ESTABLISHING BASELINE AGRICULTURE PERFORMANCE AND RURAL DEVELOPMENT INDICATORS FROM A GOVERNANCE PERSPECTIVE

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Department of Agriculture

NARRATIVE REPORT

UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato

UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Philippines

NARRATIVE REPORT

A. BASIC INFORMATION		
1. Title	**ESTABLISHING BASELINE AGRICULTURE PREFORMANCE AND RURAL DEVELOPMENT INDICATORS**	
2. Status	☐ Ongoing ☒ Completed	
3. Project Leader **Study Leader** (Indicate College/Unit)	**DR. FRANCISCO GIL N. GARCIA (SUC PRESIDENT IV)** **DR. GEOFFRAY R. ATOK (CA)** **PROF. JALALODEN B. MAROHOM (CBDEM)** **PROF. NERISSA G. DELA VIÑA (CBDEM)** **PROF. JENNET R. MAG-ASO (CBDEM)**	
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4. Lead Unit/College		
Collaborating Unit/College	**College of Agriculture** **College of Business, Development, Economics and Management**	
5. **Category**	☐ Program ☒ Project ☐ Study	
6. Classification	☒ Research	☐ Development
	☐ Basic ☒ Applied	☐ Pilot Testing ☐ Prototype Development ☐ Tech. Promotion/Commercialization
7. Thematic Area	☐ Quality Learning, Skills Development, and Literacy ☒ Social Development, and Strong Institutions ☐ Preservation of Culture ☐ Environmental Protection, Conservation, and Risk Reduction ☐ Food Security and Poverty Reduction ☐ Good Health and Well-being ☐ Innovations in Science, Engineering, and Technology ☐ Sustainable Entrepreneurship and Management	
8. Project Duration	**January 2021 – June 2021 (6 months)**	
9. Project Location	North Cotabato and Sarangani Province	
10. Total Budget Requested (Php)	Php 1,500,000.00	

B. TECHNICAL DESCRIPTION

1. Rationale / Significance

The Department of Agriculture (DA) is mandated to promote agricultural and rural development through the provision of policy framework, public investments, and support services needed for domestic and export-oriented agricultural enterprises. Under the leadership of Secretary William Dar, the DA has pursued the attainment of national food security, with special emphasis on the welfare of key players in agricultural production—the farmers and fisherfolk—as a key component of this strategic direction. This has been reflected in the current theme adopted by the DA, *"Masaganang Ani, Mataas na Kita"*, which underscores the importance of greater income for farmers and fisherfolk in the overall effort to achieve agricultural development.

In pursuit of the vision of ensuring food security and ameliorating the conditions of farmers and fisherfolk, the DA adopted the "new thinking" organized in eight paradigms to level up the agricultural sector of the Philippines. These are the eight paradigms:

- modernization of agriculture
- industrialization of agriculture
- promotion of exports
- farm consolidation
- infrastructure development
- roadmap development
- higher budget and investments for agriculture
- legislative support.

This approach of the DA is aligned with the collective vision of the Filipino people articulated in AmBisyon Natin 2040 which recognizes the pivotal role of agriculture in reducing poverty and inequality by solving food insecurity and generating sustainable livelihood. The agricultural sector is one of the identified priority sectors with direct impact to realizing AmBisyon Natin 2040. Furthermore, AmBisyon Natin and the eight paradigms are anchored on broader global goals– the United Nations Sustainable Development Goals (SDG), especially Goal 2: Zero Hunger– which aims to end hunger, achieve food security and improved nutrition, and sustainable agriculture. Bringing the services to the people–a key pillar of good governance–undergirds these broad fundamental policies.

As early as 1991, three decades ago, the Local Government Code was enacted to move the basic agricultural services closer to stakeholders–especially the farmers and fisherfolk. The Code mandates the devolution of agricultural extension to local government units (LGUs). However, *governance* concerns continue to confront the Philippine administrative system including the agricultural sector. The challenges of centralization, coordination, overlapping and fragmented responsibilities between and among the national government agencies and LGUs have contributed to the poor performance of the agricultural sector and served as hindrances for services to reach the people. The agricultural sector has registered the lowest share in the gross domestic product (GDP) for the past decade and its gross value added (GVA) has been decreasing steadily from 14.1% in 2011 to 8.82% in 2019. It continues to be an important source of livelihood, contributing 22.9 percent to the national employment in 2019.[1] However, the

farmers and fisherfolk, who are the main stakeholders in agricultural production, posted the highest poverty incidence among the basic sectors in 2018 at 40.08% and 36.9% respectively.[2]

Hence, concerns have been raised about the reach of government including the DA to the famers and fisherfolk. For instance, initial observations have been raised that less than 10 percent of the agricultural sector or roughly 800,000 famers and fisherfolk out of the 10 million total clientele of the DA have been reached and assisted by government programs.[3] This limited reach has been attributed to many reasons ranging from simple lack of resources, to poor horizontal and vertical coordination, to the lack or absence of information and awareness among the agricultural stakeholders about the different government initiatives, to lack of participation - which can be framed within the context of governance. The DA, over the years, has launched several banner programs to increase its reach and impact to farmers and fisherfolk, including farm consolidation and clustering. However, the challenge of program and policy tracking and monitoring of the Department still persists.

Objectives of the Study

The main goal of this research project is to establish within the DA a centralized database on its stakeholders and beneficiaries, their access and utilization of technology and funding sources, and their feedback on the department's and its attached agency's programs, activities, and projects (PAPs) for use in evidence-based planning, policymaking, budgeting, monitoring, and evaluation in the Philippine agricultural sector.

Specifically, this study has the following objectives:

1. Assess the effectiveness of the RSBSA and other farmer and fisherfolk databases as basis in disseminating assistance from DA programs and projects;
2. Examine the impacts of the DA's existing programs and projects on the productivity and welfare of agricultural stakeholders in the regions;
3. Determine the extent of technological utilization by farmers and fisherfolk in the regions; and
4. Assess the accessibility and utilization of funding sources for agricultural and fisheries production in the regions.

The project is envisioned to pave the way for the establishment of an agricultural governance policy research network composed of the DA's partner state universities and colleges (SUCs). The network will be utilized to assist the Department in tracking and monitoring agricultural and rural development in SUCs' respective areas which will be consolidated and utilized in designing and crafting future strategic policy directions of the DA.

2. Methodology

The study is primarily quantitative in approach and adopts a survey research design. Research teams from 32 state universities and colleges (SUCs) across the country will

conduct a nationwide survey with farmers, farm workers/laborers, livestock raisers, and fisherfolks randomly selected from cluster municipalities in each province. The survey will be administered mainly through face-to-face interviews that will last for approximately one hour.

The project employs Multistage Random Sampling aiming for representativeness down to the level of congressional districts with at least 400 respondents per province. All agricultural stakeholders, namely farmers, farm workers/laborers, livestock and poultry raisers, and fisher folks will be proportionately represented in the study. Male and female agricultural stakeholders will also be represented proportionately. The total number of target respondents nationwide is at least 32,400.

The study population includes all members of the Philippine labor force who engage in agricultural activities, i.e., farming, farm work/labor, livestock and/or poultry raising, and fishing, within the duration of the research (March to June 2021). Individuals who do not engage in agriculture are excluded from the study. All children less than 18 years of age will also not be included in the study. Respondents may withdraw from participating at any point during the interview without giving any reason.

Sampling Procedure

A multistage sampling shall be employed, following the stages and steps below.

Stage 1: Select sample cities or municipalities.

Within each study area or province, using rand() function in excel, agricultural or coastal cities/municipalities will be selected randomly without replacement using rand( ) function.

