

# NFA RICE (Responsive Initiatives for Confidence Enhancement) in the Marginalized Sector

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## **ABSTRACT**

The study intended to address the gap in the knowledge regarding the consumers' perception on NFA rice quality through data triangulation from among the consumers and review of existing policies of the agency. Moreover, the level of perception of NFA rice quality when taken as a whole as assessed by consumers in Barangay Ermita, Sipaway Island before the implementation of project initiatives was neutral, which means that they neither agreed nor disagreed with the statements about NFA rice. When grouped according to age, the 15-30 years old group agreed that the statements were mostly true. On the other hand, the 31-45 and 46-60 years old groups gave a neutral rating. When grouped according to civil status, the single and separated agreed while the married and widowed were neutral. When grouped according to the number of children, those without children and with 3-5 children agreed while those with only 1-2 children and 6-10 children gave a neutral rating. When grouped according to the educational level, the college level and high school level respondents rated neutral; however, the elementary level agreed. Also, when grouped according to family monthly income, the less than P5,000 and P5,000 to P8,000 monthly income groups rated neutral whereas the P8,000 to P10,000 and more than P10,000 monthly income groups agreed that descriptions of NFA rice are mostly true. After the project initiatives were implemented, the respondents when taken as a whole agreed that the descriptions about NFA rice are mostly correct. Likewise, the respondents across the variables agreed that most statements regarding NFA rice are true. An exception is the widows who were not entirely convinced about NFA rice. Regarding their dominant perception in the area of consumption, 206 from 217 total respondents consume NFA mostly daily. In terms of awareness, 198 residents knew about NFA rice and 144 respondents said that their awareness about NFA rice came from their own experience. In the area of preference, 203 respondents like NFA rice. However, in the area of purchase, 206 respondents buy NFA rice at the barangay accredited outlet. The study reveals that there was a significant difference in the level of perception before and after the project initiatives were conducted when taken as a whole. According to age, there was a significant difference in all categories. Regarding civil status, there was a significant difference in the level of perception of the married respondents and none among single, separated, and widowed respondents. Concerning the number of children, there was no significant difference in the level of perception among the respondents with no children contrary to families with 1 to 10 children. In terms of educational level, there was no significant difference among respondents who were in the college level contrary to the respondents in high school and elementary levels. As regards to family monthly income, there was no significant difference among respondents who earn P8,000 to P10,000 monthly and more. However, there was a significant difference among respondents who earn less than P8,000 monthly. There

was no significant difference in the level of perception before and after project initiatives conducted in the areas of consumption, awareness, preference, and purchase. In the sensory analysis between the panelists and consumers, there was a significant difference in the assessment of the raw NFA rice opposing their assessment of the cooked NFA rice. The top contributing factor that caused low confidence among the consuming public before and after the project initiatives is the tough texture of NFA rice. A Rice Distribution Policy is proposed to improve confidence in NFA rice quality by enhancing its accessibility among consumers.

**Keywords:** Perception, Rice Quality, Data Triangulation, Project Initiatives, Accessibility

## Chapter 1

### THE PROBLEM AND ITS CONTEXT

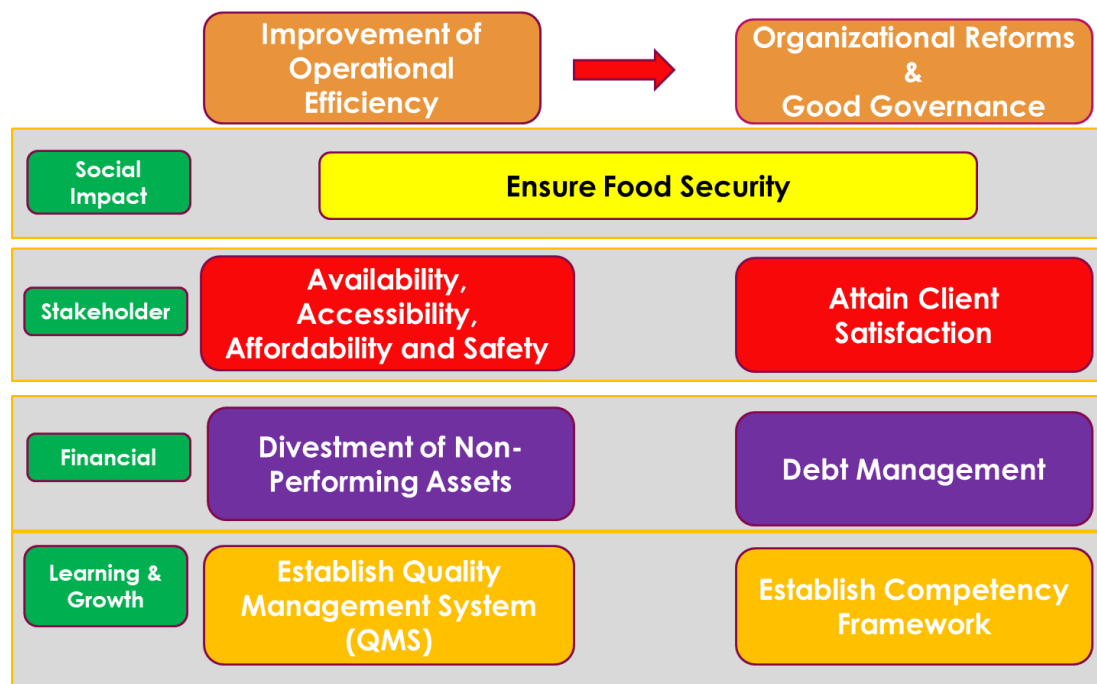
This chapter discusses a project contextual framework aligned with the National Food Authority mandate and the final major output concerning its stakeholders. It examines the issues and gaps that an opportunity or the proposed Capstone Project (CP) can resolve so that realization of social outcome in general and organizational outcome, in particular, be achieved.

