

**Republic of the Philippines  
Bangsamoro Autonomous Region in Muslim Mindanao  
Ministry of the Interior and Local Government**

**Republic of the Philippines  
Data Collection Survey on Community  
Development Responding to Needs and  
Challenges of Communities in Bangsamoro  
Final Report**

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**Japan International Cooperation Agency**

**IC Net Limited**

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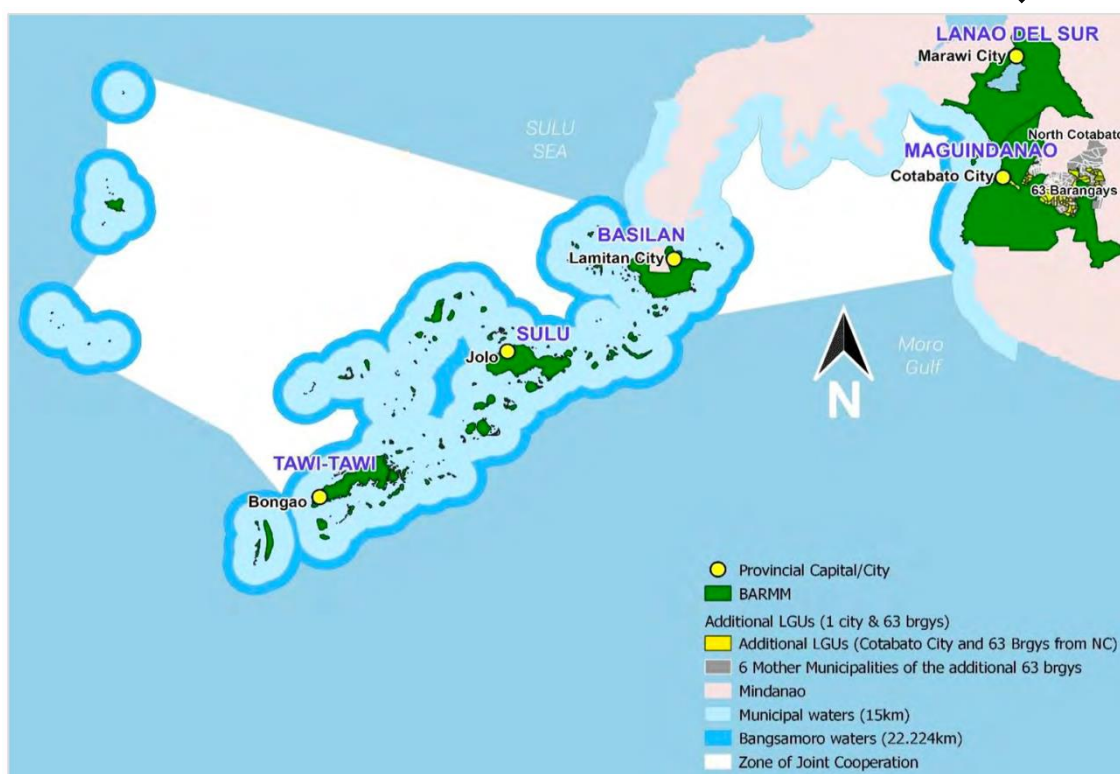
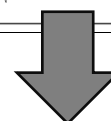
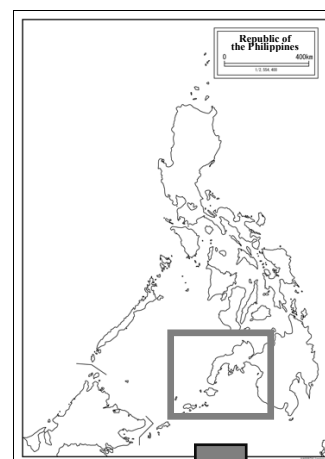
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### Abbreviation List

Abbreviation	Full Name
AI	Artificial Intelligence
ARMM	Autonomous Region in Muslim Mindanao
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
BDP	Bangsamoro Development Plan
BIAF	Bangsamoro Islamic Armed Forces
BICTO	Bangsamoro Information and Communications Technology Office
BIR	Bureau of Internal Revenue
BIWAB	Bangsamoro Islamic Women Auxiliary Brigade
BOC	Bureau of Customs
BOL	Bangsamoro Organic Law
BPAT	Barangay Peace Operations Team
BPDA	Bangsamoro Planning and Development Authority
BPO	Business Process Outsourcing
BTA	Bangsamoro Transition Authority
BYC	Bangsamoro Youth Commission
CATI	Computer Assisted Telephone Interviewing
CBA	Center for Bits and Atoms
CDA	Cooperative Development Agency
CF	crowdfunding
CODEF	Cost of Devolved Functions
COVID-19	Coronavirus Disease 2019
CSO	Civil Society Organization
CY	Calendar Year
DBP	Development Bank of the Philippines
DIBs	Development Impact Bonds
DRM	Disaster Risk Management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
ETF	Exchange Traded Fund
EU	European Union
FFCAs	Farmers and Fisherfolk Cooperatives and Associations
FIT	Feed-in Tariff
FS	Feasibility Studies
GDP	Gross Domestic Product
GRDP	Gross Regional Domestic Product
ICT	Information and Communication Technology
IDB	Independent Decommissioning Body
IDPs	Internally Displaced Persons
IEC	Information Education and Communication
IIC	Ideation Impact Challenge
IP	Indigenous People
IPHO	Integrated Public Health Office
IRA	Internal Revenue Allotment
IRR	Implementing Rules and Regulations
JICA	Japan International Cooperation Agency
LBP	Land Bank of the Philippines

Abbreviation	Full Name
LDA	Latent Dirichlet Allocation
LENGKE	Local Exchange and Network of Goods in any Kind of Emergency
LGU	Local Government Unit
LMC	Last-mile Connectivity
LSIP	Localized Social Integration Program
MAFAR	Ministry of Agriculture, Fisheries and Agrarian Reform
MC	Memorandum Circular
MHPSS/PFA	Mental Health and Psychological First Aid
MILF	Moro Islamic Liberation Front
MILG	Ministry of the Interior and Local Government
MIT	Massachusetts Institute of Technology
MOH	Ministry of Health
MPDC	Municipal Planning Development Coordinator
MPIC	Metro Pacific Investments Corporation
MPOS	Ministry of Public Order and Safety
MSSD	Ministry of Social Service and Development
MTIT	Ministry of Trade, Investment and Tourism
MW	Megawatts
NAP P/CVE	National Action Plan on Preventing and Countering Violent Extremism
NC2	National Certificate Level II
NGO	Non-governmental Organization
PDM	Project Design Matrix
PHP	Philippine pesos
PO	Plan of Operation
PSS	Psychosocial Support
PV	Page Views
RA	Rapid Assessment
REIT	Real Estate Investment Trust
RHU	Rural Health Unit
SDF	Special Development Fund
SDGs	Sustainable Development Goals
SGLG	Seal of Good Local Governance
SHEP	Smallholder Horticulture Empowerment and Promotion
SIBs	Social Impact Bond
SNS	Social Networking Service
SPARTA	Smarter Philippines through Data Analytics R&D, Training and Adoption
TESDA	Technical Education and Skills Development Authority
TFDCC	Task Force for Decommissioned Combatants and their Communities
TRAIN	Tax Reform Acceleration and Inclusion
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
UU	UInique Users
VADER	Valence Aware Dictionary and Sentiment Reasoner
WHO	World Health Organization



Area of Bangsamoro Autonomous Regin in Muslim Mindanao  
(From the 1<sup>st</sup> Bangsamoro Development Plan)

## Background

The report was prepared based on the survey entitled, “*Data Collection Survey on Community Development Responding to Needs and Challenges of Communities in Bangsamoro.*” The survey was conducted in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) from March 2021 to February 2022.

The report contains the basic information and analysis results for future business deployment in the area. It organizes the information, experiences, and lessons gathered from the survey. The main activities undertaken in the survey are 1) Conducting the need survey of people in the concerned area, 2) Collecting proposals for addressing the needs of people by the open invitation through the internet, and 3) Implementing the pilot projects in collaboration with the relevant ministries of the Bangsamoro Transition Authority (BTA).

The report is structured as follows:

“Chapter 1 Current Situation of BARMM” summarizes the data and information collected from existing documents and web pages to introduce the current situation in the BARMM.

“Chapter 2 Survey Method for Inquiring the Issues and Needs of People” introduces both the general and the specific survey methods applied in the survey.

“Chapter 3 Survey Results on the Priority Community Issues and Needs in the BARMM” summarizes the issue and the need survey result that was implemented in the survey.

“Chapter 4 Innovative Ideas to Address the Issues of the People of BARMM” introduces the ideas to address the issues of the people of BARMM which were determined from the survey.

“Chapter 5 Implementation Process and the Results of Pilot Projects” reports the implementation process, lessons learned, and future scope of implementation of similar projects based on the seven implemented pilot projects. These projects were selected together with the relevant ministries of BTA from the proposals collected online through open invitation.

“Chapter 6 Suggestions on the Fund Mobilization Mechanism and Options” suggests fund mobilization mechanisms and options in utilizing the private sector fund for the future Bangsamoro Autonomous Local Government.

“Chapter 7 Scope of Future Cooperation in BARMM” introduces options for future cooperation activities in BARMM. This chapter includes the following: (1) proposals for future cooperation projects based on the experience of the pilot projects; (2) a cooperation plan for utilizing the external fund; and (3) the implementation of projects in the BARMM.

In Chapters 3, 4, 5, and 6, detailed survey reports are available and the following are explained in more detail:<sup>1</sup>

- ✓ Summary Report on Priority Community Issues and Needs in the BARMM (Chapter 3);
- ✓ Complementary Survey on Ex-Combatants (Chapter 3) ;
- ✓ Collection of Innovative Ideas to Address the Issues of the People of BARMM (Chapter 4);
- ✓ Pilot Project Implementation Report (Chapter 5); and
- ✓ Executive Summary on Fund Mobilization (Chapter 6).

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<sup>1</sup> The listed reports are attached to the main report as a separate volume.

## Chapter 1 Current Situation of BARMM

### 1.1 Summary Information of the BARMM Region

The BARMM is in the western part of Mindanao Island, located in the southern part of the Republic of the Philippines, and stretches to the Sulu Archipelago. Its natural environment is suitable for agriculture due to its high temperature, abundant rainfall throughout the year, and fertile soil.

An overview of the region could be found below.<sup>2</sup> The area has a high potential for economic growth if its political stability continues. Considering the regional data, the population density is very low, the population growth rate is high, and the level of the gross regional domestic product (GRDP) per person is one-third of the national average.

- Population 4.27 million (4.2% vs whole of country )
- Population growth rate 2.89% (National average 1.90%/2000-2010)
- Population density 103 per km<sup>2</sup> (National average 337 )
- Area 35,826.95 km<sup>2</sup> (12.0% vs whole of country)
- GRDP (2019) PHP 2,491.6 hundred million (1.3% vs. whole of country)<sup>3</sup>
- GRDP per person PHP 55,087 (2020) (National average: PHP 164,919)<sup>4</sup>
- Basic literacy rate 78.8% (National average: 93.8%)<sup>5</sup>

As for the distribution of religious population, the most important characteristic in the region, 91.3% of the population is Muslim, 5.2% is Roman Catholic, and the remaining belongs to other Christian denominations.<sup>6</sup>

#### Ethnicity Distribution

The distribution of the major ethnic groups is as follows.<sup>7</sup>

**Table 1-1: Major Ethnic Groups in the BARMM**

Ethnic Group	Population	Percentage	Major Residential Area
1. Maranao	827,194	24.8%	Lanao Del Sur
2. Tausug	854,347	24.3%	Sulu
3. Maguindanao	768,630	21.8%	Maguindanao/Cotabato City
4. Sama/Samal	250,095	7.1%	Tawi-Tawi
5. Iranon/Iraynon	211,838	6%	Maguindanao
6. Yakan	153,486	4.4%	Basilan
7. Other Ethnic Groups	152,183	4.3%	

### 1.2 Preparation Status for Transferring to the Autonomous Region

A plebiscite for confirming the Bangsamoro Organic Law (BOL) was conducted in 2019, along with the voting to join the BARMM. It resulted in the Basilan Province, excluding Isabela City, Lanao Del Sur Province, Maguindanao Province, Sulu Province, Tawi-Tawi Province, Cotabato City, and 63 Barangays in North Cotabato Province joining the BARMM.

<sup>2</sup> Most of the data are from “1<sup>st</sup> Bangsamoro Development Plan” and “Philippine Statistics Authority Bangsamoro Autonomous Region in Muslim Mindanao.” URL: <http://rsoarmm.psa.gov.ph/>

<sup>3</sup> Philippine Statistics Authority, Gross Regional Domestic Product (2020) by Region, Available from: <https://psa.gov.ph/grdp/tables>

<sup>4</sup> Philippine Statistics Authority, Gross Regional Domestic Product (2020) by Region, Available from: <https://psa.gov.ph/grdp/tables>

<sup>5</sup> 2019 Functional Literacy Education and Mass Media Survey (FLEMMS) <https://psa.gov.ph/content/every-100-filipinos-94-are-basic-literate-2019>

<sup>6</sup> 2015 Census of Population

<sup>7</sup> The table is prepared based on the information in “Access Bangsamoro.” URL: <https://accessbangsamoro.ph/2019/08/23/ethnic-groups-in-barmm/>



**Table 1-2** shows the overview of newly joined local governments.

**Table 1-2: Overview of Local Governments in the BARMM**

Province	Capital	Population		Area	Density	Num. City	Num. Muni.
Basilan	Lamitan	346,579	8.11%	3,453.42	100	11	210
Lanao del Sur	Marawi	1,045,429	24.47%	15,055.51	69	39	1,159
Maguindanao	Biluan	1,173,933	27.47%	9,968.31	118	36	508
Sulu	Jolo	824,731	19.30%	4,547.16	181	19	410
Tawi-Tawi	Bongao	390,715	9.14%	3,626.55	108	11	203
Cotabato City		299,438	7.01%	176.00	1,701		37
North Cotabato		192,324	4.50%				63
Total		4,273,149		36,826.95		116	2,590

The “1st Bangsamoro Development Plan (1<sup>st</sup> Plan),” covering 2020 to 2021 and prepared by the Bangsamoro Transition Authority (BTA), identified eight intermediate outcomes. The outcome relevant to public administration and governance is to “establish foundations for an inclusive, transparent, accountable, responsive, and effective governance.” Specifically, the following three points are listed as priority agenda:

- Enact priority measures mandated by the Bangsamoro Law, such as the Electoral Code, Civil Service Code, Administrative Code, and other legislations that need to be enacted by the Parliament of the BTA. <sup>8</sup>
- Review, integrate, and harmonize the Bangsamoro Development Plan (BDP), Autonomous Region in Muslim Mindanao (ARMM) Regional Development Plan, Camp Transformation Plan, and other Bangsamoro plans to respond to current needs.
- Establish an appropriate bureaucracy for the Bangsamoro government that will ensure the right balance between the size of the bureaucracy and the services that need to be delivered as well as the appropriate skills required for employees.

In relation to the above-mentioned intermediate outcomes, the following 11 points were identified as priority issues to be addressed from 2020 to 2022:

- 1) Poor compliance and enforcement of laws;
- 2) Prevalence of corrupt practices and other forms of illegal activities;
- 3) Limited functionality of some local government units (LGUs);
- 4) Limited participation in planning, implementing, monitoring, and evaluation at both the regional and local levels;
- 5) Low revenue generation capacity both at the regional and local level;
- 6) Low absorptive capacity and project readiness both at the regional and local level;
- 7) Weak establishment of the financial management system;
- 8) Limited revenue and fund sources;
- 9) Lack of effective capacity and fiscal policies;
- 10) Weak justice system resulting in limited access to justice; and
- 11) Poor electoral system and process.

Regarding the performance evaluation of local governments in the Philippines, there is a certification system for the Seal of Good Local Governance (SGLG).<sup>9</sup> As of 2018, 23 cities and municipalities, or 19.5% out of 118, in the BARMM were certified by the SGLG. However, the “1st Plan” indicates that further improvement is required.<sup>10</sup> The indicators of the SGLG cover almost all

<sup>8</sup> Although the Bangsamoro Administrative Code and for Other Related Purposes (2020) and the Bangsamoro Civil Service Code (2020) were formulated, other priority laws are not yet completed.

<sup>9</sup> Indicators for the SGLG in 2021 are following ten (10): 1) Financial Administration and Sustainability; 2) Disaster Preparedness; 3) Social Protection and Sensitivity; 4) Health Compliance and Responsiveness; 5) Sustainable Education; 6) Business – Friendliness and Competitiveness; 7) Safety, Peace and Order; 8) Environmental Management; 9) Tourism, Heritage Development, Culture and the Arts; and 10) Youth Development.

<sup>10</sup> It cannot be said that the BARMM Region is significantly lower than other regions in the Mindanao Island. For example, 10 cities and municipalities, 13.7% out of 73, got certificated in the Caraga Region (Region 13) next to the

the required functions of the local government. It is worth considering that the capacity development of local governments will be implemented in line with the certification system of the SGLG.

### **1.3 Status of Transition Process**

Based on the Bangsamoro Basic Law, the BTA was established within the transition period of three years from 2019 before the Bangsamoro parliamentary elections could be held in 2022. However, in October 2021, the Philippine government decided to postpone the elections for another three years or until 2025 by amending the Bangsamoro Basic Law.

The COVID-19 pandemic has largely affected the transition process. For example, the delay in the enactment of electoral codes is a major obstacle to the implementation of elections. Additionally, the slow pace of the normalization process, which includes decommissioning and provision of socio-economic support for Moro Islamic Liberation Front (MILF) combatants, has indirectly affected the transition process, as its delay could cause political and security instability.

Since the term of office of the current BTA members will end in 2022, it is unclear whether new members will be appointed by the President or whether the incumbent members will continue. Of the 80 members, 41 are recommended by the MILF. In any case, the MILF will lead the BTA by 2025. According to local media reports, the Bangsamoro and Philippine governments are generally supportive of extending the transition period. However, the question now is how far the government's governance capacity can be strengthened and the provision of public services and peace dividends can be expanded in both quality and quantity during the three-year extension period. In addition, there are many issues to be addressed by the Bangsamoro government while the COVID-19 pandemic continues, such as how far the needs of ex-combatants can be met through normalization and the response to increasing violent extremism.

### **1.4 Current Situation on COVID-19**

The Philippine government, through the Department of Health, confirmed the first case of COVID-19 on January 30, 2020. About a month later, on March 11, 2020, a man with a travel history to Metro Manila was confirmed as the first case in the Bangsamoro region. By January 15, 2022, a total of 20,582 people had been confirmed to have been infected in the region and a total of 484 people had died. However, this was a relatively low infection rate in the Philippines. Although the Bangsamoro region has the lowest number of infections in the Philippines, the number of infections has increased by 561 during the week from January 6, 2022, making it the sixth wave of infections, and it is considered to be spreading rapidly.

In response to the surge in COVID-19 infections worldwide, President Duterte declared the entire country a public health emergency through Presidential Decree No. 922 on March 8, 2020, and the Department of Health issued Code Red Sub-level 2 for COVID-19. After the country was declared a public health emergency, the interim governing body convened its own interagency task force on COVID-19 and began implementing community quarantine measures. In March 2020, South Lanao Province, including Marawi City, was designated as an enhanced regional quarantine, followed by Tawi-Tawi and Cotabato City. In addition, the entire region was designated as a general regional quarantine from May 1, 2020. In addition, the province of South Lanao was placed under enhanced community quarantine from September 8 to October 31 due to the rapid increase in COVID-19 infection.

Containment measures to prevent the spread of COVID-19 greatly restricted the provision of public services and movement in the Bangsamoro region. Even before the COVID-19 crisis, the Bangsamoro region, which had been affected by conflict, violence, and political instability, as well as multidimensional vulnerability and inequality, had one of the highest poverty rates in the country. the

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BARMM Region and 5 cities and municipalities, 10.0% out of 49, got certificated in the Davao Region (Region 11). Besides, 51 cities and municipalities, 22.7% out of 225, got certificated in the Ilocos Region (Region 1) of the northern part of the Luzon Island. The numbers are calculated by the reporter based on the information in 2018 from the Department of the Interior and Local Government; <https://www.dilg.gov.ph/reports-and-resources/seal-of-good-local-governance/12/>.

impact due to the pandemic has been significant in the region.

The response of the Bangsamoro Government to the COVID-19 crisis, as articulated in the COVID-19 Response and Recovery Plan for the Bangsamoro Region for 2020-2022, focuses on social welfare and development, essential health service delivery, economic recovery, infrastructure support, and improved governance. The plan is aligned with the following four goals:

- To provide a framework for socio-economic recovery that follows the guidelines and health protocols of ‘the new normal’.
- To ensure a harmonized approach to the implementation of concerned policies, priority programs and projects to mitigate and recover from the impacts of COVID-19.
- To streamline and maximize the use of funds and other resources of the Bangsamoro government.
- To provide policies to strengthen preventive measures against COVID-19 and other new and re-emerging infectious diseases that may occur in the future.

### **1.5 ICT Situation in Bangsamoro Region**

While significant progress has been made in enhancing and utilizing information technology in the Philippines, the region still faces challenges in terms of fully benefitting from it. For instance, 64.6% of Manila residents have access to the Internet, but the number drops to 12.7% in the Bangsamoro region. The absence of a significant difference in the ownership ratio of mobile phones and smartphones in the two areas suggests that most people in Bangsamoro use mobile phones without Internet access. This hypothesis is supported by the fact that 2G and 3G communications occupy 85% of the transactions in Bangsamoro, while 4G accounts for 94% in Manila.

Many development organizations position low Internet penetration as one of the most significant challenges. For example, the United States Agency for International Development (USAID) named this challenge as a “last-mile connectivity (LMC)” issue and has been implementing various projects driven by the digital inclusion team.<sup>21</sup> Similarly, Mercy Corps, one of the biggest development consulting organizations in the United States, has launched improvement projects such as setting up 85 Wi-Fi poles in refugee camps in Venezuela.<sup>22</sup> As the Internet connectivity issue is among the sustainable development goals (SDGs), the region is also expected to improve the situation.

In fact, the Bangsamoro Information and Communications Technology Office (BICTO)) finalized a master plan to lead the E-Government initiative in November 2021, with the LMC issue as one of priorities.

## Chapter 2 Survey Method for Inquiring the Issues and Needs of People

This chapter extracts practical lessons for a future similar survey by reviewing the implemented survey method. In addition, some concrete points of note are indicated in the case of the survey regarding the use of big data analysis in the Philippines. The survey was implemented remotely, considering the security risk in the BARMM and the COVID-19 situation. None of the survey team members visited the survey area, and the entire process was completed utilizing only local resources and information from the Internet. Although not all the obtained lessons and experiences are applicable considering the unusual survey method, some are useful and practical.

### 2.1 General Comparison of the Needs Survey Method

**Table 2-1** in the Inception Report is the revised summary table on the method used to survey needs and issues. Generally, the content of the table is sufficient for providing an overview of the survey method. The following lessons were obtained through 1) document survey, 2) big data analysis, and 3) questionnaire survey by sampling, utilized during survey administration.

#### 2.1.1 Document Survey

Although data can be useful through comparison of the past and the present and/or a concerned area and others, comparing the past and present is difficult, and much available data are still based on the previous administrative unit because the BARMM was formulated from the previous administrative unit of the Autonomous Region in Muslim Mindanao (ARMM) in 2019. It is well understood that reform of the administrative unit seriously impacted the document survey. Specifically, the data are arranged by *region* in the case of the Philippines, and the impact must therefore be smaller if the data arrangement is done based on *province* and *city*. However, the indicated problem should be temporary, and the data for the *ARMM region* will soon be replaced by data from the *BARMM region*.

In general, data related to economic activity are well-organized, and data are available annually, at least in many developing countries. However, data related to social issues, for example, the primary school enrollment rate and the infant mortality rate, are sporadically collected in many cases, and social data are rarely continuously collected and available annually. To understand people's needs and priority issues, social data are more crucial in many cases, and data from a document survey can be used to overview the concerned country and area. Only in rare cases can data from a document survey be used directly for comprehending these aspects.

Recently, many countries have been arranging their activities in line with the SDGs, and relevant data are also arranged in line with the SDGs. It is expected that social data will be well-organized in relation to the SDGs.

#### 2.1.2 Big Data Analysis

As mentioned in **Table 2-1**, Facebook's big data could not be used for data analysis due to the company policy of Meta Platform, Inc., formerly Facebook, Inc.; the survey had to use other data sources as a replacement. When conducting a survey based on big data analysis in the future, the survey design should be prepared without using Facebook data. On the contrary, the data from Facebook are still considered essential, and it is recommended that JICA officially consult with Meta Platform and obtain permission to use Facebook data for big data analysis.

More details on lessons are described in the following sections.

#### 2.1.3 Questionnaire Survey by Sampling

Although the plan was to conduct the questionnaire survey using mobile phones, it was difficult to obtain mobile phone numbers from the Bangsamoro side, and a questionnaire survey by sampling was administered via the Internet instead.

If the survey area meets either of the following conditions, it will be possible to administer a questionnaire survey by sampling via phone:

**Condition 1)** A fixed-line phone is common, and the area can be identified by the telephone number.

**Condition 2)** The mobile phone service area a particular service provider offers is limited to a

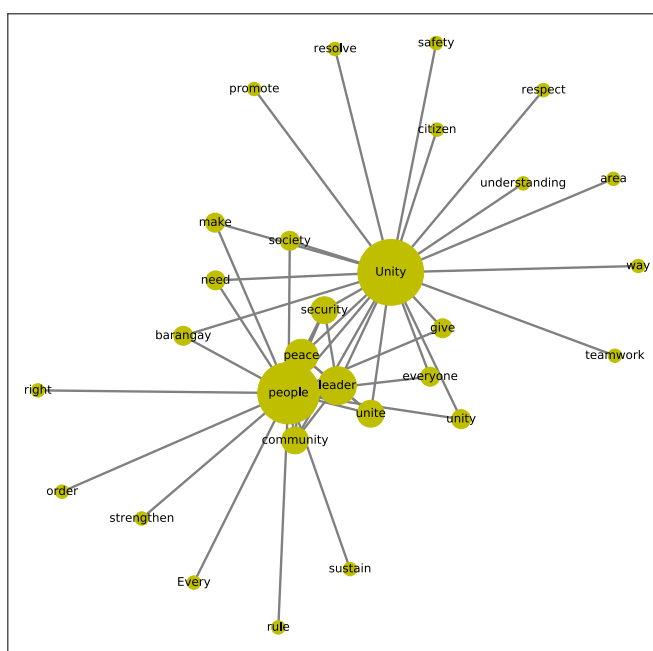
certain area that overlaps with the target area.

Based on the experience of administering the questionnaire survey by sampling via the Internet, the following problems were identified: 1) difficulty facilitating targets' questionnaire webpage access and 2) an imbalance of areas depending on the availability of Internet access. Regarding the first point, it is well understood that it is not possible to attract enough respondents by depending solely on voluntary participation through advertisement and local NGOs' campaigns. When employing a similar method in the future, an incentive system will be involved. Regarding the second point, the problem was foreseen, and a countermeasure was taken: Field researchers were allocated to collect responses in areas with difficulty accessing the Internet. As a result, the collected responses are substantially imbalanced depending on the region, and the countermeasure was inadequate. If the survey can allocate a longer period for administration of the questionnaire survey, other methods can be applied; for example, the number of respondents can be boosted by introducing the initial respondents to potential additional respondents.

In addition, telephone numbers were collected during the above-mentioned questionnaire survey and a follow-up survey involving ex-combatants was conducted using the collected telephone numbers. The follow-up survey used the original questionnaire and included open-ended questions. To analyze the responses to the open-ended questions, the text-mining<sup>11</sup> method using artificial intelligence (AI) was applied instead of reading by humans. This method is worthy of consideration for effectively analyzing a certain amount of text data.

### Co-occurrence Network Analysis

The figure in the box shows the result of a co-occurrence network analysis, which is the part of the text-mining method. Frequent correlated words are identified per block of narrative answers to a questionnaire survey. The analysis can be done per sentence instead of block of narrative answers if necessary. Furthermore, the size of the yellow circle behind individual words indicates the frequency of appearance in the narrative answers; larger size means more frequent appearance. In addition, the distance between words indicates the degree of correlation; the nearer the distance, the stronger the correlation. The figure shows the analysis results regarding the security situation. It may be interpreted that respondents strongly feel the needs for "Unity" of "People" and "Understanding," and "Teamwork" and "Leader" are considered important for "Unity."



<sup>11</sup> It is a text data analysis method that useful information is identified by dividing text data into words or sentences, converting them into data that can be handled by a computer, and analyzing the frequency of appearance, correlation of co-appearance, and appearance tendency.

**Table 2-1 Summary of Survey Method of Needs and Priority Issues**

Applicable Scale	Wide scale of needs such as National and Province Level	Wide scale of needs such as National and Province Level	Wide scale of needs such as National and Province Level	Smaller area and/or Topic Specific needs	Smaller area and/or Topic Specific needs	Needs of Village and /or Community Level Needs
Survey Method	① <b>Document Survey:</b> National/Provincial/Sector Development Plan, National Census Report, and Various Sector Statistic Report.	② <b>Big Data Analysis:</b> Analysis of any type of data such as text, picture, sound, etc. in the SNS and Web pages	③ <b>Questionnaire by Sampling (Interview by researchers are not included.)</b>	④ <b>Interview: Structured or Semi-Structured Interview)</b> (the interviewees are selected randomly.)	⑤ <b>Interview: Key Informant Interview, Group Interview, etc.</b>	⑥ <b>Participatory Rural Appraisal, Participatory Learning and Action, etc.</b>
Advantage	<ul style="list-style-type: none"> <li>It is possible to grasp priority issues (needs) based on the wide range and comprehensive data.</li> <li>It is possible to check the data remotely without visiting the concerned area/country.</li> </ul>	<ul style="list-style-type: none"> <li>Various needs (priority issues) can be identified, and the priority can be fixed statistically.</li> <li>The survey can be done for the specific period of past time.</li> <li>It is possible to conduct the survey remotely without visiting the concerned area/country.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate needs and priority issues can be identified following the survey objective and scope and the attributes of needs are also identified in the survey.</li> </ul>	<ul style="list-style-type: none"> <li>It is possible to identify the needs and priority issues and collect other detail information.</li> </ul>	<ul style="list-style-type: none"> <li>It is possible to identify the needs and priority issues and collect other detail information.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed information of needs and priority issues can be collected in the target village and community, and the countermeasures can be identified also during the survey.</li> <li>The survey itself can be a preparatory activity for the future action and some consensus building is also possible.</li> </ul>
Disadvantage	<ul style="list-style-type: none"> <li>It is not necessarily available of the latest required data.</li> <li>Although the national data is available in many cases, the local data is not necessarily available. (Especially, the comparison of past and present data is impossible in the case of the BARMM due to the reform of the administrative unit.)</li> </ul>	<ul style="list-style-type: none"> <li>It is difficult to clarify the attributes of needs and priority issues.</li> <li>It is difficult to secure experts of the computer programing and big data analysis (Data Scientist) in the developing country.</li> <li>It is officially difficult to use Facebook data that is considered essential one for the big data analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Survey result can be influenced depending on formulated questionnaire itself and the way of distribution such as direct, web, and mobile phone. The credibility of collected data is also influenced.</li> <li>The survey target is limited, and selection bias is not avoidable. At least, the target people are most often limited to those who can read and write the main language.</li> </ul>	<ul style="list-style-type: none"> <li>It is rather difficult to compile the survey result with the numerical information, especially, in the case of the semi-structured interview.</li> <li>The wider target area/people, the more interviewers, more cost and more complex management are required.</li> </ul>	<ul style="list-style-type: none"> <li>The survey result can be influenced by the bias of interviewers; therefore, it is difficult to select appropriate interviewers.</li> <li>It is difficult to compile the survey result in a quantitative way and the result must be qualitative.</li> </ul>	<ul style="list-style-type: none"> <li>Collected information does not necessarily focus on the needs and priority issues of people, and it is not always easy to identify required information.</li> <li>Experienced facilitators who can speak local language are indispensable, and it is not necessarily easy to secure such facilitators.</li> </ul>
Remark	<ul style="list-style-type: none"> <li>If the required latest data is available, it is most effective and efficient survey method.</li> </ul>	<ul style="list-style-type: none"> <li>It is rather easy to repeat the same survey after preparing the computer program. It is advantage of trend analysis over time.</li> </ul>	<ul style="list-style-type: none"> <li>The wider target area, the more cost and time for the survey is required.</li> </ul>	<ul style="list-style-type: none"> <li>The survey result heavily depends on the set topics and prepared interview guide.</li> </ul>	<ul style="list-style-type: none"> <li>It is advantage for inquiring the detail information of pre-fixed needs and priority issue rather than examining the needs and priority topics.</li> </ul>	<ul style="list-style-type: none"> <li>Although it is advantage for the survey in the very small area and specific community, the survey in a wider area is not appropriate.</li> </ul>

## 2.2 Details of Big Data Analysis

### 2.2.1 Data Collection

The survey team used three types of data for the analysis: 1) online news, 2) Twitter, and 3) YouTube comments. In total, 368,485 texts were used.

