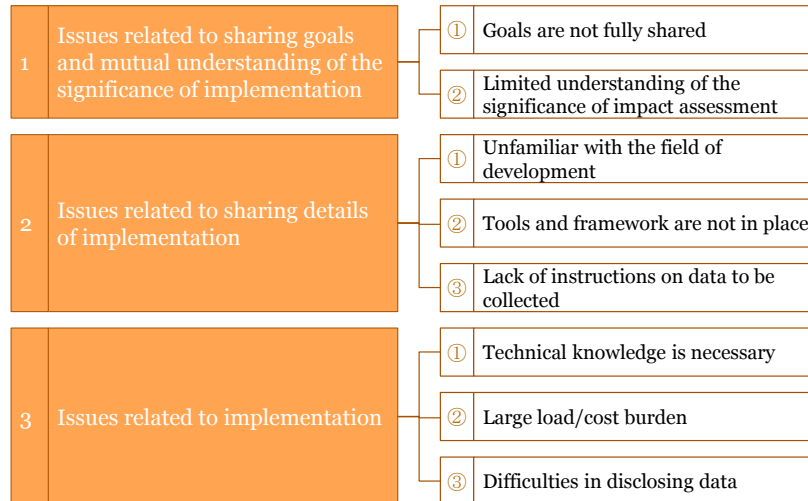
Source: Prepared by research team

3.4 Perspective of Japanese companies in development impact assessment methods

3.4.1 Analysis

The results of the questionnaires, interviews with the selected companies and the three companies participating in the workshop provided a good insight into the challenges and needs of companies performing development impact assessments. Development impact assessments discussed in section 3.4 mainly deal with the creation of development impact assessment indicators for BOP F/S projects and the implementation of baseline surveys (hereinafter referred to as indicator setting and basic data collection).

Figure 3-8: Overview of issues faced by companies

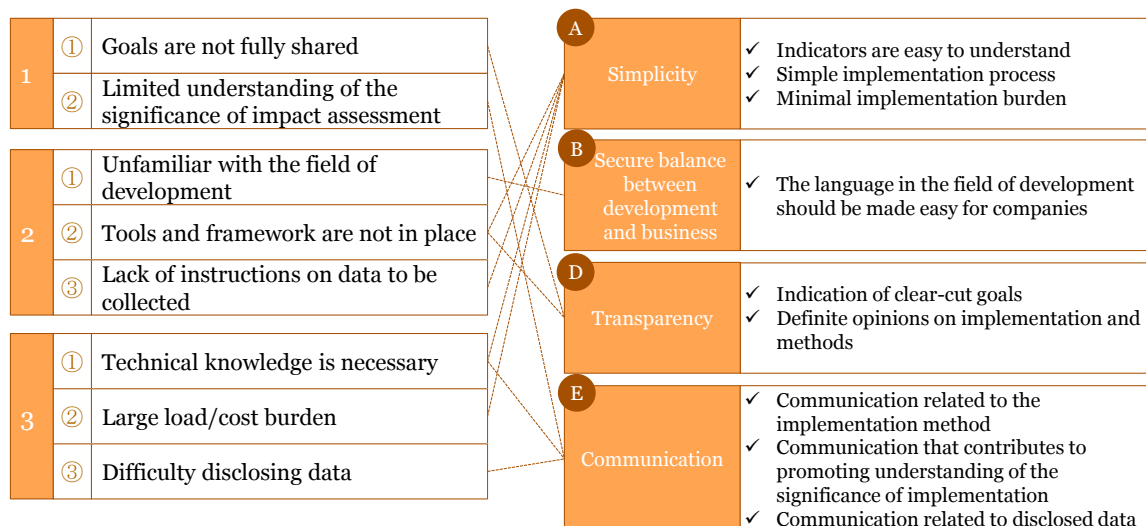


Source: Prepared by research team

3.4.2 Key factors to take into account when drafting development impact assessment methods (based on comments from companies)

Based on comments from companies, the following requirements, organized into four categories, were recognized and as key factors to take into account when drafting a development impact assessment method: (A) simplicity, (B) obtaining a balance between development impact and business, (D) transparency, and (E) communication (note, point (C), securing consistency with global trends discussed in section 3.3.3, is assessed as not applicable.)

Figure 3-9: Important factors for drafting impact assessment method based on the comments



Source: Prepared by research team

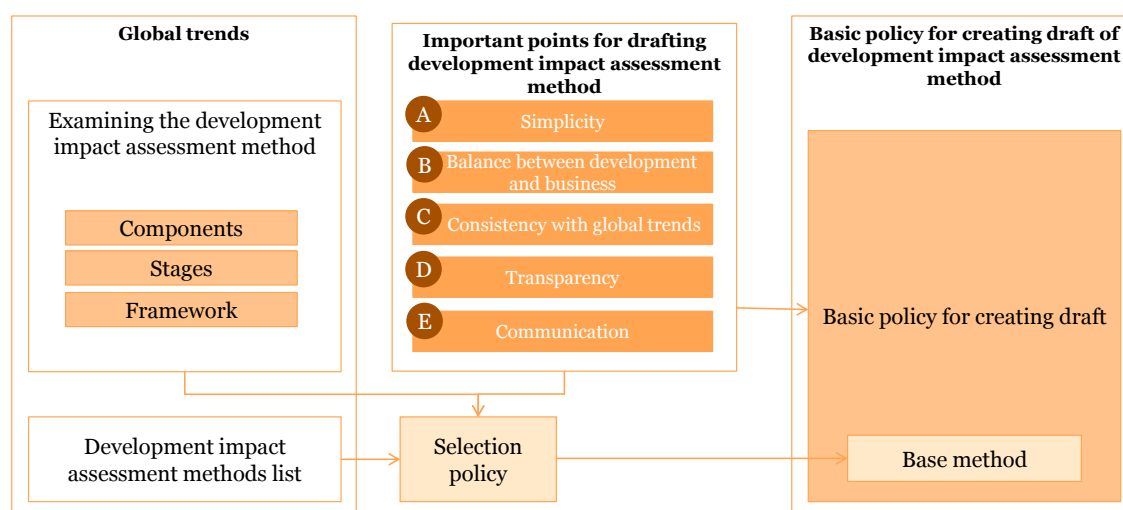
3.5 Formulating a draft development impact assessment method

3.5.1 Basic policy for drafting a development impact assessment method

(1) Procedures for reviewing basic policies

In formulating a draft development impact assessment method, consideration was given to the findings of the analysis in sections 3.2–3.4. The key requirement of the basic policy for creating a draft is to ensure that it reflects requirements of both JICA BOP F/S and business. The basic policy should also take into consideration existing assessment methods. For the purposes of this research, an appropriate assessment method has been selected from existing development impact assessment methods. The selection process was based on an analysis of the findings from the review of development impact assessments, and the JICA BOP F/S and business requirements previously discussed.

Figure 3-10: Procedures for reviewing requirements for drafting a development impact assessment method



Source: Prepared by research team

(2) Requirements for drafting development impact assessment method

Based on the research findings in sections 3.3 and 3.4 and reference to point (2) JICA BOP F/S and business requirements, five categories are established: (A) simplicity, (B) a balance between development and business, (C) consistency with global trends, (D) transparency, and (E) communication.

