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CHALLENGES AND IMPACT OF RICE FARMING IN ARGAO

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ABSTRACT: ***The purpose of this study was to identify the challenges and impact of rice farming in the selected barangays, both lowland and upland areas of Argao, Cebu. This research was conceived to investigate the psychosocial, social and economic impact of rice farming to both farmers and community. This study used both qualitative and quantitative in nature, using alternately both the grounded theory and normative approaches. In gathering data as to the challenges met by farmers in farming rice employing the grounded theory approach, the Focus Group Discussion (FGD) and Interview methods was used; likewise, as to the impact of rice farming to both the farmers and the community, an adapted questionnaire was used to address the variables involved. Findings revealed that most of the rice farmers in the four (4) barangays garnered a highly positive level in terms of physical, psychosocial and economic impact of rice farming to both the farmers and the community. In addition, between the comparisons of upland and lowland areas in terms of the level of impact of rice farming to both the farmers and the community, the upland areas dominated with a highly positive impact in terms of physical, psychosocial and economic than the lowland areas. Further, the study identified several major problems that the rice farmers were facing before, during and after rice farming season. Based on the results, the researchers formed a draft of proposed policies to enhance the psychosocial, social and economic well-being of both the farmers and community. Such policies will be presented to the legislative body of the municipality for possible deliberation and consideration thereby contributing to the envisioned food security, sustainability and sufficiency of the local government unit. In like manner, the findings will be also used as basis for designing an extension program addressing the challenges and concerns of rice farmers and in developing their psychological, social and economic well-being.***

KEYWORDS: ***Rice Farming, Impact, Physical, Psycho (logical)-social, Economic, Farmers, Community, Challenges, Problems, Lowland and Upland Areas, Policies, and Well-being***

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Original Article

INTRODUCTION

Rice is the staple food of most Southeast Asian countries including the Philippines. Rice production in the country is not sufficient hence up until now it is still one of the major rice importers in the region. Arida, 2018 of the Philippine Rice Research Institute identifies several problems besetting the rice industry in the country like high cost of inputs, low price of palay, lack of capital, labor problem, lack of postharvest facilities, pest and diseases and irrigation system.

During this time of the pandemic, when mobility is limited making importation of rice even more difficult, government agencies tasked for food production and security like the Department of Agriculture (DA), and the National Food Authority (NFA) as well as the various local government units of the country ranging from provincial, municipal down to barangay level aim for food self- sufficiency. Programs like Sugbusog are geared towards promoting back to the basics farming activities for constituents to be self-sufficient in terms of food, especially of one considered staple, as rice.

Rice farming in Argao is not as active as it was back then for one reason or the other. Rice farmers remain marginalized and no major programs for their well-being nor for increase of their production have been heard of making production generally insufficient. Most constituents on the other hand have been comfortably buying imported rice from retailers. This scenario has to be treated with urgency by the local government and its partner agencies considering the key role that rice farmers play in securing sufficient food supply in the municipality. Addressing the actual problems and needs of rice farmers would enhance agricultural productivity, thus leading to a self-sufficient community. Similarly, linkage and support services among rice stakeholders should be strengthened to facilitate the goal of food self- sufficiency.

In the context of the aforementioned, this research is conceived to investigate the psychosocial, social and economic impact of rice farming to both farmers and community with the intention of being able to support the government's thrust by drafting policies which can help promote psychological, social and economic well-being of rice farmers and the community in general. In like manner, the study also intends to examine the challenges met by farmers in farming rice to be able to help address them through a viable extension program.

OBJECTIVES

The purpose of the study is to generate both qualitative and quantitative data on the impact and challenges of rice farming to both the farmers and community in the municipality of Argao.

Specifically, it aims to:

- Determine the level of impact of rice farming to both farmers and community as to: psychological, social and economic;
- Identify the challenges met by farmers in rice farming;
- Frame proposed policies for the well-being of both rice farmers and community for presentation to the legislative body of the municipality; and
- Design extension program to address the concerns and challenges met by farmers in rice farming.