> **Step 1 - A**: Make a list of the cities/municipalities in the province alphabetically. Categorizing these cities/municipalities into congressional districts. *See below example for Bohol Province.*

Bohol Province (400 respondents)

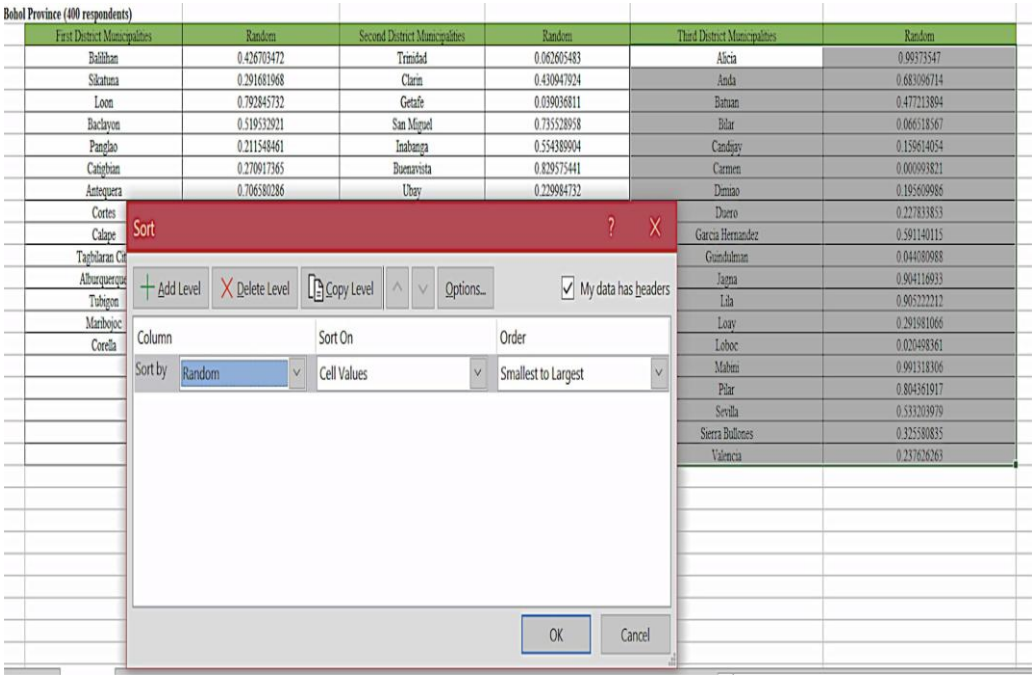
First District Municipalities	Second District Municipalities	Third District Municipalities
Alburquerque	Bien Unido	Alicia
Antequera	Buenavista	Anda
Baclayon	Clarin	Batuan
Balilihan	Dagohoy	Bilar
Calape	Danao	Candijay
Catigbian	Getafe	Carmen
Corella	Inabanga	Dimiao
Cortes	President Carlos P. Garcia	Duero
Loon	Sagbayan	Garcia Hernandez
Maribojoc	San Isidro	Guindulman
Panglao	San Miguel	Jagna
Sikatuna	Talibon	Lila
Tagbilaran City	Trinidad	Loay
Tubigon	Ubay	Loboc
		Mabini
		Pilar
		Sevilla
		Sierra Bullones
		Valencia

Step 1 - B: Assign random numbers to each city/municipality using the rand ( ) function in excel. Before proceeding with another column to generate random numbers, make sure to copy and paste as values first the random numbers generated so as to avoid the change in values of the generated numbers. *See below example for Bohol Province.*

Bohol Province (400 respondents)

First District Municipalities	Random	Second District Municipalities	Random	Third District Municipalities	Random
Alburquerque	0.972302536	Bien Unido	0.44125793	Alicia	=rand()
Antequera	0.004692382	Buenavista	0.016230494	Anda	0.358370913
Baclayon	0.775828972	Clarin	0.914846431	Batuan	0.322726496
Balilihan	0.707634155	Dagohoy	0.136720709	Bilar	0.436218976
Calape	0.879646718	Danao	0.804481227	Candijay	0.290484322
Catigbian	0.632155244	Getafe	0.969221801	Carmen	0.487288366
Corella	0.46707613	Inabanga	0.838559082	Dimiao	0.186407209
Cortes	0.554231686	President Carlos P. Garcia	0.549561008	Duero	0.800734417
Loon	0.106145401	Sagbayan	0.507467938	Garcia Hernandez	0.926147409
Maribojoc	0.392851934	San Isidro	0.125451614	Guindulman	0.971234105
Panglao	0.270246544	San Miguel	0.053925991	Jagna	0.631717169
Sikatuna	0.212807689	Talibon	0.798243546	Lila	0.580004322
Tagbilaran City	0.529313282	Trinidad	0.447069837	Loay	0.671187755
Tubigon	0.844649985	Ubay	0.32762748	Loboc	0.839323913
				Mabini	0.350617623
				Pilar	0.837374114
				Sevilla	0.95529974
				Sierra Bullones	0.51723246
				Valencia	0.97844545

Step 1 - C: Sort these cities/municipalities by the random numbers generated.



Step 1 - D: Select the first five agricultural or coastal municipalities of each congressional district to be the sample cities/municipalities. The number of agricultural or coastal municipalities to be chosen should be in proportion with the number of agricultural or coastal municipalities in the congressional districts.

Bohol Province (400 respondents)

First District Municipalities	Random	Second District Municipalities	Random	Third District Municipalities	Random
Balilihan	0.99700301	Trinidad	0.76912824	Carmen	0.983432335
Sikatuna	0.807716184	Clarin	0.779865497	Loboc	0.079895162
Loon	0.973967379	Getafe	0.915253896	Guindulman	0.883851768
Baclayon	0.054082121	San Miguel	0.08411633	Bilar	0.29752457
Panglao	0.600793708	Inabanga	0.154039238	Candijay	0.580598469
Catigbian	0.333104986	Buenavista	0.642294621	Dimiao	0.968593312
Antequera	0.109931958	Ubay	0.482712061	Duero	0.776350714
Cortes	0.652886837	President Carlos P. Garcia	0.2040004	Valencia	0.130845479
Calape	0.218716422	Danao	0.644778988	Loay	0.243771325
Tagbilaran City	0.758043873	Talibon	0.090111554	Sierra Bullones	0.030603582
Alburquerque	0.3535604	Bien Unido	0.776810403	Batuan	0.425245332
Tubigon	0.711088986	Dagohoy	0.387843118	Sevilla	0.083420839
Maribojoc	0.308151278	San Isidro	0.161785186	Garcia Hernandez	0.862608421
Corella	0.332715504	Sagbayan	0.192104012	Anda	0.502682558
				Pilar	0.234729289
				Jagna	0.906910858
				Lila	0.831465572
				Mabini	0.102225764
				Alicia	0.781648526

Stage 2: Select Sample Barangays

Once the cities/municipalities have been selected, agricultural or coastal barangays will be selected among the selected cities/municipalities randomly without replacement using rand( ) function in excel. The steps are similar with how we selected cities/municipalities.

Step 2 - A: Make a list of the barangays in the selected municipalities alphabetically.

Step 2 - B: Assign random numbers to each barangays using the rand( ) function in excel. Before proceeding with another column to generate random numbers, make sure to copy and paste as values first the random numbers generated so as to avoid the change in values of the generated numbers

Step 2 - C: Sort these barangays by the random numbers generated.

Step 2- D: Select the first three agricultural or coastal barangays of each city/municipality to be the sample barangays. The number of agricultural or coastal barangays to be chosen should be in proportion with the number of agricultural or coastal barangays in the selected cities/municipalities.