Figure 3-11: Requirements for drafting a method

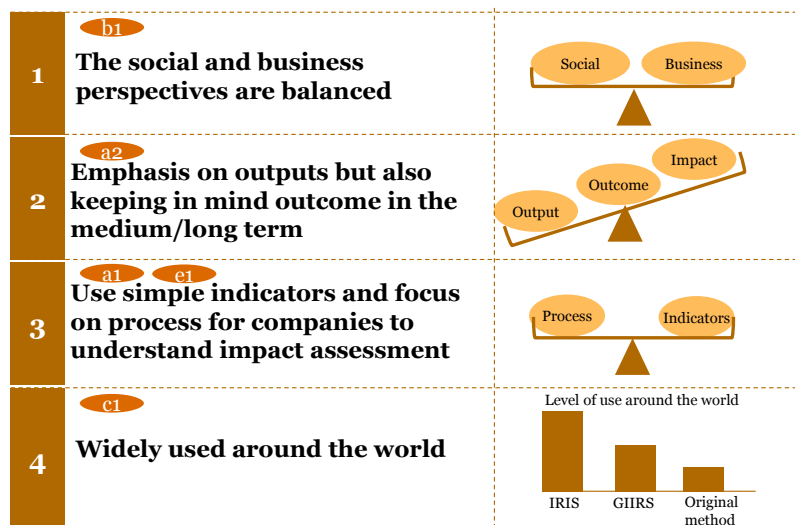
A Simplicity	<ul style="list-style-type: none"> ✓ Indicators are easy to understand ✓ Simple implementation process ✓ Minimal implementation burden 	a1 a2
B Balance between development and business	<ul style="list-style-type: none"> ✓ Sustainability of the business is included in assessment ✓ The language in the field of development should be made easy for companies ✓ Indicators are linked to development issues defined by JICA 	b1
C Consistency with global trends	<ul style="list-style-type: none"> ✓ Enable partnerships with other development assistance organizations to develop and improve assessment methods ✓ Enable comparisons with non-Japanese projects 	c1
D Transparency	<ul style="list-style-type: none"> ✓ Indication of clear-cut goals ✓ Clear views on implementation and methods 	
E Communication	<ul style="list-style-type: none"> ✓ Keep communication with companies related to the implementation of assessment ✓ Keep communication that contributes to promoting understanding of the significance of implementation ✓ Keep communication related to disclosed data 	e1

Source: Prepared by research team

(3) Selecting an existing assessment method as the base for the draft guide

The selection policy is based on JICA BOP F/S and business requirements and the results of the review of items in the development impact assessment. Four key criteria in the selection policy are (1) establishing a balance between social and business perspectives, (2) emphasizing on output whilst considering medium to long term outputs, (3) simplifying indicators whilst emphasizing the communication process to create a mutual understanding of the reasons and benefits of assessing development impact with the company, and (4) selecting a method that is widely used.

Figure 3-12: Selection policy for choosing benchmarks



Source: Prepared by research team

The current main global development impact assessment methods were analyzed in the context of this policy (Figure 3-13). In selecting the base for the assessment method, IRIS was selected as the reference indicator owing to its balance between social value and business indicators, and its global recognition, while also referencing process-oriented approaches¹.

Figure 3-13: Classification of major development impact assessment methods

#	Impact assessment methods	Organization	Component		Stages			Type of framework		Level of use
			Social	Business	Output	Outcome	Impact	Indicators	Process	
1	Impact Reporting and Investment Standards (IRIS)	Global Impact Investing Network (GIIN)	○	○	○			○		⊙
2	Global Reporting Initiative Guideline	Global Reporting Initiative (GRI)	○		○			○		○
3	Global Impact Investing Rating System (GIIRS)	GIIRS members	○	○	○			○		○
4	Measuring Value of BCTA Initiative, A Result Reporting Framework	Business Call to Action (BCTA)	○	○	○	○		○		△
5	Development Outcome Tracking Systems (DOTS)	International Financial Corporation (IFC)	○	○	○			○		△
6	Measuring Impact Framework	World Business Council on Sustainable Development (WBCSD)	-	-		○	○		○	△
7	Poverty Footprint Framework	Oxfam	-	-		○	○		○	×
8	Baseline Form for new projects	DFID Business Innovation Facility (BIF)	-	-		○			○	△
9	Social Return on Investment (SROI)	Roberts Enterprise Development Foundation (REDF), New Economic Foundation (NEF)	-	-	○	○			○	△
10	Progress out of Poverty Index (PPI)	Grameen Foundation	○		○			○		△

Source: Prepared by research team

(4) Summary of IRIS and considerations for use as a benchmark

IRIS was developed as a common reporting language for social and environmental performance, and is widely used. The advantage of IRIS indicators is that they include a good balance of social and business-related indicators. (1) The indicators enable an objective assessment of outputs versus activity. One issue (constraint) is that it is not possible to measure social and development impact at the outcome and impact levels. (2) Another issue is that indicators do not always correspond to the actual conditions of the company or to the data collected by the company or JICA.

Taking these advantages and issues associated with IRIS into consideration, the following points have to be addressed when drafting a development impact assessment method.

- ✓ Extract and reorganize IRIS indicators (mainly output indicators) to obtain a well-balanced blend of indicators that relate to both social and business values.
- ✓ IRIS indicators should be introduced either at the initial or the seed stage of the project. The indicators are mainly for outputs that arise directly from inputs. As the business operations become mature (e.g. from several years up to 10 years after launch), a follow-up survey is conducted for outputs, and IRIS is used as the assessment method to measure outcomes and impact.
- ✓ Although utilizing IRIS indicators as reference, the final draft will have an emphasis on process, allowing the company to add proprietary indicators and measure outputs as needed. Also, it needs

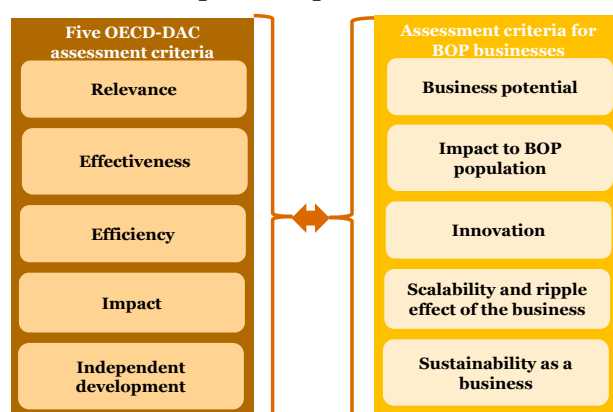
¹ Measuring Impact Framework (WBCSD) was used as a reference for the process-oriented development impact assessment method. Details are in Appendix 6.1.7.

to be made clear how these indicators link with JICA’s development index and existing assessment methods.