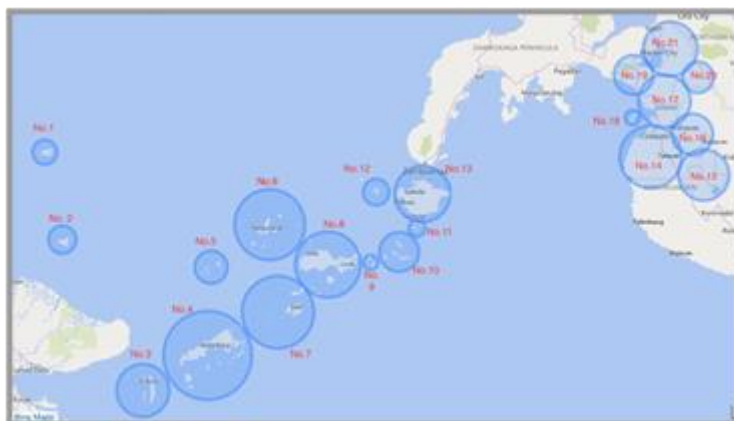
#### Online News

The survey team identified 84,400 news articles posted between October 2020 and March 2021 from online news in the Bangsamoro region, Mindanao, and the Philippines. Then, keywords (see below for details) were then applied, and 13,922 articles related to the region were identified for the analysis.

**Table 2-2: Online News**

Language	# of Articles	Remarks
English	10,764	
English (+Tagalog)	2,100	Translated into English for analysis
Tagalog (+English)	859	Translated into English for analysis
Tagalog	199	
<b>Total</b>	<b>13,922</b>	

#### Twitter



**Figure 2-1: Tweet Locations**

Tweets posted in the Bangsamoro region were collected per coordinate shown in the map during the study period. In general, there are two types of tweets: those that do and do not include location information. Each user can decide whether to include location information in a Tweet, though most individuals choose not to. For this study, as it was necessary to analyze posts made by residents, the survey team limited the number of tweets to those that did include location information. Thus, 9,024 users and 401,682 tweets were collected in all regions, of which 341,446 posted in English and Tagalog were used for analysis.

### **YouTube comments**

The survey team collected comments on videos posted by specific channels targeting the region during the study period. The team qualitatively identified channels targeting residents of the region because comments on videos posted by those channels are more likely to be posted by residents. However, it is technically impossible to limit to the commenters only from the region strictly. The team cannot deny the possibility that comments from non-local residents may be included even in resident-broadcasted videos. As a result, 13,117 comments on 40 channels were used for the analysis.

**Table 2-3: YouTube Comments**

Language	Number of articles	Remarks
English	7,214	
English (+ Tagalog)	131	Translated into English for Analysis
Tagalog (+ English)	129	Translated into English for Analysis
Tagalog	5,643	
<b>Total</b>	<b>13,117</b>	

#### **2.2.2 Keyword Selection**

To use the aforementioned online news as big data, it is necessary to exclude articles about regions outside of Bangsamoro so that the survey team can get the data only about Bangsamoro-related issues. For this purpose, the survey team selected keywords through qualitative research and filtered articles with them. Then, the team used articles that contained at least one keyword for analysis. This process is called filtering. The team worked with local resources in the keyword selection process, identifying a total of 3,027 keywords.

- Municipalities and 63 barangays in the BARMM region: 2,744
- Names of ministers, bureaucrats, councilors, and Bangsamoro Provisional Authority staff: 154
- Names of ethnic groups: 50
- Government agencies, academic institutions, radio stations, and armed groups: 79 results

As mentioned earlier, filtering was applied to a total of 84,400 news articles. In total, 13,922 English and Tagalog articles were used for analysis.

Twitter and YouTube comments were not filtered because Tweet information is limited to residents thanks to the geographic data. YouTube comments were collected based on channels that post videos targeting the region. The survey team did not apply filtering on social media because such filtering may lead to a significant loss of social media data, as most of such data are likely to be short sentences.

#### **2.2.3 Languages in Big Data**

Bangsamoro is a multilingual region where more than 15 languages are spoken. However, only two languages, English and Tagalog, were used for the big data analysis. This is because 1) most of the data are generated in English or Tagalog, and 2) both languages are often used in public. By targeting the two, the survey team was able to cover most of the online conversation.

In topic modeling, the survey team identified topic groups in English and Tagalog because identifying topics by mixing both languages would impair the interpretability of the analysis results. News articles in which both languages are mixed (e.g., English articles quoting residents' statements in Tagalog) are all translated into English and analyzed as English data.

The survey team translated all Tagalog data into English for sentiment analysis. This is because sentiment analysis techniques have been developed well in English. and the survey team judged that



machine translation into English would be more reliable than maintaining and analyzing data in Tagalog. However, there is a possibility of mistranslation by a machine when it translates texts from Tagalog to English. In the future, it will be ideal to use Tagalog sentiment analysis technology when the technology advances so that the survey team can analyze the Tagalog texts for sentiment analysis directly.

For needs counting, the survey team prepared terms that express needs in English (such as “need,” “want,” and “suggest”) and used the average number of frequencies of those terms in texts.

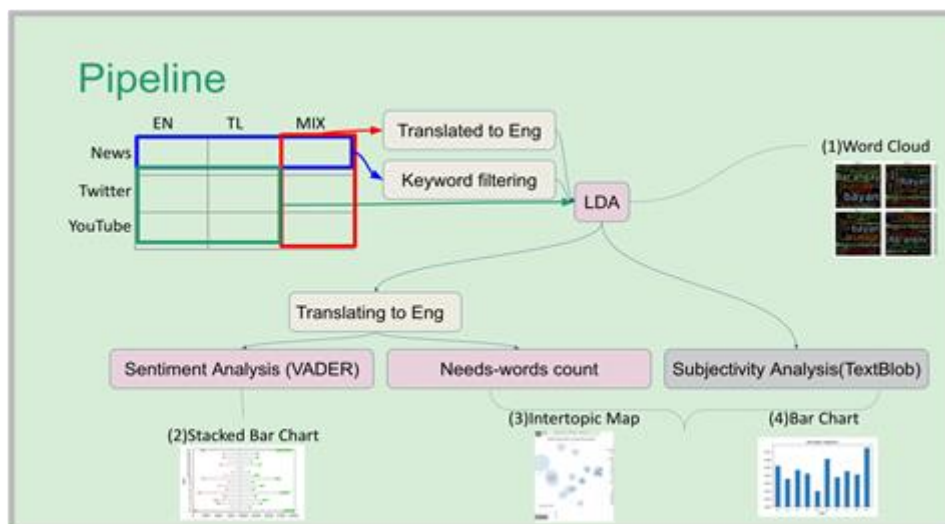
### 2.2.4 Analytical Methods and Results

This analysis consisted of 1) data preprocessing, 2) topic modeling, and 3) sentiment analysis and needs counting. In data preprocessing, filtered online news data, tweets posted in the region, and YouTube comments were categorized into each language using automated language classifier tools. Then, the survey team identified only nouns and proper nouns from each sentence in the preprocessing step. The frequency of words’ occurrence was calculated for each data source. Only the words with medium to high frequency were used for the later analysis.

LDA, a topic modeling method, was applied to the preprocessed data to identify topics by language. As it is possible to choose the number of topics, 10 to 18 topics were experimentally outputted and the number with the highest interpretability was selected.<sup>4</sup> Then, the survey team ended up with 18 topics for English and 12 for Tagalog.

The survey team applied the valence aware dictionary and sentiment reasoner (VADER), a sentiment analysis tool, and needs counting for each of the identified topics. As VADER is an English-specific analysis tool, Tagalog data were converted into English using Google’s machine translation tool. Then, sentiment values were measured. For the needs count, words that express needs in English and Tagalog were listed, and the frequency of occurrence of these words was measured.

As supplementary information, the survey team also applied subjectivity analysis using TextBlob, a tool for identifying subjective information. However, as this information did not provide much meaningful information for understanding the priority needs, it was not included in the analysis results. Figure 2-2 indicates the pipeline for the analysis, from data collection to visualization.



**Figure 2-2: Process from Data Collection through Data Analysis**

## 2.3 Details of the Supplemental Survey

### 2.3.1 Supplemental survey for all residents

The complementary research used the field and online questionnaire survey methods to rank the prioritized needs by attributes such as gender and occupation. This supplementary survey played a significant role in specifying priorities at the micro level as well as needs by social attributes.

For the supplementary research, each priority issue identified by the big data analysis was fleshed out into needs with the help of local resources, and a questionnaire was developed to select the most important among them.

In addition, when summarizing the priority issues identified through the big data analysis into priority issues for the supplementary research, similar priority issues were grouped together and organized, and two issues that were of great interest to JICA and MILG were added: social cohesion and socio-economic program for ex-combatants.

**Table 2-4: Attributes and specific needs options for each priority issue**

Number	Priority issue	Specific need
1	Age	<ul style="list-style-type: none"> <li>a. 19 or under</li> <li>b. 20~29</li> <li>c. 30~39</li> <li>d. 40~49</li> <li>e. 50~59</li> <li>f. 60~</li> </ul>
2	Gender	<ul style="list-style-type: none"> <li>a. Male</li> <li>b. Female</li> <li>c. Prefer not to say</li> </ul>
3	Occupation	<ul style="list-style-type: none"> <li>a. Farmers/Fisherfolks</li> <li>b. Employees</li> <li>c. Employers/Self-Employed</li> <li>d. Government Officials</li> <li>e. Other than the above</li> </ul>
4	Location	<ul style="list-style-type: none"> <li>a. Cotabato City</li> <li>b. Maguindanao (other than Cotabato City)</li> <li>c. Marawi City</li> <li>d. Lanao del Sur (other than Marawi City)</li> <li>e. 63 barangays (in North Cotabato)</li> <li>f. Basilan (other than Isabela City)</li> <li>g. Sulu</li> <li>h. Tawi-Tawi</li> <li>i. Other than BARMM</li> </ul>
5	Which language do you use at home	<ul style="list-style-type: none"> <li>a. Maguindanao</li> <li>b. Maranao</li> <li>c. Tausug</li> <li>d. Bisaya</li> <li>e. Iranun</li> <li>f. Tagalog</li> <li>g. Language of Indigenous People (IP)</li> <li>h. Others</li> </ul>
6	Affiliation	<ul style="list-style-type: none"> <li>a. Do you identify yourself as a returnee from Malaysia?</li> <li>b. Are you affiliated with BIAF/BIWAF?</li> <li>c. Are you affiliated with another armed group?</li> <li>d. None of the above</li> </ul>

Number	Priority issue	Specific need
7	Social Cohesion	<ul style="list-style-type: none"> <li>a. Fair and inclusive ethnic representation in the Bangsamoro government (e.g., sharing the seats in the government organizations; quota system)</li> <li>b. More financial support to civil society including NGOs to promote the activity related to social cohesion</li> <li>c. More recognition on shared Bangsamoro history (e.g., provision of history classes at school in the BARMM specifically on the regional history)</li> <li>d. More education on social cohesion to people (e.g., awareness workshops or campaign)</li> </ul>
8	Development /Economic Recovery	<ul style="list-style-type: none"> <li>a. Government support given to the poor (Monthly household income is no less than PHP 10,481) (e.g., immediate provision of rice, allowance, or commodities etc.)</li> <li>b. Government support given to larger population including the middle class (Monthly household income is PHP 10,481 or above) (e.g., Tax reduction, or food discount coupons for all, etc.)</li> <li>c. Government support given to industries (e.g., Company-tax reduction, or investment, etc.)</li> <li>d. Government support given to damaged industries such as tourism, agriculture, or fishery (e.g., assistant programs or subsidy, or temporary employment for companies or unemployed persons, etc.)</li> </ul>
9	COVID-19 Response	<ul style="list-style-type: none"> <li>a. Compliance to the government protocols (e.g., movement restriction, or enforcing the use of masks, etc.)</li> <li>b. Awareness-raising on preventive measures (e.g., distribution of brochures, campaign on radio or other medium, etc.)</li> <li>c. Information on covid-19 vaccination (e.g., distribution of brochures on information about effectiveness, substance, or side-effect etc.)</li> <li>d. Accessible healthcare services (e.g., access to pills, local clinics, and hospitals, and provision of face masks, hand soaps and sanitizers, etc.)</li> <li>e. Psychosocial programs such as supporting mechanism to mitigate loneliness or stress due to lockdowns (e.g., meet-up events while keeping social distance, or community workshops, etc.)</li> </ul>
10	Disaster Response (e.g., Earthquakes, Typhoon, Flood, and others)	<ul style="list-style-type: none"> <li>a. More functioning public agency such as BARMM's Rapid Emergency Action on Disaster Incidence (READI)</li> <li>b. More collaboration between public agency and municipality governments (e.g., more budget and capacity building to municipality for the implementation)</li> <li>c. More education on disaster readiness to population (e.g., awareness workshops or evacuation trainings at schools)</li> <li>d. More emergency facilities and supplies (e.g., ensuring shelters, food stock, or provision of essentials including clothes)</li> <li>e. More funding to survivors of disasters (e.g., provision of financial support, livelihood support, relocation arrangement)</li> </ul>
11	Implementation of Law and Justice	<ul style="list-style-type: none"> <li>a. More functioning Bangsamoro legal system (e.g., amendment to the laws, or strict implementation of the laws)</li> <li>b. More power to municipality governments to practice the legal system including facilities such as municipality courts</li> <li>c. More education on the legal system to people (e.g., awareness workshops or classes at schools)</li> <li>d. More alignment between the legal system with traditional legal system (e.g., encouraging discussion on the difference between judgments sentenced by the legal system and the traditional court)</li> </ul>

Num ber	Priority issue	Specific need
12	Socio-economic program for Ex-combatants	a. More government-led programs (e.g., training programs, or housing or livelihood assistant) b. More support to host community rather than individuals (e.g., financial and human resource support to municipality governments to implement integration programs) c. More efforts to minimize discrimination against ex-combatants among people (e.g., awareness campaign or joint activities with people and ex-combatants) d. More support to Indigenous People (IP) who are also affiliated with BIAF/BIWAF (e.g., training programs, or housing or livelihood assistant)
13	What do you think Bangsamoro needs the most?	a. Social Cohesion b. Development / Economic Recovery c. COVID-19 Response d. Disaster Response e. Implementation of Laws/Justice f. Socio-economic program for Ex-combatants

The survey methodology is as follows:

- 1) Collect information from a wide range of Bangsamoro residents through an online survey.
- 2) In areas where access to the Internet is likely to be difficult, or to ensure that sufficient information is collected from specific groups, field research is used to collect information from ex-combatants; returnees from Sabah Province, Malaysia; residents of the 63 barangays in North Cotabato that newly joined the BARMM in 2019; and residents of island provinces.

**Table 2-5** and **Table 2-6** below provide an overview of the online and field survey, respectively.

**Table 2-5: Overview of the Online Survey**

Item	Overview
Survey period	June 17 to 29, 2021
Contractor	Consortium of Bangsamoro Civil Society, Inc (CBCS)
Target respondents	All residents in BARMM
Implementation process	1) Preparation of questionnaires (by the research team) and preparation of online questionnaire 2) Preparation of questionnaire in local language 3) Dissemination of the online questionnaire to residents through SNS and a minimum of 20 non-governmental and civil society organizations in each province that are members of the consortium of CBCS. 4) Analysis of the survey data (by the research team)
Analysis methods	The collected responses by online and field survey are tallied together. The combined data was analyzed in the usual way (single-tabulation and cross-tabulation).

**Table 2-6: Overview of the Field Survey**

Item	Overview
Survey period	June 17 to 24, 2021
Contractor	Consortium of Bangsamoro Civil Society, Inc (CBCS)
Target respondents / Survey area	<ul style="list-style-type: none"> <li>• Residents in 63 barangays in North Cotabato / North Cotabato</li> <li>• Residents in island provinces / Sulu, Basilan, and Tawi-Tawi provinces</li> <li>• Ex-combatants / Maguindanao province, Cotabato city, and North Cotabato</li> <li>• Returnees from Saba, Malaysia / Sulu, Basilan, and Tawi-Tawi provinces</li> </ul>

Item	Overview
Implementation process	<ol style="list-style-type: none"> <li>1) Preparation of questionnaires (by the research team) and preparation of web-based tabulation format</li> <li>2) Preparation of questionnaire in local language</li> <li>3) Briefed the focal person at the MILG on the study area and obtained permission from the MILG for the field survey area.</li> <li>4) Explanation of the purpose of the survey to the local government and barangay chairmen.</li> <li>5) Conducting field research</li> <li>6) Analysis of the survey data (by the research team)</li> </ol>
Analysis methods	Same as the online survey

### 2.3.2 Additional supplemental survey for ex-combatants

For ex-combatants (BIAF/BIWAF), an additional survey was conducted to investigate their needs and socio-economic conditions in more detail.

The survey asked questions about the needs and socioeconomic status of ex-combatants. The content of the additional survey is shown in **Table 2-7** below.

**Table2-7: Questions of Additional Survey**

Item	Question
Decommission status	<ol style="list-style-type: none"> <li>1. Were you decommissioned officially by the Independent Decommissioning Body (IDB)? (Yes or No questions)</li> <li>2. Current occupation (Single-choice question and partially open-ended question)</li> </ol>
Living conditions	<ol style="list-style-type: none"> <li>1. Please evaluate your living condition from 1 (Much Worse) to 5(Much Better)</li> <li>2. What would be needed the most to improve livelihood of your household (Single-choice question and partially open-ended question)</li> <li>3. What do you need to improve the livelihood of your household? (Open-ended question)</li> </ol>
Peaceful community	<ol style="list-style-type: none"> <li>1. Please evaluate the peace level of your barangay or community from 1 (Terrible) to 5(Peaceful) in comparison with your neighboring barangay/community?</li> <li>2. What is the key challenge in making your community more peaceful? Please choose one. (Single-choice question and partially open-ended question)</li> <li>3. What do you think is necessary to promote peace in your barangay/municipality? (Open-ended question)</li> </ol>
Normalization Process	<ol style="list-style-type: none"> <li>1. What do you think is the important issue for the respondent to promote the normalization process? (Single-choice question)</li> <li>2. Other important issue (Open-ended question)</li> </ol>

The survey was conducted through telephone interviews using telephone numbers collected with the consent of the first survey respondents and partly through face-to-face interviews. **Table 2-8** below provides an overview of the survey.

**Table 2-8: Overview of the Additional Survey of Ex-combatants**

Item	Overview
Survey period	October 29 to December 2, 2021
Contractor	Consortium of Bangsamoro Civil Society, Inc (CBCS)
Implementation process	<ol style="list-style-type: none"> <li>1) Preparation of questionnaires (by the research team) and preparation of web-based tabulation format</li> <li>2) Preparation of questionnaire in local language</li> </ol>

Item	Overview
	3) Telephone interviews and face-to-face interviews / data entry into web-based tabulation format in parallel 4) Analysis of the survey data (by the research team)
Analysis methods	- Quantifiable responses were tabulated in the usual way. - Descriptive responses were analyzed and tabulated by text mining using Artificial Intelligence (AI) to find trends in the responses.

## 2.4 Caveats on Analysis

### 2.4.1 Caveats of Big Data Analysis

The effectiveness and limitations of the big data analysis methods to identify community needs are shown below.

**1) Selection bias in the data used:** In this analysis, big data from the Internet are used as a data source. While this approach is extremely effective because it can handle more information than traditional surveys, it can only identify topics discussed on the Internet. In an environment in which the Internet usage rate is limited, as in the Bangsamoro regions (household usage rate: 5.1%; individual usage rate: 12.7%), one must be aware of the risk that only the voices of a limited number of residents who have access to the Internet are used in the analysis (data selection bias). In addition, it should be noted that the use of social media, such as Twitter and YouTube, tends to be concentrated in the relatively young. Thus, the results of the analysis are likely to reflect their voices strongly. In addition, the Internet information could contain misinformation, malinformation, or fake news, and it is necessary to be recognize that the information online is not necessarily equal to the fact, rather it reflects the perception of the people.

The survey team decided to minimize the influence of selection bias in the data by conducting a supplemental survey using traditional methods and using online news as a data source to collect the voices of a wide range of generations.

The survey team recommends that when similar projects are considered in the future, selection bias should be avoided as much as possible. This can be done by using audio information from the widely used TV (household penetration rate: 48.2%) and radio (household penetration rate: 20%) media, using Speech to Text technology to convert audio data into text information. A project example using audio information is illustrated in (6) below. The use of imagery could be possible yet, it is important to recognize the risk of deepfake imagery that are artificially manipulated and made up.

This analysis uses the sentiment score as a proxy variant to measure people's needs. Needless to say, the further technological enhancement is significantly important to identify needs without relying on proxy variables.

**2) Handling of languages:** Data science technologies that handle linguistic information, including the technologies applied here, have been developed mainly in English. Thus, analysis of languages other than English, especially minor languages that are not often the subject of research, becomes more difficult. Therefore, it is important to secure sufficient labor time for analysis and recognize the technical limitations correctly.

For example, the survey team used existing language detection tools to classify the data by language. While these tools are essential for handling big data, it is important to note that the risk of misjudgment increases when dealing with relatively minor languages. In addition, because sentiment analysis technology has the highest performance in analyzing information in English, the survey team measured sentiment values in English after machine-translating Tagalog into English, as described above.<sup>19</sup> When dealing with languages that are more minor, one needs to identify issues and plan countermeasures at the beginning of the project to improve the quality of the analysis.

**3) Data source selection:** In this analysis, the results of the English analysis were interpretable,

while the Tagalog topics were more abstract and difficult to interpret. This difference is likely because the English data contain a high percentage of online news so that several topics connected to social issues were identified. Meanwhile, for the Tagalog data, social media were the main data source. Thus, opinions were not necessarily expressed in a way that was connected to social issues. This tendency was also observed in the analysis per data source.

The underlying hypotheses are as follows: 1) social media are not used as a tool to discuss social issues in the region; 2) social media users are relatively young, and the topics are biased accordingly; and 3) more data are needed to conduct highly interpretive topic modeling using social media alone.

The survey team succeeded in identifying topics related to the project's purpose by analyzing them along with online news. However, when conducting similar analyses in the future, it is important to identify platforms where social issues are discussed in interpretable ways (e.g., specific radio programs or specific Twitter users and their followers).

**4) Use of Facebook data:** Facebook is one of the most popular social media in the region. Accordingly, the survey team explored the possibility of using Facebook data. However, the team found that doing so through Facebook's official channel would require long-term negotiation and re-planning of the project. Therefore, the team decided to substitute it with YouTube comments and additional online news articles.

**(Supplementary Note)** Further development in big data analytics in the Philippines

Although there are challenges and caveats involved in utilizing big data for development projects in the Bangsamoro region as well as the Philippines, some of the country's novel initiatives are enhancing this field. For instance, Smarter Philippines through Data Analytics R&D, Training and Adoption (SPARTA) has organized and provided open data and has also been educating in-house data scientists, with the aim of training 30,000 data scientists by 2022. Moreover, Data Ethics PH stimulates ethical discussion about the use of big data and implements some of their own analytical projects. Private companies are also contributing to the development of the data science field. For instance, Pasco Philippines provides satellite images, while Senti AI leverages original algorithms tuned specifically for Tagalog and other languages used in the country. Strategic collaboration with these organizations and companies could lead to the further enhancement of big data analytics.

#### **2.4.2 Caveats of Supplemental Survey**

The effectiveness and limitations of the supplemental survey methods to identify community needs are shown below.

##### **1) Limitations of remote surveys in the BARMM:**

We had planned to collect a wide range of information by conducting the survey using feature phones, which are widely used in this region, as well as smartphones that use data communication. However, it was difficult to obtain phone numbers from the Bangsamoro government in the limited survey period, therefore we decided to conduct two parallel surveys: 1) an online survey and 2) a questionnaire survey using local enumerators. The survey could collect enough number of responses without the information from the Bangsamoro government.

We also learned much about the lack of information development in administrative organizations and the lack of organized resident information held by the Bangsamoro local government. When using the mobile phone survey method, it is necessary to collect information such as mobile phone number by utilizing local networks of NGOs, CSOs, and barangay Chairmen in the surveyed area. The method requires considerable time and workload almost same as an ordinary field survey. In the present circumstances, there is less merit to collect the information from residents by use of mobile phone in the BARMM.

##### **2) Effectiveness and limitations of online survey methods:**

The online survey was effective for gathering information from a wide range of sources in a short period of time. In addition, as there was no need to send enumerators to the field, the survey cost was lower than that of field surveys. In addition, by managing all the data in an online-based database, we were able to monitor the daily progress of the survey and provide detailed survey instructions to the sub-contractor, which also improved the efficiency of the survey.

However, if there is no clear benefit to the respondents in online surveys, it is difficult to collect a sufficient number of responses just by posting them on SNS. To collect enough responses, some kind of incentive should be prepared for the respondents.

In general, the reliability of the online responses is lower than a face-to-face survey because there are no supervisors in online surveys. However, the problem does not happen this time because respondents could leave web questionnaire in the middle of answering if he or she loses them. In addition, if there is a benefit in answering the questionnaire, some might answer several times using different names. Since the survey was voluntary, such cases would be very rare<sup>12</sup>.

### **3) Limitations of conducting field research:**

For ensuring the safety for the enumerators during the field survey in the BARMM, it was required to have the local government officials of the concerned Barangay accompany the enumerators and to select enumerators who have a good local connection to the survey area, especially, in the area of island provinces.

In addition, it is required to report the content and location of the survey to the MILG and obtain permission from the MILG. It should be very careful that enough lead time is secured because several weeks may be required to obtain the permission.

### **4) Effectiveness and limitations of combination of online and field surveys:**

Combination of online and field surveys was effective from the aspect that the survey team collected enough samples quickly by online survey while field survey supplementary collected data from specific people who do not have access to the Internet. This survey method was effective in terms of collecting the responses of more diverse residents.

While the same questionnaire was used in the online / field survey, the data collection method (online and interview survey) and the respondent selection method (voluntary response and interviewer selection) are respectively different. Although it is not accurate statistically, it can be effective to know the trends in the area since we have secured a sufficient number of responses.

#### **2.4.3 Caveats of combining big data analysis and supplemental survey**

The effectiveness and limitations of the survey method using big data analysis and a supplemental survey to identify community needs are given below.

In this study, the survey team extracted BARMM residents' topics of interest using big data analysis and then conducted field and remote surveys to understand the attribute information and more detailed issues and needs. This method was effective in that it captured the advantages of big data analysis, which can extract many residents' topics of interest in a short period of time. In addition, field/remote surveys supplemented the big data analysis to obtain samples of specific residents that big data analysis alone cannot reach and to collect more detailed information.

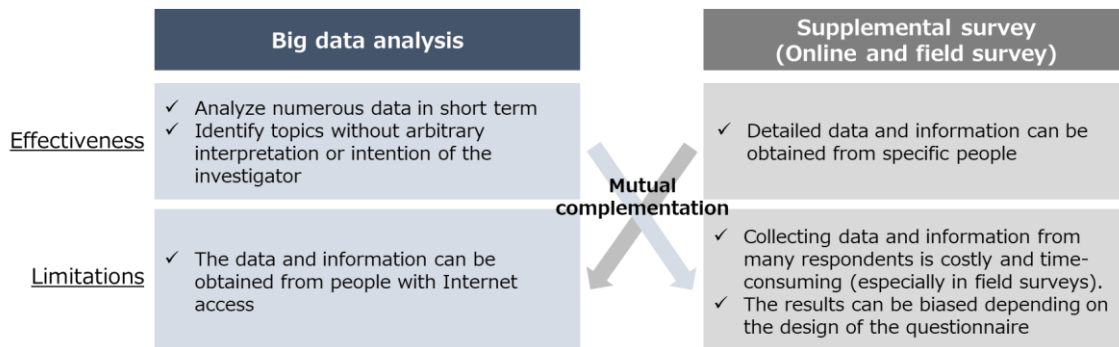
This method is effective when it is necessary to investigate the needs of many people within the limits imposed by survey cost and time. For example, when a major social change such as COVID-19 occurs, as in this case, it is necessary to quickly identify the needs of the population. On the other hand, if the survey targets are limited, and knowledge of their needs is specified to a certain extent, it is possible to investigate their needs in depth using traditional methods such as interview surveys. In this study, additional complementary surveys for ex-combatants played the same role.

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<sup>12</sup> It is possible to avoid multiple responses from the same respondent by use of the web program to some extent. In addition, when the incentive is linked with the respondents' e-mail addresses, many cases can be avoided.



**Figure 2-3** shows the effectiveness of this survey method.



**Figure 2-3: Effectiveness of Survey Methods**

## Chapter 3 Survey results on the priority community issues and needs in the BARMM

This section presents the results of the analysis of BARMM residents' issues and needs.

As shown in Chapter 2, the survey team used big data analysis and traditional survey methods to identify the community issues and needs of all residents by topics, regions, and specific affiliations. In addition, the survey team conducted an additional supplemental survey to understand the needs and socioeconomic conditions in more detail.

### 3.1 Summary of the issues and needs in the BARMM identified using big data analysis and traditional methods

In the big data analysis, the survey team applied techniques such as 1) topic modeling, 2) sentiment analysis, and 3) needs counting, to three types of information (online news, Twitter, and YouTube comments; 368,485 texts in total) to determine the “most negatively-discussed topics by people in the region,” which are considered as needs. The topics that satisfied the following three conditions were then identified, for both English and Tagalog data, as prioritized needs. Following the primary analysis, the survey team conducted a supplementary survey using cellular phones and other methods based on the results of the primary analysis to rank the priority needs by various attributes, including gender, occupation, or residential area.

**Tables 3-1** and **Table 3-2** show the final priority topics identified by the big data analysis. The “theme” in the tables is the interpretation of the topics identified as a collection of words.

**Table 3-1: Priority Needs from English Data**

Topic	Theme	Number of words (Condition 1)	Negative (Condition 2)	Needs (Condition 3)	Mentioned in RA? (Yes or No)
0	Economic Development Policies by BARMM	✓			Yes
2	Policing/Enforcement and anti-drug operations		✓		No
3	Diplomatic Relations with China		✓		No
4	Stabilization and Military operation in Sulu		✓		No
5	Industry development	✓		✓	Yes
6	Law enforcement in the region		✓		No
7	Economic Recovery			✓	Yes
9	COVID-19 and quarantine	✓		✓	Yes
13	Disaster Response	✓	✓	✓	No
15	Domestic Political Situation in the Philippines	✓			No

Topic	Theme	Number of words (Condition 1)	Negative (Condition 2)	Needs (Condition 3)	Mentioned in RA? (Yes or No)
16	COVID-19 and vaccination			✓	No

**Table 3-2: Priority Needs from Tagalog Data**

Topic	Theme	Number of words (Condition 1)	Negative (Condition 2)	Needs (Condition 3)	Mentioned in RA? (Yes or No)
4	Frustrations brought by the pandemic		✓		No
5	Uninterpretable	✓			No
8	Economic deprivation and hardship in life	✓			Yes
9	Untranslatable			✓	-
10	Physical and mental stress (Loneliness, headaches, etc.)		✓	✓	No

In the supplementary research, the survey team conducted online and field questionnaire surveys to collect information on the attributes of people in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and more specific needs that are difficult to grasp through the big data analysis. When summarizing the priority issues identified through the big data analysis into priority issues for the supplementary research, similar priority issues were grouped together and organized, and two issues that were of great interest to JICA and MILG were added: Social cohesion and Socio-economic program for Ex-combatants.

The priority issues considered most important by the people of the Bangsamoro are shown in **Figure 3-1**.

The three most important priority issues were “Development and Economic Recovery”, “Social cohesion”, and “Implementation of Law and Justice”. Contrary to expectations, interest in “COVID-19 response” was the lowest, probably because there is a greater need for economic support due to COVID-19, than for infection prevention and vaccination.



**Figure 3-1: Number of responses on the most important issues (all residents)**

**Table 3-3** shows the issues that people in the BARMM considered to be the most important among all priority issues. The response rate (weighting) was analyzed by weighting the specific needs asked for each topic by the priority among the priority issues.<sup>13</sup>

As for priority issues, the three priority issues of development and economic recovery, social cohesion, and implementation of Law and Justice were generally in high need. Contrary to expectations, the need for COVID-19 response was low.

Regarding specific needs, for “Development and Economic Recovery”, “Government support given to the poor” was the most needed, and “Government support given to damaged industries such as tourism, agriculture, or fishery,” “Government support given to larger populations including the middle class,” and “Government support given to industries” were also generally required. Regarding “Social Cohesion”, the needs for “Fair and inclusive ethnic representation in the Bangsamoro government,” “More financial support to civil society including NGOs to promote the activity related to social cohesion,” and “More education on social cohesion to people” were high. Regarding “Implementation of law and justice”, the needs for “More functioning Bangsamoro legal system,” “More education on the legal system, to people” and “More alignment between the legal system with traditional legal system” were high.

“More government-led programs” of “Socio-economic program for Ex-combatants” are ranked at ninth for female residents, while the specific needs was not ranked within 10<sup>th</sup> place for male residents. There is little difference in the needs of residents between the male and the female.