Stage 3: Select Sample Households

In each sample barangay map, interval sampling will be used to draw the required number of sample households. To determine the required number of households, the following steps will be followed:

Step 3 - A: Divide the designed 400 respondents per province into the number of congressional districts in the province. That is, for example in Bohol province,

sample size per congressional district =400/3 = 133.33

Note: In cases where the sample size computed is not a whole number, round up, and divide in such a way that the distribution will have more sample size for the congressional district having more cities/municipalities. That is, the first and second districts will be assigned for 133 sample sizes while the third district, having the most number of municipalities, will have 134 sample sizes.

Step 3 - B: Divide the sample size per congressional district into the five selected cities/municipalities. That is,

sample size per city/municipality =133/5 = 26.60, or

sample size per city/municipality =134/5 = 26.80

Note: In cases where the sample size computed is not a whole number, round up, and divide in such a way that the distribution will have more sample size for the cities/municipalities selected first. That is, for our example,

CITY/MUNICIPALITY	**SAMPLE SIZE N= 400**	***CITY/MUNICIPALITY***	**SAMPLE SIZE N= 400**
1st Selected city/municipality	27	*6th Selected city/municipality*	27
2nd Selected city/municipality	27	*7th Selected city/municipality*	27
3rd Selected city/municipality	27	*and so on …*	27 or 26
4th Selected city/municipality	27	*and so on until …*	26
5th Selected city/municipality	27	*Last Selected city/municipality*	26

Step 3 - C: Divide the sample size per city/municipality into the three selected barangays. That is,

sample size per barangay =26/3 = 8.67, or

sample size per barangay =27/3= 9

Note: In cases where the sample size computed is not a whole number, round up and divide in such a way that the distribution will have more sample size for the barangays selected first.

BARANGAY	**SAMPLE SIZE N = 400**	***BARANGAY***	**SAMPLE SIZE N = 400**
1st Selected barangay	9	*4th Selected barangay*	9
2nd Selected barangay	9	*and so on until …*	9 or 8
3rd Selected barangay	9	*Last Selected barangay*	8

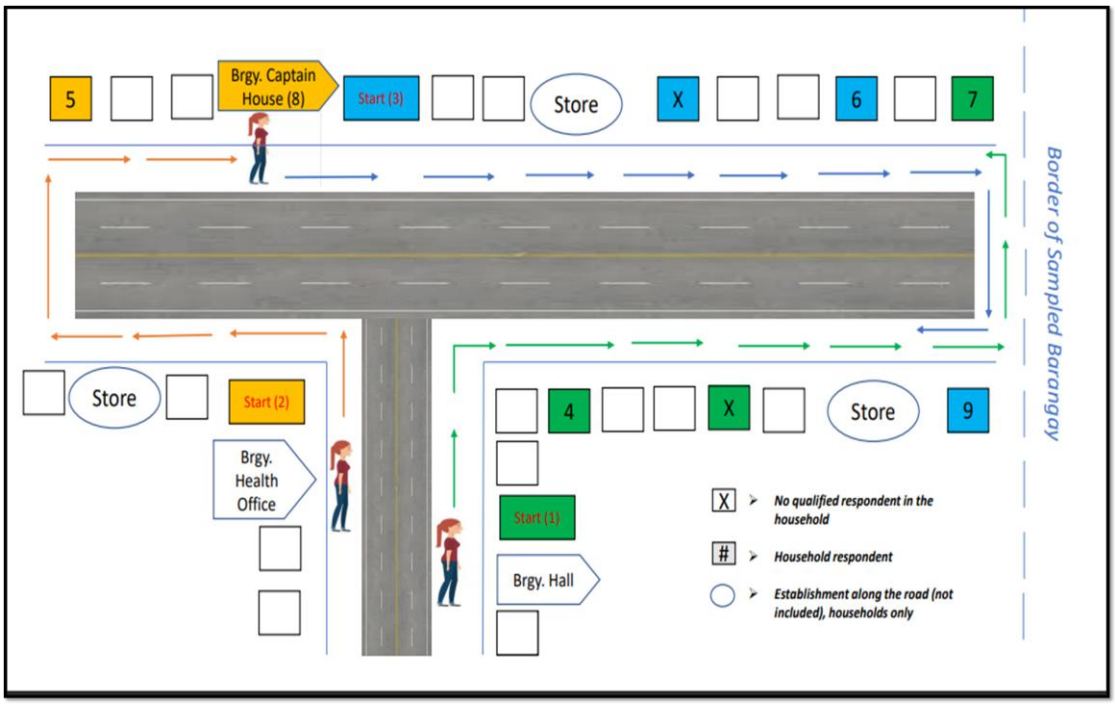
A starting point will be considered in selecting households drawn at random. The first sample household is the household on the right of the starting point. Assign a starting point successively from the first respondent to the last (see Table below). The designated starting point will follow this order: *1st - Barangay Hall, 2nd - Barangay Health Office, and 3rd - Barangay Captain's House.*

BARANGAY (n = 9)	**RESPONDENT**	**STARTING POINT**
1st Selected barangay	1	Barangay Hall
1st Selected barangay	2	Barangay Health Office
1st Selected barangay	3	Barangay Captain's House
1st Selected barangay	4	Barangay Hall
1st Selected barangay	5	Barangay Health Office
1st Selected barangay	6	Barangay Captain's House
1st Selected barangay	7	Barangay Hall
1st Selected barangay	8	Barangay Health Office
1st Selected barangay	9	Barangay Captain's House

In case where the starting points are on the same building or are adjacent, the first sample household of the first starting point should be on the right of the starting point while the first sample household of the second starting point should be to the left of the starting point. This is to avoid the same households to be interviewed.

Subsequent sample households will be chosen using a fixed interval of three (3)

households in between the sampled ones. These households should be to the right of the first household chosen as seen in the figure below.



Data Gathering Methods

For the purposes of conducting the survey project, two (2) data gathering methodologies will be used, which were deemed as the most efficient and effective way of reaching the farmers, farmworkers/laborers, and fisherfolks during the survey fieldwork. The data gathering methodologies are as follows:

1. **Door-to-Door Interview.** Door-to-door interviews are most efficient for farmers, farmworkers/laborers, livestock raisers, and fisherfolks who are not always carrying cell phones with them. Thus, the best way to reach them is by visiting the respondents' homes. However, this assumes that the communities or areas where the customers reside can be properly identified.

2. **Telephone Interview.** Telephone interview is a supplemental way of reaching farmers, farmworkers/laborers, livestock raisers, and fisherfolks who are not in their houses during the visit or field survey. In using this methodology, SUCs are reminded that complete contact information of the possible respondents including names and contact details are required.

Respondents for this study include vulnerable groups such as the elderly, indigenous peoples, and individuals on welfare/social assistance as they are significantly represented in the agricultural sector. There are minimal risks involved in taking part in the survey. However, participation in the study is voluntary. Whether the respondent takes part or not will not affect any future services that they will receive from the DA, its attached agencies, or the university/college/institution that is implementing the survey. Additionally, the respondent may decline to answer any question or withdraw from the interview without giving a reason.

3. Accomplishment

The 3 component studies were being conducted simultaneously. Each component have the same phasing and accomplishments. The following were the details of our accomplishments starting from the pre-implementation stage until data gathering. Currently, the team is still in the data gathering process.