(5) Securing a connection with existing development impact assessment indicators and BOP business development impact assessment indicators

As discussed in section 3.3.3, JICA requirements derive from need to assess the development impact of BOP F/S projects. Therefore, it is essential to ensure that there is a relationship between the existing JICA development impact assessment methodologies and the newly developed assessment methodologies. The figure below illustrates the relationship between the five OECD-DAC assessment criteria presently being used in JICA’s development impact assessment and the BOP business development impact assessment. This relationship was established based on analysis and the knowledge accrued by JICA to date.

Figure 3-14: Connection between the five OECD-DAC assessment criteria and BOP business development impact assessments



Source: JICA’s BOP business development impact, November 2012; materials released by the Office for Private Sector Partnership, Private Sector Partnership Division, JICA

In addition, the newly drafted method will help support the understanding of BOP business development impacts by highlighting the correlation between IRIS indicators and the JICA–defined development sector with sector specific development indicators.

(6) Conclusion on basic policy for drafting development impact assessment method

Based on the above, the basic policy for formulating a draft development impact is defined as follows.

Figure 3-15: Basic policy for formulating a draft

JICA/company requirements	Basic policy for creating draft of development impact assessment method	
A Simplicity	A1	➤ Present concrete examples for indicators for development impact evaluation
	A2	➤ Simplify necessary steps to set indicators
	A3	➤ Use company's existing resources to set indicators
B Balance between development and business operations	B1	➤ Incorporate business perspectives and sector-specific perspectives into the framework
	B2	➤ Convert development terminologies into general terms and include both in the report
	B3	➤ Examine the involvement of BOP along the value chain of the proposed business
	B4	➤ Clarify the relationships between JICA-stipulated development issue sectors, main development issue guidelines, indicators, and examples of indicators
C Consistency with global trends	C1	➤ Use IRIS indicators as examples
D Transparency	D1	➤ Clarify the goal for setting indicators and implement a base line survey, which is required by JICA as a part of the BOP F/S survey
	D2	➤ Clarify the entire process for setting indicators and implementing a base line survey
	D3	➤ Present the output vision of what is expected in advance
E Communication	E1	➤ Explain the significance and method of impact assessment prior to BOP F/S project.
	E2	➤ JICA and the company to discuss indicators to be set.
	E3	➤ JICA and the company to examine disclosure methods for base line data

Source: Prepared by research team

3.5.2 Explanation of the draft development impact assessment method

(1) Summary of the draft development impact assessment method

The draft development impact assessment method explains the key points that warrant attention when a company considers developing a BOP business and its associated development impact. It then supports the process of creating indicators by connecting the business operations to potential development impacts. The ultimate aim of the method is to contribute to the building of business models that factor in development impacts through the indicator definition process. The draft is structured to support companies in understanding some of the broader potential benefits that are not captured in traditional business models.

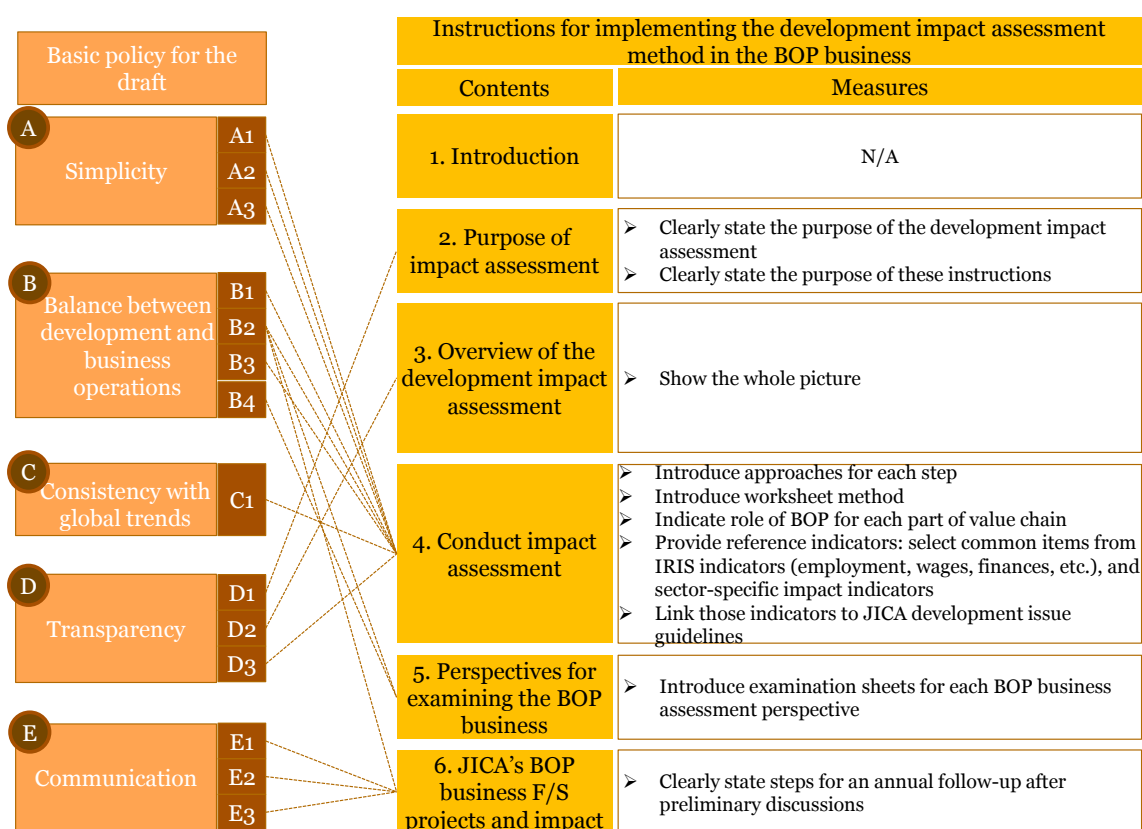
The basic policy is embodied in the draft guide, and the following six considerations were made.

- (1) The draft guide clearly describes the objectives for the companies (uses of the guide) to foster understanding of the development impact assessment (D1).
- (2) The draft guide describes the overall measures for implementation for the companies (D2).
- (3) To facilitate implementation, the draft guide introduces step-by-step approach and prepares a workflow for each step. Companies can refer to the examples of common indicators (employment, wage, financial, etc.) and sector-specific indicators (A1, A2, B1, B2, C1, D3) from IRIS to support understand the potential development impacts.

- (4) The draft guide clarifies relationships with BOP beneficiaries using standard value chain model, allowing companies to understand the process better. (B3).
- (5) The guide introduces worksheets that specify different components and viewpoints of BOP business (B4).
- (6) To support communication with JICA, the draft guide clearly describes steps for assessment progress status prior to, and during the research. (E1–E3).

The figure below shows the relationships between each items in the basic process for creating a draft for development impact assessment method and development impact assessment guide for BOP business (hereinafter referred as “guide”).