**Table 3-3: Results of specific needs analysis for all priority issues (all residents)**

Rank	Priority issue	Specific need	Response rate (Weighting)
1	Development /Economy Recovery	Government support given to the poor	24%
2	Social Cohesion	Fair and inclusive ethnic representation in the Bangsamoro government	13%
3	Development /Economy Recovery	Government support given to larger population including the middle class	7%
4	Development /Economy Recovery	Government support given to damaged industries such as tourism, agriculture, or fishery	7%

<sup>13</sup> The percentage of respondents who selected this option in the question asking the needs of each topic was multiplied by the percentage of respondents who selected it as the most important topic in the final question.

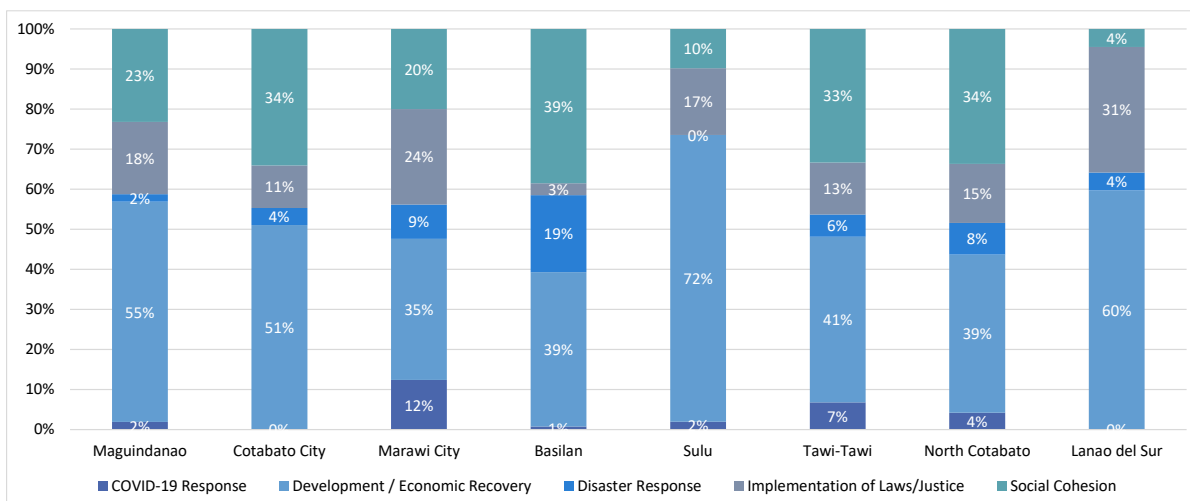
Rank	Priority issue	Specific need	Response rate (Weighting)
5	Implementation of Law and Justice	More functioning Bangsamoro legal system	7%
6	Social Cohesion	More financial support to civil society including NGOs to promote the activity related to social cohesion	4%
7	Development /Economy Recovery	Government support given to industries	4%
8	Social Cohesion	More education on social cohesion to people	4%
9	Implementation of Law and Justice	More education on the legal system to people	3%
10	Implementation of Law and Justice	More alignment between the legal system with traditional legal system	3%
11	Socio-economic program for ex-combatants	More government-led programs	3%
12	Social Cohesion	More recognition on shared Bangsamoro history	3%
13	Implementation of Law and Justice	More power to municipality governments to practice the legal system including facilities such as municipality courts	2%
14	COVID-19 response	Compliance to the government protocols	2%
15	Disaster Response	More functioning public agency such as BARMM's Rapid Emergency Action on Disaster	2%
16	Disaster Response	More emergency facilities and supplies	1%
17	Socio-economic program for ex-combatants	More support to host community rather than individuals	1%
18	Disaster Response	More collaboration between public agency and municipality governments	1%
19	Socio-economic program for ex-combatants	More support to Indigenous People (IP) who are also affiliated with BIAF/BIWAF	1%
20	Disaster Response	More funding to survivors of disasters	1%
21	COVID-19 response	Accessible healthcare services	1%
22	Socio-economic program for ex-combatants	More efforts to minimize discrimination against ex-combatants among people	1%
23	Disaster Response	More education on disaster readiness to population	1%
24	COVID-19 response	Awareness-raising on preventive measures	1%
25	COVID-19 response	Information on covid-19 vaccination	0%
26	COVID-19 response	Psychosocial programs such as supporting mechanism to mitigate loneliness or stress due to lockdowns	0%

### 3.2 Identified needs in BARMM by topic and region

**Crosstabulation results of regions and needs:** The results of the cross-tabulation analysis of the respondents' residential areas and needs for each topic are shown below.

#### a) The most important issues in Figure 3-2

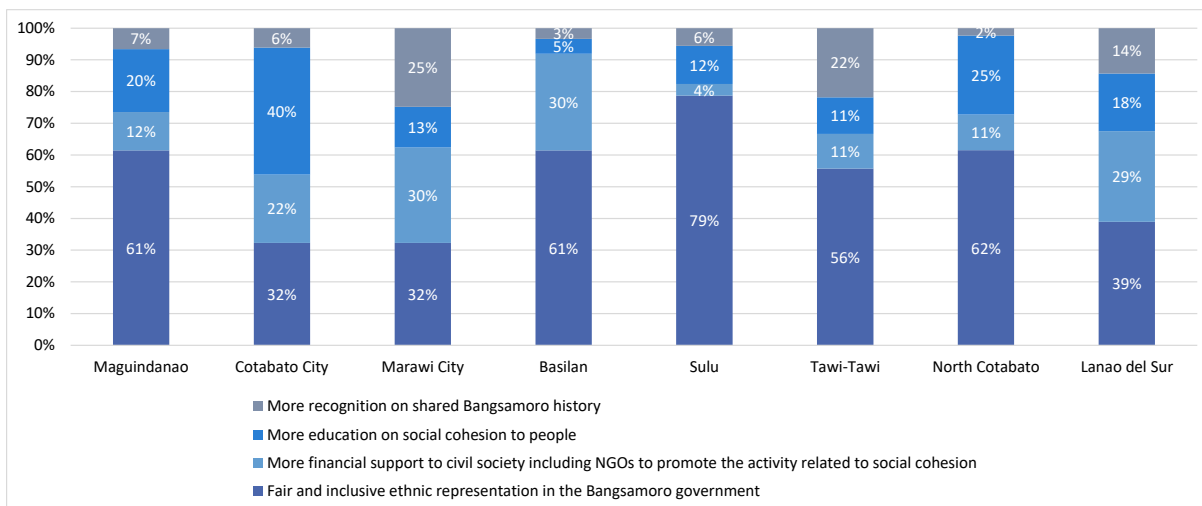
Overall, the need for “Social cohesion” was high, but the trend was most pronounced in Sulu and Lanao del Sur provinces. “Implementation of law and justice” were relatively high in Lanao del Sur and Marawi City, while “Development and Economic Recovery” were relatively high in Maguindanao, Cotabato City, Marawi City, Basilan, Tawi-Tawi, and North Cotabato.



**Figure 3-2: Cross tabulation of regions and the most important issues**

#### b) Social cohesion in Figure 3-3

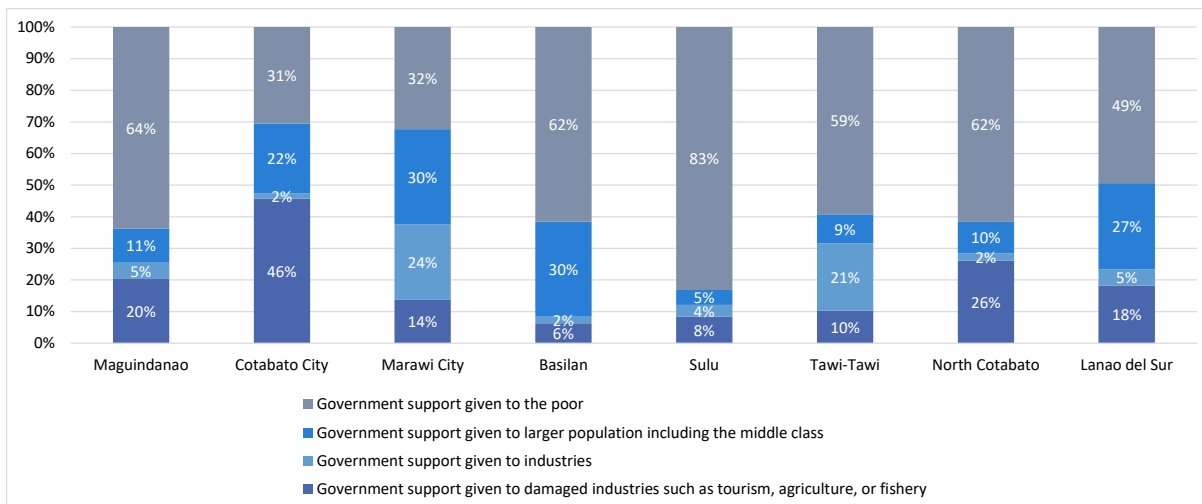
In the provinces of Maguindanao, Basilan, Sulu, Tawi-Tawi, North Cotabato, and Lanao del Sur, “Fair and inclusive ethnic representation in the Bangsamoro government” was the highest. In Marawi City, “Fair and inclusive ethnic representation in the Bangsamoro government” and “More financial support to civil society including NGOs to promote the activity related to social cohesion” was high, while in Cotabato City, “More education on social cohesion to people” was high.



**Figure 3-3: Cross tabulation of regional and socioeconomic support needs**

**c) Development and economic recovery in Figure 3-4**

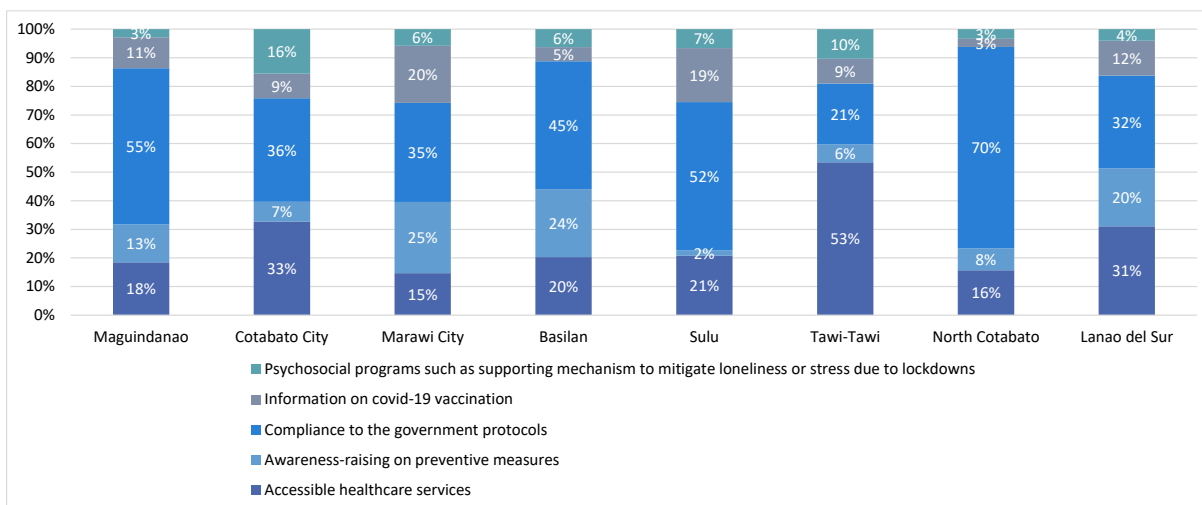
“Government support given to the poor” was the highest in all regions except Cotabato City. In Cotabato City, “Economic support for industries affected by the Coronavirus disaster such as tourism, agriculture, and fisheries,” was the highest. This might reflect industry structure of each region.



**Figure 3-4: Cross tabulation of regions and development and economic recovery needs**

**d) COVID-19 response in Figure 3-5**

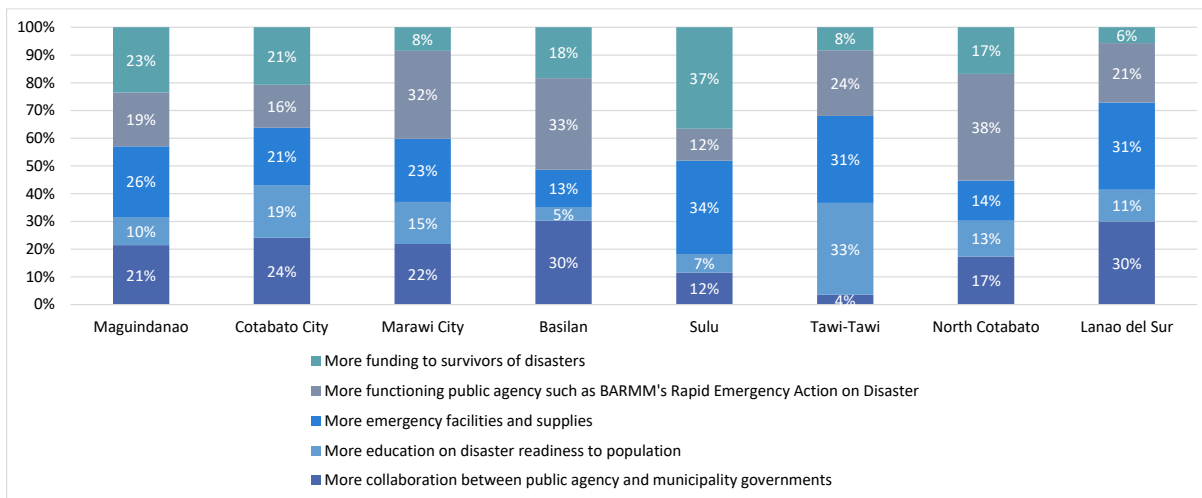
In all regions except Tawi-Tawi, the need for “Compliance to the government protocols” was the highest. In Tawi-Tawi, the need for “Accessible healthcare services” was the highest.



**Figure 3-5: Cross tabulation of region and COVID-19 response needs**

**e) Disaster response in Figure 3-6**

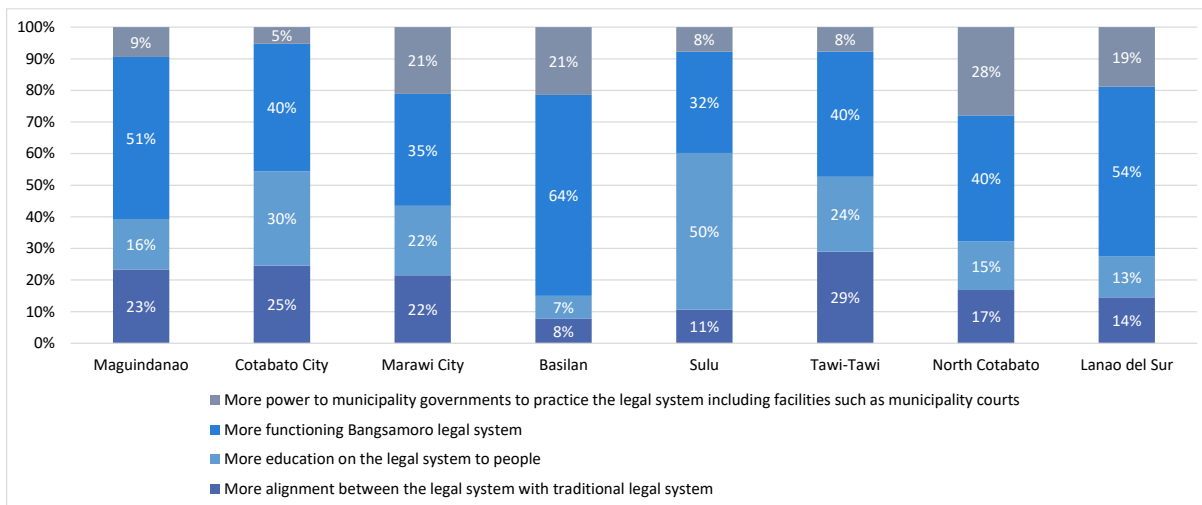
Overall, the needs were divided. In Marawi City, Basilan, and North Cotabato, “Strengthening the functions of public institutions responsible for disaster response” was relatively high, while in Sulu, Tawi-Tawi, and Lanao del Sur, “More emergency facilities and supplies” was relatively high.



**Figure 3-6: Cross tabulation of regional and disaster response needs**

**f) Implementation of law and justice in Figure 3-7**

In all regions except Sulu, “More functioning Bangsamoro legal system” was the highest. In Sulu, “More education on the legal system to people” was the highest.

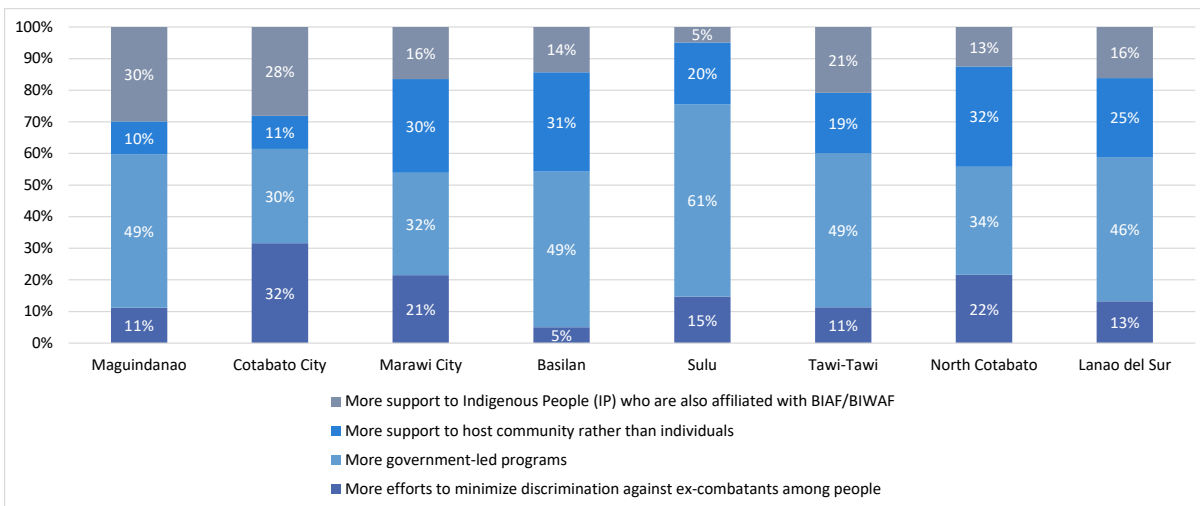


**Figure3-7: Cross tabulation of region and implementation of law and justice needs**



**g) Socio-economic program for ex-combatants in Figure 3-8**

In all regions except Cotabato City, “providing more government support programs” was the highest. In Cotabato City, “More efforts to minimize discrimination against ex-combatants among people” was the highest.



**Figure 3-8: Cross tabulation of socio-economic support needs for regions and ex-combatants**

### 3.3 Identified issues and needs of specific BARMM residents

#### 3.3.1 Needs assessment results for the residents of 63 barangays in North Cotabato

**Table 3-4** shows the social attributes of respondents in 63 barangays in North Cotabato. Their social attributes are similar to those of all residents but are characterized by a very high percentage of Maguindanao speakers and a high percentage of BIAF/BAWAF.

**Table 3-4: Social Attributes (63 Barangays in North Cotabato)**

Attribute	63 Barangays in North Cotabato (214)		All Residents (1301)	
Gender	Male:	66% (142)	Male:	67% (866)
	Female:	33% (71)	Female:	32% (414)
	Prefer not to say:	0% (1)	Prefer not to say:	2% (21)
Age	19 or under:	2% (4)	19 or under:	3% (34)
	20 ~29:	21% (44)	20 ~29:	19% (253)
	30 ~ 39:	23% (50)	30 ~ 39:	28% (363)
	40 ~ 49:	23% (49)	40 ~ 49:	26% (332)
	50 ~ 59:	20% (42)	50 ~ 59:	16% (209)
	60~:	12% (25)	60~:	8% (110)
Occupation	Farmers/Fisherfolks	68% (146)	Farmers/Fisherfolks	49% (635)
	Employers/Self-Employed	14% (31)	Employers/Self-Employed	20% (260)
	Employees	4% (9)	Employees	12% (155)
	Government Officials	3% (7)	Government Officials	4% (51)
	Others	9% (20)	Others	15% (199)
Affiliation	Another armed group	7% (15)	Another armed group	3% (38)
	BIAF/BIWAF	61% (130)	BIAF/BIWAF	32% (416)
	Others	31% (67)	Others	56% (732)
	Returnee from Malaysia	0% (1)	Returnee from Malaysia	9% (114)
Language	Maguindanao	98% (209)	Maguindanao	40% (514)
	Maranao	1% (2)	Maranao	24% (312)
	Language of Indigenous People (IP)	0% (1)	Language of Indigenous People (IP)	15% (197)
	Tausug	0% (0)	Tausug	12% (152)
	Iranun	0% (0)	Iranun	1% (14)
	Bisaya	0% (0)	Bisaya	1% (12)
	Tagalog	0% (1)	Tagalog	0% (5)
	Others	0% (1)	Others	7% (95)

**Note:** █ shows the highest percentage in each question

The specific needs of the residents of 63 North Cotabato barangays were analyzed by weighting the priority of the specific needs about which each topic inquired by priority, as shown in **Table 3-5**. “Government support for the poor” under “development and economic recovery” was the most urgent need, followed by “fair and inclusive ethnic representation in the Bangsamoro government” under “social cohesion.” The results were similar to those for all residents. However, they differed in that there was a greater need for “more education on social cohesion to people” and relatively high rank, fourth, is given.

**Table 3-5: Results of specific needs analysis for all priority issues (Residents in North Cotabato)**

Rank	Priority issue	Specific needs	Response rate (Weighting)
1	Development /Economy Recovery	Government support given to the poor	22%
2	Social Cohesion	Fair and inclusive ethnic representation in the Bangsamoro government	19%
3	Development /Economy Recovery	Government support given to damaged industries such as tourism, agriculture, or fishery	9%
4	Social Cohesion	More education on social cohesion to people	8%
5	Implementation of Law and Justice	More functioning Bangsamoro legal system	5%
6	Implementation of Law and Justice	More power to municipality governments to practice the legal system including facilities such as municipality courts	4%
7	Development /Economy Recovery	Government support given to larger population including the middle class	4%
8	Social Cohesion	More financial support to civil society including NGOs to promote the activity related to social cohesion	3%
9	Socio-economic program for ex-combatants	More government-led programs	3%
10	Disaster Response	More functioning public agency such as BARMM's Rapid Emergency Action on Disaster	3%

### 3.3.2 Needs Assessment Results of Ex-combatants

#### 1) Results of Specific Needs Analysis of Ex-combatants

The specific needs of Ex-combatants<sup>14</sup> were analyzed by weighting the priority of the specific needs asked for each topic by priority as shown in **Table 3-6**.

“Government support given to the poor” of “Development and Economic Recovery” was the most needed and “Fair and inclusive ethnic representation in the Bangsamoro government” of “Social cohesion” was secondly needed. The results were similar to those for all residents. However, they differed in that there was a greater need for “Socio-economic programs for Ex-combatants”, particularly in the areas of “More government-led programs” in sixth and “More support to Indigenous People (IP) who are also affiliated with BIAF/BIWAF” in eighth.

**Table 3-6: Results of specific needs analysis for all priority issues (Ex-combatants)**

Rank	Priority issue	Specific needs	Response rate (Weighting)
1	Development /Economy Recovery	Government support given to the poor	29%
2	Social Cohesion	Fair and inclusive ethnic representation in the Bangsamoro government	15%
3	Development /Economy Recovery	Government support given to damaged industries such as tourism, agriculture, or fishery	9%

<sup>14</sup> Including the Bangsamoro Islamic Armed Forces (BIAF/BIWAF) and other armed groups.

Rank	Priority issue	Specific needs	Response rate (Weighting)
4	Implementation of Law and Justice	More functioning Bangsamoro legal system	7%
5	Development /Economy Recovery	Government support given to larger population including the middle class	5%
6	Socio-economic program for ex-combatants	More government-led programs	5%
7	Social Cohesion	More education on social cohesion to people	5%
8	Socio-economic program for ex-combatants	More support to Indigenous People (IP) who are also affiliated with BIAF/BIWAF	4%
9	Social Cohesion	More financial support to civil society including NGOs to promote the activity related to social cohesion	3%
10	Implementation of Law and Justice	More alignment between the legal system with traditional legal system	3%

## 2) Additional Survey

For ex-combatants, an additional survey was conducted to investigate their needs and socio-economic conditions in more detail.

Regarding the additional survey, 282 valid responses were collected. **Table 3-7** below shows the tabulated data on the needs and socioeconomic status of the ex-combatants.

**Table 3-7: Needs and Socioeconomic Status of Ex-Combatants**

Item	Women		Men	
Age	20-29:	24% (5)	20-29:	12% (27)
	30 - 39:	14% (3)	30 - 39:	21% (48)
	40 - 49:	24% (5)	40 - 49:	24% (56)
	50 – 59:	24% (5)	50 – 59:	25% (59)
	60 ~	14% (3)	60 ~	18% (42)
Education background	No schooling:	10% (2)	No schooling:	11% (24)
	Completed grade3:	10% (2)	Completed grade3:	14% (32)
	Completed grade6:	15% (3)	Completed grade6:	24% (53)
	Completed grade10:	10% (2)	Completed grade10:	24% (53)
	More than high school level:	55% (11)	More than high school level:	27% (60)
Occupation (current)	Farmers/ Fisherfolks :	43% (9)	Farmers/ Fisherfolks :	65% (150)
	Employees:	0% (0)	Employees:	4% (9)
	Employers/ Self-employed:	14% (3)	Employers/ Self-employed:	13% (29)
	Government officials:	14% (3)	Government officials:	2% (4)
	Others:	29% (6)	Others:	17% (40)
Occupation (plan after decommissioning)	Continue with the current occupation	10% (2)	Continue with the current occupation	25% (57)
	Retire	5% (1)	Retire	8% (18)
	Don't know	14% (3)	Don't know	35% (81)
	Seek for different occupation	71% (15)	Seek for different occupation	33% (76)
	↓		↓	
	Agriculture/fishery/livestock	7% (1 人)	Agriculture/fishery/livestock	17% (13)
	Small business	87% (13)	Small business	57% (43)
	Construction	0% (0)	Construction	4% (3)
	Wage labor	0% (0)	Wage labor	1% (1)

Item	Women		Men	
	Formal employment	0% (0)	Formal employment	16% (12)
	Others	7% (1)	Others	7% (4)
Living conditions (self-assessment)	Much worse	10% (2)	Much worse	6% (14)
	Relatively worse	48% (10)	Relatively worse	36% (84)
	Normal	33% (7)	Normal	43% (99)
	Relatively better	10% (2)	Relatively better	13% (29)
	Much better	0% (0)	Much better	3% (6)
Needs to improve livelihood	Micro-credit:	19% (4)	Micro-credit:	8% (18)
	Training:	52% (11)	Training:	46% (107)
	Formal employment:	0% (0)	Formal employment:	9% (20)
	Business management support:	24% (5)	Business management support:	27% (63)
	Others:	5% (1)	Others:	10% (24)
Needs on training <sup>15</sup>	Agriculture:	27% (4)	Agriculture:	42% (62)
	Fishery:	0% (0)	Fishery:	24% (35)
	Livestock:	20% (3)	Livestock:	19% (28)
	Construction-related skills:	0% (0)	Construction-related skills:	7% (10)
	Skills related to automotive technics:	0% (0)	Skills related to automotive technics:	5% (7)
	Others:	53% (8)	Others:	3% (5)

**Note:**   shows the highest percentage in each question

The results of the survey revealed the following.

The largest number of males are in the 50–59 age group, followed by the 40–49 age group. It is expected that it will take longer for them to adjust to society than the younger generation, so this age group needs the most support. Most have a high school education or more, so it seems that ex-combatants' level of education is not extremely low compared to general BARMM residents. As for their current occupation, most of them are farmers or fisherfolks. In the case of female respondents, the most frequent response for future prospect after decommissioning was "other (small business)." For men, "don't know" was the most common choice, followed by "other (small business)."

Regarding living conditions, most respondents rated their economic situation as "relatively worse" to "normal." For "needs to improve livelihood," the most common response was "training," and the results show that men have a pressing need for agriculture-related training. On the contrary, analysis of the open-ended responses revealed that words such as "capital" and "support" are mentioned mainly in the "business" category, that many of the respondents are currently engaged in agriculture and fishery, and that "small business" is a common prospect after decommissioning. This suggests that ex-combatants may be interested in diversifying their sources of income to stabilize their livelihood.

### 3) Considerations regarding the issues and needs of ex-combatants

The supplemental survey identified "development/economic recovery" and "social cohesion" as the top needs, while additional research revealed that BIAF/BIWAF ex-members need income diversification through small-scale businesses based on agriculture and fishery, industries in which the majority are currently employed.

As a next step, in the provinces of the main island, Mindanao, information and data about ex-combatants' farming should be collected, and training in suitable agricultural techniques should be

<sup>15</sup> For training needs, it was assumed that respondents who chose training in the "Needs to improve livelihood" section above would choose more detailed training needs. However, there were cases in which respondents selected detailed training needs without relating them to general needs, and we considered these cases to be significant data and tabulated them as such.

provided. However, in island provinces, information and data about fishery resources in the area should be collected, and training on fishing techniques to utilize the identified fishery resources is promising.<sup>16</sup> In addition, the use of the Smallholder Horticulture Empowerment & Promotion (SHEP) approach could be considered to meet the demand for increased income.

Support for the diversification of income sources is also needed, although support for easy projects (such as promoting retail stores like the Sari-Sari Store) may not always be effective. This is because if more than one person starts the same business in the same area, there is a high possibility of realizing the fallacy of composition. In order to diversify income sources, using the agriculture and fishery resources that the ex-combatants already have is a good starting point to create different products (e.g., processing agricultural products or utilization of resources that were not considered as resources in the past). In this case, new possibilities will be created if we take a bird's eye view of the entire Philippines, not just the BARMM region.<sup>17</sup>

### 3.3.3 Needs assessment results for returnees from Saba, Malaysia

**Table 3-8** shows the social attributes of returnees from Saba, Malaysia. Regarding occupation, most of them are farmers/fisherfolks, and there are no or few government officials, employers/self-employed, and employees among them. It can be inferred that there are more unemployed in this group compared to the general residents.<sup>18</sup> Most of them use the language of the indigenous people and Tausug.

**Table 3-8: Social Attributes (Returnees from Saba, Malaysia)**

Attribute	Returnees from Saba, Malaysia (114)		All residents (1,301)	
Gender	Male:	81% (92)	Male:	67% (866)
	Female:	18% (20)	Female:	32% (414)
	Prefer not to say:	2% (2)	Prefer not to say:	2% (21)
Age	19 or under:	5% (6)	19 or under:	3% (34)
	20 ~29:	24% (27)	20 ~29:	19% (253)
	30 ~ 39:	32% (37)	30 ~ 39:	28% (363)
	40 ~ 49:	18% (20)	40 ~ 49:	26% (332)
	50 ~ 59:	17% (19)	50 ~ 59:	16% (209)
	60~:	4% (5)	60~:	8% (110)
Occupation	Farmers/Fisherfolk	67% (76)	Farmers/Fisherfolk	49% (635)
	Employers/Self-Employed	2% (2)	Employers/Self-Employed	20% (260)
	Employees	0% (0)	Employees	12% (155)
	Government Officials	0% (0)	Government Officials	4% (51)
	Others	32% (36)	Others	15% (199)
Location	Maguindanao	0% (0)	Maguindanao	21% (268)
	Marawi City	0% (0)	Marawi City	18% (231)
	63 barangays (in North Cotabato)	1% (1)	63 barangays (in North Cotabato)	16% (214)
	Tawi-Tawi	46% (52)	Tawi-Tawi	14% (182)
	Basilan (other than Isabela City)	46% (53)	Basilan (other than Isabela City)	12% (150)
	Sulu	7% (8)	Sulu	8% (109)

<sup>16</sup> However, as we faced in the pilot projects of this project, the ex-combatants selected were old (including the disabled), which is not suitable for the training considering the purpose of the training. In the case of training for ex-combatants, it is not always easy to provide appropriate training to appropriate targets, although it may be unavoidable to some extent.

<sup>17</sup> Examples of regional revitalization in Japan, such as the “leaf business” (selling natural leaves as decorations for Japanese cuisine) in Kamikatsu Town, Tokushima Prefecture, Shikoku, may be helpful.

<sup>18</sup> Thirty-one respondents out of 36 who answered “others” did not specify their occupation.

Attribute	Returnees from Saba, Malaysia (114)		All residents (1,301)	
	Lanao del Sur (other than Marawi City) Cotabato City	0% (0) 0% (0)	Lanao del Sur (other than Marawi City) Cotabato City	6% (79) 5% (68)
Language of Indigenous People (IP)	Maguindanao	0% (0)	Maguindanao	40% (514)
	Maranao	0% (0)	Maranao	24% (312)
	Tausug	32% (37)	Tausug	12% (152)
	Iranun	0% (0)	Iranun	1% (14)
	Bisaya	2% (2)	Bisaya	1% (12)
	Tagalog	0% (0)	Tagalog	0% (5)
	Others	18% (20)	Others	7% (95)

**Note:** ■ shows the highest percentage in each question

The specific needs of returnees from Sabah Province, Malaysia were analyzed by weighting the priority of the specific needs asked for each topic as shown in **Table 3-9**.