- ✓ MOA signing – January 26, 2021
- ✓ NTP Released – April 27, 2021
- ✓ Series of Meetings Conduct with DA Nation:
    1. February 11, 20216
    2. February 16, 2021
    3. March 30, 2021
    4. May 6, 2021
    5. June 8, 2021
    6. June 22, 2021
- ✓ Start of Data Gathering – June 17, 2021
- ✓ List of Municipalities have been surveyed:
    1. Makilala
    2. Kabacan
    3. Matalam
    4. Carmen
    5. Antipas
    6. President Roxas
- ✓ Total – 154 respondents
- ✓ By the end of September 2021, the team accomplished the conduct of survey in the province of North Cotabato with 400 respondents.
- ✓ The data consolidated were analyzed and interpreted.

The main goal of this research project is to establish within the DA a centralized database on its stakeholders and beneficiaries, their access and utilization of technology and funding sources, and their feedback on the department's and its attached agency's programs, activities, and projects (PAPs) for use in evidence-based planning, policymaking, budgeting, monitoring, and evaluation in the Philippine agricultural sector. There were components considered in the study. These are the following: a) assessment on the effectiveness of the RSBSA and other farmer and fisherfolk databases as the basis in disseminating assistance from DA programs and projects; b) examining the impacts of the DA's existing programs and projects on the productivity and welfare of agricultural stakeholders in the regions; c) determining the extent of technological utilization by farmers and fisherfolk in the regions, and d) assessing the accessibility and utilization of funding sources for agricultural and fisheries production in the regions.

The components of this study were being conducted simultaneously. Each component has the same phasing and accomplishments. The following were the details of our accomplishments starting from the pre-implementation stage until data gathering. On January 26, 2021, the proponents signed the MOA of the project. Then, on February 11 & 16, 2021, the DA-National conducted a meeting and informed the SUC's of the flow of the project. On March 30, 2021, the DA conduct another series of meeting via Zoom. Then, On June 8, 2021, the DA proposed the survey questionnaire and explained how the survey questionnaire works and gathered suggestions from SUC's, and on June 8, 2021, DA set another series of meetings about the survey questionnaire suggestions to the project staff. The team visited all the municipalities subject to the study and talked to each municipality's mayors and municipal agriculturist officer about the

purpose of the study and how this study would help their areas in delivering services to the farmers and fisherfolks.

Before the data gathering, the component leaders conducted several meetings and orientation to the research assistant and enumerators regarding the questionnaire. They were oriented on getting reliable data from the respondents and the research ethics in conducting interviews with the respondents. The survey questionnaire comprises 27 pages per respondent, and it is categorized whether the respondent is farmers/farm laborers, livestock/ poultry raisers, and fisherfolks.

The data gathering started on June 17, 2021, and it took 3 weeks to survey the 400 farmers/farm laborers, livestock raisers, and fisherfolks. There are 3 barangays randomly selected in each municipality. In each barangay, the desired number to be interviewed is 9 respondents, a total of 27 respondents per municipality. Therefore, it took 1 day per municipality that is being interviewed in North Cotabato province. On June 22, 2021, the team attended a meeting held by the DA to discuss the deliverables and the best practices that must be considered in conducting research even during the pandemic.

Moreover, the team comprises a project leader, 4 project staff, 1 RA, and 5 enumerators. As the team's best practices to get a reliable source of information and increase the respondents' willingness to participate in the interview, the team gave them some snack foods as a token of appreciation for the participation. On July 8, 2021, the team presented the accomplishment report during the mid-year in-house review. All 3 districts, 5 municipalities per district, 3 barangays per municipality, and 8-9 households per barangay in the province of Cotabato were already done. Among the municipalities that have been surveyed in the province are the following: Makilala, Kabacan, Matalam, Carmen, Antipas, President Roxas, Libungan, Alamada, Midsayap, Aleosan, Pikit, Mlang, Tulunan, Magpet, and Kidapawan City. A total of 400 respondents were being interviewed in those areas. Currently, the team is encoding/tallying the data gathered from the respondents. The team is planning to proceed to Sarangani province once there's a signal from the funding agency to proceed with the activities planned and can start data gathering in the Province of Sarangani.

Respondents Profile

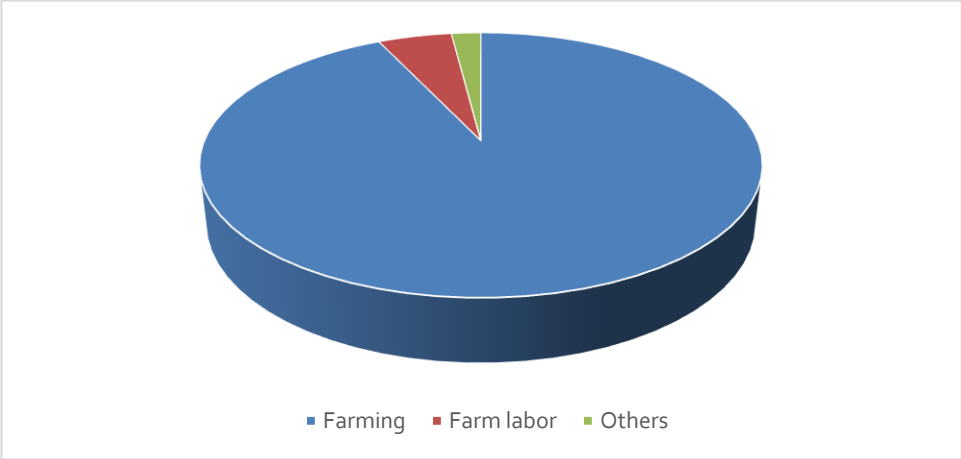
The Establishing Baseline Agriculture Performance and Rural Development Indicators Survey were conducted in the province of North Cotabato. The respondents from this province were farmers. Most of the respondents were 46 to 60 years old, the majority were male, married, and most of them were high school graduates. The majority of the respondents owned the land where the house is located, 84% did not receive money remittances from relatives living in other cities/ provinces and even in another country. It was observed that respondents mostly had children that are below and above 21 years old, and the majority did not belong to groups such as senior citizens, the person with a disability, and indigenous people. The Pantawid Pamilyang Pilipino Program was not observed in the majority of the respondents, and 75% were head of the family with a household composed of 2 males and 2 females and only 1 is working.

In addition, the majority of the respondents were identified by having a government ID, specifically Voter's ID. A small number is identified to have UMID, GSIS, PhilHealth, SSS, Driver's License, PRC License, and Passport. Eighty-seven percent (87%) were not SSS members but 49% is a member of the association or cooperatives. It was observed that 63% were registered in the RSBSA and registered in the years 2018 (5%), 2019 (17%), 2020 (13%), and 19% in 2021. The respondents have to travel 30 minutes to 1 hour to the city/ municipality.