METHODOLOGY

The study will be both qualitative and quantitative in nature using alternately both the grounded theory and normative approaches. In gathering data as to the challenges met by farmers in farming rice employing the grounded theory approach, the Focus Group Discussion (FGD) and Interview methods will be used; likewise, as to the impact of rice farming to both the farmers and the community, an adapted questionnaire will be used to address the variables involved. Statistical tools are used to treat the numerical data.

RESULTS & DISCUSSION

This section includes the presentation, analysis and interpretation of the data collected in this study that answered the specific problems presented. All responses gathered were presented, analyzed and interpreted by the researchers.

The Level of Impact of Rice Farming to Both Farmers and Community as to: Physical, Psychosocial and Economic

Table 1 comprises the indicators that answer to the questions in regards to the level of physical impact to rice farming to both the farmers and the community.

Table 1: Physical Impact

Indicators	Standard Deviation	Weighted Mean	Level
1.The rice fields do not cause physical discomfort and inconvenience to me and my family members	0.024	1.04	Highly Positive
5. The rice fields in my vicinity add beauty to my surroundings.	0.022	1.05	Highly Positive
8. The rice farms within my vicinity do not damage my properties such as my fence, yard, and even my house.	0.345	1.11	Highly Positive
13. The rice farms in our vicinity do not cause an increase in the number of pests such as bugs, rats, locusts, and the like.	1.048	2.05	Positive
15. Rice farming does not cause ugliness to our surroundings.	0.343	1.06	Highly Positive
Grand Mean	**0.441**	**1.262**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

Based on the data gathered, the physical existence of rice fields has contributed a high **positive impact** on the residents of Argao. This simply implies that they do not find rice farms disrupting, annoying, causing discomfort and inconvenience. Moreover, respondents claim that even if they are living in the town, they can still feel and experience the greenery and the beauty of nature. Recently, rice fields are becoming one of the popular tourist attractions here in the Philippines. Tikkanen (2019) In the Philippines, the famous Banaue rice terraces was identified as one of the UNESCO World Heritage Sites in 1995 described as "a living cultural landscape of unparalleled beauty". This is one of the perfect examples that rice fields offer beautiful sceneries. Rice field tourism also provides a good experience and chance to enjoy nature. On the contrary, some expressed that rice fields contributed to the increase in the number of pests in the place.

Next table presents the indicators that answer the questions in regards to the level of psychosocial impact to rice farming to both the farmers and the community.

Table 2: Psychosocial Impact

Indicators	Standard Deviation	Weighted Mean	Level
2. I have a harmonious relationship with the rice farmers.	0.1	1.01	Highly Positive
3. My family and I find peace and serenity looking at the rice fields.	0.239	1.06	Highly Positive
9. The rice farms within my vicinity do not cause anxiety and trouble in my mind.	0.371	1.06	Highly Positive
10. Harvest time is an occasion for social gathering which can promote camaraderie and harmonious relationship.	0.278	1.06	Highly Positive
14. Rice farming, from planting to harvesting, has fostered cooperation and understanding among the people in the community.	0.315	1.04	Highly Positive
Grand Mean	**0.301**	**1.046**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

As reflected in the table, indicator 2 got the highest weighted mean of 1.01% which means that it has caused the greatest contribution in building a strong bond among them. Klerkx et. al (2019) points out that farmers create different networks for generating and implementing innovations on the farm, depending on their motivations, innovation objectives, and resource endowments. It is where farmers configure a support network that, despite compositional differences, helps them arrive at the same type of innovation projects, compensating or substituting different types of social capital. This can be done starting from planting rice until harvest time. It is during this time that they not only perform the steps in planting and harvesting but also sharing experiences, exchanging laughter and doing merry-making. As such they do not feel tired while working because they enjoy what they are doing. Anxiety has no place in them because just by merely looking at their fruits of labor they can acquire peace, satisfaction and fulfilment. In totality, rice farming in Argao has a **high positive psychosocial impact.**

Next table reflects the indicators that answer the questions in regards to the level of economic impact to rice farming to both the farmers and the community.