Figure 3-16: Connection between the basic policy and the draft guide for development impact assessment method



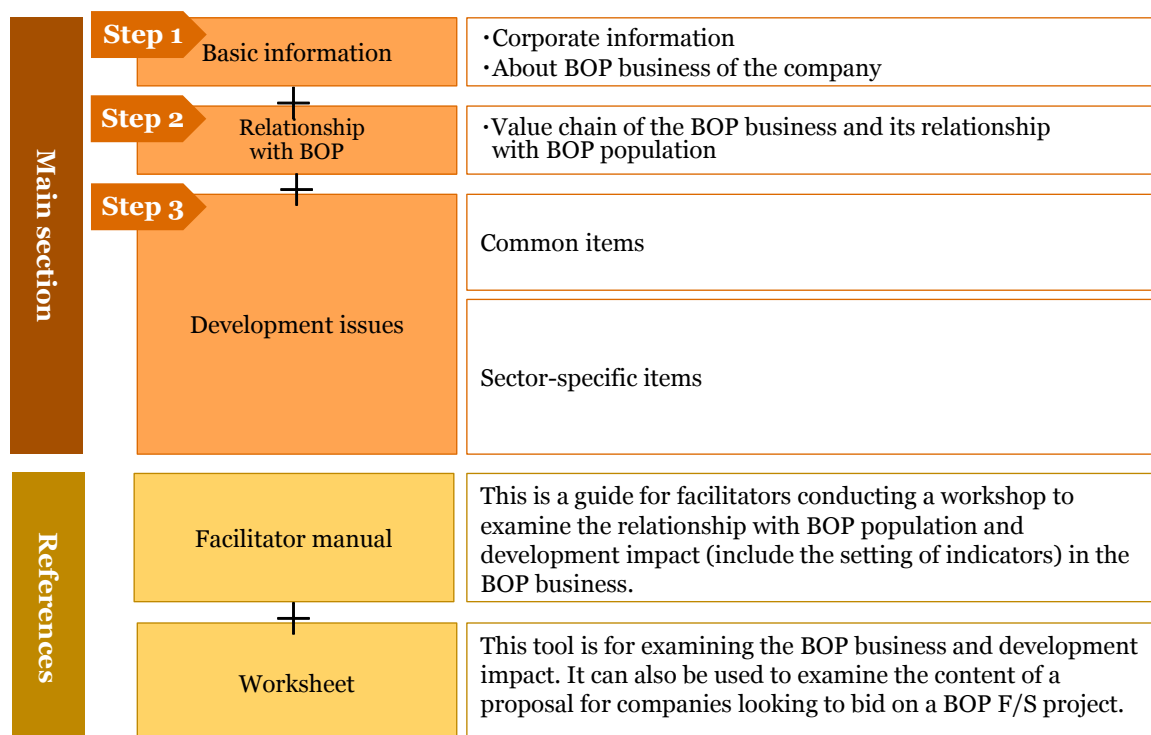
Source: Prepared by research team

(2) Overview of the guide

The indicator definition process consists of the following three steps and is intended to be implemented in a practical manner. The Facilitation Manual and Worksheets are attached as reference materials.

Each component includes consideration of: the objective and needs of each development assistance organization, the results from the global trend analysis, and an analysis of the company's needs and issues it faces.

Figure 3-17: Overview of the guide for the development impact assessment method



Source: Prepared by research team

3.5.3 Instructions on using the development impact guide

The company implementing the F/S project adopts the guide for implementing a development impact assessment to (1) create a set of draft indicators, (2) review data collection and indicators, and (3) conduct reporting. Two additional tools have been provided to support implementation—(A) worksheet for applicants and (B) facilitation manual.

A Worksheet for applicants: This tool assists a company in examining the BOP business and development impact in the initial stages by answering a simple set of questions. It can also be used to examine the content of a proposal for companies looking to bid on a BOP F/S project.

B Facilitator manual: This is a guide for facilitators conducting workshops examining the relationship with BOP customers and the emergence of development impact (include indicator setting) in the BOP business. Workshop is expected to promote discussions among BOP business stakeholders to further understanding of development impact and on building a business model.

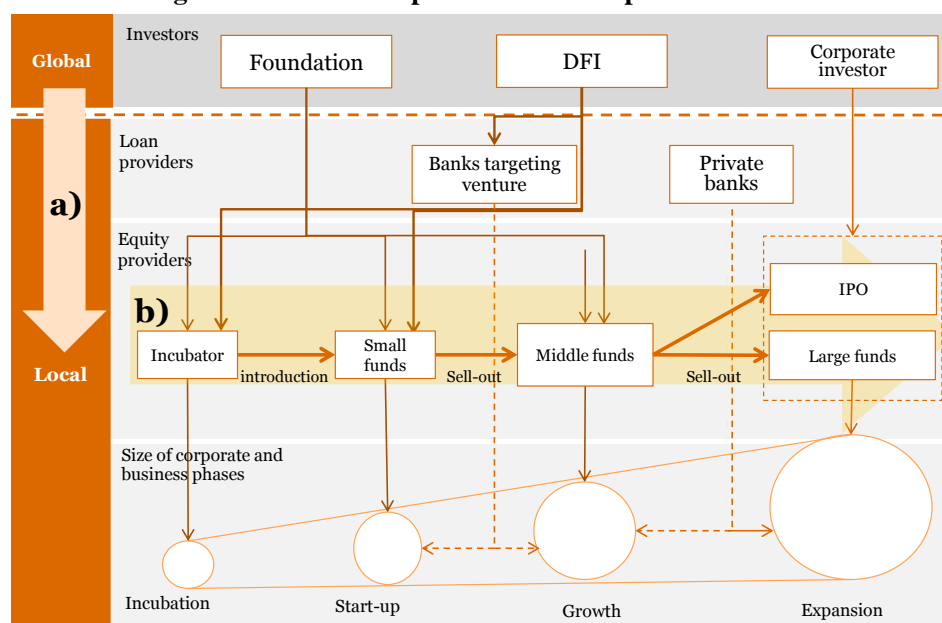
4. Examining financing methods for BOP businesses

4.1 Impact investment trends and the role of DFIs and development assistance organizations

4.1.1 Overview of impact investments

In this research, interviews were held with representatives from three different groups of participants in the impact investment sector. The groups were; (1) investors of US and European DFIs (Development Financial Institutions) and foundations, (2) fund managers headquartered in Europe but managing investor capital in developing countries, and (3) fund managers managing capital domestically in India and with headquarters in India. The results of this research represent a portion of the global flow of capital.

Figure 4-1: Flow of capital related to impact investments



Source: Prepared by research team

As shown by arrow a) in Figure 4-1, impact investments, which were originally provided by global DFIs, foundations and NGOs (Non-Governmental Organizations), are funded by equity or loans via local impact funds and/or financial institutions to local enterprises in the start-up or growth phase.