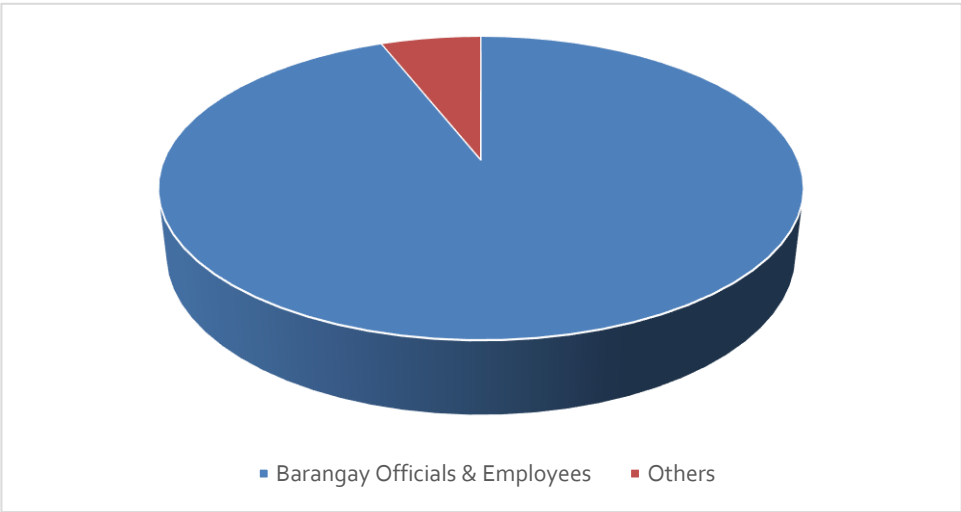
Agricultural Activities and Services Received (General)

The main source of household income was farming, which employed 92 percent of

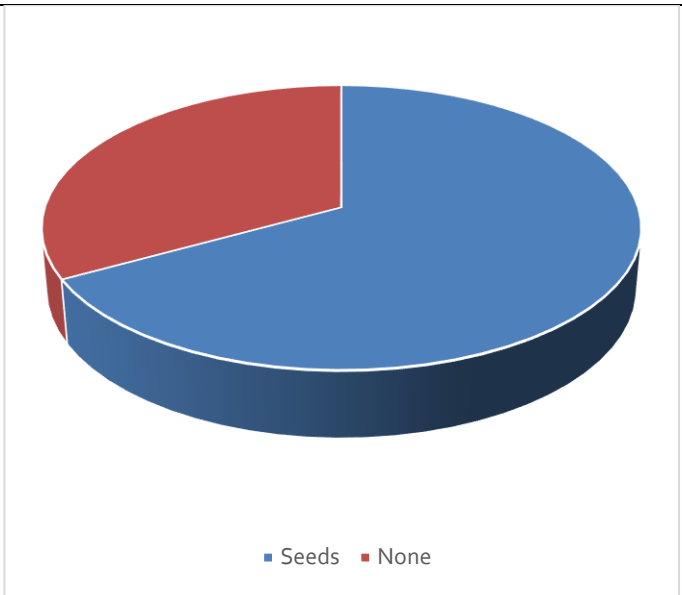
respondents, while five percent (5%) earned a living as a farm laborer and the remaining (3%) earned a living from poultry and livestock raising.



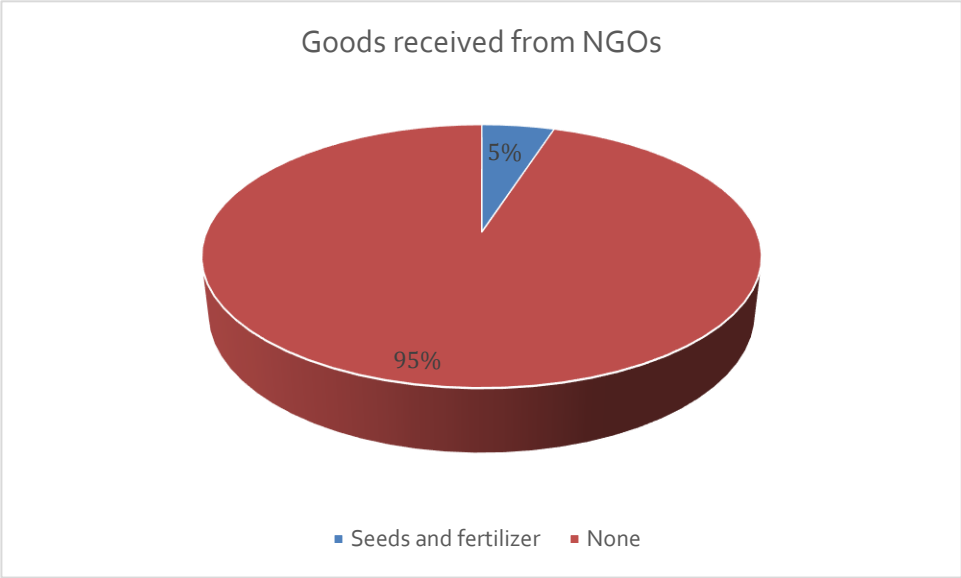
In terms of the source of agricultural services information among respondents for the government's agricultural services, 96% came from barangay officials and employees, while the rest came from municipal technicians, agents, enterprises, and someone who had used the government's services.



All respondents were asked if they had received goods and services from the government in the previous 12 months (for example, seeds, fertilizer, biological control agents, botanical pesticide, construction of farm production facilities, rehabilitation of farm production facilities, upgrading of farm production facilities, technology demonstrations, advice from or consultation with LGU extension workers, IEC materials, post-harvest equipment and machinery, training, and others). According to the findings, 67 percent of respondents received goods from the government, primarily seeds, while 33 percent did not receive any goods from the government. However, 10% of respondents received training from the government in the previous 12 months, while the remainder (90%) did not receive any form of government training.

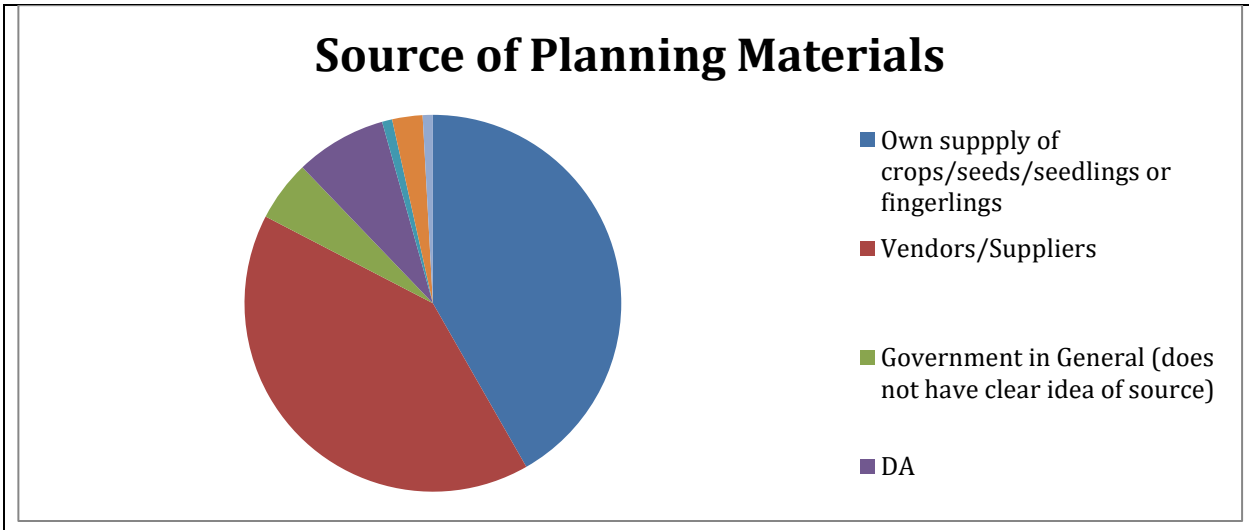


On the other hand, 5% of respondents received agricultural goods and services from NGOs, while 95% did not receive any goods or services from NGOs. NGOs typically provide seeds and fertilizer as goods and services. Furthermore, no respondents received any goods or services from development partner organizations such as the World Bank or the Asian Development Bank.