Table 3: Economic Impact

Indicators	Standard Deviation	Weighted Mean	Level
4. With the rice farm in my vicinity, I now have an alternative source where I can buy cheaper rice.	0.472	1.14	Highly Positive
6. The rice farms in my vicinity have helped me generate additional income such as: selling rice hulls to ornamental-plant growers and rice stalks as organic fertilizers.	0.379	1.09	Highly Positive
7. The rice farms in my vicinity have provided fertilizers for my crops and or food for my livestock.	0.514	1.17	Highly Positive
11. I believe that the rice farms in our vicinity have augmented the income of our barangay.	1.233	2.21	Positive
12. The local rice products are sold at a price lower than that of the commercial rice in the market.	0.617	1.27	Highly Positive
Grand Mean	**0.471**	**1.376**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

As reflected in the table, rice farms in Argao have generated additional income to the farmers such as selling rice hulls to ornamental-plant growers and rice stalks as organic fertilizers and foods for the livestock. Soil fertilization is an emerging trend for rice husk agricultural application. Rice husk can be used to fertilize soil due to the high lignin content (Kumar et al., 2013). Husk, with its rich reserves of potassium and silicon, helps to amend the soil, enhance its properties by decreasing soil bulk density, and improve its fertility with the air pockets created underground (Badar and Qureshi, 2014). Using a composting technique to degrade the rice husk is very slow, taking up to ~4 months before it is converted to fertilizer. However, plants and flowers are shown to increase in growth and stability with rice husk as a fertilizer source

(Badar and Qureshi, 2014). Leading to both the upland and lowland areas to at least have an alternative way of earning aside from selling the rice they harvested. In rice milling, nothing is a waste, according to them; everything can be utilized from the stalk, the bran, the husk and the rice grains. Holistically, rice farming in Argao has a **highly positive impact** on their economy.

Comparisons between the Upland and Lowland Areas in the Level of Impact of Rice Farming to both Farmers and Community as to Physical, Psychosocial and Economic.

Rice production systems can be simply classified into lowland and upland rice. In lowland rice, fields are usually flooded during part or all of the growing season; lowland rice includes rain-fed lowland, irrigated lowland, deep-water and mangrove swamp (Saito et al., 2013). Upland rice is generally grown on level or sloping, unbounded fields. In this manner, comparisons between the upland and lowland areas in rice farming.

In the next table, the comparison between the upland and the lowland areas in the level of impact of rice farming to both farmers and the community is presented.

Table 4: Physical Impact (Lowland vs. Upland)

Indicators	Upland (n=41)		Lowland (n=59)	
	Weighted Mean	**Level**	**Weighted Mean**	**Level**
1.The rice fields do not cause physical discomfort and inconvenience to me and my family members	1.00	Highly Positive	1.07	Highly Positive
5. The rice fields in my vicinity add beauty to my surroundings.	1.05	Highly Positive	1.05	Highly Positive
8. The rice farms within my vicinity do not damage my properties such as my fence, yard, and even my house.	1.00	Highly Positive	1.19	Highly Positive
13. The rice farms in our vicinity do not cause an increase in the number of pests such as bugs, rats, locusts, and the like.	2.34	Positive	1.85	Positive
15. Rice farming does not cause ugliness to our surroundings.	1.05	Highly Positive	1.07	Highly Positive
Grand Mean	**1.29**	**Highly Positive**	**1.24**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

Table 4 presents the comparison between the upland and the lowland rice farming as to physical impact. Where, in both areas resulted in a highly **positive impact.** Meaning, rice farming and rice farms did not cause them discomfort, inconvenience, damage to their properties and cause ugliness to their surroundings. In indicator 13, we can clearly see a big difference between the upland and the lowland areas. With a **0.49** difference, the upland area of rice farms does not cause an increase in the number of pests compared to the lowland areas. Gallagher (2002) numerous species of rats occur in rice

fields that can cause considerable damage throughout the community. Rats often migrate locally from usually permanent habitats to rice areas as the food supply changes throughout a year cycle. Snails are also carried by the flow of irrigation water and spread rapidly throughout the community but this only happens sporadically.