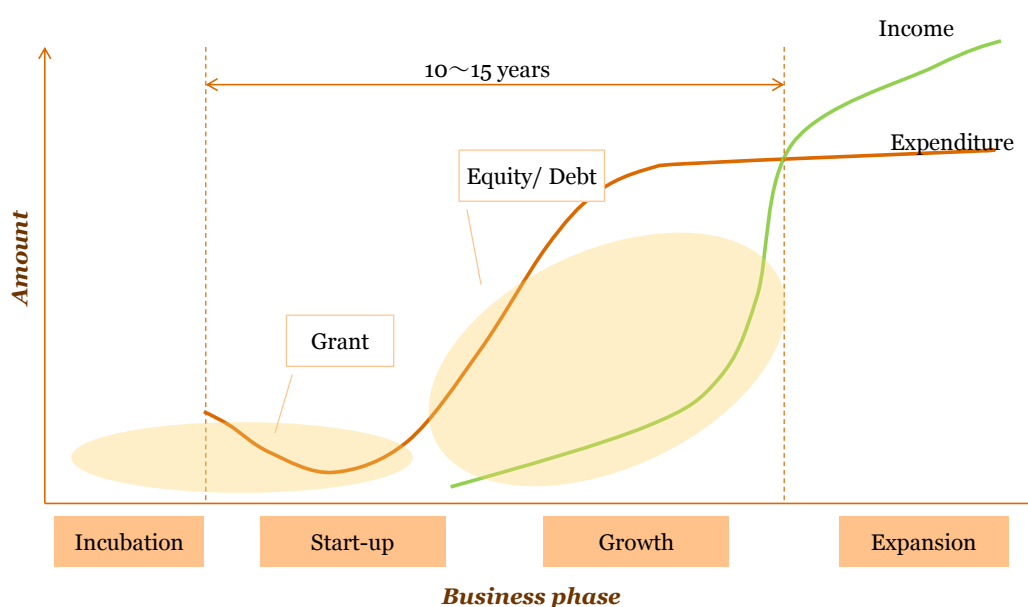
In addition, a portion of the funds from global DFIs, foundations or NGOs are provided as grants to business incubators for entrepreneurs. The key to success for local funds is to explore and identify portfolio companies that have “high potential”. However, in any developing country, new enterprises are unlikely to have a track record and very few entrepreneurs are able to prepare sophisticated business plans. Therefore, small-sized local funds identify investment opportunities through the use of business incubators as a way to explore potential portfolio companies.

As shown by arrow b) in Figure 4-1, high potential portfolio companies are introduced to local small-sized funds (The average deal size USD100K-500K) by the business incubators. Then, if the

enterprise progresses to the start-up phase, it will be sold to a medium-sized fund (The average deal size USD500K-5M). If the enterprise continues to grow and reaches the growth stage, it will typically be sold onto a large-sized fund participating in the local commercial-based financial market or go public.

Impact investment funds are mainly provided to enterprises in the start-up and growth stages. This is because most commercial banks are reluctant to provide investment or loans to such enterprises as expenditures exceed income during these stages, resulting in a high potential default risk before their business stabilizes (see Figure 4-2). Local impact funds and local financial institutions, leveraging their close relationships in each local area, try to identify good investment opportunities and offer funds to enterprises in the start-up and growth stages until they can raise finance in the mainstream financial market.

Figure 4-2: Business phases & revenue and expense trends



Source: Prepared by research team based on Shell Foundation materials

4.1.2 Roles of DFIs/development assistance organizations

Findings from this research indicate that the demand for, and the roles of DFIs and development assistance organizations in impact investing fall within in three categories: financing, indirect support connected to financing, and platform development.

Figure 4-3: Roles of DFIs/development assistance organizations



Source: Prepared by research team

4.1.3 Roles of DFIs in finance

(1) Fundamental principles and role of DFIs

DFIs have a role to play in terms of contributing to the mobilization of private-sector capital. In these cases, the DFI takes the initiative by making an investment in situations where there is a business opportunity but there are barriers to capital inflows from the private sector, whilst taking into consideration the return on its investment.

It should be noted that this is not limited to DFIs, and the Articles retain the basic principle that public institutions should not impede the activities of private-sector companies¹.

(2) Classification of emerging market investment

As explained in (1), the role of DFIs is to stimulate the mobilization of private-sector capital by actions irrespective of the potential business opportunities, in situations where private funding is not materializing because of a lack of information and incorrect understanding of risks. Up until now, impact investment has been widely defined as an area with high economic and social return²s. However, due to the fact that the difference between the role of DFIs and the role of private impact investments cannot be explained with the two axes that have been in use up until now, the areas in which DFIs should be acting are clarified, by introducing a third axis of ‘market immaturity/insufficiency’. Market immaturity refers to when markets in a broad sense (including the likes of the infrastructure and labor markets – not just the financial market) are underdeveloped, while market insufficiency refers to when a market is undersupplied and does not function healthily, usually due to the market being incomplete, the existence of external economies, or information gaps.

The investment market in emerging countries used to be defined on two axes: (1) economic return, and (2) social return. However, as the role of DFIs could not be explained with the two dimensions, we introduce the third axis, ‘the degree of market immaturity/insufficiency’, to clarify the domains where public intervention is required.

¹ <http://www.ifc.org/wps/wcm/connect/c5f3ee004aaadf98141d39e0dc67fc6/Linkages.pdf?MOD=AJPERES>

² In this report, economic return means financial returns or losses as a result of an investment activity for a certain specified period. The indicators that objectively show economic return include IRR (Internal Rate of Return), ROI (Return on Investment), and ROA (Return on Asset). In this report, economic return means financial returns or losses as a result of an investment activity for a certain specified period. The indicators that objectively show economic return include IRR (Internal Rate of Return), ROI (Return on Investment), and ROA (Return on Asset).

Dividing each axis into two levels—high and low—results in eight domains. The eight domains are classified into three types —type A private-sector companies are able to independently carry out business activities, type B private-sector companies have difficulty independently carrying out business activities, and type C companies enjoy neither type A nor type B conditions required for social and economic value creation. Type B: private-sector companies, which have difficulty independently carrying out business activities, are further divided into the following three subcategories.

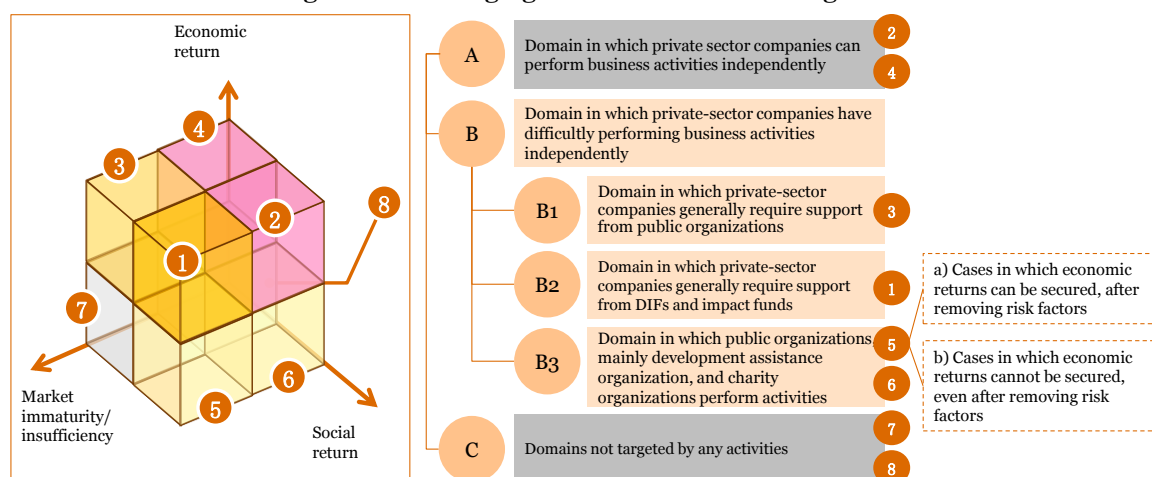
B1 represents private-sector companies that generally require support from public institutions (Domain 3 in Figure 4-4)