Compared to the results for all residents, the specific needs of “Disaster Response” ranked high, in sixth and ninth. The relatively high need for “Disaster Response” in Basilan and Tawi-Tawi may reflect the regional characteristics of the returnees from Sabah Province, Malaysia, who live mainly on these island provinces.

As for the specific needs, “Government support given to the poor” of “Development and Economic Recovery” and “Fair and inclusive ethnic representation in the Bangsamoro government” of “Social cohesion” were the top needs, and were higher than those of all residents of the BARMM. This seems to reflect the political anxiety and severe economic condition of the returnees from Sabah Province, Malaysia.

**Table 3-9: Results of specific needs analysis for all priority issues (returnees from Sabah, Malaysia)**

Rank	Priority issue	Specific need	Response rate (Weighting)
1	Development /Economy Recovery	Government support given to the poor	41%
2	Social Cohesion	Fair and inclusive ethnic representation in the Bangsamoro government	36%
3	Development /Economy Recovery	Government support given to larger population including the middle class	3%
4	Socio-economic program for ex-combatants	More government-led programs	3%
5	Social Cohesion	More financial support to civil society including NGOs to promote the activity related to social cohesion	2%
6	Development /Economy Recovery	Government support given to damaged industries such as tourism, agriculture, or fishery	1%
7	Disaster Response	More emergency facilities and supplies	1%
8	Implementation of Law and Justice	More functioning Bangsamoro legal system	1%
9	Disaster Response	More education on disaster readiness to population	1%
10	Socio-economic program for ex-combatants	More support to Indigenous People (IP) who are also affiliated with BIAF/BIWAF	1%

### 3.3.4 Needs Assessment Results of the Residents in Island Provinces

**Table 3-10** shows the social attributes of island province residents. The results are characterized by the low percentages of employers/self-employed and employees. It can be inferred that there are less employment opportunities in private sectors. Regarding affiliation, the percentage affiliated with BIAF/BIWAF is very low compared to the general residents. Most of them use the language of the indigenous people and Tausug.

**Table 3-10: Social Attributes (Residents in island provinces)**

Attribute	Residents in island provinces (441)		All residents (1301)	
Gender	Male:	64% (282)	Male:	67% (866)
	Female:	34% (151)	Female:	32% (414)
	Prefer not to say:	2% (8)	Prefer not to say:	2% (21)
Age	19 or under:	2% (10)	19 or under:	3% (34)
	20 ~29:	18% (81)	20 ~29:	19% (253)
	30 ~ 39:	35% (156)	30 ~ 39:	28% (363)
	40 ~ 49:	24% (105)	40 ~ 49:	26% (332)
	50 ~ 59:	16% (72)	50 ~ 59:	16% (209)
	60~:	4% (17)	60~:	8% (110)
Occupation	Farmers/Fisherfolks	54% (238)	Farmers/Fisherfolks	49% (635)
	Employers/Self-Employed	6% (28)	Employers/Self-Employed	20% (260)
	Employees	7% (32)	Employees	12% (155)
	Government Officials	7% (32)	Government Officials	4% (51)
	Others	25% (111)	Others	15% (199)
Affiliation	Another armed group	1% (3)	Another armed group	3% (38)
	BIAF/BIWAF	8% (36)	BIAF/BIWAF	32% (416)
	Others	66% (289)	Others	56% (732)
	Returnee from Malaysia	26% (113)	Returnee from Malaysia	9% (114)
Language	Maguindanao	0% (1)	Maguindanao	40% (514)
	Maranao	0% (0)	Maranao	24% (312)
	Language of Indigenous People (IP)	42% (186)	Language of Indigenous People (IP)	15% (197)
	Tausug	34% (151)	Tausug	12% (152)
	Iranun	0% (0)	Iranun	1% (14)
	Bisaya	2% (9)	Bisaya	1% (12)
	Tagalog	0% (1)	Tagalog	0% (5)
	Others	21% (93)	Others	7% (95)

**Note:** █ shows the highest percentage in each question

The specific needs of the island province residents were analyzed by weighting the specific needs about which each topic inquired by priority, as shown in **Table 3-11**.

The results were similar to those for all residents. However, they differed in that the percentages that indicated “government support for the poor” under “development and economic recovery” and “fair and inclusive ethnic representation in the Bangsamoro government” under “social cohesion” were higher than for all residents (with the former being 7% higher and the latter being 5% higher). The higher percentage of respondents indicating “government support for the poor” suggests that the level of poverty is higher than that of all residents, while the higher percentage of respondents indicating “fair and inclusive ethnic representation in the Bangsamoro government” suggests low percentages of MILF, to which the current BARMM prime minister belonged, reflecting a high level of awareness of political power dynamics.



**Table 3-11: Results of specific needs analysis for all priority issues (Residents in island provinces)**

Rank	Priority issue	Specific need	Response rate (Weighting)
1	Development /Economy Recovery	Government support given to the poor	31%
2	Social Cohesion	Fair and inclusive ethnic representation in the Bangsamoro government	18%
3	Development /Economy Recovery	Government support given to larger population including the middle class	7%
4	Development /Economy Recovery	Government support given to industries	5%
5	Implementation of Law and Justice	More functioning Bangsamoro legal system	5%
6	Social Cohesion	More financial support to civil society including NGOs to promote the activity related to social cohesion	4%
7	Development /Economy Recovery	Government support given to damaged industries such as tourism, agriculture, or fishery	4%
8	Social Cohesion	More recognition on shared Bangsamoro history	3%
9	Social Cohesion	More education on social cohesion to people	3%
10	Implementation of Law and Justice	More education on the legal system to people	3%

## Chapter 4 Innovative Ideas to Address the Issues of the People of BARMM

### 4.1 Outlines of Collection of Innovative Measures

The survey team, in cooperation with a subcontractor (Moropreneur Inc.), launched an online contest of innovative ideas (“the Bangsamoro Idea Challenge”) on July 9, 2021. Details of the contest are given below:

The contest was open to all individuals and organizations in the BARMM. Applicants had to choose one priority issue from seven identified issues (1. Development/economic recovery, 2. Response to COVID-19, 3. Disaster risk reduction and response, 4. Implementation of law and justice, 5. Social cohesion, 6. Social-economic program for ex-combatants, and 7. Prevention of violent extremism) and submit a solution or countermeasure relevant to the chosen priority issue. The contest was conducted online, and was promoted through websites and social media networks (Facebook, Instagram, and Twitter) by the Moropreneur. Applicants submitted their ideas through Google Forms prepared by the survey team (see Appendix 1 for the proposal template). By the deadline for submission (23:59 [Philippines Standard Time] on Monday, August 2, 2021), 41 applicants submitted their ideas. According to the pre-fixed criteria of the Bangsamoro Idea Challenge, two ideas from outside the BARMM were excluded from the selection process. The trends of the collected ideas are summarized as follows:

**Table 4-1: Breakdown of Submitted Proposals**

Affiliation of Applicant	<ul style="list-style-type: none"> <li>● Individual : 14 applicants</li> <li>● Group/organization (NGO, Civil Society Organization: CSO), Private sector, School Club: 25 entities</li> </ul>
Age of Applicant	<ul style="list-style-type: none"> <li>● Applicants under age 29: 35 applicants</li> </ul>
Residence of Applicant	<ul style="list-style-type: none"> <li>● Maguindanao province: 17 applicants</li> <li>● Cotabato city: 9 applicants</li> <li>● 63 Barangays of North Cotabato province: 6 applicants</li> <li>● Lanao del Sur: 5 applicants</li> <li>● Tawi-Tawi province: 2 applicants</li> </ul>
Issue addressed by Applicant	<ul style="list-style-type: none"> <li>● Development/economic recovery: 18 applicants</li> <li>● Response to COVID-19: 16 applicants</li> <li>● Disaster risk reduction and response: 3 applicants</li> <li>● Implementation of law and justice: 6 applicants</li> <li>● Social cohesion: 4 applicants</li> <li>● Prevention of violent extremism: 5 applicants</li> </ul>

Among these 41 proposals, the survey team short-listed 11 countermeasures according to the selection criteria, and confirmed the details through online interviews with applicants.

**Table 4-2: Evaluation Criteria**

<b>Innovativeness (Highest Possible Score: 5)</b>
➤ Is the idea innovative and new in BARMM with regard to execution processes, products, services, and/or strategies?
<b>Concreteness (Highest Possible Score: 5)</b>
➤ Does the idea identify a problem based on reliable evidence?
➤ Does the idea directly address the identified problem at the target community?
<b>Potential Impact (Highest Possible Score: 3)</b>
➤ Is the outcome from the idea likely to be sustainable after the intervention?
➤ Does the idea have potential to be duplicated in BARMM?
<b>Relevance (Highest Possible Score: 3)</b>

- Does the idea specify a problem relevant to any of the seven priority issues?
- Does the idea target people in BARMM?
- Does the idea pay sufficient attention to vulnerable groups in the relevant community(ies)?
- Does the idea respond to the current COVID-19 situation?

#### 4.2 Innovative Measures Proposed by Bangsamoro Residents

Among the short-listed 11 countermeasures, the awardees of the MILG and JICA are listed in **Table 4-3**.

**Table 4-3: List of Awardees**

Title of Idea		Awardee
<b>MILG Award</b>		
MILG Award	Garbage Recycle Project	Hope for Young Individual Inc. - Nurhanniesa M. Derico
Second Award	Floating Academy	Esmael U. Sema
Second Award	Weaving Wonders: Weaving Every Dream of Sama Dilaut in Tawi-Tawi	Nur-mukin A. Usman / 3i (inspiration, ideas, innovation)
<b>JICA Award</b>		
JICA Award	Bangsamoro Community Law Clinic	Kharsum H. Mohammad
Second Award	MFC: Battle against misinfodemic	Amalhayah M. Alikhan
Second Award	Floating Academy	Esmael U. Sema

Summary of award-winning countermeasures are described in **Table 4-4**.

**Table 4-4: Summary of Countermeasures of Awardees**


**Garbage Recycle project**

**Project Purpose:** Waste is recycled into materials for promoting a sustainable society.

**Background:**  
 In the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), despite the work of government agencies, businesses, and industries to reduce waste, population growth and industrial expansion have caused an increased amount of waste and damage to the environment.

The project aims to reduce waste by recycling it into materials for constructing roads, hollow blocks, and housing. In addition, the project will contribute to improving the livelihood of vulnerable people such as garbage collectors. The beneficiaries of the project are out-of-school children, their parents, and the Internally Displaced Persons (IDPs) in Papandayan, Marawi City, and Lanao del Sur.

The project is expected to help enable the parents to earn income to send their children to school. The project will help the parents use dried garbage and plastics to produce hollow blocks, concrete blocks, and cement, and sell them.



Waste recycling can help the people of the BARMM reduce waste and soil pollution. Furthermore, the project can have a wide range of community residents take part in it and raise their awareness on environmental protection. The project can be a model environmental protection activity throughout the Bangsamoro region.

Note: The picture is provided by Ms. Nurhanniesa M. Derico.

**Outputs:**

The project will accomplish the following three outputs that directly lead to the realization of the above-mentioned Project Purpose.

<b>Output 1</b>	Waste is reduced by being recycled into other useful materials.
<b>Output 2</b>	Vulnerable people earn income through the recycling activity.
<b>Output 3</b>	Awareness on environmental protection in communities is enhanced.

**Activities:**

The project will implement the following three activities for accomplishing the above-mentioned three Outputs.

<b>Activity 1</b>	People in the target areas collect waste that can be recycled.
<b>Activity 2</b>	Collected waste is recycled into materials for such purposes as making roads, hollow blocks, and housing, and the people sell them.
<b>Activity 3</b>	A social media campaign and face-to-face seminars are organized to promote environmental protection activities.

**Innovative Aspect:**

Waste will be recycled into useful materials and sold. In addition, an online campaign for enhancing awareness on environmental protection will be launched. Such approach has the following innovative aspects.

- 1 – Waste will not be just disposed of but recycled to be useful materials, and bring income to people who take part in the project.
- 2 – Recycling is not common in the BARMM. However, the project will bring to the region the recycling technologies that are widely used in other regions of the Philippines such as Manila.
- 3 – The project will link environmental protection with the improvement of the livelihoods of vulnerable people such as garbage collectors. Addressing the two issues together is innovative in the BARMM.

**Direct Target Beneficiaries:**

Out-of-school children, their parents, and the IDPs in Papandayan, Marawi City, and Lanao del Sur

**Expected Input:**

- Expert on recycling technology
- Expert on public relations
- Volunteers (that can be both individuals and LGUs) who help manage the project activities
- Budget for the equipment to recycle waste
- Budget for a social media campaign
- Budget for administrative costs

**Bangsamoro Community Law Clinic**

**Project Purpose: A community law clinic is established for vulnerable people who need legal advice.**

**Background:**

Solving community legal issues is one of the most important tasks in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). Whenever someone must deal with legal issues, he or she may feel embarrassed or panic. Although there are institutions handling legal issues, many, especially those without many years of schooling or education, do not necessarily know legal measures and approaches. It is thus critical to guide them to the first place to consult law experts and let them know their rights.



The project aims to establish a community law clinic that gives access to law and the legal system to everybody, especially vulnerable people. The community legal clinic is for not only educating the public on the legal system but also providing young law graduates with constructive work experiences to practice their profession as a legal adviser. In addition, the clinic aims to reduce the burden of law practitioners in government institutions from giving basic information and briefing on legal matters to their clients. It will lead to improvement of the justice system in the BARMM by expediting the processing of court cases.

Note: The picture is provided by Ms. Kharsum H. Mohammad.

**Outputs:**

The project will accomplish the following two outputs that directly lead to the realization of the above-mentioned Project Purpose.

<b>Output 1</b>	A Bangsamoro community law clinic is built and equipped with necessary facilities.
<b>Output 2</b>	The people of Bangsamoro communities are given free legal advice and referral.

**Activities:**

The project will implement the following four activities for accomplishing the above-mentioned two Outputs.

<b>Activity 1</b>	Pro bono law experts are listed and registered.
<b>Activity 2</b>	A Bangsamoro community law clinic is built in cooperation with LGUs.
<b>Activity 3</b>	The community law clinic is widely publicized to the people of Bangsamoro communities through social networking services (SNS).
<b>Activity 4</b>	The community law clinic is operated by a municipal LGU in cooperation with registered pro bono lawyers.

**Innovative Aspect:**

A Bangsamoro community law clinic will be built to provide the people of Bangsamoro communities with access to law and legal advice. This approach has two important innovative aspects.

- 1 – It will be the first attempt to give communities direct access to easy and free legal consultation.
- 2 – The activity will contribute to enhancing the legal system in the BARMM. It will reduce the burden of existing legal practitioners and provide young lawyers with a chance to develop their capacity.

**Direct Target Beneficiaries:**

The Bangsamoro people who need legal advice

**Expected Input:**

- Expert on the law who can advise young pro bono lawyers

- Pro bono lawyers who provide legal consultation services to clients
- Budget on building a Bangsamoro community law clinic
- Budget for a social media campaign
- Budget for administrative costs

### Floating Academy

**Project Purpose: The youth are trained to become a vanguard against violent extremism through a floating academy.**

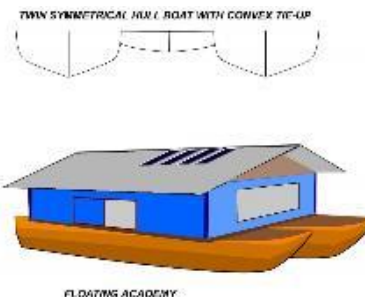
#### Background:

Violent extremism has become an emerging field of interest particularly to government and policy makers in the Philippines. To address the issue of violent extremism, the Philippine government has approved the National Action Plan on Preventing and Countering Violent Extremism (NAP P/CVE). It aims to prevent radicalization leading to violent extremism through a “whole of nation approach” or convergence of the government, civil society organizations, the religious sector, and other key stakeholders.

Education is one of the most important and powerful approaches to address the issue. However, children in wetlands have limited access to education because they are far from schools and transportation is inconvenient.

The project aims to build a floating academy for the wetlands. The academy is a boat that can move from home to home and provide education to children with limited access to education. It will provide the Bangsamoro youth with education on emerging violent extremism in global and local contexts, and equip them with knowledge and skills to tackle the issue. The youth educated by the academy are expected to be role models to fight violent extremism in not only their locality but also the entire Bangsamoro region.

Note: The illustration is provided by Mr. Esmael U. Sema.



#### Outputs:

The project will accomplish the following three outputs that directly lead to the realization of the above-mentioned Project Purpose.

<b>Output 1</b>	The floating academy is built and equipped with necessary facilities.
<b>Output 2</b>	Youth from Sultan sa Barongis are trained on the issue of violent extremism as well as vocational skills.
<b>Output 3</b>	Trained youth leaders disseminate their message against violent extremism through different media particularly through SNS.

**Activities:** The project will implement the following four activities for accomplishing the above-mentioned three Outputs.

<b>Activity 1</b>	Workshops on prevention of violent extremism are organized for training of Youth Leaders.
<b>Activity 2</b>	Build a floating academy funded by the local communities by the support from regional communities such as individuals, NGOs, and CSOs.
<b>Activity 3</b>	Youth Leaders organize social media campaign to fight against violent extremism.
<b>Activity 4</b>	Children in the area are provided supplementary education by volunteer teacher.

#### Innovative Aspect:

The floating academy will be built to train young people in wetlands as role models to fight violent extremism. The academy will also be used to provide supplementary education to the young people. This approach has three important innovative aspects:

- 1 – The floating academy will be built by the support of local communities, which symbolizes their strong commitment to renounce violent extremism.

- 2 – The floating academy can educate children in wetlands.
- 3 – While youth tend to be vulnerable to violent extremism as SNS are increasingly used as a medium for radicalization, the trained young leaders will be a vanguard to fight violent extremism by disseminating anti-extremist and anti-violence messages by themselves also through media such as SNS.

**Direct Target Beneficiaries:**

Youth leaders from respective Barangays in wetlands.

**Expected Input:**

- Expert on violent extremism
- Expert on conflict resolution and prevention
- Volunteer teachers
- Budget for constructing the floating academy and necessary equipment
- Budget on a social media campaign
- Budget on administrative costs

**Weaving Wonders: Weaving Every Dream of Sama Dilaut in Tawi-Tawi**

**Project Purpose:**

**Mat weaving, which is one of the industries that have suffered the most damage by the COVID-19 pandemic, is revived to support weavers' livelihoods.**

**Background:**

Mat weaving is one of the stagnant industries in the Bangsamoro region. The distinct mat weaving patterns, designs, and colors vary by province. This proposal focuses on the Badjao, one of the minority tribes in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). Their main source of livelihood is fishing, and the village that they live in is called "Pondohan." The Badjao are also famous for their mat weaving designs that have been reportedly passed down to them by their forefathers. They also developed a practice called "Pag Umboh" or prayer. Each design holds different meanings, and the colors also vary. However, the Badjao's mat weaving is declining for reasons including the following: 1) recent Badjao youths tend not to practice weaving; 2) some Badjao youths tend to adopt aspects of other cultures because they do not necessarily believe in the strengths of their own culture; and 3) globalization tends to result in traditional practices abandoned. Before the COVID-19 pandemic, some of the weavers were solely depending on mat weaving for their livelihood. However, the pandemic devastated tourism, and directly affected the income of the weavers.

The project aims to uplift the social and economic status of the weavers by training them to innovate new products and designs. The products with more market value such as bags, doormats, wall designs, keychains, and others are likely to bring more income to the weavers than mat weaving.

**Outputs:**

The project will accomplish the following two outputs that directly lead to the realization of the above-mentioned Project Purpose.

<b>Output 1</b>	Livelihoods of traditional mat weavers are improved.
<b>Output 2</b>	The weaving industry is empowered.

**Activities:**

The project will implement the following two activities for accomplishing the above-mentioned two Outputs.

<b>Activity 1</b>	Skill training will be implemented for traditional mat weavers on product development, designing, and marketing.
<b>Activity 2</b>	New souvenirs such as bags, doormats, wall designs, keychains, and others based on traditional mat weaving will be developed with colors and creative designs.

<b>Activity 3</b>	Follow-up will be implemented on the trained weavers regarding marketing and sales of new weaving products, particularly marketing through social media and exports, which are effective during the COVID-19 pandemic.
<b>Activity 4</b>	Social media accounts will be created for advertising and selling both traditional and new weaving products.

**Innovative Aspect:**

Traditional mat weavers who are economically damaged by the COVID-19 pandemic will be empowered by skill training. This approach has the following four innovative aspects.

- 1 – Weaving products with more market value will be developed with the characteristic cultural designs of the tribe.
- 2 – The value of traditional mat weaving in the region will be publicized in the entire region through the Internet.
- 3 – Each design will have meanings, implications, and history of its own.
- 4 – All materials will be environmentally friendly and free of toxic materials.

**Direct Target Beneficiaries:**

Two Pondohan villages in Tawi-Tawi that practice traditional mat weaving and have suffered serious economic damage by the COVID-19 pandemic

**Expected Input:**

- Expert on weaving
- Expert on small business marketing
- Expert on e-commerce
- Budget for training on product development, designing, and marketing
- Budget for administrative costs

**MFC: Battle against misinfodemic**

**Project Purpose: Misinformation on COVID-19 vaccines is prevented.**

**Background:**

Misinformation on COVID-19 is spreading on the Internet. It has affected people in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). The most vulnerable people are easily confused by such information. Misunderstanding on COVID-19 increases health risks and may cause discrimination and prejudice in communities. In addition, misbeliefs about COVID-19 vaccines impede vaccination rollout.

Note: The picture is provided by Ms. Amalhayah Macarik Alikhan.



**Outputs:**

The project will accomplish the following output that directly leads to the realization of the above-mentioned Project Purpose.

<b>Output 1</b>	People in the BARMM have access to correct and updated information on COVID-19 and vaccines against the disease.
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**Activities:**

The project will implement the following four activities for accomplishing the above-mentioned output.

<b>Activity 1</b>	COVID-19-related misinformation on the Internet is checked, and correct and evidence-based information is prepared.
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<b>Activity 2</b>	An intensive campaign is organized to spread correct and evidence-based information on COVID-19 through various media such as the Internet, radio, and newspapers.
<b>Activity 3</b>	Competitions such as quiz bowl and poster making are held to involve a wide range of people in spreading correct and evidence-based information on COVID-19. Such events are held as both in-person events and online.
<b>Activity 4</b>	Periodic seminars are organized to monitor the progress in spreading correct and evidence-based information on COVID-19.

**Innovative Aspect:**

The above-mentioned approaches have the following important innovative aspects.

- 1 – Correct and evidence-based information on COVID-19 can be delivered effectively to a wide range of people using various media such as the Internet, radio, and newspapers.
- 2 – Events such as quiz bowl (featuring SNS influencers and traditional leaders as guests and hosts) will be organized to deliver information to people who are not interested in the news and do not have much access to the media.

**Direct Target Beneficiaries:**

People of the BARMM

**Expected Input:**

- Expert on COVID-19
- Expert on online analysis
- Budget for checking information on COVID-19 on the Internet
- Budget for a campaign through various media
- Budget for organizing a quiz bowl competition including a venue, a master of ceremonies, and prizes
- Budget for periodic seminars
- Budget for maintaining an implementation body

Additionally, an online presentation conference was held on September 16, 2021, where representatives of JICA and MILG announced the award winners. For the award-winning countermeasures, a brochure explaining outlines of the countermeasures with awardee's photo was developed (**Figure 4-1**).



**Figure 4-1: Brochure of Award-Winning Countermeasures**

Additionally, the Minister of MILG proposed an innovative solution to the problem he identified in Bangsamoro, outline of which is described in **Table 4-5**.

**Table 4-5: Outlines of Measures Proposed by MILG**

Bangsamoro Innovation Hub	
<p>COVID-19 has affected economic activity in the Bangsamoro region, depriving young people of employment opportunities. Meanwhile, many young people who have acquired ICT skills in Manila and abroad have returned to the Bangsamoro region, but employment opportunities to utilize those skills are very limited. Utilizing the potential of these young people not only contributes to the development of the region, but also prevents young people from becoming inclined to violent activities and contributes to the peace and stability of the region.</p> <p>The idea is to establish a coworking space for young people who are active in the ICT field. Specifically, it provides entrepreneurs, engineers, researchers, etc. in the Bangsamoro region with free workspaces, high-spec computers, the Internet, software, the latest experimental equipment, and guidance from experts. It also contributes to establish networks with innovators across the Philippines and abroad. A part of the READi-BARMM building owned by MILG is a candidate site for the project, and the innovation hub is operated by government agencies such as the Ministry of Trade, Investment and Tourism (MTIT) in cooperation with ICT experts. It is expected to do.</p>	
Output 1	An innovation hub will be established and necessary equipment and materials will be prepared.
Output 2	Young people receive training on ICT technology and entrepreneurship
Output 3	Young people develop innovative products and services to meet the challenges and needs of the Bangsamoro region
Activity 1	Conduct a survey to identify potential innovation hub sites.
Activity 2	Create an innovation hub and its operation and management plan.
Activity 3	Establish an innovation hub.
Activity 4	Regularly hold training and workshops for young people.
Activity 5	Operate an innovation hub and support the development of innovative products and services by young people.
Activity 6	Promote collaboration with other innovation hubs in Mindanao, the Philippines as a whole, and abroad.
<p><b>Innovative aspect</b></p> <ol style="list-style-type: none"> <li>1- It will be a pioneer of public coworking spaces for young people in the Bangsamoro region.</li> <li>2- Young people in the Bangsamoro region can work with other innovators.</li> <li>3- Young people can receive professional guidance by the experts while using facilities equipped with advanced technologies such as high-spec computers, the Internet, software, and the latest experimental equipment.</li> </ol>	

### 4.3 Lessons-learned and Suggestions

#### Number of submitted ideas:

While the challenge was widely disseminated through the website and Facebook and Twitter accounts of Moropreneur, and IC Net’s network in Mindanao, only 41 ideas were submitted, which is less than expected. The reasons for the somewhat unsatisfactory result may include 1) limited duration of the campaign, and 2) approach of calling for ideas through the Internet.

The challenge was originally planned for three weeks, but it was extended for another week, as the survey team received a very limited number of ideas. This was partly because there were important Muslim religious holidays in the last week of the original campaign period. It may not have been the best time to run the campaign; consequently, a wide range of Muslim people were not involved. Additionally, limited Internet access within the region may have hindered the participation of a wider population.

Most ideas were submitted by young residents in Cotabato City and Maguindanao province (among 41, only two participants were from the island province Tawi-Tawi). The survey team has also

contacted universities (such as the Mindanao State University in different provinces) within the BARMM and Mindanao, although the survey team received few ideas from students. Additionally, when JICA formulated this Survey, the Minister of MILG expressed his interest in collecting innovative ideas from youths who had to come back to BARMM from Manila due to COVID-19 pandemic. Unfortunately, we have not collected any ideas from such cohort either.

It is suggested that the hybrid approach of online/offline campaigns and more preparation time to involve potential participants such as university students and youth organizations/groups can be applied to encourage more participation if similar initiatives are organized in the future. In particular, partnership with the Bangsamoro Youth Commission of BARMM (BYC-BARMM) may further enhance involvement of wide range of youth organization in BARMM, so that more strategic approach to reach very specific target groups such as youth returnee from Manila can be adopted.<sup>19</sup>

#### **Quality of ideas:**

The limited quality of the submitted ideas was another challenge that the survey team faced during the activity. The team excluded 30 out of 41 submitted ideas as those ideas were either not properly articulated or not relevant to the community issues identified by the survey. Additionally, most ideas seemed to be poor with regard to innovativeness. It may be somewhat ambitious to expect both innovative and well-elaborated countermeasures to address diverse community issues from ordinary citizens without any technical support.

To generate innovative and well-articulated ideas, one needs to be equipped with particular strategies (research, testing, and refining ideas) and techniques such as problem analysis, mind mapping, and storyboarding. It is suggested that workshop/training be provided to specific target groups such as student/youth groups before calling for ideas so that more innovative and elaborate ideas relevant to the community issues in the BARMM may be generated.

Meanwhile, at the same time, a similar idea contest for young people was recently held in Bangsamoro. Looking at the results of those contests, there does not seem to be significantly different in terms of number of applicants and quality of the proposed ideas in comparison with those of Bangsamoro Idea Challenge. If similar contest shall be conducted in future, it may be beneficial to collaborate with initiatives such as the Innovation Hub proposed by the Minister of MILG thereby providing young people with the opportunity to continuously improve their skills and innovations.

#### **Similar Contests held in Bangsamoro**

##### **1) Ideation Impact Challenge (IIC)**

The IIC was organized by UNDP under a project of Prevention of Violent Extremism through Promoting Tolerance and Respect for Diversity Phase II (funded by EU) and a project funded by the Citi Foundation (Youth Co: lab). 28 youth teams participated in capacity development training to create business ideas. Among them, several teams were selected to participate in UNDP's Regional Springboard Program (UNDP's Regional Springboard Programme) where they receive technical and financial supports. The ideas that received the award included plastic waste reduction, entrepreneurial support for single mothers, and coastal waste reduction campaigns.

##### **2) Bangsamoro Data Challenge**

The contest utilized data from One Bangsamoro (<https://www.openbangsamoro.com/>), a database built with the support of the Asian Foundation, and called for ideas from young data scientists, analysts, application developers and students to solve social problems in Bangsamoro. Sixteen ideas were submitted, and ideas such as identifying indicators to improve student dropout rates and visualizing areas vulnerable to earthquakes and tsunamis received the Excellence Award.

Meanwhile, it was encouraging to see young awardees and participants from the BARMM

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<sup>19</sup> BYC-BARMM has recently organized a similar initiative ("Ideation Impact Challenge") in partnership with the United Nations Development Programme (UNDP) that is co-funded by the European Union (<https://www.pna.gov.ph/articles/1153117>).

actively participating in the online presentation conference held on September 16, 2021. Although some of the awardees could not join the conference mainly because of unstable Internet connection at their end (pre-recorded presentation was used for them), they could articulate their ideas, which attracted interest among participants, particularly from the BARMM. Overall, the Bangsamoro Idea Challenge was a valuable opportunity to encourage dialog between the BARMM officials/staffers and young Bangsamoro residents, and it can be replicated in the future while redressing the above-mentioned limitations.

Apart from the online idea contest, MILG proposed a concrete and feasible idea. In recent years, highly qualified residents have been appointed as government officials in the BARMM so it would be effective to solicit ideas from other ministries and local governments.

## **Chapter 5 Implementation Process and Results of the Pilot Projects**

### **5.1 Selection of Pilot Projects**

The Survey Team examined the feasibility of the measures proposed in the Rapid Assessment and those planned by the Bangsamoro government to address issues caused by the COVID-19 pandemic. The Survey Team also called for project proposals from relevant entities in the BARMM including local government units (LGUs), civil society organizations (CSOs), non-governmental organizations (NGOs), the private sector (companies, chambers of commerce, and agricultural cooperatives), and universities. The selection criteria are as follows.

#### **Prerequisites for the Selection**

- Each pilot project must be completed within three months from August 2021.
- The budget of each pilot project must not exceed PHP 1,300,000. Projects with a smaller budget are also acceptable.
- Each pilot project must be implemented within the Bangsamoro region.
- Each pilot project must address at least one of the following priority issues: (1) development/economic recovery, (2) COVID-19 response, (3) disaster response, (4) implementation of law and justice, (5) social cohesion, (6) social-economic program for ex-combatants, and (7) prevention of violent extremism.

#### **Criteria 1: Feasibility of the Proposal for a Pilot Project**

##### **【Main Perspectives】**

- Does the proposal apply an innovative or new approach in BARMM?
- Is the proposal feasible with the specified timeframe and budget?
- Can the proposal realize the specified output effectively and efficiently?
- Does the applicant demonstrate a strong organizational capacity to manage the proposal successfully?

#### **Criteria 2: Relevance to the Priority Needs Identified in the Survey**

##### **【Main Perspectives】**

- Does the proposal directly address a specific problem relevant to the priority issue(s)?
- Does the proposal demonstrate a clear and evidence-based understanding of community challenges and needs?
- Does the proposal identify the countermeasures (solutions) theoretically from the identified problem?

#### **Other Important Perspectives**

- Does the proposal pay sufficient attention to the needs of vulnerable groups in the community?
- Is the proposal sensitive to the local context and likely to abide by the principle of “Do No Harm”?
- Is the proposal likely to be sustainable after any intervention or being replicated in other sites?
- Does the proposal include measures to mitigate risks arising from the COVID-19 pandemic?

As a result of the online campaign, 46 countermeasures were proposed by 39 organizations. In addition, among the measures proposed in the Rapid Assessment (RA) and proposed by the Bangsamoro government, the survey team confirmed feasibility of several measures as a pilot project in consideration of relevance to the priority issues identified in the survey, expected implementation period and budget, as well as availability of potential implementers within the region. The Survey Team also confirmed affinity/relevancy between the measures proposed in the RA and by the Bangsamoro government and some of the countermeasures proposed through online-campaign as described in **Table 5-1**.