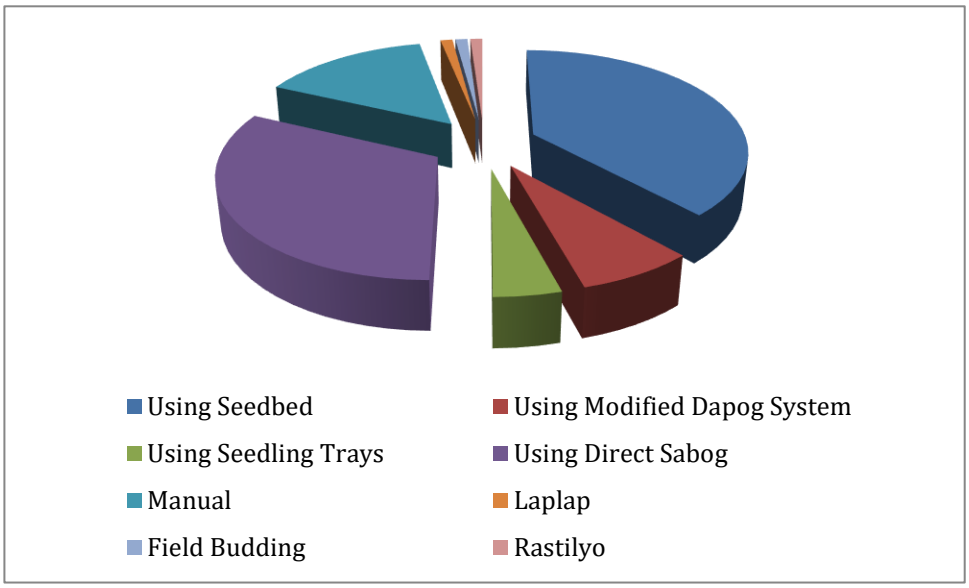


Use of Technology (General)

On the manner of planting, stocking, and materials selection, most of the respondents obtained their planting materials (from farmers) and/or fingerlings and stocks (for aqua farmers) from their supply of crops, seeds, seedlings, or fingerlings (48%), followed by the vendors/suppliers (47%), Department of Agriculture (9%), the government in general (6%), cooperatives (3%) and from other government agencies (1%) as well as cooperatives (1%). Most respondents reported that their planting materials and/or fingerlings and stocks were more high yielding (97%), less resistant to pests (95%), and more resistant to harsh climatic conditions (93%). The minority of the respondents reported the high cost or lack of capital (8%) as the leading cause that prevents them from using planting/stocking materials that are more high-yielding and more resistant to pests or resistant to harsh climatic conditions.



In terms of preparation for farming/crop production, the use of seedbeds was found to be the most usual method of seedling preparation (38%) for crop farmers, using direct sabog (30%), manual (14), modified dapog system (7%), seedling trays (4%), and others (1%) such as laplap, field budding, and rastilyo.

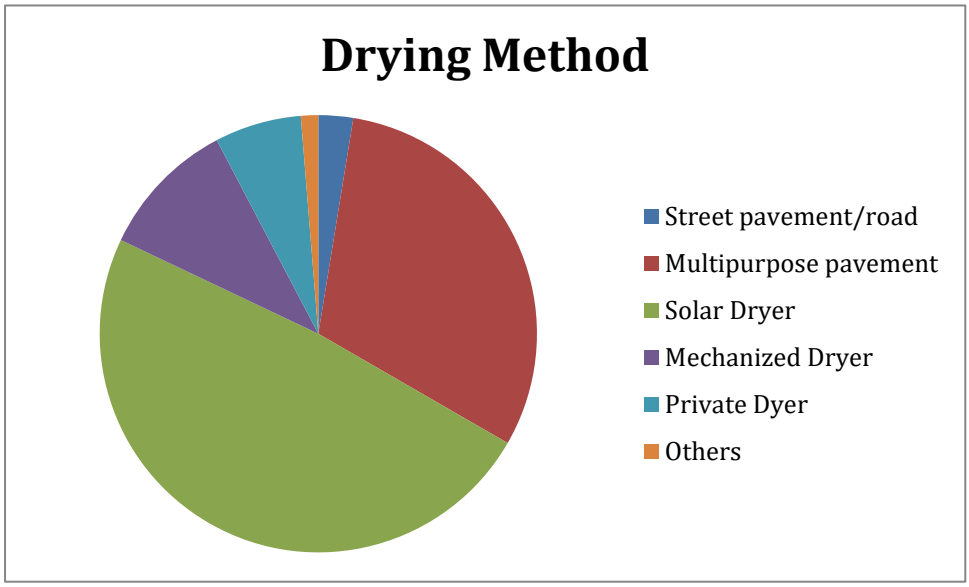


On the manner of obtaining information on prices and availability of inputs, the majority of the respondents (96%) do not use the internet to learn about the price and availability of inputs such as planting materials, fertilizers, pesticides, and fingerlings.

Most of the respondents (68%) use equipment and technology for production, maintenance, and upkeeping of their respective production sites (i.e., farm, livestock/poultry farm, or fish pen/fish cage). Some of the most popular equipment and/or technologies used include Bao-bao (31%) and Tractor (26%). On the other hand, those who do not have equipment or technology utilized manual labor (31%) to maintain and keep their production site clean, safe, and healthy.

Manual harvesting (54%) was found to be the most popular way of harvesting crops or products among the respondents, followed by the use of mechanized equipment (50%). In the case of mechanized harvesting, some of the leading functions include combined harvesting/threshing (51%). In the case of agricultural products requiring the use of drying as a method, the use of solar dryer (38%) is the leading technique employed by the respondents followed by the use of multipurpose pavement (24%), mechanized dryers (8%), private dryer (5%), street pavement/road (2%), and others (1%), respectively. For harvests requiring grading or classification before selling, the majority of the

respondents (99%) report having no tool for such purpose. Grading and classification are instead accomplished mainly through buyer determination (73%), use of own visual inspection (12%), having an agreement with the buyer (10%), and others (3%).



On the subject of agricultural activities, respondents most often set prices for their harvests or products as identified by the traders or buyers (91%), followed by cooperative or association pricing (8%), and by the use of word-of-mouth (3%). The majority (99%) do not use the internet to determine the prevailing market prices for their agricultural produce. Most of the respondents (99%) also do not use the internet to offer to sell their harvests or products. Around 74% of the respondents surveyed also are not transporting their harvests or products from their farms to the markets or other places where they could be sold. The buyers or traders only went to their site to pick up their products. In such cases that the farmers need to transport their harvests, they used other means not stated by the respondents.

4. References

5. Problems Met and Recommended Action

Problems Met:

1. Supplies and other items in the PRs are not yet available.
2. Delayed finalization of survey instrument from funding agency.
3. Border restrictions due to Covid-19 pandemic which the provinces declare GQC.
4. Data gathering issues such as unwillingness of some respondents for an interview that leads to slow movement in the data gathering process.
5. Project and budget put on-hold in view of the expiration of the effectivity of the funds as provided by Republic Act 11519, known as "Bayanihan to Recover as One Act", last June 30, 2021.
6. Work-In-Isolation of some personnel that delayed the processing of purchase requests, canvassing and other necessary papers.

Action Taken:

1. Borrowed supplies from other projects, and utilized the department resources for the meantime.
2. Continued follow-up for the survey instrument.
3. Start data gathering in the nearby municipalities in the province of North Cotabato.
4. Replacing the respondent chosen for an interview.

6. **Budget Utilization**

- ✓ Only 19.09% was utilized as of October 2021.
- ✓ Other supplies were not yet utilized due to limited movements and Work-In-Isolation.