#### 1.1 Background of the Study

Rice (*Oryza sativa L.*) is a distinct and prominent harvest consumed widely, specifically in the Asian region where rice production and consumption account for 90 percent of the world's rice (Food and Agriculture Organization [FAO], Retrieved January 23, 2019).

In the Philippines, rice is an essential agricultural crop and the most important staple cereal in the consumption basket of about 80 percent of Filipinos; hence, it is the main source of income among Filipino farmers. Despite its global significance, rice consumers have very specific preferences by sizing up rice quality based on its attributes such as taste, texture, color, and smell, or those extrinsic to the product, such as packaging, brand, or label.

Due to its importance as the staple food in the country, on September 26, 1972, Presidential Decree No. 4 created the National Grains Authority which, later, on January 14, 1981 was reconstituted by Presidential Decree No. 1770 into what is presently known as National Food Authority (NFA). It is entrusted a role in ensuring food security as well as stabilizing the price and supply of the staple cereal, both at the farm and consumer levels. These previous mandates were implemented through some undertakings and strategies such as *palay* procurement, buffer stocking, and rice distribution. However, these mandates were repealed through the approval of Republic Act (RA) 11203, recognized as Rice Trade Liberalization Act which requires NFA to continue ensuring national food security through buffer stocks obtained from local sources as provided in the said Act.



**Figure 1. NFA Strategic Map**

Despite the change in the mandates, the Capstone Project of this research is still in line with the strategic map of the NFA in terms of its stakeholders by making NFA rice available, accessible, and safe, and by continuously improving the delivery of its services to attain client satisfaction. These objectives are driven by its internal processes such as rationalized and efficient local procurement, rolling buffer stocking, and implementing organizational reforms.

The NFA distinguishes its public obligation of ensuring the state's food security while improving the farmers' profit and of providing them an equitable rate of return of investment.

The agency provides services and fair value to the consumers' purchases and public needs to support its stakeholders' welfare. It also provides open communication lines to give fast and efficient feedback mechanism in responding to consumer and market needs during emergencies and calamities. Moreover, it provides continuous improvement of its employees' personal and professional competence to enable them to deliver quality and efficient services to the public, enhance community awareness, and work as a team towards genuine public service.

In line with the Philippine Rice Industry Roadmap by 2030 of the Philippine Rice Research Institute (PhilRice), the core support extended to Filipinos indicates: 1) government *palay* procurement in focus provinces and rice importation (if needed) for buffer stock program; 2) strategic distribution of stocks particularly in supply-deficit provinces, and 3) port decongestion in supply-deficit provinces near disembarkation port of imported rice. These support schemes allow the government to address the need of the citizens in terms of rice requirements.

Through the DSWD, the state-run food agency hopes to attain its target NFA rice distribution outlets in the areas of vulnerable residents such as urban, rural and calamity-prone vicinities, and island provinces to ensure that all Filipinos, especially the disadvantaged groups, have enhanced confidence on and have reasonable access to affordable government rice. This means that NFA rice must be accessible not only among those who can afford it but also among those who are financially and socially deprived, particularly in Geographically-Isolated and Disadvantaged Areas (GIDA).

Besides the accessibility of rice, its quality is of growing significance. Major features of rice include the physical form of grains, eating and cooking qualities (ECQs), milling output, and nutritive attributes. Grain physical form denotes the length, width, and chalkiness of grains. Also, protein content and composition constitute the ECQs aside from the nutritional composition of the rice grain and further establish the flour and dough mixing properties (Mukamuhirwa et al., 2018).

During the storage period, the quality maintenance of rice is very significant, and it is a basic prerequisite to the storage process. It must be easily accessed, dried, and protected from the weather condition. Also, it must avoid contact with pests and animals. Proper materials must also be used in storing the paddy (Kolb & Braunbeck, Accessed March 7, 2019).

NFA's standard operating procedure coded TS-SQ03 (Retrieved March 14, 2019) indicates that inventories are properly classified and aligned with the set standards and measures. This quality audit is performed regularly, focusing on the classification of stocks and the accomplishment and accountability of classifiers inherent to their functions. It is primarily composed of sampling and validation of preliminary classification using laboratory analysis. It is being conducted by the Quality Audit Team (QAT) during NFA operations like *palay* procurement, drying, milling, dispersal, and storage. During procurement, particular attention is given to establish the true condition of the stocks and to check the performance of the assigned classifiers.

Since buffer stock requires a certain period, the storage causes the rice to age. Rice aging process comprises of grain physical and chemical attributes composed of starch, protein, and lipids that influence its consumption quality. While the rice grain components are maintained during the storage, physical modifications still occur. This further affects the gelatinous properties, taste, and roughness of cooked rice (Zhuo, 2019).

Recently, FAO (Accessed March 9, 2019) has reported the escalating tension in the country, internally and externally, that prompted them to review the functions of the government trading organizations in rice procurement, domestic selling, and international trade, because of the reduction of their functions and the involvement of the private sector in shared responsibilities. While interventions in maintaining the volume of public stocks purchases are largely taken into account, some governments are encouraged to sell publicly existing inventories to minimize financial costs and to seize or reduce storage space difficulties. To safeguard the food access among marginalized sectors in the case of a food shortage during calamities and emergencies, humanitarian or emergency stocks are maintained. Issuance of these stocks occurs during emergencies, or they become a portion of large post-disaster safety measures, as viewed necessary by the state (Caballero-Anthony et al., 2015).

### 1.1.1 The Problem

In the 20 years of being in the national agency, the proponent has been into field monitoring and has witnessed how the consumers embrace government efforts in identifying issues and problems towards development. The proponent interviewed some consumers to define their existing perception of NFA rice. Subsequently, the data derived have become the compelling factors for the proponent to pursue this study.