B2 represents private-sector companies that require support from a DFI or impact fund (Domain 1)

B3 represents activities by public and charity institutions, mainly development assistance organizations (Domains 5 and 6)

Domain 5 can be further divided into two other categories—one where economic return can be secured if risk factors are eliminated (5a) and another where economic return cannot be secured despite the elimination of risk factors (5b). In domain 5a, assistance from public institutions is essential in creating conditions conducive to removing obstacles and independently securing economic return. This includes businesses such as sustainable agriculture, which is high cost, businesses affected by fluctuating weather conditions, and the establishment of businesses in post-conflict regions. A specific example of this could be the introduction of a Feed in Tariff (FIT) to promote solar energy and taxes and subsidies due to externalities, such as pollution.

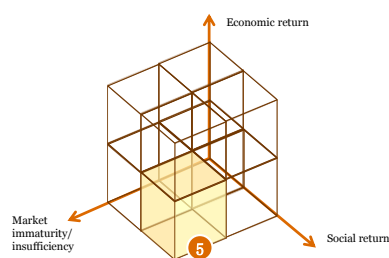
Figure 4-4: Emerging market investment categories



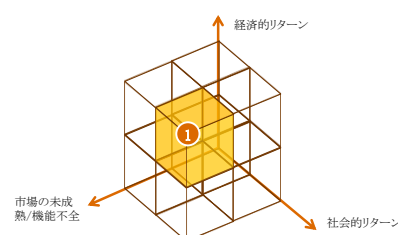
Source: Prepared by research tea

(3) Scope of DFI activities

At present, DFIs carrying out investment activities in domain 5a include CDC (UK), FMO (Netherlands), and Norfund (Norway). In addition to traditional funds that target economic independence (profit oriented), these DFIs also are beginning to introduce some portfolios funds that focus on projects that emphasize social return with lower economic returns.



A number of DFIs in this survey were mapped in domain 1. There are many private-sector impact funds in domain 1, particularly focused in the high-return area. It is anticipated that more private-sector capital will be categorized under domain 1. Our opinion is that public institutions, which mainly consist of development assistance organizations, will be required to



strengthen activities in domain 5a, which is an area that will become even more difficult for private-sector capital to access (at this stage, projects in this domain have low economic returns but social returns are high and economic returns are expected to be seen in the future).

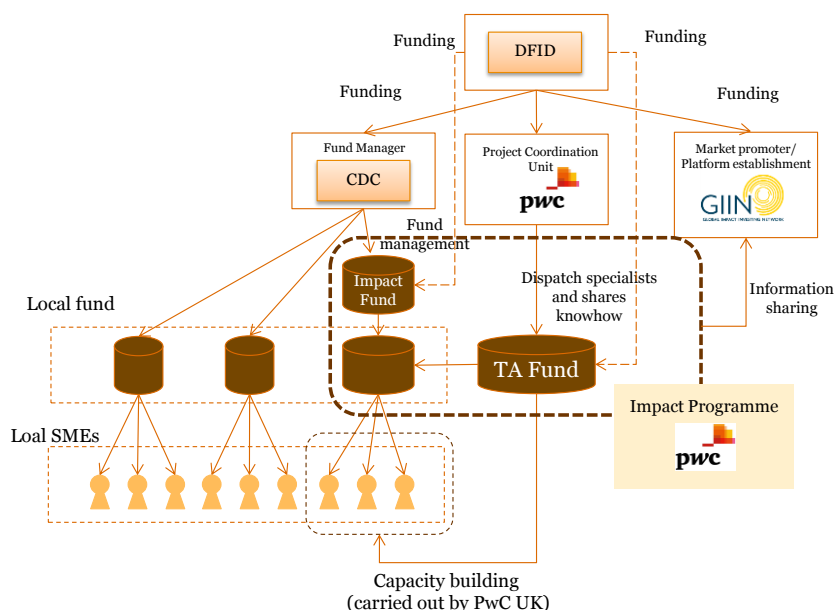
On the other hand, there are potential side effects potential side effects impact investing with compromised returns can bring about, i.e., market distortions. For instance, cheap/subsidized provision of solar lantern can hinder the genuine efforts by others to provide them on a financially sustainable way.

4.1.4 Technical assistance of DFIs in impact investment

DFIs offer supply risk capital as well as indirect support, mainly through technical assistance. Since the goal of the DFI is to secure the commitment of the portfolio company, in many cases the DFIs will request a cost-sharing arrangement.

For example, DFID (Department for International Development) has decided to establish a technical assistance fund in tandem with the establishment of the Impact Fund by CDC. The technical assistance fund is to be managed by PwC UK. Specialists in various fields at PwC will share their knowledge on operating businesses in developing countries with CDC and organizations within the Impact Programme (Investment Mobilization for Prosperity and Catalytic Transformation Programme), which includes funds targeted for investment. Furthermore, the impact investing fund will carry out capacity building for the local SMEs to which it provides capital.

Figure 4-5: Technical assistance fund to be set up alongside the CDC Impact Fund



Source: Prepared by research team

In this survey, a number of private-sector funds indicated that undertaking capacity building for the investment target through technical assistance was crucial to the success of the impact investment. At the same time, due to the fairly high cost of setting up a technical assistance facility, few private-sector funds have established their own technical assistance facility. In cases where one is established, one approach adapted is where a technical assistance fund is established and donations managed as capital, while in other cases a fund uses a technical assistance facility provided by a DFI or another party. In light of this, we observe a high level of demand for DFI technical assistance facilities.

4.1.5 Platform establishment by development assistance organizations

In the field of impact investment, key factors are DFI financing, technical assistance support, and investment platforms managed by development assistance organizations. However, there are limited resources, such as data essential for making investment decisions, information on how BOP business entrepreneurs solve problems and what methods can be used, and opportunities linking investors and entrepreneurs. There is a significant need to gather this information and for third parties to provide opportunities for investors and entrepreneurs to network. Benchmarks for platforms sponsored by development assistance organizations or for impact investing are the Practitioner Hub, which is hosted by DFID (UK) and SIDA (Sweden), and GIIN, whose lead supporters are DFID and USAID (US). These platforms provide (1) information and tools to entrepreneurs for carrying out business activities (examples of business models, issues and solutions, and information on external support such as financing and technical assistance, etc.), (2) an environment for peer networking, (3) tools to support investment decisions (databases and search engines on potential investee businesses and funds), (4) impact investing assessment tools, (5) an environment to match investors and entrepreneurs, and (6) information related to impact investment for the private investors.