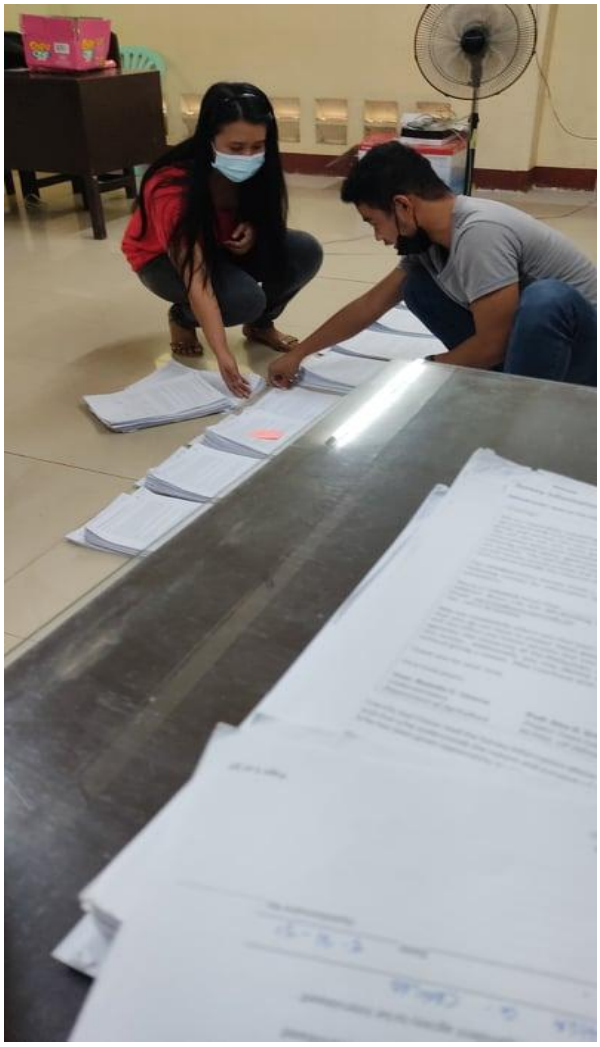
Actual Budget	Utilized Budget	Percent Utilization
Php1,500,000.00	Php298,539.55	19.90%

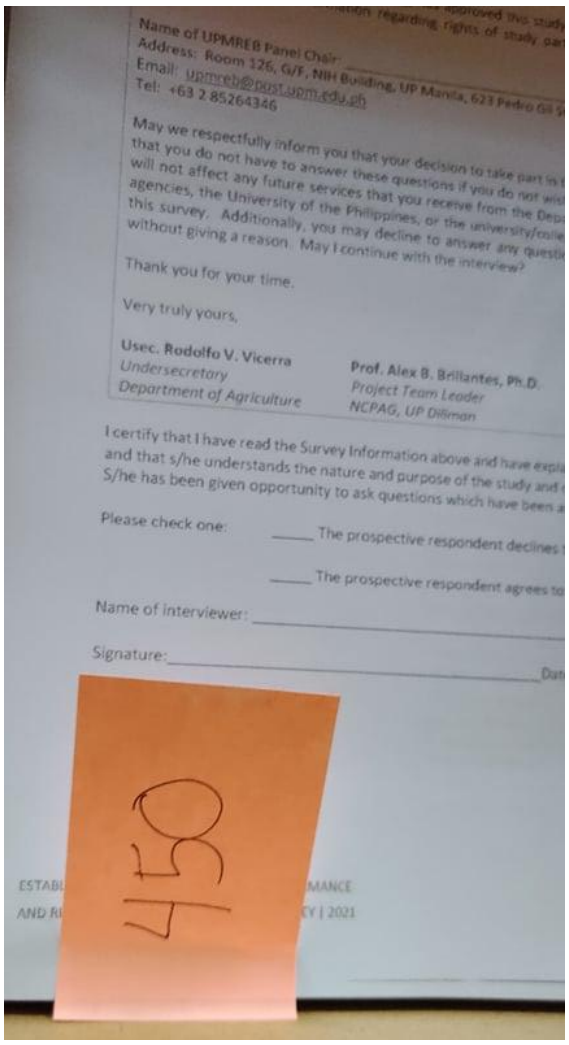
7. **Attachment**s:

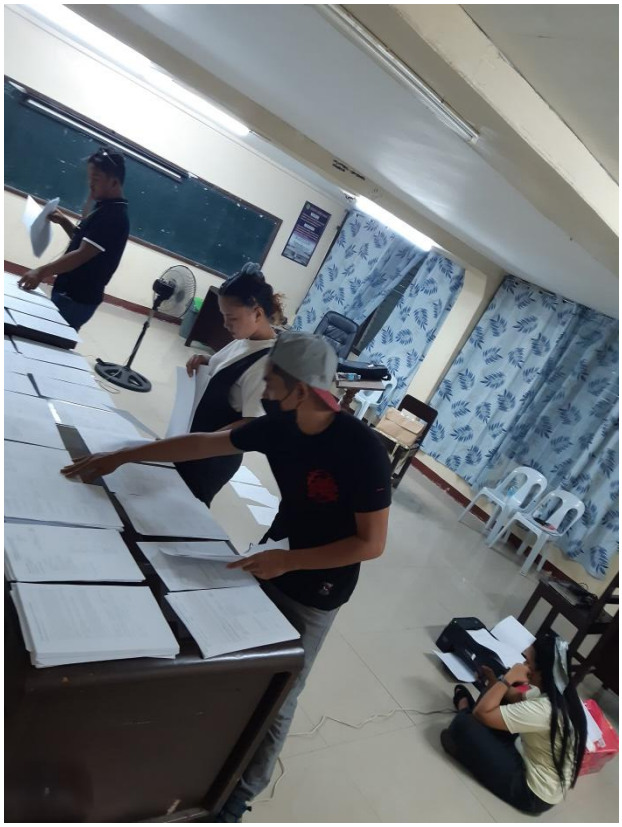
a. Data, supplementary table and/or figures, photo documentation (when applicable)
b. Workplan