**"Wala kami ma'am subong gakansumo sang NFA nga bugas kay pigaw sang natilawan ko. Biskan barato pa pero katig-a kag may baho. Pero indi ko sigurado sa subong kay dugay naman to."** (*Ma'am, we currently don't consume NFA rice because of its low quality. Despite its cheapness, it is tough and smells unpleasant. However, I am no longer sure if its quality has remained the same since it has long ago when I tasted it*).

**Meynard Arcamo, 30, Taxi Driver, DS Benedicto**

**"Wala ko ma'am gakaon NFA nga bugas kay gatukar hapo ko." (I do not eat NFA rice, ma'am, because it triggers my asthma).**

**Jimmy, 62, Pedicab Driver, Bago City**

**"Sang una ma'am nagakaon kami NFA nga bugas sa balay pero subong wala na. Ok man lang ang bugas kaso tig-a gid sya kung maluto ti dapat dugangan gid tubig kung mag tig-ang." (We used to eat NFA rice at home, Ma'am, but we don't eat it anymore. NFA rice is just fine, but when it is cooked, it is very tough, so more water should be added in cooking it.)**

**Rammy Sanao, 24, Tricycle Driver, Bacolod City**

**"Nagabakal kami ma'am bugas sang NFA kay nami man kag barato pa. Ginahambalan ko gani ang mga gapangape di sa amon nga nami subong ang bugas sang NFA kay puti na kag wala baho." (We consume NFA, Ma'am, because it is good and cheap. Thus, I inform coffee drinkers in our store that the NFA rice being sold now is white and odorless.)**

**Marjorie Hebrona, 48, Street Vendor, Bacolod**

The study is also anchored on the following legal provisions:

One is Republic Act No. 11203 or "An Act Liberalizing the Importation, Exportation, and Trading of Rice, Lifting for the Purpose the Quantitative Import Restriction on Rice, and for Other Purposes." The Implementing Rules and Regulations (IRR)" provisions 8.3.2 state that NFA shall maintain the optimal level of buffer stocks at all times, except to make releases in response to emergencies, in support of disaster relief programs of the government, or to dispose of stocks as necessary before the quality of rice deteriorates/becomes unacceptable or unsafe. Storage, sale, and distribution of stocks shall be done under existing guidelines, provided that these guidelines are consistent with Rule 8.3.1.

Furthermore, Rule 8.7 of the same Republic Act provides that "the NFA shall engage Department of Social Welfare and Development (DSWD) and Local Government Units (LGUs) in distributing the buffer stock during emergencies. Instead of cash subsidy for the purchase of rice, the NFA through DSWD may distribute actual rice to intended beneficiaries in areas where it is logistically efficient to do so. This option shall be considered in the independent study indicated in Rule 8.2.1". Since this provision requires an independent study, the researcher gives light to the government in this concern.

Another is Republic Act 7394 or the Consumer Act of the Philippines which states that "it is the policy of the State to protect the interests of the consumer, promote his general welfare and to establish standards of conduct for business and industry. Towards this, the State shall implement measures to achieve the following objectives: a) protection against hazards to health and safety; b) protection against deceptive, unfair and unconscionable sales acts and practices; c) provision of information and education to facilitate sound choice and the proper exercise of rights by the consumers; d) provision of adequate rights and means of redress; and e) involvement of consumer representatives in the formulation of social and economic policies."

Furthermore, Republic Act 10611 or Food Safety Act of 2013 is "an act to strengthen the food safety regulatory system in the country to protect consumer health and facilitate market access of local foods and food products, and for other purposes." "Section 3 provides that to strengthen the food safety regulatory system in the country, the State shall adopt the following specific objectives: (a) protect the public from food-borne and water-borne illnesses and unsanitary, unwholesome, misbranded or adulterated foods; and (b) enhance industry and consumer confidence in the food regulatory system." For the NFA to be



compliant to this Act, the personnel and all warehouses nationwide should comply with the Sanitation Standard Operating Procedures (SSOP), current Good Manufacturing Practices (cGMP), and the Hazard Analysis Critical Control Points (HACCP).

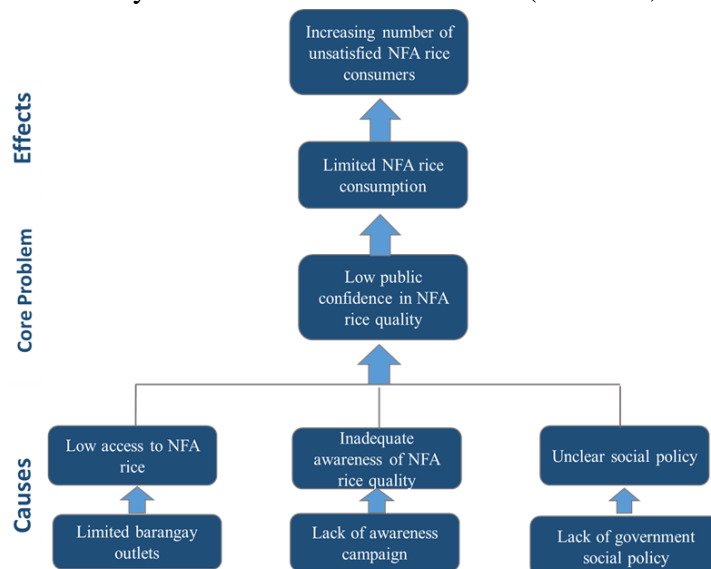
**1.1.2 Problem and Objective Tree Analysis**

The agency promotes the welfare of its stakeholders by ensuring the consumers' confidence in NFA rice quality while accelerating its accessibility to the marginalized sector. Confidence enhancement initiatives provide a good feedback mechanism by opening communication lines to stakeholders. Feedbacks become a reference to identify a policy to consumer rice requirements and to access not only during emergencies and calamities but at all times as stipulated by the law. It also improves the agency's delivery of quality services to the vulnerable sector of society. Risk management and communication strategies implementation directed at rebuilding consumer trust in NFA rice quality and government services are very essential.