**Table 5-1. Selected Feasible Measures**

Measure suggested in the Rapid Assessment	Measures proposed through online campaign
Introduce “Market-on-Wheels” to areas where the mobility of the public is affected significantly.	<ul style="list-style-type: none"> <li>● Development of E-Bangsamoro System (online platform for agribusiness, including collaboration with Market-on-Wheels conducted by the MAFAR)</li> </ul>
Conduct a Comprehensive Risk Assessment of Supply Chains for micro and small enterprises and government entities.	<ul style="list-style-type: none"> <li>● Same as above (related to strengthening of agribusiness value chain)</li> </ul>
Conduct a further study on the public’s access to medical services and facilities to determine the root causes of limited access, and form strategies to address such challenge.	<ul style="list-style-type: none"> <li>● SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19 in Kabacan</li> </ul>
Provide government-initiated or -funded public transportation to areas where the mobility of the general public has been affected significantly.	
Implement cash-for-work programs in line with activities that meet the immediate needs of the general public.	<ul style="list-style-type: none"> <li>● Recovery Initiative for Sustainable Economy (RISE) : food for work</li> </ul>
Implement a community-based and market-driven agriculture/aquaculture development program to increase the household income of smallholder farmers/fisherfolk.	<ul style="list-style-type: none"> <li>● Maximizing Opportunities for the Marginalize Communities through Alternative Livelihood Program: livelihood support to IP</li> <li>● Project PUSAW: agricultural livelihood support</li> <li>● Strengthening Peace Efforts through integrated Halal Chicken Production and Halal Feeds in Maguindanao</li> <li>● Scaling-up Backyard Duck Raising along the Marsh Kabuntalan for Food Security and Economic Recovery through Shariah-based community financing</li> <li>● Bamboo Tiles and Bamboo Plyboard Making with Provision of Equipment</li> <li>● Spices &amp; Herbs: Green Entrepreneurship for Agricultural Transformation (GREAT) Through Selected Cooperatives in Maguindanao &amp; Special Administrative Areas</li> <li>● Community-based Free-range Broiler Chicken Production Project</li> </ul>
Measures planned by the Bangsamoro Government	Measures proposed through online campaign
Procurement or leasing of assets to transport passengers and cargo between mainland provinces and island provinces	
Provision of medical supplies to the Rural Health Unit (RHU) and hospitals	
Supporting existing school lunch programs to address potential undernourishment	<ul style="list-style-type: none"> <li>● Assistance and Management to Indigent Undernourished Children by Organizing a Barangay Nutrition Scholar in Every Barangay</li> </ul>
Strengthening the transport capacity for COVID-19 patients in specific areas in Bangsamoro	
Supply vaccines for COVID-19 in the heavily affected areas in BARMM.	<ul style="list-style-type: none"> <li>● Engaging Community-based Organizations Response and Resilience Building in Vulnerable Communities of Maguindanao</li> </ul>

	<ul style="list-style-type: none"> <li>● COVID-19 Information as Aid</li> <li>● BANTAY COVID-19 (Barangay Awareness, Networking, and Trainings Against COVID-19)</li> <li>● Mitigating Covid-19 Transmission through Inclusive Response</li> <li>● BioPhil: Misinfodemic Intervention Program</li> <li>● SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19 in Kabacan</li> </ul>
<p>Capacity building for public schools to respond to the new normal related to the COVID-19 pandemic.</p>	<ul style="list-style-type: none"> <li>● Creating Access to Reading and E-Learning Materials for the Bangsamoro Children and Youth</li> <li>● School-Based WASH and Humanitarian Protection for COVID-19 and Disaster Preparedness for 5 Elementary Schools in Lanao del Sur</li> </ul>
<p>Support Bangsamoro students in need (foreign students and local students).</p>	
<p>Salam (Support and Legal Advocacy for Muslims)          Conditional funds are given to former Moro Islamic Liberation Front (MILF) combatants so that they can be service providers after receiving skill training and political education.</p>	<ul style="list-style-type: none"> <li>● Combatant's Economic Empowerment in Leadership and Development in BARMM</li> <li>● ANEW (Assisting the Normalization of Ex-combatants With Civil Registration and Right Education)</li> <li>● Social Economic program for Ex Combatants</li> <li>● Engagement of MILF Ex-Combatants on the Production and Promotion of Low Cost Resilient Sanitation Marketing Options and Disaster Risk Mitigation in Flood Prone Municipalities</li> <li>● R LABAY Planning, Engineering and Research Services (RLABAY PlannERS) Model: Socio-Economic Interventions for Decommissioned Combatant and His Family</li> <li>● Camp Readiness for Economic Growth (CARE-GROW)</li> </ul>
<p>Activities and capacity development to strengthen community resilience</p>	<ul style="list-style-type: none"> <li>● Social Cohesion: Increasing Capacity of Youth Leaders on the Prevention of Violent Extremism through innovative and traditional communications</li> <li>● Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao</li> <li>● Fostering Peace Building Initiatives through Transformative Community Dialogue in the Promotion of Culture of Peace</li> <li>● Families for Peace: Enhancing Program Sustainability for the Formation of Resilient and Productive Model Families to Promote Peacebuilding and Non-violence in their Communities</li> <li>● Marawi IDPs Demand Accountability for Social Cohesion (MIDAS) Project</li> <li>● Bityala Kalilintad: Grassroots Learning on Peace Education, Human Rights, and Peace Journalism</li> <li>● Maral Recovery Seminar and Values Formation among to the Youth of Marawi</li> <li>● Saguiaran Youth Active Citizens on Social Cohesion and Preventing and Countering Violent Extremism</li> <li>● Strengthening Community Participation in Early Warning, Prevention and Response System for the Prevention of Violent Extremism in the Bacolod-Kalawi, Lanao del Sur</li> </ul>

	<ul style="list-style-type: none"> <li>● Strengthen Reintegration Program for Abu Sayyaf Returnees (SRPAR) in Sulu</li> <li>● Building Youth Social Cohesion through Paintings of Bangsamoro Historical Events</li> </ul>
Strengthen market-oriented agricultural and fisheries capacity of cooperatives through the provision of machinery and facilities equipped with modern technology, and encourage private sector participation.	<ul style="list-style-type: none"> <li>● Development of E-Bangsamoro System</li> </ul>
Rural electrification (on/off grid)	

Of these, fifteen were short-listed by the survey team in consideration of satisfying the basic requirements of the pilot project, namely (i) relevance to the key priority issues as well as measures proposed by RA and the Bangsamoro government, (ii) those that can be completed within a three-month implementation period, as well as regional balance. Under the initiative of MILG, the proposals were reviewed online with the relevant ministries and agencies of the Bangsamoro government<sup>20</sup>, and as a result, 7 projects were selected as pilot projects. **Table 5-2** describes all short-listed proposals, among which seven finally selected proposals are highlighted in blue.

**Table 5-2: List of Short-Listed Proposals**

	Name of Organization	Project Title	Target Area(s)	Key Issues	Outlines of Project
1	Kutawato Greenland Initiatives, Inc. (KGI)	Maximizing Opportunities for the Marginalize Communities through Alternative Livelihood Program	Cotabato City	(i)	Livelihood support for urban farmers, fisherfolks , and Indigenous People (Bajao).
2	Keamanan, Inc.	Social Cohesion: Increasing Capacity of Youth Leaders on the Prevention of Violent Extremism through Innovative and Traditional Communications (YSpeak!)	Cotabato City, Tawi	(v),(vii)	Capacity development of youth on using SNS and radio.

<sup>20</sup> MILG: Abdul Rahman A. Kara, Project Development Officer III, Ministry of Health (MOH): Director General Amirel Usman and Nhaid Cosain, Bangsamoro Planning and Development Authority (BPDA): Jannaima Ebrahim and Salma Ali, Technical Staff, Bangsamoro Youth Commission (BYC): Amenodin M. Samporna, Ministry of Trade, Investment and Tourism (MTIT): Amina Karon-Mendez.



	Name of Organization	Project Title	Target Area(s)	Key Issues	Outlines of Project
3	Consortium of Bangsamoro Civil Society (CBCS)	Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao	South Upi, North Upi, Datu Blah Sinsuat, Ampatuan, Datu Odin Sinsuat, Datu Hoffer, and Datu Saudi Ampatuan	(v)	Creation of a venue to strengthening tri-people (Muslim, Christian, IP) thrust and confidence.
4	Mindanao Organization for Social and Economic Progress (MOSEP) Inc	Engagement of MILF Ex-Combatants on the Production and Promotion of Low Cost Resilient Sanitation Marketing Options and Disaster Risk Mitigation in Flood Prone Municipalities	Datu Montawal, Pagalungan, Datu Piang, Datu Salibu	(vi)	Skills development of ex-MILF combatants to sustain their economic recovery through the provision of Artisans training.
5	Reconciliatory Initiatives for Development Opportunities Incorporated (RIDO)	Fostering Peace Building Initiatives through Transformative Community Dialogue in the Promotion of Culture of Peace	Marawi city, Lanao del Sur	(vi)	Empowerment of informal state actors and the ex-combatant to promote social cohesive community.
6	Initiatives for Dialogue and Empowerment through Alternative Legal Services (IDEALS), Inc.	Bityala Kalilintad: Grassroots Learning on Peace Education, Human Rights, and Peace Journalism	Marawi city, Maguindanao	(vii)	Advocacy on peace and human right among out-of-school youth, campus journalists and students etc.
7	Maranao People Development Center Inc.(MARADECA)	Mitigating Covid-19 Transmission through Inclusive Response	Ditsaan Ramain, Bubong, Marawi city	(ii)	Dissemination of information of COVID-19 and its prevention.
8	Maranao People Development Center Inc.	Camp Readiness for Economic Growth (CARE-GROW)	Jabidah MILF Camp	(i)	Capacity development of MILF ex-combatants on livelihood.

	Name of Organization	Project Title	Target Area(s)	Key Issues	Outlines of Project
9	Maranao People Development Center Inc.	Strengthening Community Participation in Early Warning, Prevention and Response System for the Prevention of Violent Extremism in the Bacolod-Kalawi, Lanao del Sur	Bacolod-Lalawi	(iii),(vii)	Establishment/strengthening of community security platforms.
10	University of Southern Mindanao College of Health Sciences	SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19 in Kabacan, BARMM-SGA	Kabacan	(ii)	Provision of psychosocial services and culture-sensitive health interventions.
11	Tiyakap Kalintad Inc.	Spices and Herbs: Green Entrepreneurship for Agricultural Transformation (GREAT) Through Selected Cooperatives in Maguindanao & Special Administrative Areas.	Shariff Aquak, Datu Montaval, Buluan, Pagalungan, Pikit, Datu Montawan, Sultan Kudarat, Barira	(i)	Income generation through enterprise development and marketing access, promotion of post-harvest technologies.
12	Isabela Foundation Inc.	Family Disaster Resiliency	Lantawan Maluso and Lamitan, Basilan Province	(ii),(iii)	Capacity development on family emergency preparedness, and awareness raising on COVID-19 prevention.
13	Gagandilan Mindanao Women Inc.	Strengthen Reintegration Program for Abusayyaf Returnees (SRPAR) in Sulu	District 2, Province of Sulu	(vii)	Provision of skills development training to ex-combatants for their reintegration into the normal life in the community.

	Name of Organization	Project Title	Target Area(s)	Key Issues	Outlines of Project
14	MLGU South Ubian	Assistance and Management to Indigent Undernourished Children by Organizing a Barangay Nutrition Scholar in every Barangay	South Ubian, Tawi	(i), (iii)	Food supports to undernourished children.
15	Young Mindanao Professionals for Peace (YMPP)	Development of E-Bangsamoro System	All BARMM (main Island)	(i)	Establishment of a digital platform that will facilitate business to business linkage among market players (suppliers and buyers) of agri-fisheries commodities and products.

The survey team developed a monitoring / reporting system on the Web and held briefing sessions for each organization on how to use it. Each organization recorded the progress of their pilot project using the system, and submitted the deliverables set for each outcome. The survey team also organized a series of online monitoring session with each organization to monitor progress and provide guidance. Additionally, the survey team conducted interview with some of the beneficiaries and stakeholders of the pilot projects with support from national staffer and local subcontractor (the Moropreneur) to collect in-depth insights on the results of the pilot projects.

## 5.2 Summary of Pilot Projects

**Table 5-3** presents outlines of the pilot projects.

**Table 5-3: Outlines of the Pilot Projects**

1. Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao	
Implementer	Consortium of Bangsamoro Civil Society (CBCS)
Beneficiaries	Target Group: IPs, Moro, and Christian Settlers Estimated beneficiaries' number: 2,500 individuals (500 households from 5 municipalities)
Target Areas	Target Area: Municipalities of Maguindanao, BARMM.
Project Purpose	Collaboration and mutual understanding among tri-people are promoted.
Expected Outputs	1 Implementation of tri-people activities 2 Implementation of awareness building activity (IEC) on the concept of ancestral domain framework 3 Implementation of Peace Monitoring and Evaluation
Major Activities	1-1. Series of coordination meetings at municipal and barangay level 1-2. Consultation among selected tri-people peace actors 1-3. Formulation of activity plan 1-4. Tri-People Community Peace Vegetable Gardening 1-5. Tri-people Community Food Festival 2-1. Preparation of IEC materials 2-2. Implementation of awareness building activity (IEC) 3-1. Formulation of monitoring plan 3-2. Implementation of monitoring activities 3-3. Preparation of monitoring report

<b>2. Engagement of MILF Ex-Combatants on the production and promotion of low cost resilient sanitation marketing options and disaster risk mitigation in flood prone municipalities of Pagalungan, Datu Montawal Datu Piang, and Datu Salibu, Province of Maguindanao</b>	
Implementer	Mindanao Organization for Social and Economic Progress (MOSEP) Inc
Beneficiaries	Ex-combatants, families, and communities Estimated beneficiary number: Direct beneficiary for the training: 30, Indirect beneficiaries for low-cost sanitation options (3,824 households, or at least 22,946 individuals)
Target Areas	Target Area: Pagalungan, Datu Montawal Datu Piang, and Datu Salibu, Province of Maguindanao
Project Purpose	Ex-combatants become able to promote low-cost sanitation facilities as business.
Expected Outputs	1. Completion of training in carpentry, masonry, and plumbing 2. Low-cost sanitation facilities are promoted in the target areas 3. Building of a cooperative relationship with LGUs in the target area
Major Activities	1-1. Coordination & courtesy calls, assessment & orientation of ex-combatants on the project, listing and preparation for training 1-2. Artisans' training in carpentry, masonry, and plumbing 2-1. Training in marketing, financial management, IEC materials & promotion 2-2. Establishment of workshop team and procurement of materials needed as capital inputs 2-3. Demonstration sanitation facilities are constructed. 2-4. Promotion activities are conducted in respective demonstration sites. 3-1. Project presentation to respective LGUs 3-2. MOA signing with LGUs
<b>3. Mitigating Covid-19 transmission through inclusive response</b>	
Implementer	Maranao People Development Center Inc.(MARADECA)
Beneficiaries	Target group: Vulnerable people (women, youth, the elderly, adolescent parents, orphans, widows, pregnant and lactating women, people with disability) and vendors in the markets Estimated beneficiaries' number: 121,000 people
Target Areas	Target area: 5 Markets in (1) Timber Barangay, Ditsaan Ramain (Municipality), (2) Pindolonan Barangay, Bubong (Municipality), (3) Poblacion Barangay, Bubong (Municipality), (4) Madanding Barangay, Bubong (Municipality), (5) Patani Barangay, Marawi City. All these barangays are in Lanao del Sur.
Project Purpose	People in the target area become ready and willing to take preventive measures against COVID-19.
Expected Outcomes	1. Understanding of COVID-19 and its preventive measures (including vaccination) is enhanced in the target areas. 2. People in the target areas are better equipped with supplies for good hygiene and sanitation practice. 3. Economic impact due to COVID-19 is mitigated through home gardening.
Major Activities	1-1. To hold coordination meetings with stakeholders (Barangay local government units, Integrated provincial health office, vulnerable people) to determine details of the activities 1-2. To conduct training for existing community volunteers of the Barangay Peace Action Team on community outreach 1-3. To design, print, and distribute flyers in the markets 1-4. To develop a new radio program for communication about COVID-19 1-5. To disseminate key messages through a radio program 2-1. To distribute hygiene kits to vulnerable community members and vendors 2-2. To install handwashing facilities in the markets 3-1. To distribute vegetable seeds (e.g., eggplants, pechay, okra, bush beans) to those who have prior experience with home gardening and gardening

	equipment 3-2. To provide an orientation on home gardening to people selected for seed distribution
<b>4. SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19 in Kabacan, BARMM-SGA</b>	
Implementer	University of Southern Mindanao College of Health Sciences
Beneficiaries	Target group: Residents of four barangays of Kabacan in Special Geographic Area Estimated beneficiaries' number: 400 residents
Target Areas	Target area: Four barangays of Kabacan in Special Geographic Area (Pectad, Nangaan, Simone, Buluan)
Project Purpose	Access to psychosocial support (PSS) and information about health promotion and illness prevention is improved.
Expected Outcomes	1. Knowledge as to socio-economic and health status and knowledge, attitude and practices regarding COVID-19 at the community level is generated. 2. The number of people with PSS needs who receive PSS is increased. 3. People in the target area are equipped with proper knowledge about health promotion and illness prevention.
Major Activities	1-1. Develop a questionnaire for rapid assessment 1-2. Train enumerators 1-3. Collect and analyze data 1-4. Identify people who may need PSS through rapid assessment 2-1. Co-design culturally sensitive, age-appropriate psychosocial activities with Barangay health workers 2-2. Conduct training of PSS services assistants 2-3. Carry out psychosocial activities (i.e., play and art therapy, Emotional Freedom Technique, Referral) 3-1. Conduct community consultation to identify key messages for dissemination 3-2. Develop and pilot new IEC materials with help of Department of Communication based on identified local needs 3-3. Reproduction and distribution of developed printed materials 3-4. Presentation of developed materials through radio broadcast
<b>5. Family Disaster Resiliency</b>	
Implementer	Isabela Foundation, Inc.
Beneficiaries	Target Group: Children, youth, and families Estimated beneficiaries' number: 250 families
Target Areas	Target Area: 1 city and 2 municipalities (Lamitan City, Maluso, and Lantawan with 15 barangays) in Basilan Province
Project Purpose	Cooperation is enhanced among families and their communities to ensure a safe environment against disaster
Expected Outcomes	1. Trainers on mental health and psychological first aid (MHPSS/PFA) are developed. 2. Awareness building (IEC) on DRM & COVID-19 prevention is implemented. 3. The skill and knowledge of target families against disaster are enhanced.
Major Activities	1-1. Formulation of activity (Stakeholders' round-table discussion) 1-2. Implementation of youth & adult facilitators' training on mental health and psychological first aid (MHPSS/PFA) 2-1. Production of DRM & COVID-19 prevention and response IEC Materials 2-2. IEC materials will be promoted through radio, vlog, and Facebook. 3-1. Implementation of one-day sessions of MHPSS/PFA/Mental Health to members of the families by the trained people. 3-2. Provision of vegetable gardening tools and seeds for food security to the participants of the one-day session.

<b>6. Strengthen Reintegration Program for Abu Sayyaf Returnees (SRPAR) in Sulu</b>	
Implementer	Gagandilan Mindanao Women Inc. (GMWI)
Beneficiaries	Target Group: Abu Sayyaf surrenderers, wives, widows of Abu Sayyaf Estimated beneficiaries' number: 40 Abu Sayyaf surrenderers
Target Areas	Target Area: Municipality of Omar, Luuk, Caluang, and Panamao, District 2, Province of Sulu
Project Purpose	Promoting the reintegration programs of Abu Sayyaf Surrenders
Expected Outcomes	1. Implementation of livelihood skills training 2. Promotion of products by Abu Sayyaf surrenderers/wives and their families
Major Activities	1-1. Coordination among LGUs and stakeholders 1-2. Collecting information on livelihood needs and program orientation of the target beneficiaries 1-3. Community-based livelihood skills training for 1st batch (20 Abu Sayyaf returnees/wives returnees) 1-4. Community-based livelihood skills training for 2nd batch (20 Abu Sayyaf returnees/wives returnees) 1-5. Provision of assistance kits (materials, equipment, or small amounts of cash) to beneficiaries for production materials and equipment used for product output 2-1. Implementation of one-day event to launch Produced products with partners such as LGUs, NGO, CSO, security sector, Ulama, traditional leaders, line agencies, and community elders.
<b>7. Development of E-Bangsamoro System</b>	
Implementer	Young Mindanao Professionals for Peace (YMPP)
Beneficiaries	Target Group: Farmers and fisherfolk in the Bangsamoro engaged in agribusiness Estimated beneficiaries' number: 50 individual farmers and fisherfolk; 20 farmers and fisherfolk cooperatives and associations (FFCAs); and 10 buyers
Target Areas	Target Area: Maguindanao and Lanao Del Sur Provinces, and Cotabato City
Project Purpose	Building business linkage among farmers, fisherfolk, farmer and fisherfolk cooperatives and associations (FFCAs), and buyers.
Expected Outcomes	1. Development of the E-Bangsamoro system
Major Activities	1-1. Hiring of the System Development Team, Enumerators, and Project Officers for the Proposed E- Bangsamoro System 1-2. Development of the E-Bangsamoro system. 1-2. Registration, validation, and monitoring of FFCAs and prospect buyers 1-3. Meeting with the farmers/fisherfolk and farmer-groups (face-to-face and virtual). Proof of concept (PoC) of the E-Bangsamoro system.

The results of the respective pilot projects are summarized below (for details, please refer to the Completion Report on Pilot Projects).

### 5.2.1 Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao

After a courtesy visit to the Ministry of Indigenous People’s Affair and the Ministry of Agriculture, Fisheries and Agrarian Reform (MAFAR), CBCS selected target barangays for the pilot project through consultation with officials from the Local Government Unit (LGU) in the target municipality and barangays.

In consultation with the LGU and community leaders, the Tri-People Community-based Peace and Security Monitors (Tumulik Katinanek) was formed, consisting of Christians, Moros, and IP volunteers. The team was responsible for coordination and monitoring of various activities of the pilot project as well preventing misinformation and dissemination of antisocial propaganda.



**Photo 1: Food Festival**  
Credit CBCS

As part of the promotion of social cohesion and awareness-raising activities on peace and security in Bangsamoro, sign boards and banners were designed and installed, and T-shirts were distributed in the target communities. In addition, a food festival was held in the IP community in Datu Udin Sinsuat Municipality (**Photo 1**). Regarding community farm, vegetable seeds were distributed to 10 target barangays.

**Table 5-4: Achievement of Project Purpose and Outputs**

<p>Project Purpose: Collaboration and mutual understanding among tri-people are promoted.</p>	<p><b>Indicator 1 : Participation of 10 barangays</b> <b>Indicator 2 : Implementation of 3 activities</b> Result: Consultation with stakeholders took place in 10 barangays, and vegetable seeds and IEC material were distributed there. Additionally, a food festival was organized and people from 10 barangays participated. Given the result of each indicator, Project Purpose was achieved.</p>
<p>Output 1: Implementation of tri-people activities</p>	<p><b>Indicator 1-1. Submission of activity plan</b> Result: On October 22, an activity plan for all activities related to achievements 1 to 3 was submitted. <b>Indicator 1-2. Submission of completion report</b> Result: A project completion report was submitted. Given the result of each indicator, output 1 was achieved.</p>
<p>Output 2: Implementation of awareness building activity (IEC) on the concept of ancestral domain framework</p>	<p><b>Indicator 2-1. Submission of IEC materials</b> Result: IEC material (signboard with message related to social cohesion) was developed in consultation with community leaders. <b>Indicator 2-2. Submission of participants list</b> Result: A food festival was organized and its participant list was submitted. Given the result of each indicator, output 2 was achieved.</p>
<p>Output 3: Implementation of Peace monitoring and evaluation</p>	<p><b>Indicator 3-1 Submission of monitoring report</b> Result: Output 3 was partially achieved. Tri-People Community-based Peace and Security Monitors : Tumulik Katinanek) was organized, and endline assessment was conducted.</p>

### 5.2.2 Engagement of MILF Ex-Combatants on the production and promotion of low-cost resilient sanitation marketing options and disaster risk mitigation in flood prone municipalities of Pagalungan, Datu Montawal Datu Piang, and Datu Salibu, Province of Maguindanao

Technical training in carpentry, masonry, and plumbing was offered in collaboration with the Technical Education and Skills Development Authority (TESDA) and the Darussalaam Institute. Additionally, a MOSEP instructor offered training in marketing and financial management. Regarding toilets and sanitary facilities, MOSEP developed a leaflet for the sales promotion of four different types of facilities (Figure 5-1).



Figure 5-1: Promotional Leaflet for 4 Options

Options 1 and 2 are relatively simple designs, and Options 3 and 4 are designed particularly for flood-prone areas. The estimated selling price ranges from around 8,000 to 12,000 Philippine Peso. In addition, centers for the sales and promotion of toilet facility options have been set up in Sharif Aguak and Pagalungan Municipality.

To further promote toilet facilities, representatives of MOSEP and trained ex-combatants visited the municipality LGUs in the target areas and explained their project. The results of the activities were also shared at a seminar on ZOD, which the minister of health of the Government of Bangsamoro (Dr. Bashary Latiph) attended. MOSEP continues to engage in dialogues with the local government and the Ministry of Health to secure a budget for the dissemination of toilet facilities.

Table 5-5: Achievement of Project Purpose and Outputs

<p>Project Purpose: Ex-combatants become able to promote low-cost sanitation facilities as a business</p>	<p><b>Indicator: 30 sets of low-cost sanitation facility are installed</b> Result: Project Purpose was partially achieved. 4 units of toilet facilities were completed and installed. 2 units were completed, and concrete rings to be used for 20 units were completed.</p>
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<p>Output 1. Completion of training on carpentry, masonry and plumbing</p>	<p><b>Indicator 1.1. NC2 certification of competency granted to 90 % out of 30 participants</b> Result: Output 1 was partially achieved. Thirty ex-combatants and their close relatives participated in and completed the training, but have not yet obtained NC2.</p>
<p>Output 2. Low-cost sanitation facility are promoted in the target areas</p>	<p><b>Indicator 2.2. promotion sites are identified</b> Result: Output 2 was achieved. Centers for sales and promotion have been opened in Sharif Aguak and Pagalungan.</p>
<p>Output 3. Building of the cooperative relationship with LGUs in the target area</p>	<p><b>Indicator 3.3 The agreement is made with 4 LGUs in the target areas</b> Result: Output 3 was partially achieved. MOSEP reported activities to the target LGUs and the Ministry of Health. In addition, a draft agreement on securing budgets from local governments and the ministry for the promoting toilet facilities was prepared. MOSEP continues discussions to conclude the agreement.</p>

### 5.2.3 Mitigating COVID-19 transmission through inclusive response

Community outreach training (1 day) was conducted for community volunteers (10 people) belonging to the Barangay Peace Operations Team (BPAT) in the target area. Additionally, MARADECA developed a flyer about COVID-19 (**Figure 5-2**), which was written in a local language (Maranao). BPAT distributed 10,000 copies in the project’s target markets.



Figure 5-2: Flyer on COVID-19

As part of the advocacy, a radio program providing information about COVID-19 prevention and vaccination was broadcast on Radio Pilipina Marawi, in collaboration with the staff from the Integrated Public Health Office (IPHO) in Lanao del Sur. Additionally, hygiene kits were distributed to a total of 650 people (236 men and 414 women).

The handwashing facility was designed by MARADECA engineers and approved by the Municipal Planning Development Coordinator (MPDC) of both the Bubon and Ditsan Ramin municipalities and the Patani barangay chairperson; five units were installed in the target markets (**Photo 2**). Additionally, 200 target area residents were offered a series of training sessions on home gardening. The MARADECA resource person provided technical guidance on growing vegetables and seeds such as eggplant, pechai, and okra. Home gardening tools were also distributed to the participants.



**Photo 2: Hand Washing Facility**  
Credit MARADECA

**Table 5-6: Achievement of Project Purpose and Outputs**

<p>Project Purpose: People in the target area become ready and willing to take preventive measures against COVID-19.</p>	<p><b>Indicator 1: Proportion of people who recognize that COVID-19 is a real threat to BARMM.</b> Result: Data were not obtained</p> <p><b>Indicator 2: Proportion of people who are willing to be vaccinated if afforded the opportunity.</b> Result: Data were not obtained</p> <p>As no data for the two indicators were not obtained, we do not evaluate the achievement of the Project Purpose.</p>
<p>Output 1. Understanding of COVID-19 and its preventive measures (including vaccination) is enhanced in the target areas.</p>	<p><b>Indicator 1-1. Number of flyers distributed (7,500)</b> Result: A flyer on COVID-19 prevention was developed, and 7,500 copies were distributed in the target markets.</p> <p><b>Indicator 1-2. Number of a radio program aired (2)</b> Result: Two radio programs on COVID19 prevention was produced and broadcast on Radio Pilipina Marawi. Given the results of each indicator, Output 1 was achieved.</p>
<p>Output 2. People in the target areas are better equipped with supplies for good hygiene and sanitation practice.</p>	<p><b>Indicator 2-1. Number of households received hygiene kits (650)</b> Result: Hygiene kit was distributed to 650 households including vulnerable households, vendors and market users.</p> <p><b>Indicator 2-2. Number of handwashing facilities installed (5)</b> Result: The design of the hand-washing facility was approved by stakeholders including the local government, and the facility was installed in five markets. In addition, the rules for cleaning and maintenance of the facility were formulated by the community residents and market users. Given the results of each indicator, Output 2 was achieved.</p>
<p>Output 3. Economic impact due to COVID-19 is mitigated through home gardening.</p>	<p><b>Indicator 3-1. Number of people received vegetable seeds (100)</b> Result: Vegetable seeds (eggplant, okra, gourd, chili pepper, tomato, cucumber, etc.) were distributed to 100 households in the target area, and an orientation on vegetable production was held. Given the result of the above indicator, Output 3 was achieved.</p>

### 5.2.4 SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19 in Kabacan, BARM-SSA

A rapid assessment was conducted to confirm the residents' knowledge, attitudes, and practices regarding COVID-19 prevention, treatment, and risk management in the target barangays. Based on the survey results, the languages, media, and content of advocacy were determined. In addition, eight people, including the target barangay health workers, participated in a workshop to plan appropriate psychosocial support (PSS) in consideration of the culture and customs of the target area. At the workshop, various methods used for PSS (Photo 3) were introduced, and the appropriateness of use in the target area was confirmed.



Figure 5-3: Tarpaulin for advocacy



Photo 3: Game Therapy (left) and Art Therapy (right)  
Credit University of Southern Mindanao College of Health Sciences

Through the implementation of a rapid assessment, 160 people who seemed to need PSS were identified. PSS was offered to persons across a wide range of ages, ranging from 7 to 70. Many were worried about poverty due to a low income, lack of food, and the death of close relatives, and many suffered from the feeling of isolation due to lockdown. Through game therapy, art therapy, and the application of emotional freedom techniques (EFT), the PSS team tried to reduce their anxiety.

Furthermore, based on the results of the rapid assessment, IEC materials were developed, including a tarpaulin (Figure 5-3) and two types of posters. Two radio messages to promote COVID-19 vaccination were also produced and broadcast on a local radio station.

Table 5-7: Achievement of Project Purpose and Outputs

<p>Project Purpose: Access to psychosocial support (PSS) and information about health promotion and illness prevention is improved.</p>	<p><b>Indicator: Access to psychosocial support (PSS) and information about health promotion and illness prevention is improved.</b> Results: The Project Purpose was achieved. One hundred sixty residents who need PSS were identified; among them, 130 residents received PSS in the target communities.</p>
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Output 1. Knowledge as to socio-economic and health status and knowledge, attitude and practices regarding COVID-19 at the community level is generated.	<b>Indicator 1-1. Identification of target people of PSS.</b> Results: Output 1 was achieved. Information was collected from 400 people, and 160 people who require PSS were identified.
Output 2. The number of people with PSS needs who receive PSS is increased.	<b>Indicator 2-1. 12 persons receive the training of PSS service assistance.</b> Result: 8 people participated in the training. <b>Indicator 2-2. 120-200 person receive PSS.</b> Result: 130 people received PSS Given the results of each indicator, Output 2 was almost achieved.
Output 3. People in the target area are equipped with proper knowledge about health promotion and illness prevention.	<b>Indicator 3-1. IEC materials are developed</b> Results: Output 3 was achieved. A poster and Tarpaulin for advocacy were developed and distributed. Additionally, a radio message was developed and broadcast.

### 5.2.5 Family Disaster Resiliency

A two-day trainers' training program on mental health and psychological first aid (MHPSS/PFA) was held, during which the Isabela Foundation resource person provided guidance using video teaching materials on PFA produced by the International Red Cross. As a result, 15 PFA facilitators were trained.