4.2 Roles of JICA in impact investment

4.2.1 Anticipated roles of JICA

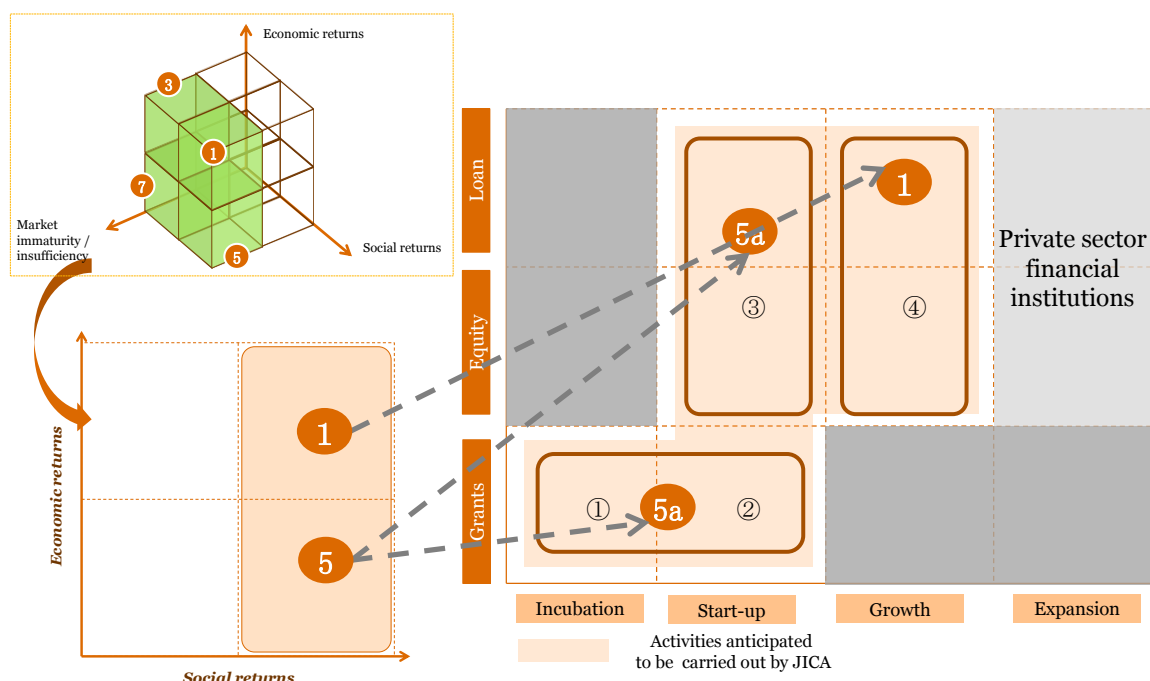
Successfully building the impact investment market in Japan will require (1) establishing an investment track record, (2) achieving the expected economic and social returns for each project, as well as (3) increasing investor recognition of these new investment trends to stimulate market activity. Of these three requirements, one role JICA could fulfill is in stimulating impact investing by building on its accomplishments in BOP F/S projects to date. Potential steps that could be taken to reach this objective include (1) considering whether to provide direct financial support to projects that have completed the F/S process, (2) providing a technical assistance facility to boost the value of these projects, and (3) gathering information related to impact investments and communicating this to investors and entrepreneurs. In implementing these steps, (1) could be handled by private-sector financial institutions, (2) could be carried out in cooperation with other JICA projects, and (3) could be carried out in cooperation with METI, JETRO, private-sector companies, NGOs, and other organizations.

4.2.2 Financing approaches to be considered by JICA

(1) Scope of activities

Taking the factors identified from this research into consideration, such as the goals of DFIs, the existing scope of activities, and the needs of private-sector funds, it was observed that the expected scope of JICA's activities is in the domain where the degree of market immaturity/insufficiency is high with social return also high. Rearranging these domains into two categories—methods for providing additional capital to the investment (grants, equity, loans) and the business phase of the investment (incubation, start-up, growth, expansion)—makes it somewhat easier to understand.

Figure 4-6: Expected scope of JICA's financing activities



Source: Prepared by research team

(2) Financing approaches and companies

In domains 5a and 1 discussed above, JICA can take two financing approaches: (1) direct investment in a company and (2) investment via a fund (this is further divided into investments in an existing fund or investments via the establishment of a proprietary fund). Investment targets (final investments) can be divided into i) Japanese companies conducting business in emerging economies (including local subsidiaries of a Japanese company or the establishment of a joint venture with local company; this applies hereafter) and ii) global and local companies carrying out business activities in emerging economies. We will examine the areas where we consolidate JICA should focus on given the needs and restrictions highlighted by this research.

[Needs and restrictions highlighted by this survey]

- Initial financing needs for Japanese SMEs planning to launch operations in an emerging economy after completing the BOP F/S process are not being met.
- Japanese funds financing social businesses require JICA's assistance in providing capital when investing in Japanese and local companies (*1).
- An emerging market investment fund, composed of private-sector funds in Europe, the Americas, and India, requires the provision of capital from JICA (*1).
- There are no incentives for European DFIs or private-sector funds to contribute capital or establish funds to assist those funds that limit their investment to Japanese companies (restrictions).
- The unearthing and management of projects for local companies requires knowledge of local conditions and broad local network. This requires substantial cost (restriction).

(*1) Includes incurring first loss, hiring and assisting first time fund managers, and the injection of risk capital).

Based on the above, the following are potential approaches that JICA should consider for providing equity/loan financing to start-up and growth stage companies.

- A) Provision of equity/loan financing through its first global fund which will target investment in global and local companies.
- B) Provision of equity/loan financing to Japanese social funds that target investment in global and local companies.
- C) Provision of equity/loan financing to Japanese social funds that target investment in Japanese companies.
- D) Establishment of a new proprietary fund and provision of equity/loan financing to Japanese SMEs planning to launch businesses in emerging economies.
- E) Provision of direct equity/loan financing to Japanese SMEs planning to launch businesses in emerging economies.

Figure 4-7: JICA offers option of loan or equity financing

Investment method	② Fund investment	Existing fund	Global funds		A JICA provides equity financing and loans to global and other funds that invest in global and local companies	
			Japanese fund	C JICA provides equity financing and loans to Japanese funds that invest in Japanese companies	B JICA provides equity financing and loans to Japanese social funds that invest in global and local companies	
		New fund	JICA fund			
			Direct investment	E Direct equity financing and loans to Japanese SMEs starting up business in an emerging economy		
			i) Japan	ii) Global/domestic		

Investment target

: Financing approaches should be considered by JICA
 : Outside scope

Note) Japanese funds: funds mainly target Japanese investors. Global funds: mainly target foreign investors
Source: Prepared by research team

4.2.3 Technical assistance of JICA

This research identified that many private-sector funds pointed out that technical assistance to carry out capacity building for investments was crucial to successful impact investments. Therefore, it is also expected that JICA will provide technical assistance facilities connected with individual investment projects. Currently, there are a number of programs that dispatch specialists to emerging

countries at the request of local governments. However, it will be necessary to establish a process to verify and examine the extent to which JICA can dispatch specialists to support individual investment projects.