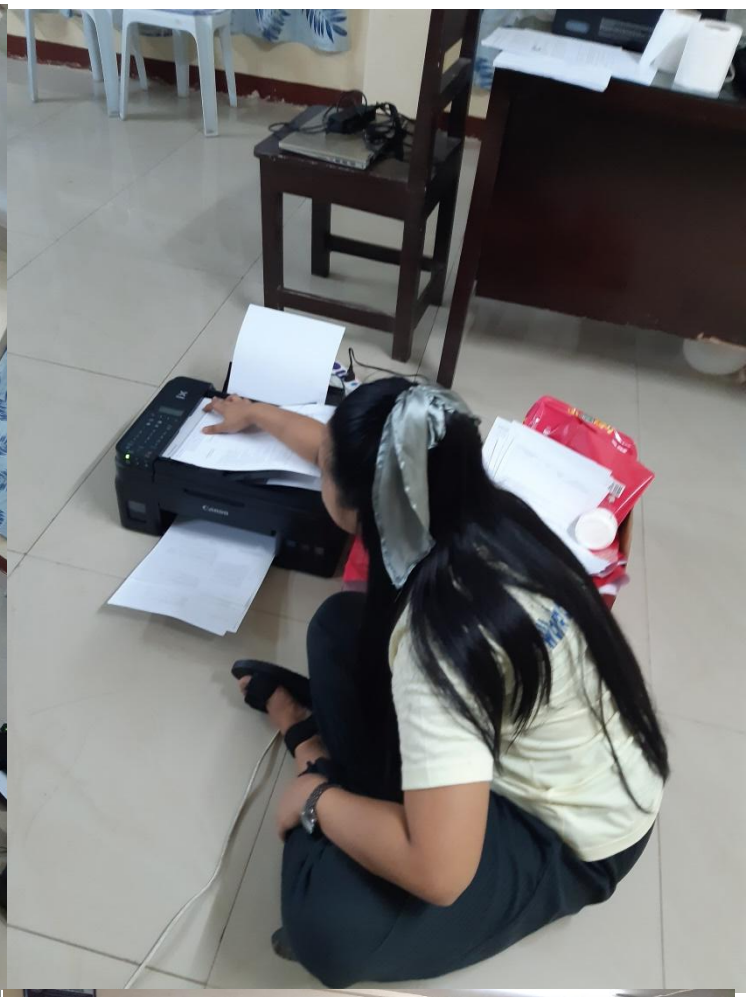
ORIENTATION

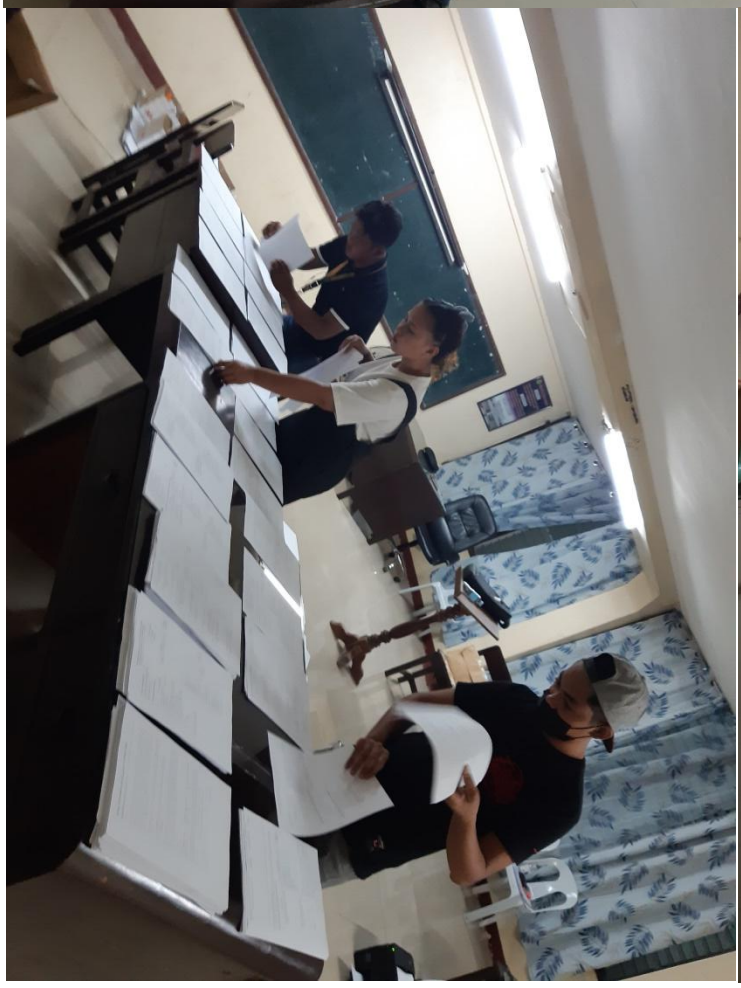
PRINTING OF SURVEY QUESTIONNAIRES











REPACKING OF TOKENS FOR RESPONDENTS OF THE SURVEY

LOADING BULK OF SACKS INTO THE TRUCK

CONDUCTED SURVEY

GIVING OF TOKEN TO THE RESPONDENTS

Workplan Schedule

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	**Activities**	**Expected Results/Outputs**	**Responsible Persons**	**Resources Required**	**Schedule of Activities**						**Budget Required**
					MONTH						
					Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	
Pre-implementation Activities	1. Preparation of LIB and Workplan 2. MOA Signing 3. Accessing the necessary documents and research tools/ instruments from the funding agency 4. Inception meeting for the project ✓ Map out activities with the team 5. Purchase of equipment and supplies 6. Hiring of Research Aide and Enumerators	1. Conducted inception meeting and assessment 2.			X	X					

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities						Budget Required
					MONTH						
					Jan	Feb	Mar	Apr	May	Jun	
1. Conduct review and validation of registry system for basic sectors in agriculture (RSBSA) and other farmers and fishermen's database/s	1. Accessing the lists of DA programs/ projects registered in the RSBSA, and other farmers and fishermen's database/s in the province. 2. Review and analyze the programs in terms of its types, status of implementation , and target beneficiaries. 3. Validate the programs from the beneficiaries through survey, FGD and KII. 4. Data cleansing, analysis and interpretation.	1. Accessed lists of DA programs/ projects registered in the RSBSA, and other farmers and fishermen's database/s in the province. 2. Reviewed and analyzed the programs in terms of its types, status of implementati on, and target beneficiaries. 3. Validated the programs from the beneficiaries through	Program leader and project staff			X	X	X	X	X	

Starting Date: JANUARY 2021			Completion Date: JUNE 2021							Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities MONTH						Budget Required
					Jan	Feb	Mar	Apr	May	Jun	
	5. Report writing	survey, FGD and KII. 4. Cleansed, analysed and interpreted the data. 5. Presented the terminal report.									
2. Impact assessment of DA's program on target communities and beneficiaries.	1. Identification and review of the DA programs in the province of North Cotabato. 2. Preparation and reproduction of research instruments. 3. Determination of inputs and outputs	1. Reviewed DA programs. 2. Prepared and reproduced survey instruments. 3. Determined inputs and outputs of DA programs. 4. Assessed level of adoption among the beneficiaries of DA programs.	Program leader and project staff			X	X	X	X	X	

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities						Budget Required
					MONTH						
					Jan	Feb	Mar	Apr	May	Jun	
	of the programs. 4. Determination of the level of adoption of farmers/ beneficiaries from the DA programs. 5. Estimation of output/ impact of the programs in terms of social, economic and environmental aspects. 6. Estimation and monetization of the output and	5. Estimated the impact of DA programs in terms of social, economic and environmental aspects. 6. Monetized the impact of DA programs. 7. Cleansed, analysed and interpreted the data. 8. Presented the terminal report.									

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities MONTH						Budget Required
					Jan	Feb	Mar	Apr	May	Jun	
	net benefits of the program. 7. Data cleansing, analysis and interpretation. 8. Report writing										
3. Analysis of technology utilization by farmers and fishermen in North Cotabato.	1. Identification of the technology /ies implemented by DA in the province. 2. Identification of farmers and fishermen - beneficiaries adopting the technology.	1. Identified the technology/ies implemented by DA in the province. 2. Identified farmers and fishermen - beneficiaries adopting the technology. 3. Determined the level of adoption of the technology being utilized	Program leader and project staff			X	X	X	X	X	

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities						Budget Required
					MONTH						
					Jan	Feb	Mar	Apr	May	Jun	
	3. Determine the level of adoption of the technology being utilized by the farmers and fishermen. 4. Data cleansing, analysis and interpretation. 5. Report writing	by the farmers and fishermen. 4. Cleansed, analysed and interpreted the data. 5. Presented the terminal report.									
4. Survey on current sources of funding for production activities of farmers and fishermen	1. Identification of farmers and fishermen who benefited the DA programs. 2. Conduct survey to determine the production practices of	1. Identified the farmers and fishermen – beneficiaries of DA programs. 2. Determined the production	Program leader and project staff			X	X	X	X	X	

Starting Date: JANUARY 2021			Completion Date: JUNE 2021								Duration: (6 months)
Objectives	Activities	Expected Results/Outputs	Responsible Persons	Resources Required	Schedule of Activities MONTH						Budget Required
					Jan	Feb	Mar	Apr	May	Jun	
	farmers and fishermen - beneficiaries. 3. Identification of the sources of funds for production activities of beneficiaries. 4. Data cleansing, analysis and interpretation. 5. Report writing	practices of beneficiaries. 3. Identified sources of funds for production activities of beneficiaries. 4. Cleansed, analysed and interpreted the data. 5. Presented the terminal report.									

Prepared by:

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