After the training, in consultation with the Ministry of Social Service and Development (MSSD), the Ministry of Agriculture, and representatives of the target barangay, a plan was formulated to launch PFA for residents and support activities related to kitchen gardens.

Trained facilitators conducted PFA for a total of 233 households (590 people), and participants were given an emergency health kit containing a radio, a mask, a face shield, and alcohol disinfectant.

Regarding advocacy activities, IEC materials on COVID-19 prevention developed by the Department of Health of the Philippines were utilized and disseminated through the Isabela Foundation's Facebook page. Similarly, on the Foundation's Facebook page, young people who had participated in the training engaged in vlogging about COVID-19 prevention. In addition, on the local radio station (97.5 DXNO Radyo Komunidad), advocacy messages related to COVID-19 prevention were broadcast from 11:00 a.m. to 12:00 a.m. on every Friday in December. Furthermore, as part of disaster preparedness, 260 households participated in training regarding growing vegetables, with the cooperation of the agricultural officers of the target LGUs. Participants were provided with farm tools and seeds (**Photo 4**).



**Photo 4: Provision of Inputs & Equipment for Gardening**

Credit Isabela Foundation, Inc.

**Table 5-8: Achievements of Project Purpose and Outputs**

Project Purpose: Collaboration and cooperation are enhanced among families and their communities for a safe environment against disaster	<b>Indicator: 15 barangays are engaged in activities of child protection and disaster risk management (DRM) actions</b> Results: The Project Purpose was almost achieved. IEC materials were distributed in 14 barangays, 590 people participated in PFA sessions, and 260 households participated in activities related to vegetable production.
Output 1. Trainers on mental health and psychological first aid (MHPSS/PFA) are developed.	<b>Indicator 1. 15 trainers are developed.</b> Output 1 was achieved. Fifteen trainers on MHPSS/PFA have been trained. The trainers include DSWD staff from the target municipality.
Output 2. Awareness building (IEC) on DRM & COVID-19 prevention is implemented.	<b>Indicator 2. Developed IEC materials</b> Output 2 was achieved. A notebook containing information on COVID-19 prevention was developed and distributed to 233 households (total of 466 copies). The information was also posted on the Facebook page of the Isabela Foundation, and advocacy was conducted by video (Vlogging).
Output 3. The skill and knowledge of target families against the disaster is enhanced.	<b>Indicator 3. Participation of 250 families</b> Output 3 was achieved. Five hundred ninety people participated in PFA sessions. For vegetable production, 260 households participated in the training and received seeds and farm equipment.

### 5.2.6 Strengthen Reintegration Program for Abusayyaf Returnees (SRPAR) in Sulu

Technical training on hollow block production was conducted in the barangay near the base camp of the 4th Marine Brigade with the participation of 20 Abu Sayyaf surrenders (**Photo 5 Upper**). A Marine Corps engineer served as an instructor in the six-day training program, and the Marine Corps purchased the blocks produced during the training for use in the camp. In addition, with the support of the Ministry of Public Order and Safety (MPOS) of the Government of Bangsamoro, a hut for concrete block production was constructed, and participants received a cash grant of PHP 10,000.



Technical training on furniture production was conducted for seven days in a barangay on a remote island (**Photo 5 Lower**). Participants were provided with basic equipment for furniture making, and with the support of the MPOS, all participants were given a cash award of PHP 10,000.



At the end of the training, LGU officials, the Marine Corps, and local leaders in the target area were invited to a presentation exhibiting the products produced during the training. In addition, training participants were received a food package and a small cash award.

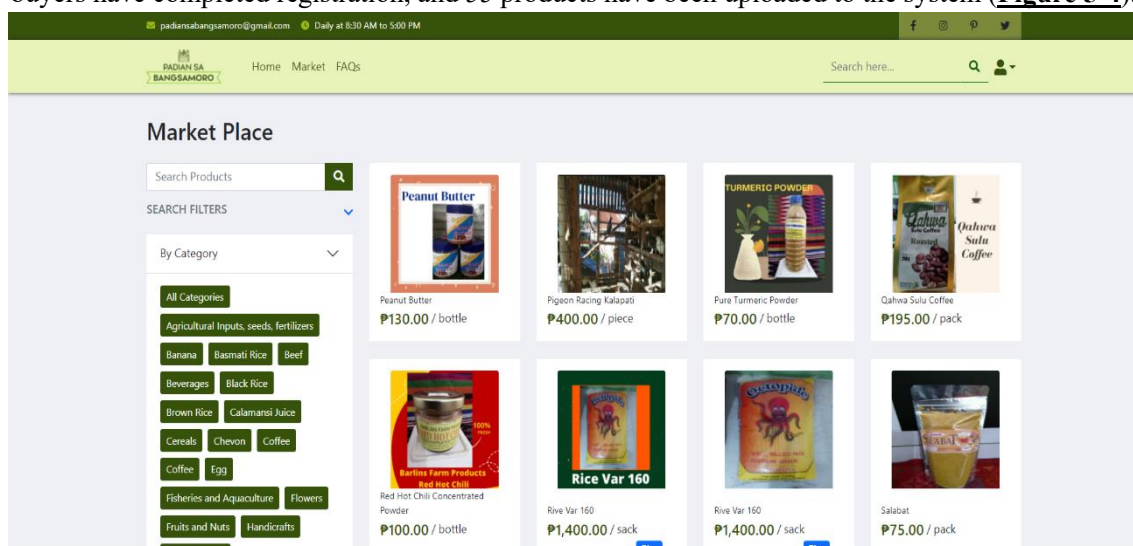
**Photo 5: Furniture Making**  
Credit GMWI

**Table 5-9: Achievements of Project Purpose and Outputs**

Project Purpose: Promoting the reintegration programs of Abu Sayyaf surrenders	<b>Indicator: Participation of 15% (40 members) of all Abu Sayyaf/wives surrenders</b> Results: The Project Purpose was achieved. Forty Abu Sayyaf surrenders participated in the training.
Output 1. Implementation of livelihood skill training	<b>Indicator 1-1. Implementation of livelihood skill training for 40 Abu Sayyaf Surrenders.</b> Results: Output 1 was achieved. Forty Abu Sayyaf surrenders completed skills training in hollow block making and furniture making.
Output 2. Promotion of products by Abu Sayyaf Surrenders/wives and their families	<b>Indicator 2-1. One day event is implemented one time.</b> Results: Output 2 was achieved. A product launching ceremony was held, in which representatives of local government unit, marines, and local leaders participated.

### 5.2.7 Development of E-Bangsamoro System

A web system was developed,<sup>21</sup> and promotional activities to increase registration were also conducted. As of December 2021, 76 farmers, fishermen, cooperatives/farmers' organizations, and 10 buyers have completed registration, and 55 products have been uploaded to the system (**Figure 5-4**).



**Figure 5-4: Market Place in E-Bangsamoro**

The website received 2,489 page views (PVs) in November (unique users: 561 for UU) and 871 in December (183 for UU). A seminar was held at MAFAR to share the results of the pilot project. The MAFAR minister (Dr. Mohammad S. Yacob) ordered the promotion of E-Bangsamoro registration via a letter sent to the relevant authorities such as the agriculture and fisheries officers in each province of Bangsamoro.

**Table 5-10: Achievements of Project Purpose and Outputs**

Project Purpose: Building business linkage among farmers, fisherfolk, farmer and fisherfolk cooperatives and associations (FFCAs), and buyers.	<b>Indicator: Use of the E-Bangsamoro system by 50 individual farmers fisherfolk, 20 FFCAs, and 10 buyers.</b> Results: The Project Purpose was achieved. As of December 2021, 76 farmers, fisherfolks, cooperatives/farmers' organizations and 10 buyers were registered, and 55 products have been introduced at the system.
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<sup>21</sup> <https://padiansabangsamoro.ph/p/web/index.html>

Output 1. Development of the E-Bangsamoro system	<b>Indicator 1. Developed Web Page</b> Output 1 was achieved. The E-Bangsamoro website ( <a href="https://padiansabangsamoro.ph/p/web/index.html">https://padiansabangsamoro.ph/p/web/index.html</a> ) was launched.
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### 5.3 Feedback from Project Implementers and Beneficiaries

To obtain insights on the achievements, challenges and lessons learned from the pilot project implementation, the Survey Team conducted interview with the participants/beneficiaries of the pilot projects. Results of the interview are summarized in **Table 5-11**.

**Table 5-11: Summary of Feedback**

<b>1) Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao</b>
<ul style="list-style-type: none"> <li>■ Interviewees: three participants including Christian, Moro and IP</li> <li>■ Summary of Response: One IP participant mentioned that the food festival was a valuable opportunity for social cohesion, as she previously had only a few opportunities to gather and communicate with the Muslim and Christian residents. All three interviewees said that they would like to continue activities that promote such dialogue between ethnic groups but stressed that integration with activities that would lead to the further improvement of livelihoods, such as the expansion of community gardening and support for young people's entrepreneurship, would be more beneficial.</li> </ul>
<b>2) Engagement of MILF Ex-Combatants on the production and promotion of low cost resilient sanitation marketing options and disaster risk mitigation in flood prone municipalities of Pagalungan, Datu Montawal Datu Piang, and Datu Salibu, Province of Maguindanao</b>
<ul style="list-style-type: none"> <li>■ Interviewees: ex-MILF combatants (4 persons) and project officer of TFDCC</li> <li>■ Summary of Response: All four ex-combatants responded that the technical training was effective at improving their livelihood. In particular, a carpenter's skill is regarded as very useful, as it can be used both for improving one's livelihood and in day-to-day life. It was confirmed that some of the participants taught other former combatants the techniques/skills they learned during the training, while others considered starting a business using the skills they acquired in the training. Participants considering starting a business commented that it would have been more effective if they had been provided with the necessary funds and equipment to become entrepreneurs. In addition, ex-combatants asked for further support to improve their livelihood, including agricultural training, agricultural equipment (seed, fertilizer, agricultural equipment, etc.), business training (in finance, marketing, etc.), and funds for expanding agricultural production. The TFDCC pointed out two important considerations when conducting technical training for ex-combatants: 1) Many decommissioned combatants are elderly people, and 2) many ex-combatants live in remote areas where telephone service is unavailable, making it difficult to contact them. The TFDCC recommended that the families and relatives of the ex-combatants be selected as participants. Additionally, as it is difficult to contact those ex-combatants who reside in remote areas, it is necessary to notify such persons of the activity schedule in advance. He also pointed out that, when planning the kind of technical training to be provided, it is necessary to consider the market demand as well as the local availability of necessary materials, whether sufficient materials and equipment can be provided, and whether the content of the training programs is suitable for the ex-combatants' skillsets.</li> </ul>
<b>3) Mitigating COVID-19 transmission through inclusive response</b>
<ul style="list-style-type: none"> <li>■ Interviewees: Community Volunteers (4 persons)</li> <li>■ Summary of Response: All of them participated in training and advocacy activities and expressed immense appreciation for the effectiveness of the activities in terms of acquiring and disseminating knowledge about COVID-19 prevention. As all four belong to the BPAT, they continue to guide community members on social distancing, wearing masks, and vaccination as part of their regular patrol activities.</li> </ul>
<b>4) SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for COVID-19 in Kabacan, BARMM-SGA</b>
<ul style="list-style-type: none"> <li>■ Interviewees: PSS Service Assistants (three persons) and beneficiaries of PSS (three persons)</li> <li>■ Summary of Response: PSS service assistants commented that the provision of PSS was effective at</li> </ul>

reducing stress among community residents due to movement restrictions caused by the COVID-19 pandemic. Two of the three interviewees were barangay municipal staff (barangay nutritionists and barangay health workers), who indicated that they would continue to provide PSS as part of their work. Meanwhile, community residents who received PSS said that some techniques such as art therapy and game therapy could be practiced at home and could help reduce stress. On the other hand, since the duration of the PSS was limited to one day, it was pointed out that more continuous support would be necessary to help the participants deal with mental health issues.

**5) Strengthen Reintegration Program for Abu Sayyaf Returnees (SRPAR) in Sulu**

- Interviewees: Surrenders from Abu Sayyaf Groups (4 persons)
- Summary of Response: They mentioned that they had not previously been able to work openly due to their criminal record in connection with terrorist organizations and that they are all grateful for having been able to participate in the technical training, thanks in part to the Marine Corps. They also positively evaluated the content of the technical training; a hollow block production trainee mentioned that the Marine Corps buys one block for six pesos, which supplements his livelihood.

**6) Development of E-Bangsamoro System**

- Interviewees: Representatives of cooperatives/farmer organizations as well as buyers who are registered in E-Bangsamoro (eight persons in total)
- Summary of Response: A common challenge they raised was that poor Internet access was a hindrance to platform expansion. In addition, they pointed out that training and the preparation of manuals are necessary to facilitate the effective use of the system. They also mentioned that it would be more convenient to link popular e-commerce sites in the Philippines, such as Shopee and Lazada. It was also pointed out that it is necessary to add functions such as delivery method selection and an indication of the number of days for delivery. In general, expectations for E-Bangsamoro are high, it is hoped that the Bangsamoro government, particularly MAFAR, will continue to support E-Bangsamoro.

**5.4 Lessons Learned and Way Forward**

**Table 5-12** summarizes major lessons learned from the pilot projects.

**Table 5-12: Major Lessons Learned from the Pilot Projects**

<b>Strengthening Tri-People Solidarity on Social Cohesion (TPSSC) in the 7 Municipalities of Maguindanao</b>
Access to the target area was difficult because of movement restrictions against the background of COVID-19 and landslides due to the rainy season, and the activity was significantly delayed from the originally planned schedule. Eventually, the planned activities were almost completed, but the activities that promote social cohesion usually take time, so the concrete results of this pilot project are limited.
<b>Engagement of MILF Ex-Combatants on the production and promotion of low-cost resilient sanitation marketing options and disaster risk mitigation in flood prone municipalities of Pagalungan, Datu Montawal Datu Piang, and Datu Salibu, Province of Maguindanao</b>
When conducting technical training for ex-combatants, it is necessary to consider an approach to support ex-combatants on a family / relative basis, as many are elderly. In addition, since learning the technology alone does not directly lead to improvement of livelihood, it is necessary to consider follow-up support for utilizing the technology (funds for starting a business, linkage with the market, etc.). In this pilot project, while the goal was to build and sell toilet facilities and contribute to improving the livelihoods of ex-combatants, the selling price is about 18,000 to 26,000 yen, which is above the purchasing power of the poor communities. Thus, promoting toilet facilities requires financial support from local governments. It is crucial to select the training content through thoroughly analyzing the market needs in order to secure the sustainable livelihood of ex-combatants.
<b>Mitigating COVID-19 transmission through inclusive response</b>
By implementing activities in cooperation with the Barangay Peace Activity Team (BPAT) and the Rural Health Unit (RHU) of the local government, sustainability is somewhat ensured after the pilot project is completed. It was found out that the local organizations in Bangsamoro have relatively abundant experience in activities such as advocacy and goods distribution, so such activities can be implemented without major problems.



**SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for COVID-19 in Kabacan, BARM-SSGA**

The pilot project was implemented by the College of Health Sciences, University of South Mindanao, and they were able to complete it without major delay and problems. Thus, they can be considered as one of the reliable partners when interventions in health sector will be planned. In addition, this project targeted barangays who newly joined the Bangsamoro government, which are located in a remote area where external support has not reached so far. The rapid assessment conducted in this project will help to better understand the situation in the area, which can be used for future interventions.

**Family Disaster Resiliency**

As COVID-19 infection spread and lockdown or movement restrictions continued in Basilan, many beneficiaries pointed out that PFA and advocacy programs contributed to relieving their anxiety, tension, and fear. In the PFA session, participants highly evaluated the "self-care" method, which is the basis of mental health. In particular, many women commented that the self-care method was effective because they could not afford to take care of their own stress and anxiety during the COVID-19 pandemic given the social expectation that they should care for their family members first. At the same time, the social welfare staff of the LGU also received training on MHPSS/PFA so that such service provision could continue even after the completion of the pilot project. While the Philippine government has been promoting mental care during the COVID-19 pandemic, the experience of this pilot project may be helpful in promoting mental care in the Bangsamoro region.

**Strengthen Reintegration Program for Abu Sayyaf Returnees (SRPAR) in Sulu**

The pilot project involved community leaders, government agencies, municipalities, and the military from the planning stage and worked smoothly even in very sensitive contexts. It also worked with the existing Social Integration Program (LSIP), and followed up on technical training by providing cash grant in cooperation with MPOS. While the normalization process for MILF combatants is proceeding, support for defectors from terrorist organizations including Abu Sayyaf is also important for peacebuilding in Bangsamoro, and the experience of this project can be used.

**Development of E-Bangsamoro System**

In the pilot project, the system was tested mainly in limited areas of Maguindanao, but when expanding registration to E-Bangsamoro throughout Bangsamoro, large-scale public relations and training activities need to be implemented on the significance and usage of this platform. In the meantime, lack of access to the Internet, especially in rural areas, was a serious challenge.

E-Bangsamoro targets officially registered cooperatives and farmers organizations to ensure the credibility of products. However, farmers in the Bangsamoro region often do not have official qualifications or business permits, so that it is necessary to promote registration as a public organization in cooperation with government agencies such as the Cooperative Development Agency (CDA). Meanwhile, given such situation, an alternative method that can confirm the credibility of suppliers even if they are not registered as an official entity, may need to be considered for a while.

Some of the products listed in E-Bangsamoro did not have product certification, some had poor packaging quality, and some had poor quality photos. To utilize E-Bangsamoro more effectively, improvement on such aspects is also important.

Bangsamoro's agriculture faces multitude of challenges including limited technology (production, processing, farming), poor transportation/infrastructure, limited resources (funds, materials and equipment, etc.), and underdeveloped value chains. This platform can be expected to contribute to the strengthening of market linkage, which is one of the challenges of Bangsamoro's agriculture, but it will be more effective by combining with support for other aspects.

The following are some of the lessons learned and suggestions based on the pilot projects' results and experiences.

**Importance of Collaboration and Coordination with the Bangsamoro Government:**

Regarding selection and implementation, the MILG provided the survey team with strong support and coordinated with related ministries and agencies through focal points. The MILG also sent an official letter about the implementation of the pilot project to the selected implementing organizations, which was useful for each organization to coordinate with the concerned stakeholders in the implementation field. The implementing organizations coordinated with various ministries such as the

Ministry of Social Services and Development (MSSD), the Ministry of Public Order and Safety (MPOS), the Ministry of Agriculture, Fisheries and Agrarian Reform (MAFAR), and the Ministry of Indigenous People’s Affairs. The MAFAR provided particularly strong support for the E-Bangsamoro pilot project, including sending official letters promoting the platform’s utilization to officials in charge of agriculture/fisheries in the provinces within BARMM. In addition, in support of the rehabilitation of Abu Sayyaf surrenders, MPOS provided cash grants to those who had completed technical training. We believe that careful trust building at the central and field levels is integral for the smooth and effective implementation of activities.

**Importance of local networking:**

The seven organizations selected for the pilot project are all based in the Bangsamoro area, and they have strong network links with local leaders/stakeholders and abundant experience with and/or knowledge of working in the complex socio-cultural contexts in Bangsamoro. These local networks and knowledge stores seem to constitute one of the major factors in that most pilot projects were able to achieve the expected results in a limited period of time. In particular, involving various stakeholders in planning and implementing activities that target MILF and Abu Sayyaf ex-combatants is critical, given the complex and sensitive nature of such interventions. During the course of the pilot project, implementing organizations coordinated not only with the ministries and LGUs but also with other entities such as the Task Force for Decommissioned Combatants and their Communities (TFDCC), the Marine Corps, and the Barangay Peace Action Team (BPAT).

While only locally grounded organizations may materialize such coordination/cooperation with diverse local stakeholders, the survey team also identified the limitations of NGOs based in the Bangsamoro region. For example, there is much room for improvement in the quality of proposals and reporting. In particular, it was difficult for the survey team to monitor the progress of each pilot project and provide timely guidance, as their reporting was often insufficient or delayed. To address this challenge, the survey team developed an online monitoring system (**Figure 5-5**), so that we were able to check progress regularly and provide necessary guidance to the implementing organizations in most cases. Given the volatile security situation as well as the current COVID-19 pandemic in Bangsamoro, implementation of community development interventions in Bangsamoro increasingly depends on local organizations, which funding agencies have to monitor and supervise remotely. As such, while institutional capacity development of local NGOs/CSOs is necessary, we will continue to improve and promote the utilization of such a system to ensure the quality of community development interventions.

**Progress Summary of Pilot Activities**

🔗 If you want to check more detail information, please click on "Project Title".

**Activity 1 (Latest Update: 2022-01-06 17:52:55)**

<b>Activity Title:</b>	SGA (Sensitive, Grounded, and Appropriate) Health: Co-Designing Health Interventions for Covid-19
<b>Planned Period:</b>	September - December, 2021

☰ "Complete Date" or "Not yet completed"

Sub-A 1-1	Complete	Sub-A 1-2	Complete	Sub-A 1-3	Complete	Sub-A 1-4	Complete	Sub-A 2-1	Complete
Sub-A 2-2	Complete	Sub-A 2-3	Complete	Sub-A 3-1	Complete	Sub-A 3-2	Complete	Sub-A 3-3	Complete

**Recent Problem: Yes**

The tight schedules of the contracted personnel in IEC cause too many delays.

**Activity 2 (Latest Update: 2022-01-05 15:09:29)**

<b>Activity Title:</b>	Strengthen Reintegration Program for Abusayyaf Returnees (SRPAR)
<b>Planned Period:</b>	September - December, 2021

☰ "Complete Date" or "Not yet completed"

Sub-A 1-1	Complete	Sub-A 1-2	Complete	Sub-A 1-3	Complete	Sub-A 1-4	Complete	Sub-A 1-5	Not yet
Sub-A 2-1	Not yet								

**Recent Problem: No**

Internet challenges, availability of trainers, on going training of both hollow blocks and furniture making for the two batches and the graduation or the launching of product produce will be on December 10, 2021.

**Figure 5-5: Web Pilot-Project Monitoring Program**

### Support for Agriculture/Agribusiness in Bangsamoro

Agriculture is the core industry in Bangsamoro, and crop production, such as cassava, coconut, corn, rice, banana, coffee, palm oil, rubber, and abaca, accounts for about 70%, while the rest is fishery and livestock.

Most of the farmers in the Bangsamoro area are small-scale farmers who own fields of 3 hectares or less. Small-scale farmers in the area face many problems, including (1) low productivity, (2) low quality, (3) limited processing capacity and limited added value, (4) limited market access, (5) limited availability of agricultural input and equipment, (6) lack of technology transfer service, (7) inaccessibility of financial services, (8) underdeveloped irrigation facilities and infrastructure, and (9) weak farmers' organizations.

E-Bangsamoro, as implemented in this project, mainly contributed to the improvement of (4) above. In particular, the COVID-19 pandemic has had a serious impact on the distribution of agricultural products, prompting the Ministry of Agriculture, Forestry and Fisheries and Agrarian Reform (MAFAR) to implement the currently ongoing emergency agricultural support program (Local Exchange and Network of Goods in any Kind of Emergency: MAFARLENGKE), in which E-Bangsamoro is included. The MAFAR minister recognized the platform's potential and extended his support to include sending a notification to the agricultural staff of each province regarding active utilization of E-Bangsamoro.

There are several similar agricultural platforms operating in Japan. Among them, Agreach is very similar to E-Bangsamoro (**Box 1**). The platform allows farmers to establish direct contact with buyers through bulletin boards, and it also provides the latest market data for major agricultural products, based on which farmers can set prices for their products. Farmers in Bangsamoro usually lack bargaining power with buyers, as they have limited market information. As such, E-Bangsamoro can refer to some functions of Agreach for further improvement.

#### Box 1: Agreach

"Agreach" is a platform that contains information on producers, restaurants, retailers, and wholesaler markets. Producers can register for free, set prices for agricultural products themselves, identify new customers, while buyers can find new suppliers, and agricultural products that meet their needs. It also helps wholesalers nationwide to disseminate their information and connect with producers and buyers. As of January 2022, the number of registered users is 1086.

Source: Agreach website (<https://agreach.jp/>)



#### 掲載状況データ

このページの掲載状況は以下の通りです。

2022/01/12

品名	産地	単位	数量	販売	入荷	数量	数量	数量	数量	数量	数量
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0
トマト	福岡	kg	5	100	0	100	0	0	0	0	0

#### バイヤー掲載

このページでは、バイヤーの登録状況を確認することができます。

登録状況を確認するにはログインが必要です。

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#### Market Data and Bulletin Board

Farmer's Direct Sales Place (Nouka no Chokubaijo) is another similar platform, but the major difference is that it has its own collection center and direct sales office (Box 2). As mentioned above, the problem of transporting agricultural products has become a serious bottleneck for agricultural promotion in the Bangsamoro region, and in particular, it is a major issue for securing profits on the supplier side. As such, E-Bangsamoro can refer to this platform for further improvement.

**Box 2: Nouka no Chokubaijo**

In Japan, about 70% of domestic vegetables and fruits are purchased and consumed in supermarkets. The "farmer's direct sales center" is a platform that delivers and sells agricultural products collected at collection bases (94 locations) nationwide to in-shops (farmer's direct sales centers) set up in supermarkets in urban areas. Producers can determine selling prices. A registration fee of 3000 yen, an annual membership fee of 2000 yen, and a handling fee (about 35% to 40% of the sales amount) at the registered shipping site will be charged.

Source: Nouka no Chokubaijo website  
(<https://nousouken.co.jp/service/farmers-direct-sales-office/>)



## Chapter 6 Suggestions on the Fund Mobilization Mechanism and Options

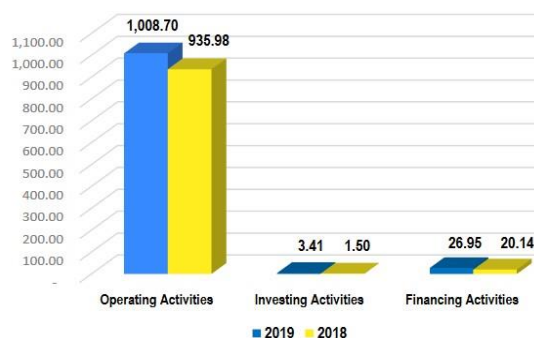
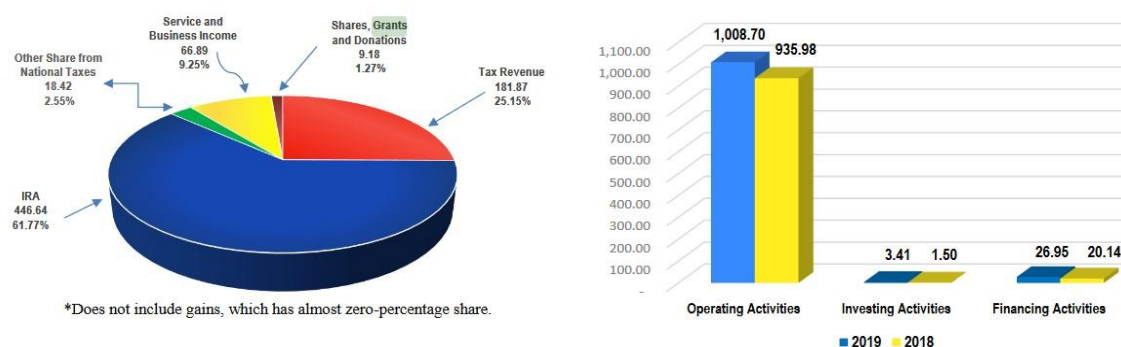
In this chapter, the status and challenges of the local government in the Philippines and the recommended options on the fund mobilization for the BARMM are presented. The information in this chapter is a summary of the relevant parts of the "Executive Summary on Fund Mobilization" (hereinafter referred to as the "Fund Mobilization Report") for this project, which was submitted separately.

### 6.1 Current Status and Challenges of Local Government Fund Mobilization in the Philippines

#### (1) LGU Revenue

The total revenue from current operations amounted to P723.02 billion, generated from tax revenue, internal revenue collections or internal revenue allotment (IRA), national taxes, service and business income, shares, grants and donations, and gains. The IRA remains the major source of revenue for the LGUs for CY 2019, with revenue totaling P446.64 billion or 61.77% of the total current operating revenue. **Figure 6-1** below shows the current composition of the total revenue.

Looking at the cash flows in **Figure 6-2**, out of the aggregate cash inflows of P1.039 trillion for CY 2019, P1.009 trillion (97%) was from operating activities, P3.41 billion (0.3%) was from investing activities, and P26.95 billion (3%) was from financing activities (cash inflow from municipal bonds).



Source: CY2019 Annual Financial Report (both right and left)

**Figure 6-1 Revenue breakdown for 2019**

**Figure 6-2: Comparative Cash Inflows CYs 2019 and 2018 (in billion PHP)**

#### (2) LGU Revenue Classification

The local governments' revenue categories are as follows. The orange area in the table is the budget the central government provided as stipulated in the Bangsamoro Basic Law and does not apply to LGUs other than BARMM. Only a limited number of LGUs issue local government bonds. The sources of bonds are the LBP and DBP.

**Table: 6-1 Revenue Classification of LGUs**

	Autonomous Revenue Source				Dependent Revenue Sources				
General Revenue Source	Local Tax	Facility rental/ administrative fee	Carry-forward from special fund	Others	Block Grant		IRA (Tax) Distribution		Local Bond (Debt)
Specific Revenue Source		Facility rental/ administrative fee				Special Development Tax		CODEF***	

\*\*General Revenue Source: Revenues that has no defined use (e.g., city taxes, IRAs)

\*\*Specific Revenue Source : Revenues for which the use is specified (e.g., central government grants for which the use is specified)

\*\*\*CODEF (Cost of Devolved Functions)

Source: JICA Survey team

The portion of funds that can be mobilized at the discretion of the local government is in the realm of the general revenue source; since the national government determines IRA allocation (dependent revenue source), the LGU cannot argue about its excess.

The two types of funds that LGUs can raise and use at their own discretion (i.e., general revenue source) are local taxes and local bonds, except for the orange area in the figure. Of these, financing through local government bonds is still underdeveloped in the Philippines (i.e., there are no investors due to underdeveloped rating agencies, etc.), and implementation in Bangsamoro is still considered difficult. At this stage, most LGUs in the Philippines are financed by IRA. In other words, the issue of mobilizing funds for LGUs in the Philippines comes down to the question of how to combine local taxes and local bonds.

Local government bonds are supposed to be a self-financing source under the Local Government Code, but they are classified as a dependent revenue source because they are subject to approval by the national government. In this case, however, the central government is strongly pushing local governments to secure their own financial resources by issuing local government bonds,<sup>22</sup> so this report will focus on the mobilization of funds through local government bonds.

Bangsamoro's revenue from the central government is stipulated in the Bangsamoro Organic Law. The table below summarizes the main revenue-related provisions. Block grants and the allocation of taxes, fees, and charges are general revenue sources. The SDF is a special revenue source, but the local government is currently struggling to coordinate with the central government, and as of the end of 2021, only a quarter of the amount receivable (10 billion pesos or 2.5 billion pesos) had been transferred.

<sup>22</sup> The more stable the mobilization of funds through municipal bonds, the more the IRA distribution can be reduced.

**Table 6-2: Key Frameworks for Fiscal Mobilization of the BARMM in the Bangsamoro Basic Law (RA11054)**

Article	Section	Descriptions
VII	28	<ul style="list-style-type: none"> <li>Establish the Bangsamoro Budget Office, which will serve as the Ministry of Finance, Budget and Management.</li> </ul>
XII	6	<ul style="list-style-type: none"> <li>It describes the sources of revenue to be appropriated, including taxes, fees, charges, and the annual block grant from the central government. Currently included in the 2020 and 2021 budgets are block grants, income tax distribution in the BARMM, and collection of regionally imposed taxes.</li> </ul>
	10	<ul style="list-style-type: none"> <li><b>The share of the BARMM in taxes, fees, and charges</b> shall be 25% of the intra-BARMM collections to the national government and 75% to the Bangsamoro government including the share of the component LGUs. In addition, for a period of ten (10) years from the effectivity of the said law, the 25% share of the national government shall be attributed to the Bangsamoro government, subject to certification of the actual amount collected by the concerned revenue collection agency and remittance to the BIR.</li> </ul>
	12-18	<ul style="list-style-type: none"> <li><b>The block grant</b> will automatically be earmarked as the BARMM's share in the collection of the BIR's national internal revenue tax and the BOC's collection.</li> </ul>
	14	<ul style="list-style-type: none"> <li><b>Special Development Fund (P5Billion/year)</b>, earmarked for 10 years from the ratification of the BOL for the reconstruction, rehabilitation, and development of conflict-affected communities in the BARMM. The disbursement of funds is contingent upon the submission of the Bangsamoro Development Plan (BDP) adopted by the Bangsamoro government, and its use is subject to the BDP as provided in Article 13, Section 6 of the BOL.</li> </ul>
	19	<ul style="list-style-type: none"> <li>Require the National Assembly to enact an annual appropriation law that allocates block grants to various agencies and programs.</li> </ul>

Source: Prepared by the JICA research team

### (3) Local Government Bonds

In October 2020, the central government's finance secretary directed local governments to borrow to the maximum extent possible in order to finance programs and projects and stimulate the local economy.<sup>23</sup> In the midst of the COVID-19 pandemic, it is natural for the DOF to insist that LGUs should take the lead in mobilizing funds according to their own local conditions. According to official data as of 2019, the majority of the local units still had 80% available borrowing capacity, and 63% of cities and municipalities did not have existing debt.<sup>24</sup>

When the need for financing arises, LGUs in the Philippines generally take out loans provided by development banks such as the Land Bank (LBP) and the Development Bank of the Philippines (DBP). In contrast, financing through the issuance of municipal bonds is not widespread in most LGUs in the Philippines, except for a few mega-cities such as Cebu City. LGUs are reluctant to issue municipal bonds because (1) their credit ratings are unclear, making it difficult for them to attract investors, and (2) LGUs themselves lack the capacity to issue, utilize, and redeem municipal bonds.