Next table presents the comparison between the upland and the lowland areas in the level of rice farming to both farmers and the community as to psychosocial impact.

Table 5 : Psychosocial Impact (Upland VS Lowland)

Indicators	Upland (n=41)		Lowland (n=59)	
	Weighted Mean	Level	Weighted Mean	Level
2. I have a harmonious relationship with the rice farmers.	1.02	Highly Positive	1.00	Highly Positive
3. My family and I find peace and serenity looking at the rice fields.	1.05	Highly Positive	1.07	Highly Positive
9. The rice farms within my vicinity have brought only anxiety and trouble in my mind.	1.10	Highly Positive	1.03	Highly Positive
10. Harvest time is an occasion for social gathering which can promote camaraderie and harmonious relationships.	1.07	Highly Positive	1.05	Highly Positive
14. Rice farming, from planting to harvesting, has fostered cooperation and understanding among the people in the community.	1.10	Highly Positive	1.00	Highly Positive
Grand Mean	**1.07**	**Highly Positive**	**1.03**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

As reflected in the table, both upland and lowland areas showed **highly positive psychosocial impact** of rice farming to both the farmers and the community. In which, according to them, rice farming not only gives them income and free rice to sustain their daily needs but they are also able to socialize with other farmers. Making friends and sharing techniques and strategies on how to grow the rice healthily and can survive until the harvest season. Also, they have fostered cooperation, understanding and camaraderie among the people in the community. As a result, toxicity has no place in their lives. On the other hand, we can identify differences between the upland and lowland areas in terms of socializing. In indicator 14, we can see a **.10** difference, which explains that farmers in the upland areas have more cooperation and understanding among the people in the farm and in the community. In addition, the farmers in the upland areas had developed more social skills due to the fact that there are many rice farmers residing in the upland areas rather than in the lowland areas.

Next table presents the comparison between the upland and the lowland areas in the level of rice farming to both farmers and the community as to psychosocial impact.

Table 6: Economic Impact (Upland VS Lowland)

Indicators	Upland (n=41)		Lowland (n=59)	
	Weighted Mean	**Level**	**Weighted Mean**	**Level**
4. With the rice farm in my vicinity, I now have an alternative source where I can buy cheaper rice.	1.20	Highly Positive	1.10	Highly Positive
6. The rice farms in my vicinity have helped me generate additional income such as: selling rice hulls to ornamental-plant growers and rice stalks as organic fertilizers.	1.12	Highly Positive	1.07	Highly Positive
7. The rice farms in my vicinity have provided fertilizers for my crops and or food for my livestock.	1.14	Highly Positive	1.19	Highly Positive
11. I believe that the rice farms in our vicinity have augmented the income of our barangay.	2.32	Positive	2.14	Positive
12. The local rice products are sold at a price lower than that of the commercial rice in the market.	1.34	Highly Positive	1.22	Highly Positive
Grand Mean	**1.42**	**Highly Positive**	**1.34**	**Highly Positive**

Legend:

1.00 – 1.75 – Highly Positive

1.76 – 2.50 – Positive

2.51 – 3.25 – Negative

2.26 – 4.00 – Highly Negative

As presented in the table, both the upland and lowland areas garnered a highly **positive economic impact** of rice farming to both farmers and community. Saying that by having alternative sources and selling rice hulls and husks to the community helped them in generating additional incomes that will help them buy seeds, pesticides and other rice farming necessities in the next planting season. It may be not big but surely it helped them in their needs. This also leads the researchers to spot the big difference between the upland and the lowland areas in terms of the augmentation of the income in their barangays. In indicator 11, we can see a **.18** difference. Furthermore, in the upland areas, most of the farmers have benefited more on the sales of rice hulls and stalks by selling them to ornamental-plant growers or commonly known in the Philippines as *"plantitas"* and the livestock raisers. In comparison, the lowland rice farmers have lower generated additional income because they personally use it in raising and feeding their own livestock and domesticated animals. In order to help shoulder the expenses for the next planting season and augment their income while waiting for the harvest time, they find alternative sources of living by selling plants, firewood, weeding, driving, laundry and other means. Some farmers sell their yield to those in the community at lower prices compared to that of commercial rice. As a result, the community has an alternative source of rice at a lower cost while the farmers would have their own consumption and use