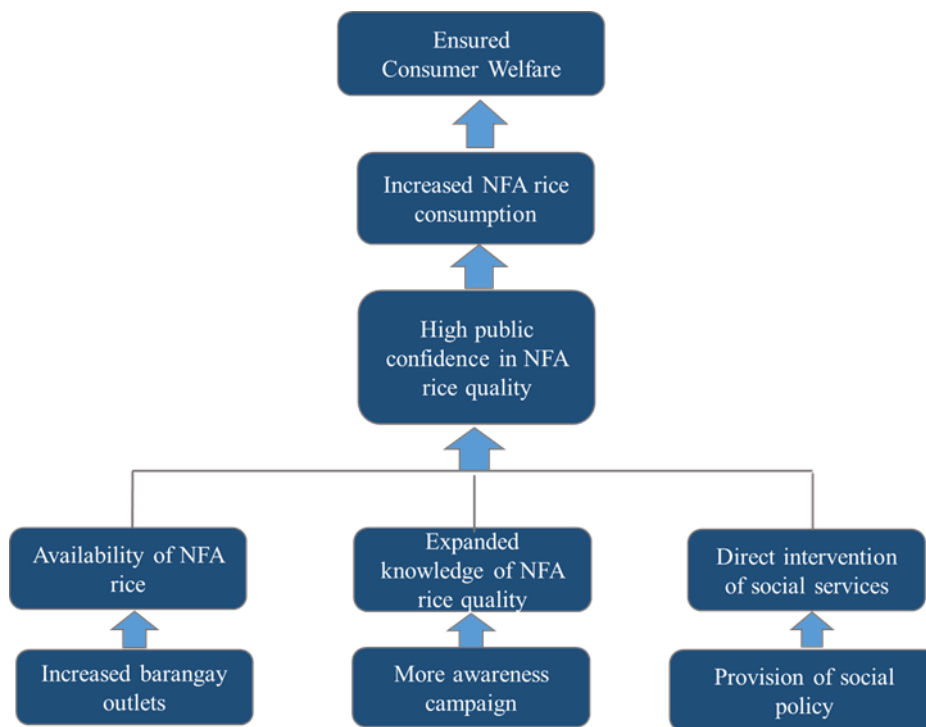
This study uses the problem tree tool as an illustrative inquiry of a problem that presents its causes, as well as its consequences. It aided the implementers to acquire a look at how a scope of complex concerns influences a problem and its effects (Thakur, Accessed March 17, 2019). In the context of this study, low public confidence towards NFA rice quality was identified as the core problem to be addressed by the agency. Possible causes of such low confidence were low access to NFA rice, lack of awareness of NFA rice quality, and absence of government policy especially in the newly-enacted Republic Act 11203, specifically on the access of the marginalized sector to NFA rice. Even though the causes were determined, there was difficulty in identifying the strength or significance of the factors in various contexts, their effects to each other, and certainly their relationship, whether they were causal or were merely linked with lack of confidence in the government.

An objective tree analysis was established to determine the itemization of objectives which were reduced and controlled to be accomplished by the project team. Thus, this study intended to enhance public confidence in NFA rice quality, to increase the accessibility of NFA rice to the marginalized sector, and to ensure consumer welfare in the availment of safe and good quality NFA rice.

As cited in the scope of the public service of citizens' engagement, trust has been concluded to go along with personal and organizational behaviors where expectations of both parties are well-defined and where confidence results from the delivery of what has been committed (Edwards, 2015).



**Figure 2. The Problem Tree**



**Figure 3. The Objective Tree**

It is important and relevant for the agency to identify, validate, and investigate the causes of low confidence among consumers, to enhance the public confidence level in NFA rice quality, as well as to distinguish interventions and policies to increase it. Despite the emphasis of Republic Act 11203 (Rice Trade Liberalization Act) that the issuance of the NFA rice must only be during emergencies and calamities, the proponent has taken into consideration to adopt an initiative in distributing NFA rice after its buffer stocking period to give benefits directly to the consumers in the marginalized sector which is the targeted beneficiaries of government rice.

The establishment of these initiatives may be facilitated by the DSWD with the cooperation of the LGUs and barangay officials where the NFA rice is most needed, thus, accelerating its accessibility to the marginalized sector. Through this scheme, the barangay officials become involved in ensuring their constituents with a good and safe quality of rice. Improving the consumers' confidence could enhance the targeted beneficiaries' trust in the government as represented by the agency in giving quality service delivery.

The collective undertakings and aspirations has assumed greater significance as the government has set the fundamentals of a stable republic. In this regard, the project proponent has considered the necessity of this study to focus on ensuring confidence in NFA rice quality while accelerating its accessibility in the marginalized sector through policy. It has been equally essential to identify the factors that contribute to low public confidence to optimize its usefulness as a guide to improving the agency's delivery of services.

**1.2 Statement of the Problem**

The study intended to address the gap in the knowledge regarding the consumers' perception of NFA rice quality.

Specifically, this study sought answers to the following questions:

1. What is the level of perception of NFA rice quality among the Barangay Ermita, Sipaway Island consumers when they are taken as a whole and when they are grouped according to age, civil status, number of children in family, educational attainment, and family monthly income?
2. What is the dominant response in the perception of the Barangay Ermita, Sipaway Island consumers when they are grouped according to the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase?
3. Is there a significant difference in the consumers' level of perception on rice quality before and after the project initiatives were conducted when the consumers are taken as a whole?
4. Is there a significant difference in the consumers' level of perception of NFA rice quality before and after the project initiatives were conducted when they are grouped according to age, civil status, number of children in family, educational attainment, and family monthly income?
5. Is there a significant difference in the consumers' level of perception on rice quality before and after the conduct of the project initiatives across the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase?
6. Is there a significant difference between the sensory analysis of NFA rice quality as assessed by the panelists and consumers?
7. What are the factors contributing to the low public confidence in NFA rice quality?
8. How does the agency address this low public confidence level to improve the citizens' trust in the government?
9. What policy is applicable in accelerating the NFA rice accessibility to the marginalized sector?