Contrarily, the legal framework for LGU-issued municipal bonds has improved considerably in recent years, and BARMM can now issue such bonds.<sup>25</sup> Regarding the establishment and operation of a rating agency within the local government bond framework, preparations are underway, with DBP taking the lead in 2021.<sup>26</sup>

<sup>23</sup> <https://www.bworldonline.com/lgus-urged-to-maximize-borrowing-capacity/>

<sup>24</sup> Business World, "LGUs urged to maximize borrowing capacity," October 29, 2020.

<sup>25</sup> The Bangsamoro Basic Law, Article 12, Section 24 says that the Bangsamoro government is authorized to issue bonds, debentures, securities, collateral, notes, obligations, and other debt instruments or documents, so that the BARMM has the authority to issue municipal bonds.

<sup>26</sup> The Development Bank of the Philippines (DBP) announced in mid-May 2021 that a credit rating system for local government units (LGUs) will be established to mainstream bond issuance as an additional source of financing for regional development projects. In cooperation with the Department of Finance, provincial regulators, and multilateral lending agencies, DBP plans to launch a rating agency for LGUs similar to the rating agencies by 2022.

While local governments in the Philippines rely heavily on IRA when it comes to financing infrastructure and social development projects, DBP's experience working with LGUs to date can be expected to help foster the LGU bond market and develop it as a sustainable financing vehicle. In other words, a credit rating system would allow LGUs to diversify their funding sources according to their needs, profitability, and financial maturity. According to DBP, the study on how to operationalize the proposed credit rating system is in its final stages.

However, very few of the LGUs under the central government have issued local bonds. In addition, many investors are still reluctant to purchase local government bonds because of creditworthiness, inclusive of the newly established rating agencies.

Furthermore, even with an operational rating agency, BARMM's rating must be said to be subordinated, and it will still take some time before it can raise funds by issuing bonds.

#### (4) Local Taxes

Furthermore, the key to increasing local taxes (see table below) is to increase real estate-related taxes by establishing industries in the region and raising the assessed value of land.

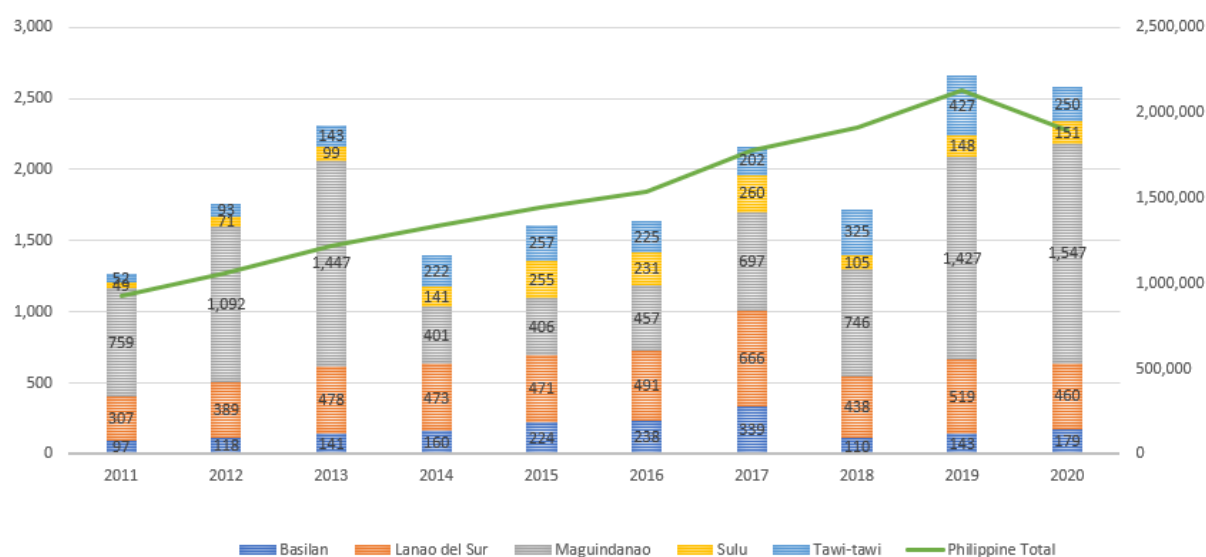
**Table 6-3: Tax Classification in the Philippines**

National Tax		Local Tax
Collector	Bureau of Internal Revenue (BIR)	LGU
Taxes	A. Income Tax B. Estate and donor's Taxes C. Value-added Tax D. Other percentage Taxes E. Excise Taxes F. Documentary stamp taxes G. Such other taxes as are or hereafter may be imposed and collected by the Bureau of Internal Revenue.	A. Real Property a. Basic Real Property Tax b. Special Education Fund Tax B. Other Local Tax a. Provincial Tax b. Municipal Tax c. City Tax d. Barangay Tax e. Community tax

Source: BIR

Tax revenue from the Bangsamoro provinces has been on a gradual upward trend since 2014, notwithstanding a drop in 2018. The tax revenue from Maguindanao is overwhelmingly the largest, accounting for about 60% of the total tax revenue from the BARMM in 2020. There has been little increase in tax revenue from Basilan and Sulu. A downward trend was noted in 2020 due to COVID-19-induced turmoil, but the drop is less than the national average.





Source: BIR

**Figure 6-3: Tax collection in the Bangsamoro by province (Million PHP)**

As mentioned above, the trends in local tax collection can be seen as a mirror that reflects the development of industries in the region. From this perspective, it can be understood that except for Maguindanao, the rest of the BARMM has not seen significant industrial development since 2014.

## 6.2 Recommended options for mobilizing private sector funds by BARMM

It is said that only about 70% of the source funds have been budgeted, and most of which are personnel costs for government employees. In other words, the blood flow (flow of money) is clogged, and there is no blood flowing to the limbs. Therefore, this study does not propose a new funding method specifically for the BARMM government; rather, it suggests a broader view of the funding cycle from the perspective of businesses and communities.

The “Fund Mobilization Report”, therefore, focuses on three types of funds: crowdfunding (CF), infrastructure funds, and social impact bonds (SIBs). In the following sections, the JICA survey team will outline the potential for mobilizing funds from these sources and discuss ways in which the BARMM government can indirectly support their development in the region. For details, please refer to the “Fund Mobilization Report.”

### (1) Possibility of developing crowdfunding

According to information on CF in the Philippines, provided by Statista,<sup>27</sup> the value of transactions in the country’s cloud investing sector is expected to reach USD 0.7 million in 2021, with a CAGR of 11.24%. The value is expected to reach USD 1.1 million in 2025.<sup>28</sup> In 2021, the average funding per cloud investing campaign was still small at USD 71,571.

CF is composed of three players; (1) project initiators, (2) supporters, and (3) an online platform that connects project initiators and supporters. The Philippine authorities are beginning to recognize various forms of CF models, including donation-, reward-, lending-, and equity investment-based models.

**Table 6-4: Types of Crowdfunding Models**

<sup>27</sup> <https://www.statista.com/outlook/dmo/fintech/alternative-financing/crowdinvesting/philippines?currency=inr>

<sup>28</sup> Globally, China has the highest transaction value (USD 1,341 million in 2021).

Type of Crowd Funding	Type of Contribution	Portal (Example)	Pros of the CF category	Motivation of Founder	Risk/Reward Mechanism
Donation based	Donation	Gava AirFunding JustGiving	Intangible paybacks	Social and intrinsic motivation	No Risk
Reward based	Pre purchase	Kickstarter Indiegogo Spark Project	Rewards and also intangible paybacks	Combination of social and intrinsic motivation plus desire for reward	Low risk (primarily fulfilment and fraud risk)
Lending based	Loan	CROPITEL Kiva Funding Circle	Repayment of loan with interest, and some socially motivated lenders- interest free	Combination of social, fundamental and financial motivation	Provides capital formation opportunity for cash flow positive businesses
Equity / Investment based	Investment	Crowdcube Gate impact Offerboard INVESTREE	Return on investment, if business do well, also rewards or intangible paybacks offered many times	Combination of intrinsic, social and monetary motivation	<ul style="list-style-type: none"> <li>• Potential to share in the profitability of the venture</li> <li>• Significant potential for financial gain</li> <li>• May Attract relatively large number of investors.</li> </ul>

Source: JICA Survey team

Although CF in the Philippines lagged behind the rest of the world in terms of its legislation, which was only enacted in 2019, it has made early progress in terms of its use, especially by American CF.<sup>29</sup> In terms of utilization, the platforms simply gather project initiators with themes that match the actual situation in the country. Project initiators tend to choose those that offer better fees and other conditions, while supporters tend to choose those that bring greater physical and social rewards. Supporters rarely care (as there is no need to care) about the platform's country of origin, so it is not too difficult for platform operators to expand horizontally across countries, as long as they gain name recognition.

In other words, there are a considerable number of CFs around the world that target Philippine projects, and project initiators can initiate and support projects by targeting supporters around the globe without worrying about the platform's country of origin.

In the Philippines, the legal framework for online finance has developed at a remarkable pace in recent years, and the related infrastructure has been developed as well. Although the general concept of CF is said to be compatible with the concept of Islamic finance (see the "Fund Mobilization Report"), this compatibility is not well known to the general public (supporters). Therefore, it is necessary for the central government and the BARMM Government to be fully convinced of the suitability of this approach and disseminate this information to supporters. The BARMM Government will also need to attract Islamic finance CF platforms from Malaysia and Indonesia in order to establish

<sup>29</sup> As for CFs with a long history in the Philippines, the US-based "GoGetFunding," "Kickstarter," and "INDIEGOGO." The number of CF platforms in the Philippines has rapidly increased since 2015.

themselves in the Bangsamoro.<sup>30</sup>

With regard to CF, the Philippines has been developing legislation in recent years. Even though there are some restrictions on the amount of and eligibility for funding, the following advantages are offered:

- a. It improves access to finance for individuals and micro-enterprises.
- b. It allows funds to reach the lower strata of society directly, without the intervention of politicians.
- c. It expands investment options for investors.

Although Muslims-only Islamic crowd funding has not yet been launched, increased usage in the BARMM is predicted due to the ability to create projects that transcend national borders.

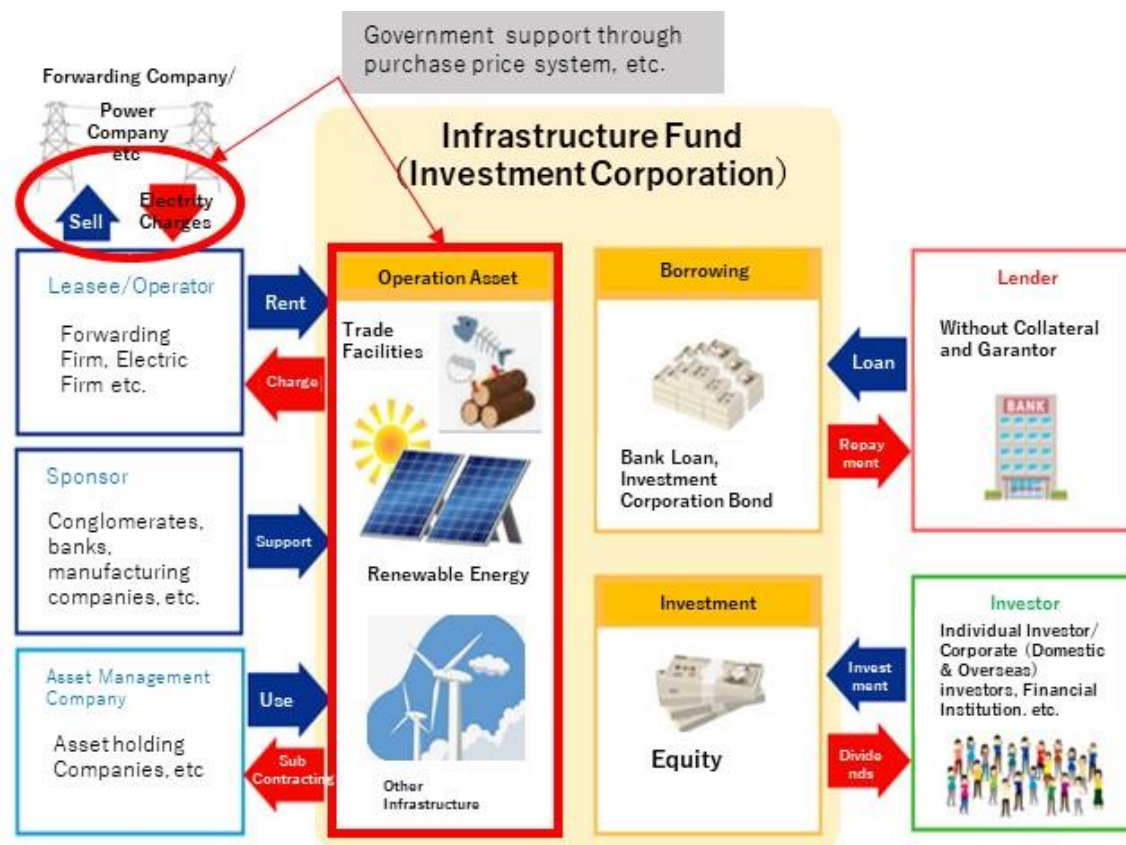
## **(2) Possibility of developing infrastructure funds**

Owing to the Tax Reform Acceleration and Inclusion (TRAIN) Act (RA No. 10963), which took effect in January 2018, together with the implementation of SEC Memorandum Circular (MC) No. 1-2020 (January 20, 2020) and the amended IRR of RA No. 9586 in January 2020, the regulations on small-lot fundraising for REITs in the real estate development sector, including infrastructure development, have been significantly relaxed, and Philippine infrastructure funds have finally begun to fundraise.

The new rules for REITs are opening new avenues of financing for companies other than traditional real estate developers.

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<sup>30</sup> According to Biancone, P. P., & Secinaro, S.34, CF and Islamic finance have the same concept and are close, especially when it comes to investors. Both are still about investing in what is expected to be high returns and being fair in the distribution of the results.



Source: JICA Survey team

**Figure 6-4: Infrastructure Fund System**

As of January 2021, there are currently five REITs listed in the Philippines.

The five listed REITs are as follows: AREIT, Inc.; DDMP REIT, Inc.; Filinvest REIT Corp (FILREIT); RL Commercial REIT, Inc. (RCR); and MREIT. The portfolios of listed REITs are mainly concentrated in the office sector. Although not yet listed (expected early 2022), the SEC has approved its first energy REIT, Citicore Energy REIT Corp. This REIT has one target property, a solar power plant in Cotabato City.

The following summarizes the trends of three major groups related to infrastructure construction in the Philippines, compiled from a search of leading Philippine newspapers in March 2020.

#### a) First Pacific Group

First Pacific's three major units in the Philippines are Metro Pacific Investments (MPIC), Philex Mining Corp., and PLDT, Inc.<sup>31</sup>

Both MPIC and Megawide Construction Corp., a division of MPIC,<sup>32</sup> are considering the possibility of issuing an infrastructure REIT.

#### b) Megawide Group

Megawide, which manages assets such as the Mactan-Cebu International Airport and the

<sup>31</sup> Two major Philippine media outlets, Philippine Star and Business World, are under the umbrella of Hastings Holdings, Inc., a unit of MediaQuest Holdings, Inc., a subsidiary of the fund managed by PLDT.

<sup>32</sup> Metro Pacific Investments (MPIC) operates toll roads such as the North Luzon Expressway (NLEX), Subic-Clark-Tarlac Expressway (SCTEX), Manila-Cavite Expressway (CAVITEX), and is also building the Cavite-Laguna Expressway (CALAX), Cebu-Cordova Expressway (CCLEX), and the NLEX-South Luzon Expressway Connector Road.

Parañaque Integrated Terminal Exchange, is preparing its initial public offering, the largest among REIT companies. They are announcing that REITs are attractive financial instruments<sup>33</sup> because they are tax efficient.<sup>34</sup>

Furthermore, its sister company Citicore Power Inc. is listing the country's first solar-based energy REIT. The solar power plants include 6.2 megawatts (MW) in Cotabato, 7.5 MW in Tarlac, 8.8 MW also in Tarlac, 18 MW in Bataan, 22.3 MW in Clark, 25 MW in Negros Occidental, and 60 MW in Cebu.

### c) Ayala Group

With the SEC issuing new REIT guidelines in January 2020, AREIT, a subsidiary of Ayala Land, announced its first listing in August 2020, offering shares in three office buildings in Makati City, raising up to 1.36 billion Philippine pesos (PHP). Furthermore, the Philippine Infrastructure Equity Index Fund, an exchange traded fund (ETF)-style unit investment trust fund managed by the Ayala-affiliated Bank of the Philippine Islands asset management company, has been created to fund infrastructure investments.

Other real estate developers interested in REITs include DoubleDragon Properties Corp, Megaworld Corp, Robinsons Land Corp, and Century Properties Group Inc.

In terms of infrastructure funds, legal developments in the Philippines have progressed rapidly in recent years, and companies that are strong in infrastructure development have been listing infrastructure funds at a rapid pace since 2020. However, there are still many REITs targeting offices and commercial facilities (because they are backed by demand for BPO) and few funds targeting infrastructure (electricity). As evidenced by Japan's infrastructure funds in the field of solar power generation,<sup>35</sup> if the BARMM can support high and stable prices for infrastructure operating income like the feed-in tariff (FIT) system, infrastructure funds will be revitalized, and infrastructure investment in the Bangsamoro will increase.<sup>36</sup>

### **(3) Social Impact Bond (SIB)<sup>37</sup>**

The SIB is an innovation in terms of social services that are contracted, financed, and delivered. It has the potential to dramatically improve social outcomes through the involvement of private capital. Unlike traditional government contracts, where the government must provide funds upfront, with an SIB, private investors provide the necessary capital. In a typical SIB contract, the government reimburses the investor, adding considerable return on the investment only if the business achieves the agreed-upon results (see the "Fund Mobilization Report").

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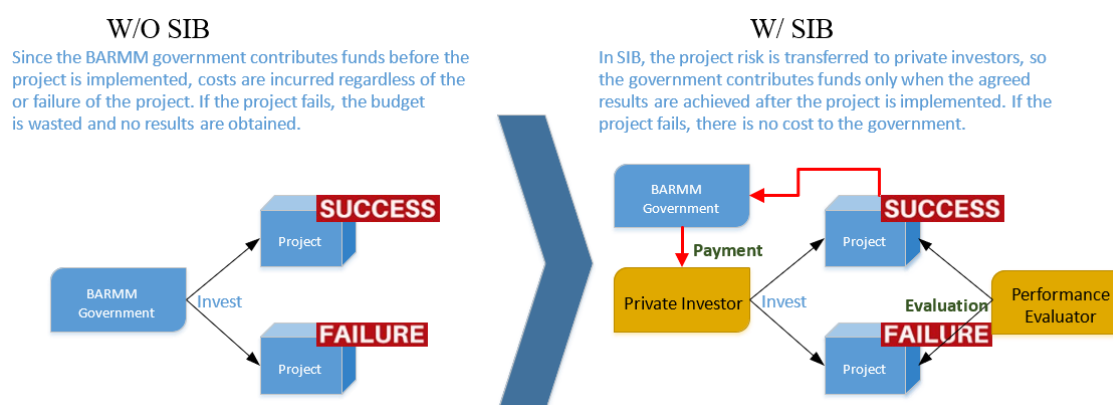
<sup>33</sup> The portfolio of the most recently listed MREIT consists of 10 office, retail and hotel properties with a total leasable area of 224,000 square meters and includes development in three of the most popular premier townships, Eastwood City, McKinley Hill and Iloilo Business Park. Eastwood City, McKinley Hill and Iloilo Business Park, three of the most popular premier township developments.

<sup>34</sup> Compared to regular listed companies, companies participating in a REIT are exempt from VAT when transferring properties to a REIT vehicle. This rule was not in place when the REIT Act was enacted in 2009 and was one of the reasons why investors did not offer REITs for the past decade.

<sup>35</sup> All seven of Japan's listed infrastructure funds are solar power REITs.

<sup>36</sup> As mentioned above, one of the reasons why many infrastructure funds target office buildings as REITs is that their income is stable, supported by BPO demand.

<sup>37</sup> In the UK, there is a distinction between social impact bonds (SIBs) and development impact bonds (DIBs). In the former, the government reimburses investors, while in the latter, third parties, such as donor agencies or foundations, fund the outcomes. In both cases, the risk shifts from the government to the private sector or a third party. Impact bonds are still few in number and small in scale. According to a Brookings Institution study, the global market for impact bonds remains stagnant at just under USD 400 million.



Source: JICA Survey team

**Figure 6-5: Conceptual diagram of the SIB mechanism**

For example, instead of paying organizations that provide health care services based on the number of people who use their programs, the contracts are designed to ensure that the organizations are repaid only if the resulting health outcomes are improved. While SIB investors receive their return on investment from the government, they also take on financial risk, as they stand to lose a portion of their investment if social outcomes do not improve. The rate of return depends on how much risk the investor is willing to assume; the higher the guarantee received for the investment, the lower the rate of return. An independent performance evaluator verifies the results via rigorous analysis, such as a randomized controlled trial.

The UNDP has entered this field, along with the World Bank, USAID, and others. The tool is still relatively new and is not well understood in developing countries. The UNDP tends to focus on examining and financing the early stages of SIB feasibility studies.<sup>38</sup>

From feasibility studies (FS) to design and due diligence, the initiation and completion of an SIB project can take a considerable amount of time. This can be a significant investment, especially when it is unclear whether the project will ultimately materialize. In developing countries, investors may not understand the local market and may be concerned about economic and political instability, which will likely increase the cost.

SIBs may be constrained by legal issues, such as donors' ability to use results-based contracting modalities. On the impact side, there is also the question of the extent to which positive outcomes or failures can be attributed to impact bonds.<sup>39</sup>

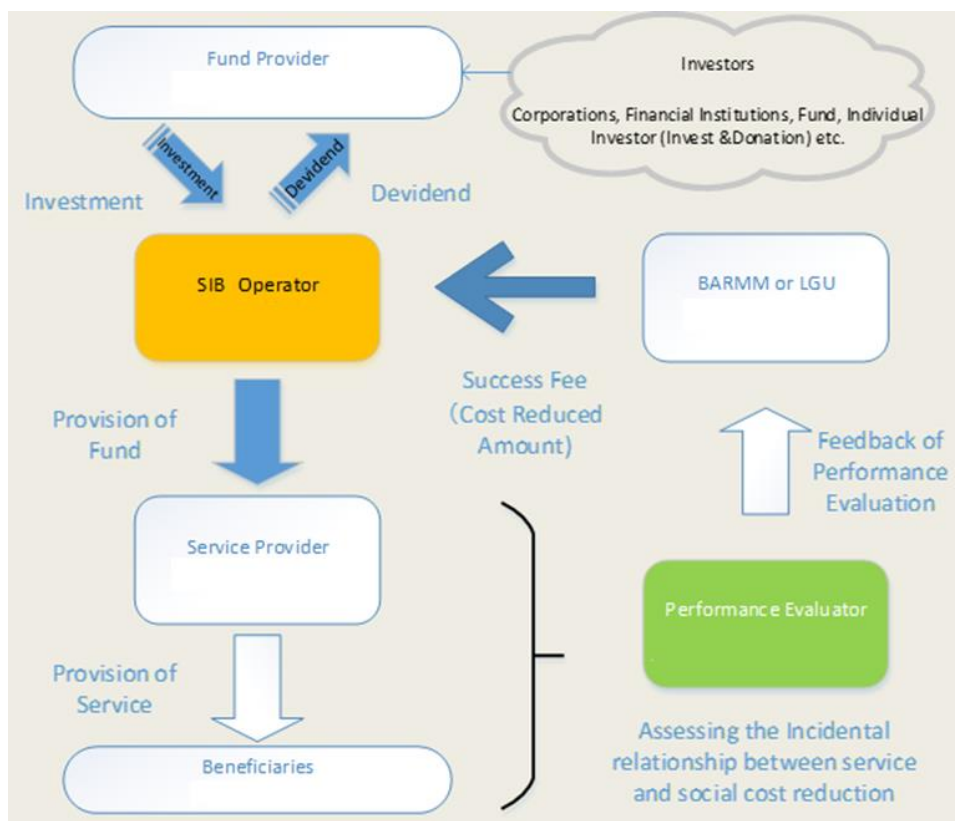
Therefore, according to the WHO, most developing countries need technical assistance for project preparation.<sup>40</sup>

Successful SIBs provide sustainable/multi-year funding to effective NPOs, increase/improve social services for disadvantaged individuals/communities, build accountability into government-sponsored programs, improve outcomes for overburdened government social service agencies, create social and financial returns for investors, and more. SIBs are designed to deliver valuable benefits to all participants.

<sup>38</sup> These include impact bonds to reduce rhino poaching in Southern Africa, to help tobacco farmers in Zambia transition to alternative plantations and other livelihoods, and to help dairy farmers in rural Armenia improve their productivity. The UN is also developing impact bonds to help stop cholera in Haiti. Many are still in the design phase and will only be partially realized.

<sup>39</sup> Impact bonds also require timely, quality, and available data, or a means to collect data in a cost-effective manner. Furthermore, strong local service providers are needed, and programs should be adjusted if delivery is weak.

<sup>40</sup> <https://www.who-seajph.org/article.asp?issn=2224-3151;year=2014;volume=3;issue=3;page=219;epage=225;aulast=Belinsky>



Source: JICA Survey team based on materials of METI (Japan)

**Figure 6-6: General Scheme of SIB**

The SIB program is usually developed with the support of an intermediary organization (an SIB operator). The SIB operator's role is as follows:

- i. Build relationships between governments, service providers, investors, and an independent performance evaluator.
- ii. Bid for and receive government-issued pay-for-success fee-type contracts.
- iii. Identify and educate investors, government officials, and service providers about the pay-for-success contracting program.
- iv. Evaluate the applicability of the service provider's services to the pay-for-success contracting program.
- v. Negotiate and establish relationships with service providers to apply for government-issued pay-for-success fee contracts.

The operator<sup>41</sup> will be responsible for the design and implementation of the SIB funding model. It will work with various stakeholders to advise on key design choices, including defining social outcomes, setting reasonable targets, and developing appropriate indicators to assess impact. It also brokers stakeholder engagement and contract signing processes, designs funding models, and brokers upfront financing from investors to service providers.

The service provider is an organization that operates a social service program through a pay-for-success fee contract. After receiving financing from investors, service providers work with

<sup>41</sup> Other well-known intermediary organizations include consulting firms in less developed countries such as Instiglio, which has been involved in many UNDP projects (<https://www.instiglio.org/>).

intermediaries and governments to prepare and deliver reports on program outcomes. The service provider can be either a non- or for-profit organization, although most service providers to date under pay-for-success contracts have been non-profit organizations. The service provider may be a consortium of different non-profit organizations that collectively provide a set of services through a pay-for-success fee contract.

The performance evaluator is an organization that is competent at evaluating social programs and is independent from the government, service provider(s), and the intermediary in terms of its interests and affiliations.

The government is one or several government agencies involved in identifying the right intervention as well as the design and negotiation of the pay-for-success contract around that intervention. The government is also responsible for disbursing payment to the intermediary in the event that its services achieve the predetermined outcomes.

Investors may be individuals, foundations, or financial institutions. These investors make project-specific investments in a special-purpose vehicle created for such investment. They receive from this vehicle their investment principal plus predetermined interest, often contingent upon the achievement of certain outcome goals. For some investors, the predetermined interest is zero, and their investment counts as a donation. For other investors, the predetermined interest is greater than zero, and their investment yields returns. The rate of return is contingent on the level of capital guarantee negotiated between the investor and the outcome payer. A higher guarantee mitigates the risk assumed by the investor but lowers the expected rate of return. Given that the contract only pays for success, in the event of non-performance, investors may lose part of their investment.

The background to the application of this mechanism in the BARMM is the current situation in which administrative services cannot be easily activated due to lack of human resources, there is no effective means of utilizing the private sector, and administrative budgets that could not be executed are accumulated in the form of contingencies.

#### **(4) BARMM's support measures for the private sector**

The following four options are recommended for mobilizing private sector funds in the BARMM (for details, please refer to the "Fund Mobilization Report"). However, the four proposed support measures have not yet been demonstrated as the project in the BARMM is still being explored under the jurisdiction of the central government.

To secure Japan's assistance, it is important to further explore each of these in depth and formulate a protocol for assistance:

1. Support for establishing CF based on Islamic finance
2. Supporting CF with a global network
3. Support for centrally listed companies in issuing infrastructure funds (especially the logistics sector)
4. Administrative Services Using Social Impact Bonds (SIB)



## Chapter 7 Scope of Future Cooperation in the BARMM

In this chapter, future cooperative projects are presented using the information, experiences, and lessons obtained through the survey. Although it is hard to say that all pilot projects that have become an important source of information for the chapter were completed successfully, it is necessary to consider some constraints; the implementation period was only three (3) months, and a large-scale natural disaster (typhoon) hit during that time. The main purpose was to collect practical information, and the trial achieved sufficient results to facilitate the examination of future directions.

Since the entire survey process was carried out remotely, apparently trivial but important findings might have been overlooked that could have been obtained by physically visiting the site. The survey team tried to supplement this gap in various ways. During implementation of the trial project, the survey team held regular web meetings with each of the implementing organizations, and if there were any particular problems, a series of meetings to specifically address those were held. In addition, the team collected information through e-mail communication, a locally hired field staff, individual interviews with concerned people, and various reports. Those activities enabled the survey team to grasp the important points in general.

The survey team hopes that more practical and effective projects will be realized based on the proposed cooperative projects in collaboration with the BARMM side.

### 7.1 Proposed Cooperative Projects Based on the Pilot Projects

#### 7.1.1 Selection of Pilot Activities

As mentioned in detail in **Chapter 5**, seven (7) pilot projects were selected from forty-six (46) proposals during a web-based examination meeting in collaboration with the relevant ministries from the BARMM side. Considering selected project topics and implemented activities, the pilot projects can be divided into the following four (4) groups.

**Table 7-1: Pilot-project Topics**

	Topic	Relevant Pilot Project
Group 1	Social Cohesion	1 pilot
Group 2	Prevention of Violent Extremism	2 pilots
Group 3	COVID-19 Response	3 pilots
Group 4	Development/Economic Recovery	1 pilot

Needs related to the Group 3 topic are expected to decrease in the near future; therefore, the proposed cooperative projects are formulated based on Groups 1–3. In addition, as mentioned in Chapter 4, the MILG side proposed an innovative countermeasure, “creation of innovation Fab,” to facilitate young people’s contribution to the prevention of violent extremism and development/economic recovery. Ultimately, the following four (4) cooperative projects are proposed:

- Project for promoting a harmonized multi-ethnic society
- Project for the peaceful reintegration of ex-combatants
- Project for the promotion of regional agriculture and fishery products using ICTs
- Project for addressing regional issues through innovation Fab (FabLab)

#### 7.1.2 Draft Project for Promoting a Harmonized Multi-Ethnic Society

The outline of the pilot project for formulating the draft project is as follows:

Pilot Project 1: Strengthen tri-people (Indigenous People (IP), Islam People, Christian) Solidarity on Social Cohesion
Target Area: Maguindanao Province
Main Activities:
✓ Cooperative vegetable garden by tri-people
✓ Food festival
✓ Enlightenment activity on the multi-ethnic society

The above-mentioned activity is popular in BARMM, and it is easy to secure the support of the BARMM people. However, the following issues are expected to arise: **Issue 1**) It takes a certain

amount of time to realize a concrete accomplishment. **Issue 2)** It is not possible to realize enough accomplishments exclusively through collaborative activities among different ethnic groups because the social and economic gap among different ethnic groups is too wide. **Issue 3)** It is difficult to ensure sustainability after the project. A strategy is needed to address Issues 1–3, while promoting collaborative activities among different ethnic groups.

Considering the above issues, the project is outlined below.