their money to buy other needs. The profit goes to the association which in turn help them shoulder the expenses to be incurred. With that, we can clearly say that the rice farms in the upland areas augmented more income in their barangay than in the rice farms in the lowland areas.

Holistically speaking, most of the rice farmers in the four (4) barangays garnered a highly **positive** level in terms of **physical, psychosocial and economic impact** of rice farming to both the farmers and the community in the congressional district of Argao, Cebu. In addition, between the comparisons of upland and lowland areas in terms of the level of impact of rice farming to both the farmers and the community, the upland areas dominated with a **highly positive** impact in terms of physical, psychosocial and economic than the lowland areas.

The Challenges Met by Farmers in Rice Farming in Argao District

Table 7 presents the answers given by the rice farmers to the questions during the Focus Group Discussion (FGD) held in their respective places. Mostly, these questions are related to the problems they've encountered in their rice farming process and how they managed to address these kinds of problems.

Table 7: Challenges Met by the Farmers in Rice Farming

Place	Problems	Possible Solutions
OBAOB	• pests such as rats • lesser harvest • lack of fertilizers and pesticides • financial incapability • insufficient rice seeds • lack of water resources • the rice withers after planting • unable to use farming equipment and machines due to lack of knowledge	• pesticides • ask assistance • irrigation
BALAAS	• planted rice withered • pests such as worms and insects • lacks manpower during planting and harvesting season • financial • unequal distribution of rice seeds • unable to use farming equipment and machines due to lack of knowledge • lack of water supply • dried up soils due to lack of water and the hot season	• pesticides • hire other people and pays them for labor • asks assistance • use the conventional way like using carabaos • irrigation

LAMACAN	• army worms • delay of replacement procedure • no support of water supply • sandy looms • unsustainable moist of the soil • pests such as snails and animals such as chickens, doves and flies • lacks manpower during planting and harvesting • Financial Assistance • crop insurance needs a lot of requirements	• use fertilizers and pesticides • wait for the replacement procedure • irrigation • hire other people and pay them for labor • asks assistance from the association
TULIC	Snails • Army Worms • insufficiency of water supply • uninterested members of the family to continue rice farming • lack of manpower during planting and harvesting • lack of fertilizers and pesticides • crop insurance needs a lot of requirements	• pesticides • fertilizers • irrigation • hire other people and pay them for labor • asks assistance from the association

The table shows the challenges met by the farmers in rice farming in Argao Cebu. There are four (4) barangays included namely Obaob and Balaas in the upland area and Lamacan and Tulic in the lowland area. These rice farmers in the mentioned barangays encountered numerous challenges. Below are the sample conversations.

Q: Unsa may mgaproblemanganahiagiannimosapagpanguma*? (What are the problems you encountered while rice farming?)*

Guillermo: Dangan sauna ang mgailagasahumayan. Dyutay ra ang mga ani. *(The rats are pestering our rice fields before resulting to lesser harvests.)*

Godofredo: Ug atakehon ug pestewagyuymahimobisannindotkaayu ug tanom. *(We can't really do something to save the rice plants if the pests attack)*

Jonathan: Ulod ug mananap*(worms and insects)*

Janice: daghan ug kuhol*(the number of snails increase)*

Jonathan: kan-on ug kuhol*(the snails eat it)*

Joselito: Pag-atakesamga army worms *(the attack of army worms)*

Marc: Pyangaw ug manok*(rice bugs and chicken)*

Gemma: Kuhol*(snails)*

Brenda: Naay army worms, minus ang harvest *(Lesser harvests because of army worms*)