### 1.2.1 Hypotheses

Based on the previous statement of the problems, these were the formulated hypotheses:

1. There is no significant difference in consumers' level of perception on rice quality before and after the project initiatives were conducted when the consumers are taken as a whole.
2. There is a significant difference in consumers' level of perception on rice quality before and after the project initiatives were conducted when the consumers are taken as a whole.
3. There is no significant difference in consumers' level of perception on NFA rice quality before and after the project initiatives were conducted when they are grouped according to age, civil status, number of children in the family, educational attainment, and family monthly income.
4. There is a significant difference in consumers' level of perception on NFA rice quality before and after the project initiatives were conducted when they are grouped according to age, civil status, number of children in the family, educational attainment, and family monthly income.
5. There is no significant difference in consumers' level of perception on rice quality before and after the conduct of the project initiatives among the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase.
6. There is a significant difference in consumers' level of perception on rice quality before and after the conduct of the project initiatives among the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase.
7. There is no significant difference between the sensory analysis of NFA rice quality as assessed by the panelists and consumers.
8. There is a significant difference between the sensory analysis of NFA rice quality as assessed by the panelists and consumers.



### 1.3 Significance of the Study

The study was intended to highlight how the agency addressed the low public confidence level in NFA rice quality and crafted a policy to accelerate NFA rice accessibility in the marginalized sector which identified the necessary interventions or support systems required to keep such execution on track. The beneficiaries of the results of this study include:

**1.3.1 Barangay Officials.** Punong Barangay and its Council shall benefit from the results of this study that has clarified and enabled them to act on their roles and improve the socio-economic level of the constituents within their jurisdiction.

**1.3.2 Consumers.** Consumers shall gain better understanding of the holistic aspect of the grains industry and the quality of NFA rice and its access that directly and indirectly affects them. With the results of this study, they are better informed, hence, are empowered to positively influence the growth of the industry by responsibly and actively fulfilling their roles as consumers under the protection of the Consumers Protection Act.

**1.3.3 Department of Social Welfare and Development.** The DSWD as implementing department shall be empowered by the formulation of guidelines or policies for easy and smooth implementation of the distribution of NFA rice.

**1.3.4 Local Government Units.** The results of the study offer an affirmation of the immediate and direct roles of the LGUs in supporting the barangay officials for their intention to improve the lives of their constituents.

**1.3.5 National Food Authority – Central Office.** The results generated may become a vital frame of reference for the agency to consider the social policy intended directly to targeted beneficiaries through the collaboration with other national government agencies and consider interventions for enhanced implementation, reinvented modes of service delivery, and the level of support provided to the stakeholders.

**1.3.6 National Food Authority – Provincial Office.** This study may help the Provincial Office in enhancing their initiatives that aim to put the grains industry and its players at the center of development. This study may deepen their knowledge and commitment to the development processes that benefit the people in the provinces, particularly the targeted beneficiaries, the poor sector of society.

**1.3.7 National Food Authority – Regional Office.** This study may serve as a guide for the Regional Office to assess the alternative program in other provinces within the region in collaboration with other national government agencies.

**1.3.8 Policymakers.** The generalizations drawn from the study have become inputs to policymakers in formulating programs or policies that may improve the productivity of the National Food Authority or the grains industry. Feedback generated from the study was used as a basis in crafting policy as required by RA 11203 on the distribution of aging buffer stock.

**1.3.9 Researchers/Academe.** The academy may use the results of this study as reference materials for the students of development management and research. The related literature, studies, and reviews, as well as the information generated by the study, can be used in academic discussions as sample data set for understanding the assessment of an organization or a policy. To researchers, the educational value of the results of this study was directly measured by its quality of information and the methodology observed. Researchers benefit from the generalizations supplied by this study, from which similar or related studies may be conceptualized or implemented.

#### 1.4 Scope and Limitations of the Study

The study assessed how consumers perceived the quality of NFA rice, determined the factors that contribute to the low public confidence level, and drafted a policy to accelerate NFA rice accessibility to the marginalized sector. The researcher coordinated and accounted for the data of the poor population of Barangay Ermita, Sipaway Island from DSWD. This study is replicable and is limited to the marginalized sectors such as the island barangays, rural and urban poor areas, and indigenous people communities where poverty incidence is high.

The respondents were chosen randomly from the particular selected island barangay. This study was conducted from April until July 2019, and the result was used to determine a proposed policy in accelerating NFA rice accessibility to the target beneficiaries, thereby, improving the agency's delivery of services.

As required by the study, the project proponent carried out sensory evaluation with both panelists and consumers, based on the different ages of rice inventory in the province of Negros Occidental. However, the good quality rice supply of the province that existed and was available during the conduct of the study aged 0 to 4 months old only and are all imported rice stocks as recorded in the provincial office Monthly Grain Stock Quality Status Report as of March 31, 2019. The latest procured *palay* inventory was not subject for milling as ordered by the Officer-In-Charge of the food agency per communication coded AO-2019-B-005 dated 13 February 2019 that there shall be no milling of *palay* until all imported rice stocks are disposed of. Therefore, the study was limited to the sensory evaluation of whatever current stocks were available.

The same questionnaire was used for a scientist (panelist) and non-scientist (consumer) which generated a result indicating a significant difference in raw NFA rice. The questionnaire was more applicable to panelists than to consumers considering that panelists are technically trained on rice classification. Sensory analysis questionnaire should be designed according to the class and type of consumer respondents and consider panelists who have no overexposure to the product being studied. If the panelists had participated in the same sensory analysis too frequently, their criteria might have changed having gained more experience than did the consumers who are new entities, not quite an expert, in this study. Questionnaires were in English and were not administered in the local dialect which could have affected the understanding of the participants in the perception survey and consequently the results. Considering the status of the respondents from the marginalized sector, the researcher did not find it easy to make a questionnaire especially that the process necessitated linguistically knowledgeable interpreters who are familiar in the target language, which is Cebuano. Since it was limited to the English language, forward translations were produced verbally; hence, the researcher used the classroom type survey using the Tagalog language to assist in distinguishing inaccuracies and misinterpretations caused from the source version.