**Table 7-2: Project Outline**

<b>Project Purpose</b>	The Project Purpose is “The collaborative activities are promoted in the target municipalities.”, and the Overall Goal is set as “Solidarity of differ ethnic groups are strengthened in the BARMM.” For bridging the Project Purpose with the Overall Goal, the duplicatable activity model is established during the project period and the dissemination of the project accomplishment is implemented as one of main project activities. The promotion of multi-ethnic society is facilitated in the project implementation activity and any specific activity to enlighten the concept of multi-ethnic society is not implemented. The project period is set for five (5) years, and it is to respond to the above <b>Issue 1.</b>
<b>Activity 0</b>	The suitable areas where the different ethnic groups are settled together are selected by Municipality and the final decision is done with the consensus of settled people. This is the preparatory work for starting the project and formulating project foundation for the project implementation.
<b>Activity 1</b>	The activity is implemented for “Collaborative activities among different ethnic groups are implemented.”. Any collaborate activities can be implemented, and the activities are implemented following the five (5) year activity plan formulated in the first year. It is ideal thar series related activities are implemented for five (5) years, for example, 1) Training of the agriculture product processing, 2) Installation of agriculture product procession facility, 3) Trial of agriculture product processing, and 4) Marketing of processed products. On the other hand, it is also possible to construct small scale infrastructures for addressing the common needs. Regarding the fund for implementing the activity, the Bangsamoro side supports the fund for the first half of the project, and the diversification of fund source is sought for the latter half of the project such as other donor fund and Cloud Funding. It is to respond to the above <b>Issue 3.</b>
<b>Activity 2</b>	The activity is implemented for “The activity result of project target areas is spread to the BARMM area.” The intervention by the project has limitations, therefore, the dissemination activity on the project and project accomplishments are implemented as a main project activity for spreading the formulated model activities in the BARMM. It is to respond to the <b>Issue 3.</b>
<b>Activity 3</b>	This activity is implemented for “Support activities are implemented against fragile groups such as IP.”. When expected collaborative activities among different ethnic groups are implemented, equal participation may be difficult for the fragile groups such as IP due to the wide social and economic gap. Therefore, the special support is given to such groups. The support activities are implemented with the support of other ethnic groups and the support activities are planned to contribute to the promotion of the multi-ethnic society. It is to respond to the <b>Issue 2.</b>
<b>Expected Input</b>	Although the expected input from the <b>donor side</b> is various required experts, required expertise is fixed after the formulation of the five (5) year activity plan in the <b>Activity 1.</b> At the beginning of the project, only a Community Development Expert is dispatched. Other input is the operation cost. It is expected that local NGOs are contracted, and field work is conducted by them. Regarding the Input from the <b>Bangsamoro side</b> , the budget for the activities in the target municipalities for the first half of the project and full-time counterparts. The exit of the project is to disseminate the formulated model

	activity across the BARMM and bridge to the duplication of the model activity. It is crucially important for the project sustainability to assign full-time counterparts for transferring the skills and knowledge how to manage the dissemination of the project result and the support of the model activity during the project period.
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The following is a summary of the above outline with the project design matrix (PDM).

**Table 7-3: PDM of Draft Project for Promoting a Harmonized Multi-Ethnic Society**

Project period: 5 years

Target area: Areas where different ethnic groups are settled together. The intention is to select the target areas by municipality.

\*From a practical viewpoint, it is better to select target areas from the main island, i.e., Maguindanao province, Lanao Del Sur province, and the 63 barangays of North Cotabato province.

Narrative Description	Indicator	External Condition/Risk
<b>Overall Goal</b>		
Solidarity of differ ethnic groups are strengthened in the BARMM	<ol style="list-style-type: none"> <li>1. Conflict among different ethnic group is decreased.</li> <li>2. People’s consciousness on the ethnicity is changed.</li> </ol>	
<b>Project Purpose</b>		
The collaborative activities are promoted in the target municipalities.	<ol style="list-style-type: none"> <li>1. All households participate in collaborative activities at least more than one time</li> <li>2. People’s consciousness on the ethnicity in the target municipalities is changed.</li> </ol>	The transition to the Autonomous Regional Government will be completed peacefully.
<b>Output</b>		
<ol style="list-style-type: none"> <li>1. Collaborative activities among different ethnic groups are implemented.</li> <li>2. The activity result of project target areas is spread to the BARMM area.</li> <li>3. Support activities are implemented against fragile groups such as IP.</li> </ol>	<ol style="list-style-type: none"> <li>1. Number of implemented collaborative activity</li> <li>2-1. The access to the project Web Page is increased every year.</li> <li>2-2. The recognition of BARM people is increased against the project and project activities.</li> </ol>	
<b>Activity</b>		
0-1. Selection of target municipalities	<p>Expected Input:</p> <p><b>Donor side</b></p> <ul style="list-style-type: none"> <li>• Experts (Community Development, Public Relation, Capacity Building, Agriculture, Small Infrastructure Development, etc.)</li> <li>• Project operation cost</li> </ul> <p><b>Bangsamoro (MILG) side</b></p> <ul style="list-style-type: none"> <li>• Budget for the activities in the target municipalities</li> <li>• Full-time counterpart personnel</li> </ul>	
0-2. Consensus building for participating in the project activities in the selected municipalities		
1-1. Identification of activities for addressing the common local issues		
1-2. Preparation of a five year activity plan		
1-3. Various financing activities for the implementation		
1-4. Activity implementation		
2-1. Preparation of project Web Page		
2-2. Collection of good practice		

Narrative Description	Indicator	External Condition/Risk
2-3. Continuous update of the project Web Page 2-4. Public relation activity besides the Project Web Page 2-5. Organization of experience sharing workshop and others		
3-1. Identification of fragile groups 3-2. Preparation of a support plan involving other ethnic groups 3-3. Implementation of support activities		Precondition: The BARMM side agrees to implement activities described in the PDM.

### 7.1.3 Draft Project for the Peaceful Reintegration of Ex-Combatants

The outlines of the pilot projects for formulating the draft project are as follows:

Pilot Project 2: Engagement of MILF Decommission-Combatants on the Production and Promotion of Low Cost Resilient Sanitation Marketing Option
Target Area: Maguindanao Province
Main Activities: <ul style="list-style-type: none"> <li>✓ Training on the construction skills of low-cost sanitation facility</li> <li>✓ Promotion of the low-cost sanitation facility</li> <li>✓ Cooperative agreement with the local governments on the low-cot sanitation facility</li> </ul>
Pilot Project 3: Strengthen Reintegration Program for Abu Sayyaf Returnees
Target Area: Sulu Province
Main Activities: <ul style="list-style-type: none"> <li>✓ Training of the agriculture product processing for Abu Sayyaf Returnees and their family members</li> <li>✓ Promotion of trail processed product</li> </ul>

The above activities could receive support from the Bangsamoro side because of the close relationship with the priority policy: decommissioning combatants in the normalization process. Furthermore, according to the follow-up survey of ex-combatants, their most pressing need is “the diversification of income sources from small businesses based on the current income sources of agriculture and fishery.” The above projects are considered to be in line with this finding.

On the contrary, the following issues are expected: **Issue 1)** Encouraging independence through the self-help approach is insufficient because the target population includes many elderly people. **Issue 2)** A mainly agricultural income is inappropriate for the target population, as they do not have enough agricultural land. **Issue 3)** It is difficult to ensure sustainability after the project.

Considering the above issues, the project is outlined below:

**Table 7-4: Project Outline:**

<b>Project Purpose</b>	The Project Purpose is “Ex-Combatants and their families can maintain a life independently,” and the Overall Goal is set as “Social integration of EX-Combatants is promoted in the BARMM.” For bridging the Project Purpose with the Overall Goal, the duplicatable activity model is established during the project period and the dissemination of the project accomplishment is implemented as one of main project activities.
<b>Activity 0</b>	The suitable beneficiary groups that are consist of Ex-Combatants mainly are selected and the final decision is done with the consensus of selected groups. This is the preparatory work for starting the project and formulating project foundation for the project implementation. From the experience of the pilot projects, it takes certain time for completing this step, and it is better to

	concentrate on this activity for the first year fully.
<b>Activity 1</b>	<p>The activity is implemented for “Agriculture productivity is improved.”. Although it is expected that the agriculture is focused on the case of the implementation only in the main land, the activity related the fishery is sought in the case of implementation including island provinces.</p> <p>Main support is for increasing the agriculture and fishery productivity, and, also, the support covers marketing based on the Smallholder Horticulture Empowerment and Promotion (SHEP) approach. If appropriate, the introduction of higher price agriculture products and new farming skill such as organic farming are also considered.</p>
<b>Activity 2</b>	<p>The activity is implemented for “The supplement income source is established besides agriculture.”.</p> <p>It is ideal that market value is added through the agriculture product processing of which materials are from the above <b>Activity 1</b>. If such a thing is difficult, the stable source of income is established by processing locally available resources. This activity is to respond to the above <b>Issue 1</b> and <b>Issue 2</b> by creating the job opportunity for elder people and people who don’t have enough farmland. In addition, the another alternative is the improvement and upgrade of existing production activities in the concerned area such as inland aquaculture.</p>
<b>Activity 3</b>	<p>The activity is implemented for “The result of project activities is spread across the BARMM.”</p> <p>The intervention by the project has limitations, and it is difficult to contribute to the Overall Goals without the duplication of the project activities in other area. As indicated in the above <b>Issue 3</b>, it is also difficult to secure the sustainability without it. Therefore, the dissemination activity on the project and project accomplishments are implemented as a main project activity for promoting the formulated model activities in the BARMM. Especially, the publication, information provision, and experience sharing shall be conducted intensively against the local NGOs, other donors, relevant ministries of the BARMM side.</p>
<b>Expected Input</b>	<p>Although the expected input from the <b>donor side</b> is various required experts, the Community Development Expert and Agriculture Expert concentrate on identifying crop plants and business that are candidates for improving agriculture productivity and establishing stable income source besides agriculture in parallel with <b>Activity 0</b> for the first year. Other input is the operation cost. It is expected that local NGOs are contracted, and field work is conducted by them.</p> <p>Regarding the Input from the <b>Bangsamoro side</b>, the staff members related to the agriculture extension work and full-time counter parts are expected. The exit of the project is to disseminate the formulated model activity across the BARMM and duplicate the model activity. It is crucially important for the project sustainability to assign full-time counterparts for transferring the skills and knowledge how to handle the dissemination of the model and the support of the model activity during the project period.</p>

The following is a summary of the above outline with the PDM.

**Table 7-5: PDM of Draft Project for the Peaceful Reintegration of Ex-Combatants**

Project period: 5 years

Project target: Formal and informal groups mainly consisting of ex-combatants and their family members

\* From a practical viewpoint, it is better to start on the main island: Maguindanao province, Lanao Del Sur province, and the 63 barangays of North Cotabato province. If possible, it is beneficial to involve the fishery-based activities in the island provinces.

Narrative Description	Indicator	External Condition/Risk	
<b>Overall Goal</b>		The transition to the Autonomous Regional Government will be completed peacefully and any regional conflict will not happen.	
Social integration of EX-Combatants is promoted in the BARMM.	1. Ex-Combatants increase the confidence of independent life.		
<b>Project Purpose</b>			
Ex-Combatants and their families can maintain a life independently.	1. Income of Ex-combatant's household is improved. 2. Life related anxiety of Ex-Combatants is lightened.		
<b>Output</b>			
1. Agriculture productivity is improved. 2. The supplement income source is established besides agriculture. 3. The result of project activities is spread across the BARMM.	1. Agriculture productivity is increased by X%. 2. Income from non-agriculture product is increased by X%. 3. Increased recognition about the project and project activity in the BARMM		
<b>Activity</b>			
0-3. Selection of target groups 0-4. Consensus building with target groups for participating in the project activities	<p>Expected Input:</p> <p><b>Donor side</b></p> <ul style="list-style-type: none"> <li>• Experts (Community Development, Agriculture/SHEP, Public Relation, Capacity Building, etc.)</li> <li>• Project operation cost</li> </ul> <p><b>Bangsamoro (MAFAR and other relevant ministries) side</b></p> <ul style="list-style-type: none"> <li>• Full-time counterpart personnel</li> <li>• Agriculture extension workers</li> </ul>		
1-1. Capacity development plan on agriculture skill is prepared per group. 1-2. Training and support on framing and marketing per group 1-3. Sales support of agriculture product			
2-1. Survey on the potential income source per group 2-2. Plan formulation for introducing new product 2-4. Training and support of trying new product 2-5. Marketing support for the new product			
3-1. Preparation of project Web Page 3-2. Collection of good practice 3-3. Continuous update of the project Web Page 2-4. Public relation activity besides the Project Web Page			Precondition: Information on the EX-Combatant can be obtained from the concerned organizations in the BRAM.

#### 7.1.4 Draft Project for the Promotion of Regional Agriculture and Fishery Products Using ICTs

The outline of the pilot project for formulating the draft project is as follows:

Pilot Project 4: Developing E-Bangsamoro System
Target Area: Whole BARMM

<p>Main Activities:</p> <ul style="list-style-type: none"> <li>✓ Development of web-based E-Bangsamoro system</li> <li>✓ Promotion of registration of farmers, fisheries, agriculture cooperatives, and potential buyers</li> <li>✓ Meeting with farmers, fisheries, agriculture cooperatives, and potential buyers</li> </ul>
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The above pilot project aims to promote the main local industries, agriculture and fishery. The topic related to “development and economic recovery” is the most attractive issue according to the results of the needs survey. In addition, the above project represents a new approach in BARMM, and it is considered to have high potential for future growth. Furthermore, the project has already been recognized by the Ministry of Agriculture and Fishery on the BARMM side and will eventually be taken over by the ministry, guaranteeing post-project sustainability to some degree.

However, the following issues are expected to arise: **Issue 1)** Although the E-Bangsamoro system is likely to be a platform that connects market players, producers, and buyers, it is not yet fully functional. **Issue 2)** There is currently no mechanism that could develop into an attractive product distribution platform for users outside BARMM. **Issue 3)** It is difficult for small-scale producers to use the system.

Considering the above issues, the project is outlined below.

**Table 7-6: Project Outline:**

<b>Project Purpose</b>	<p>The Project Purpose is “The distribution of agriculture and fishery products through the E-Bangsamoro system is well recognized in the BARMM.”, and the Overall Goal is set as “The distribution of agriculture and fishery products is increased through the internet.”.</p> <p>When the reputation of the E-Bangsamoro System is well spread in the BARMM and the project is considered the successful case widely, the entrants from the private sector are expected to appear and more competitive internet platforms will be developed. It will contribute to the accomplishment of the Overall Goal.</p>
<b>Activity 1</b>	<p>The activity is implemented for “The distribution of agriculture and fishery products through the E-Bangsamoro system is increased.”.</p> <p>The existing E-Bangsamoro system is reviewed, and the system is refined for making it the more attractive platform. In parallel, the activity for improving the visibility of the system and promoting the active participation of registered participants is implemented eventually for attracting more participants.</p>
<b>Activity 2</b>	<p>The activity is implemented for “Agriculture and fishery products become competitive outside the BARMM.”.</p> <p>The substantial growth would not be expected only by promoting the distribution of existing agriculture and fishery products, and, if highly competitive products flow in from the outside the BARMM as the region stabilize, it become difficult to promote them in the BARMM. Therefore, in order to establish competitive agriculture and fishery products outside the BARMM and capture the demand from the outside, the training and support activities for producers registered in the system are implemented.</p>
<b>Activity 3</b>	<p>The activity is implemented for “The registered number of small-scale farmers and fisheries is increase.”.</p> <p>The producers who are capable to register the system must have following conditions; 1) Availability of internet access, 2) Knowledge of E-Commerce to some degree, and 3) Production capacity of a certain amount and more, and there is little room for small-scale producers to enter the system. However, the small-scale producers are the majority in the BARMM, and it is important to develop the model in which such small-scale producers can enter and obtain economic benefits. While the entry of the small-scale producers is encouraged, the appropriate model for small-scale producers is established.</p>
<b>Expected Input</b>	<p>The expected input from the <b>donor side</b> is various required experts and operation cost.</p> <p>The expected Input from the <b>Bangsamoro side</b> is counterpart personnel and</p>

	staff members related to the agriculture extension work for supporting the small-scale producers. From the experience of the pilot project, the system can be improved by the resources of the Bangsamoro side, Therefore, after the overall refine plan is prepared by the external expert, it is expected that the budget and the resources for the system improvement are prepared by the Bangsamoro side.
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The following is a summary of the above outline with the project design matrix (PDM).

**Table 7-7: PDM of Draft Project for the Promotion of Regional Agriculture and Fishery Products Using ICTs**

Project period: 5 years

Project target: Farmers, fisheries, production cooperatives, and potential buyers in the BARMM

\*The planned target area consists of main land provinces: Maguindanao province, Lanao Del Sur province, and the 63 barangays of North Cotabato province. This is because the precondition is Internet access, and actual distribution of products is considered.

Narrative Description	Indicator	External Condition/Risk
<b>Overall Goal</b>		
The distribution of agriculture and fishery products is increased through the internet.	1. The total annual sum of distributed products through the internet has more than X% share in the BARMM.	The transition to the Autonomous Regional Government will be completed peacefully and the security situation will not be worsened.
<b>Project Purpose</b>		
The distribution of agriculture and fishery products through the E-Bangsamoro system is well recognized in the BARMM.	1. The total annual sum of distributed products through the E-Bangsamoro system become more than X Peso.	
<b>Output</b>		
1. The distribution of agriculture and fishery products through the E-Bangsamoro system is increased. 2. Agriculture and fishery products become competitive outside the BARMM. 3. The registered number of small-scale farmers and fisheries is increased.	1. The total annual sum of distributed products through the E-Bangsamoro system is increased by X% annually. 2. The total annual sum of distributed products outside the BARMM through the E-Bangsamoro system become more than X% out of the total annual sum of the system. 3. The total annual sum of distributed products by the small-scale producers through the E-Bangsamoro system become more than X% out of the total annual sum of the system.	
<b>Activity</b>		
1-1. Review of the existing system and formulation of improvement plan 1-2. Implementation of system improvement 1-3. Advertising activity for	Expected Input: <b>Donor side</b> • Experts (Agriculture (SHEP), Agriculture Product Processing, Marketing, E-	



Narrative Description	Indicator	External Condition/Risk
improving the recognition of the system and increasing registered participants 1-4. Experience sharing workshop for the system participants	Commerce, Capacity Building, etc.) • Project operation cost <b>Bangsamoro (MAFAR) side</b> • Counterpart personnel • Agriculture Extension worker • Cost for improving the E-Bangsamoro System	
2-1. Identification of potential competitive agriculture and fishery products outside the BARMM 2-2. Development of training materials for improving the product quality including product processing skill (Web-base and classroom style) 2-3. Training implementation 2-4. Support in the field for improving the product quality and processing skill		
3-1. Preparation of support plan for the small-scale producer about the production skills 3-2. Selection of small-scale producers who intend to participate in the system 3-3. Training for the small-scale producers and support in the field		Precondition:

### 7.1.5 Draft Project for Addressing Regional Issues Through the Innovation Fab (FabLab)

The core concept of Fabricating Laboratory (FabLab) is a citizen's workshop equipped with various machine tools, from digital to analog. FabLab provides an open network for the people and free space to produce any product. The origin is the Center for Bits and Atoms (CBA) established in 2001 within the Massachusetts Institute of Technology (MIT).<sup>42</sup>

Although there is no specific certification system for the use of the name FabLab, the worldwide marketing organization Fab Foundation has prepared the following charter.<sup>43</sup>

<p><b><u>What does the fab lab network provide?</u></b></p> <p>✓ Operational, educational, technical, financial, and logistical assistance beyond what's available within one lab</p> <p><b><u>Who can use a fab lab?</u></b></p> <p>✓ Fab labs are available as a community resource, offering open access for individuals as well as scheduled access for programs</p> <p><b><u>What are your responsibilities?</u></b></p> <p>✓ safety: not hurting people or machines</p> <p>✓ operations: assisting with cleaning, maintaining, and improving the lab</p> <p>✓ knowledge: contributing to documentation and instruction</p>
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<sup>42</sup> The FabLab can complement the traditional knowledge and skills by use of the modern technology. For example, traditional craft can be improved using the computer program such as Illustrator and a CNC milling machine. In other case, the FabLab can contribute to the environmental issue; the plastic stool is made by wasted plastic bags.

<sup>43</sup> From Fab Foundation web page. <https://fabfoundation.fablabbcn.org/index.php/the-fab-charter/index.html>

**Who owns fab lab inventions?**

- ✓ Designs and processes developed in fab labs can be protected and sold however an inventor chooses, but should remain available for individuals to use and learn from

**How can businesses use a fab lab?**

- ✓ Commercial activities can be prototyped and incubated in a fab lab, but they must not conflict with other uses, they should grow beyond rather than within the lab, and they are expected to benefit the inventors, labs, and networks that contribute to their success

The above charter presents recommended but not compulsory conditions so that users may benefit fully from participation in the FabLab movement. Globally, FabLab publishes content that shares experiences; as it is possible to participate in various workshops via the Internet, there is already a system in place to receive support from experienced people around the world.

FabLab's presence in the Philippines is expanding. Twenty-eight (28) FabLab institutions have been established, according to the Department of Trade and Industry (DTI). A network of those FabLab institutions is forthcoming, and the conditions for promoting FabLab in BARMM are being set.

Considering the above issues, the project is outlined below.

**Table 7-8: Project Outline:**

<b>Project Purpose</b>	The Project Purpose is “The FabLab operation in which new products are developed is established.”, and the Overall Goal is set as “The development of new products that are used outside the BARMM is realized.”. The project purpose is set for contributing to “Development and Economic Recovery”, and, if the focus is more on “Prevention of Violent Extremis”, the project purpose is set from the viewpoint of more involvement and participation of young people and entrepreneurs.
<b>Activity 1</b>	The activity is implemented for “Human resources necessary for operating the FabLab are developed.”. The human resources for the FabLab are consist of fab masters who lead the operation of the FabLab and communities which are user groups of the FabLab. Although the basic training on the FabLab is required for the fab masters at the beginning stage, it is required to hold a series of workshops for developing products and give opportunities to accumulate experiences for deepening the understanding about the FabLab. Also, when workshops for the fab masters are organized, it is also possible to develop the communities through inviting the general people. At first, it is not sure of required equipment for the FabLab. Therefore, the equipment for the small-scale FabLab is introduced and prepare the environment where the minimum work is possible. Although the cooperation with other FabLab is indispensable, it is recommended that the cooperative relationship is established with other FabLab immediately after starting the project. It is because the support from them can be expected to handle various problems encountered at the stage of the FabLab establishment.
<b>Activity 2</b>	The activity is implemented for “The system is established to operate the FabLab without external support.”. At first, the overall design of expected FabLab is prepared and required equipment is fixed. Although the equipment is introduced following the standard ones, the most suitable equipment is required to be selected considering maintenance, expected development products, and required machine level depending on the most used materials such as electronic parts, metal, wood, plastic, and cloth. After fixing the overall design, the cycle activities are implemented; the preparation of the operation manual, FabLab operation, and the revision of the operation manual during the project period. FabLab operation is conducted manly by the fab master candidates.
<b>Activity 3</b>	The activity is implemented for “The new products to address the regional needs are developed.”.

	<p>It is not enough only to establish the FabLab for realizing “The new products to address the regional needs are developed.” during the project period, therefore, this activity is added.</p> <p>First, the workshops are held for developing new products for addressing the regional needs, and the core ideas are collected from the community and the guidance is given trained community people to prepare proposals for commercializing them. Second, the most promising ideas are selected and support the product development. Finally, sales activity for the developed products are supported. This activity is expected to start in the third year and repeated more than two times per year during the project period.</p>
<b>Expected Input</b>	<p>The expected input from the <b>donor side</b> is various required experts, equipment for the small-scale FabLab, and operation cost.</p> <p>The expected Input from the <b>Bangsamoro side</b> is full-time counterpart personnel for the fab master candidates, building or space for establishing FabLab, and standard FabLab equipment.</p>

The following is a summary of the above outline with the project design matrix (PDM).

**Table 7-9: PDM of Draft Project for Addressing Regional Issues Through the Innovation Fab (FabLab)**

Project period: Five (5) years

Project target: Young people and entrepreneurs in Cotabato City and surrounding areas

Narrative Description	Indicator	External Condition/Risk
<b>Overall Goal</b>		
The development of new products that are used outside the BARMM is realized.	1. The products developed at the FabLab are sold on the commercial base outside the BARMM.	/
<b>Project Purpose</b>		
The FabLab operation in which new products are developed is established.	<ol style="list-style-type: none"> <li>1. At the end of the project, there is a prospect of rising funds of operation for three (3) years.</li> <li>2. The products developed at the FabLab are sold commercially in the BARMM.</li> </ol>	The transition to the Autonomous Regional Government will be completed peacefully and the security situation will not be worsened.
<b>Output</b>		
<ol style="list-style-type: none"> <li>1. Human resources necessary for operating the FabLab are developed.</li> <li>2. The system is established to operate the FabLab without external support.</li> <li>3. The new products to address the regional needs are developed.</li> </ol>	<ol style="list-style-type: none"> <li>1. More than five (5) fab masters, leading the FabLab, are developed.</li> <li>2. The operation manual for the FabLab is prepared.</li> <li>3. X new products are developed.</li> </ol>	Personnel trained as fab master candidates will continue working at the FabLab after the completion of the project.
<b>Activity</b>		
<ol style="list-style-type: none"> <li>1-1. Implementation of basic training on the FabLab</li> <li>1-2. Implementation of workshop for developing new products</li> <li>1-3. Activity for organizing Fab Lab communities</li> <li>1-4. Strengthen of the cooperation with domestic</li> </ol>	<p>Expected Input:</p> <p><b>Donor side</b></p> <ul style="list-style-type: none"> <li>• Experts (FabLab, Product Design, Manufacturing, Organization Enhancement, etc.)</li> <li>• Equipment for small-scale FabLab</li> <li>• Project operation cost</li> </ul>	

Narrative Description	Indicator	External Condition/Risk
and overseas FabLab; visiting and any networking events.	<b>Bangsamoro (MILG) side</b> <ul style="list-style-type: none"> <li>• Full-time counterpart personnel/ candidates of fab master</li> <li>• Building or room for the FabLab</li> <li>• Equipment; Internet facilities, laser cutters, CNC routers, milling machines, paper / vinyl cutters, 3D printers, various tools / electronic tools, etc.</li> </ul>	
2-1. Preparation of the basic design of the FabLab and procurement of required equipment 2-2. Preparation of the FabLab operation manual 2-3. FabLab operation following the operation manual 2-4. Revision of the FabLab operation manual		
3-1. Implementation of the workshop for developing the products to address the regional needs 3-2. Selection of proposals of new products by the workshop participants 3-3. Support of developing the new products 3-4. Support of the marketing and sales of developed products		Precondition:

## 7.2 Proposed Collaboration to Leverage External Funding

Due to the constraints on travel to the field, the content presented in Chapter 6 does not fully reflect the needs of the BARMM government and other stakeholders. For this reason, the JICA survey team understands that it would be prudent to first confirm and update the content of the Fund Mobilization Report at the field level before formulating subsequent cooperation proposals.

The following is an overview of the ideas for future collaboration using external funding.

### 7.2.1 Four points proposed to the BARMM Government to support the private sector

At the end of Chapter 6, the following four measures to support the private sector in BARMM were proposed. Potential support from the Japanese government for each of them is as follows.

#### 1) Support for establishing CF based on Islamic financing

In the "Fund Mobilization Report," the JICA survey team described the similarity between CF and Islamic financing and proposed the "creation of a platform for CF in the Bangsamoro Autonomous Region," for example, a "subsidy for the use of CF by the Bangsamoro Autonomous Government." However, these are areas in which Japan has little know-how.

Hence, the know-how of neighboring Muslim countries should be used for assistance. For example, JICA could support the BARMM by sourcing human resources and knowledge from Malaysia, which it considers to be a base for triangular cooperation in the region.<sup>44</sup>

#### 2) Supporting crowdfunding through a global network

<sup>44</sup> For example, Ethis Group operates ethical and Islamic crowdfunding platforms in Malaysia and Indonesia, and will soon expand to other countries. These platforms include Ethis Malaysia, Ethis Indonesia, and GlobalSadaqah.com, among which Global Sadaqah focuses on Islamic social finance (<https://blog.ethis.co/islamic-crowdfunding-platforms-malaysia/>). BARMM might have a possibility that their expertise could be used.

It is necessary to strengthen BARMM's relationship with Moslem Brotherhood organizations around the world and support fundraising through CF to solve problems in the region. By doing so, BARMM will strengthen its capacity to provide funds to the poor as well as to start-ups in the region. The "Fund Mobilization Report" lists the following activities for this purpose:

1. Establish a good relationship with fundraisers who once participated in CF in connection with the BARMM government's livelihood support, and set up a portal to handle information about funding needs in the BARMM. Establish a system that allows financiers in the region to directly reach out to fundraisers around the world through the portal.
2. Consider sharing information (and possibly capital participation) with useful platforms rather than limiting inclusion to Islamic crowdfunding platforms. In the Philippines, Cropital, Investree, etc., are considered promising in terms of the Bangsamoro's industrial policy.
3. Ask the Bangsamoro diaspora for help. This will strengthen the network between individuals and the government by tracing contacts abroad who have roots in Bangsamoro. Overseas personnel can be expected to play an active role in the issuance of crowd funding projects and investments. This will also strengthen the unity of the Muslim community.

Regarding the Japanese government's support for this proposal, the first step is to develop human resources and organizations within the BARMM government that can understand and then successfully promote this proposal. Specifically, one expert will support the formation of an "external public relations" unit within the BTA and, in the process, create an Islamic CF in the Bangsamoro region, launch an information portal, and network with fundraisers around the world.

Another expert will bridge the gap between Philippine CFs (promising ones are Cropital, Investree, etc.) and Bangsamoro farmers and small and medium enterprises to help mobilize funds at the end level. In this case, commissions and related actual costs to be paid to the CF platform will be procured through a JICA scheme (it is unclear if there is a formal JICA scheme).

### **3) Support for PSE-listed companies in issuing infrastructure funds (especially distribution facilities)**

There are challenges associated with JICA's direct support for this proposal. Specifically, it is difficult for JICA to provide direct support for this proposal because of the various risks involved in trying to influence companies in the private sector.

The purpose of this proposal is to realize infrastructure development in the Bangsamoro region through investment from the private sector and individual investors. The project will be formulated (REIT) from the perspective of investors' interests rather than the welfare of infrastructure beneficiaries. Therefore, the BARMM government should focus on attracting useful REITs, while exercising selectiveness about the social nature of the infrastructure to be introduced.

For this reason, the JICA survey team believes that Japan's assistance should focus on "welfare for Bangsamoro residents through the promotion of domestic investment," to say nothing of the support for the promotion of foreign capital investment that has been provided up to now. Therefore, for the time being, the Japanese government should consider providing support in the form of information gathering and confirmation surveys on REITs related to infrastructure development in the private sector in the Philippines, which will be implemented in the future. At the same time, Japanese government should support the compilation of measures to attract REITs and points the BARMM government should keep in mind.

### **4) Implementation of administrative services using SIBs**

As mentioned in Chapter 6, aid agencies around the world have also stated that "SIBs require a significant amount of time and cost to develop a theme for the region and a plan for implementation." In other words, it is difficult to formulate SIB projects based on a flash of ideas.

Regarding SIBs, the JICA survey team believes that a project should be conceptualized according to the Masterplan Study to mobilize funds for the private sectors in the BARMM, as

proposed below.

### **7.2.2 The Masterplan Study to Mobilize Funds for the Private Sector in the BAARM Region**

Since the "Fund Mobilization Report" was based on Internet information and a few interviews, it contains much unclarified information<sup>45</sup> and suggestions about which the JICA survey team is not entirely certain. Therefore, an exhaustive survey that includes on-the-ground substantiation of the above proposals is proposed. Having obtained and verified more accurate information about the mobilization of funds to the private sector through interviews, the JICA survey team proposes the implementation of a masterplan to formulate a business scheme that will also contribute to the formation of protocols for JICA's aid schemes, especially SIBs.

Based on this project experience, the following points should be considered when collecting information for the masterplan:

- a. The main focus is on face-to-face interviews at actual sites to confirm the accuracy of information and the intensity of the identified needs.
- b. Collect information previously untapped per the "Fund Mobilization Report" (there are too few confirmed cases, and cases from countries other than the Philippines were obtained exclusively via the Internet).
- c. Gather additional information. In addition to the information in the footnotes on this page, collect information about REIT listings, which are expected to peak in 2022 and beyond; views on existing CF platforms in Bangsamoro; achievements and challenges related to SIBs in neighboring countries; donors' activities regarding financial mobilization support, etc.
- d. Focus on corporate interviews with investors, operators of various schemes, etc.

The four central themes—and thus focuses—of the masterplan are as follows:

- a. Plan to strengthen the BARMM government's "external communications" function to establish networking with CF fundraisers around the world
- b. Plan to strengthen the BARMM government's "intermediary support" function to link local livelihoods (farmers, cooperatives) with CF's fundraising function
- c. Plan to strengthen the external relations capabilities (with companies, investors, and consultants) included in the "external communications" function mentioned above
- d. SIB project formation

As a study-type technology cooperation project, there will be room for consideration of a project that combines the masterplan survey and the four pilot activities mentioned above.

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<sup>45</sup> The information includes the BARMM government's expenditure information and issues, and the crowdfunding companies in the Philippines' track record in issuing bonds for Bangsamoro projects.