It is also important for JICA to establish a function that provides advisory services in impact assessment/analysis (including capacity building for reporting in invested companies) to individual projects, in cooperation with other organizations. This approach can be justified by the recognition of the role of intermediary organization, such as consultants, by linking financial organizations and companies in monitoring the status of development impact assessment indicators and providing quantitative analysis.

4.2.4 Establishing a platform for impact investment in Japan

In Japan, the movement to establish an impact investment platform is not very active¹. However, given the issues that have arisen for BOP business financing, the establishment of an impact investment platform in Japan is essential ahead of initiatives to promote the flow of private-sector capital into impact investments. As discussed in section 4.1.5, in the US and Europe platforms already exist—GIIN, which promotes the awareness of impact investment, and the Practitioner Hub, which aims to mobilize the BOP businesses, which is the target for impact investing. In Japan, JICA is expected to take the lead and carry out a similar series of activities. For example, the integration of the Practitioner Hub and GIIN to create a comprehensive platform is assessed as providing three functions for Japan, global investors, and entrepreneurs—(1) BOP business information exchange, (2) introduction of investment opportunities in emerging markets, and (3) the establishment of an impact investment information infrastructure.

Moreover, this would facilitate the provision of information on impact investment trends and investment funds in the US and Europe, and would also enable the introduction of impact investment opportunities in emerging markets and the exchange of information pertaining to BOP business examples and issues.

Cooperation with other organizations such as ‘the BOP business support center’ of METI and the various BOP business support schemes of JETRO is important, as is the establishment of an information sharing platform accessible to different players active in impact investment.

¹ In Japan, impact investment platforms are getting off the ground such as Hub Tokyo (provides a space for social entrepreneurs to share offices and exchange information) and the Japan branch of Asian Venture Philanthropy Network (promotes venture philanthropy, matches members’ needs, and provides opportunities for networking and learning).

4.3 Roadmap for establishing new financing approaches

4.3.1 Prioritizing financing approaches

(1) JICA assessment criteria for Private Sector Investment Finance

To prioritize the financing approaches examined in section 4.2.2, it is crucial that the assessment criteria JICA uses for its Private Sector Investment Finance are verified. Based on the results of the interview with JICA's Private Sector Partnership and Finance Department, the assessment criteria used for Private Sector Investment Finance are summarized in Figure 4-8. In summary, at this stage, it is considered that risk must be minimized whilst steps are taken to accumulate appropriate knowhow and experience of investing in emerging markets through making reliable investments.

Figure 4-8: JICA assessment criteria for Private Sector Investment Finance

Example for overseas investment program		
Risk	Profit	National interest
<ul style="list-style-type: none"> ✓ Investing as an LP not GP ✓ Negative on first losses ✓ Negative toward investing with a first time fund manager ✓ Prefer fund managers who have an overseas network 	<ul style="list-style-type: none"> ✓ Returns have to be higher than the risk-free rate 	<ul style="list-style-type: none"> ✓ Benefit for Japanese companies is required. ✓ Investment in Japanese company should be in line with the ownership ratio, in case of an overseas fund. ✓ Indirect benefits to Japanese companies, such as suppliers and purchasers of goods from Japanese companies.

<ul style="list-style-type: none"> ✓ Developing sufficient knowledge as necessary in establishing an individual fund ✓ Risk of investment should be kept to a minimum

※Above are not absolute criteria for evaluating investment. For example, fund projects from a first time manager does not always mean that it will not be taken into consideration.

Source: Prepared by research team

(2) Examining prioritization

In addition to the above JICA investment and financing assessment criteria, the research examined the potential of development a Japanese impact fund following the establishment of a Japanese impact investment platform, as well as an analysis of the prioritization of financing approaches A-E, detailed in section 4.2.2.

Figure 4-9: Examining prioritization of financing approaches (equity/loan financing)

		A	B	C	D	E
Example of criteria in deciding overseas investment	Risks	○				
	Profit			○		×*
	National interest				○	○
Strengthen Japanese impact investment				○	○	○

Investment method	Steps to consider	
	1	2
② Fund investment		
New fund		
Existing fund		
JICA Japanese fund		
Global funds		
① Direct investment		
	i) Japan	ii) Global/domestic

* Cost is high when the project scale is small

Source: Prepared by research team

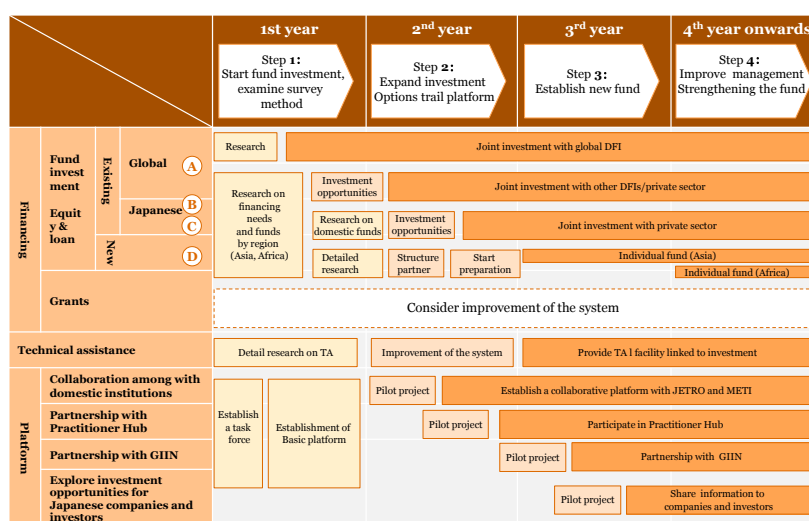
As the overseas investment and financing system has only recently resumed, and given the necessity to minimize risk whilst making reliable investments (the colored section in Figure 4-9), an appropriate approach could be to start with (A) “JICA will provide equity/loan financing through its first global fund which will target investment in global and local companies”. With regard to (E) “JICA will provide direct equity/loan financing to Japanese SMEs planning to launch businesses in emerging economies”, given the scale of projects, it is considered that utilizing the current overseas investment and financing system would be difficult. Given the amount of time required to examine and establish a new fund, (D) “JICA establishes a new proprietary fund and provide equity/loan financing to Japanese SMEs planning to launch businesses in emerging economies” is considered as an approach in the medium term. In contrast (B) “JICA will provide equity/loan financing to Japanese social funds that target investment in global and local companies”, and (C) JICA will provide equity/loan financing to Japanese social funds that target investment in Japanese companies” are likely to be considered after (A).

As discussed in section 4.2.2, consideration will not only be given to equity and loan financing but also to the provision of grants for companies in the incubation and start-up stages. However, under the current system it is difficult to award grants to individual companies. Therefore, in the long term it will be important to revise the system and related factors in response to increased demand for this type of financing.

4.3.2 Overview of roadmap (proposal)

Based on the three basic policies below, a roadmap was created outlining the actions considered appropriate for JICA given the research results to date and subsequent analysis. This roadmap is a draft and additional research and discussion with JICA is necessary in order to validate it.

Figure 4-10: Overview of roadmap (proposal)



*Management company, registration, creation of investment guidelines, examine investment, etc.

Source: Prepared by research team

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