## CHAPTER 2

### PROJECT CONCEPTUAL FRAMEWORK

This chapter discusses related pieces of literature, reviews, and studies that reflect similarities and gaps with the capstone project. It also demonstrates the design and concepts that support the study which are illustrated through a conceptual diagram.

## 2.1 Review of Related Literature

This study is supported by pertinent laws and presents relevant literature, reviews, and studies that have provided the researcher varied perspectives and proper direction in the analysis and formulation of initiatives to improve the level of public confidence towards NFA rice quality and policy draft in accelerating NFA rice accessibility to the poor sector of society.

### 2.1.1 Consumer Welfare

The Consumer Act of the Philippines (1992) "declares that it is a policy of the State to defend the interest of the consumer, promote his general welfare, and to begin standards of conduct for business and industry." "Food Safety Act of 2013 Section 9, Article XVI provides that the State shall protect consumers from trade malpractices and substandard or hazardous products." Thus, the government requires all manufactured goods, particularly rice, to be safe for the citizens of this country.

Agricultural marketing policies are regularly crucial before the industry and government. There is a need to "bridge" research to the system and decisions to enable the agency to ensure Filipino farmers a reasonable return on investment (National Food Authority Handbook, 1972).

The National Grains Standards is an established rule on quality standard specifications and packaging covering rice testing and assessment (Primer on Philippine Grain Standardization Program, Accessed January 29, 2019). The agency used in this study is mandated to maintain safe and good quality buffer stocks intended for emergencies and calamities.

The FAO and World Health Organization (WHO) have a keen concern on ideologies and guidelines scientifically promoting nationwide food control methods in manipulating the segments of the food chain. This case is precisely essential for developing countries to attain improvement in food safety, quality, and nutrition that require an excellent commitment to politics and policy.

According to Nilsen (2015), an implementation's success or failure is better understood and explained by using theoretical approaches. Implementation science transmits further evidence-based research and practice that addressed challenges. The result of this study served as a confirmation of the gap in knowledge among consumers with regards to NFA rice quality.

Denison's (2017) study has developed four traits of organizational values such as involvement, consistency, adaptability, and mission that define the model of corporate culture and effectiveness. The results reveal support for the forecast value of the traits and illustrate the complementary of qualitative and quantitative methods for studying corporate cultures. Involvement and adaptability are predictors of development that indicate flexibility, openness, and responsiveness.

### 2.1.2 Perception

The qualitative study in South India conducted by Kumar and his colleagues (2009) identified some factors that hinder or stimulate brown rice total acceptability as staple cereal. Purposive sampling and focus group discussion were used in people living in the shantytown of Chennai, Southern India. Four major themes were determined from the collected and processed data, including dietary habits and tradition, and the factors and barriers that affect consumers' brown rice preference and acceptability, consciousness, and perception. Poor knowledge of brown rice nutritional was identified as a barrier to its acceptance. This conveys the same objective of the proposed study concerning the acceptance of NFA rice among consumers in the marginalized sectors and the initiatives to influence them through awareness and interviews.

International Rice Research Institute (2018) has determined that the extra value to rice finest quality traits is the aroma based on physical characteristics like chalkiness, size, and shape of grain, and rice recovery

after milling. Associating sensory to quality properties depends on the inherent knowledge of rice grain elements that influence consumer perception.

### 2.1.3 Policy

Advocacy means representing, promoting, or defending some person(s), interest, or opinion. This concept comprises rights demonstration, social marketing, and other types of advocacy activities often referred to as "policy advocacy" (International Centre for Policy Advocacy Website, 2014).

Israel (2018) investigated the growing requests for community-academic collaboration to enhance the capability of partners to accept the new policy. Community-based participatory research (CBPR) is a shared methodology that can enhance capacity building and policy modification through the reasonable engagement of different partners.

Fox (2018) has illustrated the requisite for vertical integration to monitor the different actors simultaneously, so that sovereign society achieves active monitoring of community policy developments. He stresses the vertical amalgamation across varying levels of the policy process in coordination with policy monitoring and public interest.

Dunn (2015) in the fifth edition of his book "Public Policy Analysis" defines policy analysis as a multidisciplinary inquiry of relevant information regarding the creation, critical assessment, and communication of the policy. He emphasizes that the concept of a multi-disciplinary framework of policy analysis is both descriptive and normative. He also claims that defining and explaining the causes and consequences of strategies depend on traditional social science disciplines. It is normative since it values judgments about what ought to be in diverse to descriptive statements about what is. Policy analysis depicts various social and political philosophies to determine problems in efficiency and fairness-all of which are about what ought to be. This orientation is taken from policy analysis demands that people select among preferred consequences (ends) and required courses of actions (means).

Yagi (Accessed March 11, 2019) clarifies that the Japanese government has amended the law on the creation of emergency measures to allow it to buy or sell rice at the present market price when the situation calls for it, to warrant a fair distribution of the commodity. The state is trying to increase its public rice stocks to ensure a smooth flow of distribution of reserved inventory to needy areas. This relates to the study in the implementation of RA 11203 in which the government requires the implementing agency to craft a policy in line with the provisions of the newly enacted law.

He further discusses a rice policy that is implemented in the same way all other economic ways do in order that the government control in all rice sales may be acknowledged as a useful measure to necessarily study the rice monopoly system done in all manners as realized by the state.

As cited in Erwidodo and Stringer (2009) in their book "Indonesia in a Reforming World Economy," utilizing the poverty reduction policy in the agricultural sector is vital in achieving short-term targets in developing food security in Indonesia. An increase in agricultural growth rates is linked with the decrease in rural poverty and improved food security.