As shown in the conversation above, the most common problems mentioned above are **pests such as army worms, snails, rats and rice bugs.** All the farmers in the 4 barangays claimed that every time they start to plant rice, pests are also present and that problem alone causes a lot of damages and sometimes leads to lesser harvests if not taken care of immediately. Farmers lose an estimated average of 37% of their rice crop to pests and diseases every year (Rice Knowledge Bank). Pests such as snails eat young and emerging rice plants. They cut the rice stem at the base, destroying the whole plant. Also rats cause an average of 5−10% loss in rice yield every year. Rats breed at an alarming rate when food is abundant. One female rat can produce 35 rats in a season. Next are insects in which more than 100 species of insects are considered pests in rice production systems globally, but only about 20 species cause significant economic damage (Rice Knowledge Bank).

The next most common problem the rice farmers' facing is the **insufficiency of water**. The farmers in the four (4) barangays said that it's also because of lack of water which results in the dryness of the farm.

Q: Unsa may mgaproblemanganahiagiannimosapagpanguma*? (What are the problems you encountered while rice farming?)*

Janice: makasulay ug daottungodsakakulangsatubig*(We experienced drought due to lack of water supply*.)

Joselito: kinahanglanjudnamo ug water impounding area. Wala man guy supports water. *(We really all water impounding areas due to lack of water supply.)*

Brenda: problemasatubig*(water problem)*

Corazon: usahaymahubsan kung initnya way irrigation *(Sometimes we experienced dryness due to no irrigation provided.)*

Artemio: madaot ang uma kung walaytubig*(the farm dries up because of no water)*

Joselito: needs water management

Due to this, the planted rice withers and dies which eventually leads to lesser harvests and a greater loss of income of the rice farmers. Some of the farmers are also pleading to the local government to at least provide them irrigation especially those places where water is insufficient. Poor drainage that keeps soil saturated is detrimental to crops and degrades soil quality. Drainage mechanisms are dysfunctional or inadequate because farmers believe that rice grows best when water is supplied in abundance (Aduyi et. al 2002).

Moving forward, out of 4 barangays, 3 of them claimed that aside from the pests and insufficiency of water supply, **financial incapability** is also a problem to face and to be solved.

Q: Unsa may mgaproblemanganahiagiannimosapagpanguma*? (What are the problems you encountered while rice farming?)*

Guillermo: financial jud para palitunta ug abuno*(we need financial assistance for us to buy fertilizers)*

Teodolfa: kwarta*(money)*

Jonathan: kwarta*(money)*

Janice: problemasasuholsamasabahin 250 ang adlaw 200 per harvest *(problems for the payment of labor)*

Corazon: mas dalisatrabaho if nay financial assistance *(it's easier to work if there is a financial assistance)*

Joselito: Needs another source of income, kasagaransamaagbabauldagko ug utang *(we need another source of income, mostly the rice farmers have bigger debts)*

Gemma & Leah: Dapatnaayayudauntasa insecticide or less ang presyo*(we hope there is an assistance for insecticides or hoping for a lesser price)*

As presented in the conversation above, some of the people lack money in buying pesticides and fertilizers which results in the increase of pests and diseases in their rice farms. This primarily leads to lesser harvests and lesser income of the farmers. In this manner, the farmers have opted to borrow money from institutions that aid the farmers which leads them to have countless debts in the institution. As a result of credit rationing, small-scale farmers turn to informal credit sources. Borrowing from informal channels is attractive since it offers flexible repayment schedules, variable amounts of loan amortization, adjustable collateral requirements, and payment of the loan at the farmgate (Llanto 1989) cited (Dacuycuy 2020). Indeed, the lack of knowledge about the target clients' financial needs, the nature of their different economic activities, and the dynamics and risks in their commercial relations have resulted in the low penetration of the formal sector in rural areas (Hernandez 2017).

The next discussion presents one of the most common problems in rice farming. Out of four (4) barangays, three (3) of them claimed that **lack of manpower during planting and harvesting season** is also a major problem of the rice farmers. They reasoned that mostly their children weren't certain if they wanted to pursue farming or not.