UK Essays (2018) describes the inductive policy implementation by distinguishing factors to affect the service delivery domestically, determining what and how to accomplish targets, and establishing a linkage technique to identify various actors involved in the policy implementation. The methodology describes the central unit as the controller of the developed policies between some institutions and their stakeholders rather than the decision-maker. By limited explanation of implementation behavior, a bottom-up approach revolved as an ideal and analytical method for a complex organizational and political problem.

Smith (2017) assumes that most policy studies have an implicit hypothesis that formulated policy is already subject for implementation. This assumption is not valid for some developing countries who craft broad policies and for bureaucracies who lack the political will to implement the crafted policies. He explains that policy implementation is more influenced by stakeholders than policy formulation, which creates tensions among components like the system, organization performance, target beneficiaries, and environmental factors in the implementing process. The resulting pressures in transaction patterns may or may not match the outcome of the policy formulator's expectations. By feedback to the policymakers and implementers, the transaction patterns may become crystallized into institutions and generate tensions in which the policy is supported or rejected for further implementation.

#### 2.1.4 Quality Standards

Technical Research and Services Department (TRSD) Memorandum coded TRSD-RL-C-063 dated 07 March 2018 was issued to come up with the Revised Laboratory Manual on Grains Analysis as well as additional procedures on the analysis of corn grits and grain shapes. The objective is to know the characteristics and quality level of grain supplies in conformity with the standard requirements and grade descriptions. This is being performed through the conduct of physical and chemical test of grains and related commodities in support of research and operation.

According to NFA's standard operating procedure TS-SQ04 (Accessed June 8, 2019), the main concern is the age and quality status of stocks in the preparation/formulation of the distribution marketing plan and operational strategy to ensure the appropriate disposal of stocks. That is, good stocks are disposed of before they deteriorate to guarantee a better market price.

In this regard, NFA prepares the Grain Stock Quality Status Report, which is a monthly report for age determination and status of stocks quality stored in NFA warehouses nationwide that conforms to the standard grade requirements of the agency on a per variety specifications.

Moreover, NFA's memorandum 2015 AO-2K15-K-023 dated November 26, 2015, that is based on 9-6-3 grains storage policy states that disposition of stocks is being guided by a protocol on the price adjustment, assuming that rice stocks have changed physiochemical properties. Because the rice prices depend on the quality of the rice, which is dependent on time; therefore, pricing can be adjusted based on age.

NFA SOP No. GM-WH07 (accessed June 8, 2019) requires the First In-First Out (FIFO) principle where stocks earlier received or acquired are arranged or piled in such a way that they are convenient to issue such stocks first. The positioning of walkways in between piles, relative to entrances and exits, is appropriately situated. Straight lines providing maximum clear view should be used to support the FIFO plan.

Additionally, the laboratory analysis report for imported milled rice deliveries is undertaken on a per vessel per warehouse basis. This procedure is conducted based on quality parameters such as whole kernels in minimum percent (%) broken including brewers or chips at maximum percent (%), moisture content at maximum percent (%), milling degree, and age by comparing the result of analysis to the specified contract specifications of the total volume in bags received in the disport province.

While the government implements measures to ensure good rice quality, the stakeholders of the Philippine rice industry are currently applying methods and standards for the improvement of rice variety as highlighted in Patindol's paper (Accessed January 30, 2019). It shows the four significant aspects of the quality of rice, namely, (1) milling potential, (2) physical attributes, (3) physiochemical properties, and (4) organoleptic attributes.



Specifically, Deliya and Parmar (2012) revealed that consumer behavior in rice purchases is directly dependent on the rice packaging features and details. The packaging is one of the promotional strategies that can encourage impulsive buying practices due to an increase in consumers' lifestyle. In the point of sale, package performs an essential role in marketing communications that influence the consumer's purchase decision.

On the other hand, grading is reliant on the physical and chemical attributes of rice. There is a positive inclination between grades and head rice composition; the greater the head rice content, the superior the grade. Better rice quality attracts a higher price, which is profit potential and beneficial for an agent concerned in rice quality enhancement. This associates the preference of the consumers when it comes to the quality of rice, especially in areas where the volume of rice stocks is available for sale (Ridwan, 2006). Similarly, Cuevas (2016) discusses that premium-grade rice quality consumption is predominantly dependent on the socio-economic status of consumers, but lower-income classes are increasingly conscious of food quality. The study shows similarity in terms of the purchasing capacity of poor families who can only afford to buy affordable yet good quality rice.

Finally, Bamishaiye (2012) contends that a quality grain is one that can satisfy the consumer specifications concerning a range of predetermined Quality and Safety standards. Promotion of standardization and grading of commodities is an important aspect of agricultural marketing. This relates to the current study in which awareness of quality determines consumer preferences.

### **2.1.5 Sensory Analysis**

According to Unneveher et al. (1992), the traditional variety label for Philippine rice is commonly a modern-day variety of grain. Its form or cooking features are generally illustrated during laboratory analysis, thereby, sending signals to the consumers that the said rice has some necessary characteristics.

## **2.2 Synthesis and Gaps**

These relevant literature, reviews, and studies reveal similarities in terms of policy implementation success through a collaborative approach and reasonable engagement of implementers and beneficiaries that can assist capacity building and policy modification. Also, the comparative concepts regarding perception level determined that rice preferences rely on the physical attributes and awareness of their value and importance. In parallel views, rice quality is a major factor that influences the buying behavior of society where physical and chemical attributes are being ascertained despite the purchasing capacity of individuals.

In this context, the proposed project is not a replication of the research and studies reviewed considering that the subject is government rice which is being assessed in terms of its total acceptability despite the presence of commercial rice in the market and is being evaluated in terms of the improvement of its accessibility. Also, a gap in the adoption or formulation of an agricultural policy that addresses social issues and concerns in the country was identified despite a new law that was implemented.