Q: Unsa may mgaproblemanganahiagiannimosapagpanguma*? (What are the problems you encountered while rice farming?)*

Leah: kompetensyasa labor *(there's a competency in labor)*

Brenda: di silaganahanmagbaul*(they don't like farming)*

Gina: diliinteresado ang mgabanaysapamilya*(some of the family members aren't interested)*

Leah: Walaymanunodsauma kay ang mgaanaknanrabahona*(our children weren't able to pursue farming because they already other works)*

Vilma: di namusunod ang mgaanaknganananom*(our children don't like pursuing planting)*

Janice: walaymananom, walaymo harvest *(no planters and no harvesters)*

Joselito: nagkagamay ang farmers *(decreasing number of rice farmers)*

Gwen: crisis man gud kay covid 19

As shown in the conversation above, mostly the reason why there is a lack of manpower in the planting and harvesting of rice is because usually the rice farmers' families are not interested and are not willing to follow their footsteps. According to the Manila Bulletin (2020) farmers' decision to abandon rice farming and shift to other crops is a result of the decline in the price of locally produced palay, which was triggered by the entry of large volumes of imported rice into the country. The rice tariffication law already drove rice farmers away from their farms. The US Department of Agriculture's (USDA) Foreign Agricultural Service (FAS) here in Manila said in one of its industry reports that Filipino farmers' decision to abandon rice farming amid declining palay prices is already taking a toll on the Philippines' rice

production. This gradually leads to the decreasing population of the farmers. Also, the disinterests of the family members in pursuing farming adds to the problem of the existing demise of the rice farming community here in the Philippines and in Argao.

In totality, there are four (4) major problems the rice farmers are facing: **1.pests such as army worms, snails, rats and rice bugs, 2. insufficiency of water, 3. financial incapability, and 4. lack of manpower during planting and harvesting season.** Furthermore, let us not disregard the minor problems mentioned above as it is as important as the major problems. All of these problems should be catered to and should be taken care of.

Expected Output

The findings of the study will form basis for the drafting of proposed policies to enhance the psychosocial, social and economic well-being of both the farmers and community. Such policies will be presented to the legislative body of the municipality for possible deliberation and consideration thereby contributing to the envisioned food security, sustainability and sufficiency of the local government unit. In like manner, the findings will be also used as basis for designing an extension program addressing the challenges and concerns of rice farmers and in developing their psychological, social and economic well-being.

Budgetary Requirement

Particulars	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Personnel Services					
• Research Overtime (1 Project Leader)	2,500.00	7,500.00	7,500.00	7,500.00	25,000.00
• Research Overtime (3 Co-Researchers)	6,000.00	18,000.00	18,000.00	18,000.00	60,000.00
• Research Assistants (4)	4,000.00	12,000.00	12,000.00	12,000.00	40,000.00
Subtotal (PS)	10,500.00	37,500.00	37,500.00	37,500.00	125,000.00
Publication Fee					12,500.00
Dissemination/Presentation					20,000.00
Maintenance & Other Operating Expenses (MOOE)		8,000.00	8,000.00	8,000.00	24,000.00
• Supplies and Materials		16,000.00	16,000.00	16,000.00	48,000.00
• Transportation and Traveling Expenses (45 barangays)		6,000.00			6,000.00
• Food of 4 RA x 10 days x 150/day		6,000.00			6,000.00
• Food for FGD Respondents @ 150 /Pax (4 FGD sessions with 10 respondents per session)					

Subtotal (MOOE)		36,000.00	24,000.00	24,000.00	84,000.00
TOTAL BUDGET	**10,500.00**	**67,500.00**	**55,500.00**	**55,500.00**	**241,000.00**

Implementation Plan

Project Gantt chart

Particulars	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Correspondence with CD, Municipal mayor and Barangay Chairs/Captains										
Data Gathering										
Tabulation, Analysis and Interpretation of Data										
Writing of Manuscript										
Submission of Completed Research and Preparation for Research Presentations										

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