### 2.3 Conceptual Design

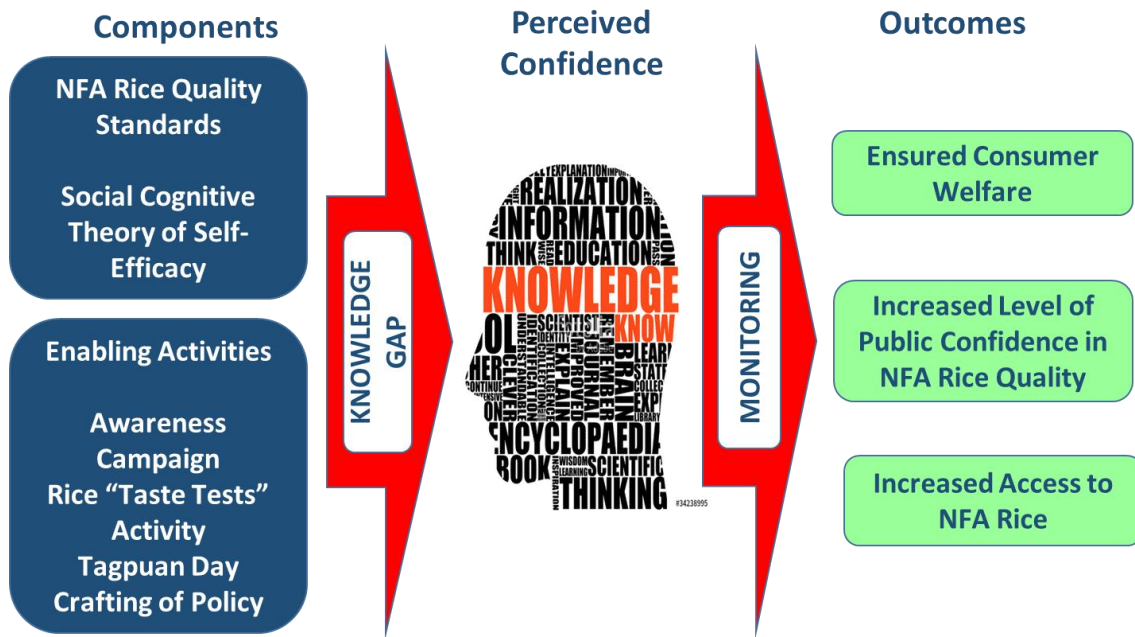


Figure 4: Schematic Diagram of the Conceptual Framework

The conceptual framework is based on Psychologist Albert Bandura's social cognitive theory of self-efficacy. It is embraced as positive psychology and is therefore considered one of the most empowering mentality, commonly known as self-efficacy or confidence. It is a positive belief of personal competence or hopes in accomplishing a task and delivering an advantageous outcome (Akhtar, 2008).

The conceptual framework describes the researcher's opportunity to implement initiatives to address the gap in knowledge regarding NFA rice quality among consumers while accelerating its accessibility, particularly in the marginalized sector. Acknowledging the gap in knowledge that the researcher has witnessed during the fieldwork, the recent approval of RA 11203 also allows assessing the existing policies and guidelines in the Agency's delivery of services.

The initiatives that include information and education campaign, rice tasting activity, and direct NFA rice selling were the bases for crafting a policy that would improve the knowledge and awareness and achieve the perceived public confidence. This level of confidence was validated through the conduct of a perception survey and sensory evaluation by analyst experts and consumers to achieve further the desired outcomes of the project of ensuring consumer welfare, increasing the level of public confidence, and increasing access to NFA rice through the proposed policy.

The conceptualization of this project replicates the following characteristics of a development project to improve public governance:

**2.3.1 Citizen-centric.** The project is primarily for the general welfare of consumers in marginalized barangays through acquired knowledge from advocacy campaigns to exercise their rights and facilitate sound choice. Cascading these activities at the barangay level would widen consumer awareness about NFA rice quality and ensure confidence while accelerating its accessibility among barangay residents, who are poor and underprivileged, particularly, in the Geographically Isolated and Disadvantaged Area.

**2.3.2 Collaborative.** Though NFA is the lead agency in this proposed project, its success would not be possible without proper coordination with the DSWD as the implementing agency with regards to

government rice distribution, LGU, and Barangay Officials. A collaborative effort is essential to achieve efficient delivery of services. Thus, a close working relationship and partnership with the agencies mentioned above is necessary, especially in analyzing the impact of the initiatives in the community.

**2.3.3 Relevant.** The project would stimulate the consumers' consciousness on the quality of NFA rice and the government's strategies to improve its accessibility to the residents and consumers in the marginalized areas when the policy draft is approved. Such awareness would make them more vigilant and watchful on their consumer rights and welfare.

**2.3.4 Innovative.** The project has a certain degree of originality considering that the agency is focused on advocacy campaigns on major programs before the enactment of RA 11203. However, this project is more driven specifically on information and awareness campaign regarding NFA rice quality. This initiative concentrates more in the marginalized areas like island barangays, urban and rural poor areas, as well as indigenous people communities unlike in the past where the Agency concentrated in major markets. This endeavor would be a partnership between NFA and DSWD as implementing agencies for the improvement of the delivery of services and the welfare of the people.

## CHAPTER 3 METHODOLOGY

This chapter discusses the research design, locale, unit of study, data collection procedures, statistical tools, framework for analysis, as well as the implementation plan used in the study.

### 3.1 Research Design

This study used mixed methods of research, an approach for conducting research that incorporates collection, analysis, and integration of quantitative and qualitative data for better understanding of a research problem or concern (Bulsara, Accessed January 29, 2019).

This research design was adopted because of the nature and direction in which the results are measured and evaluated against some known or assumed standards. Quantitative measures were used to assess how the consumers in the marginalized sector perceive NFA rice quality and provide initiatives directed towards the characterization of NFA product and services. It also led towards the identification of the factors contributing to the low level of public confidence in NFA rice quality and the determination of social policy in the disposition of aging rice.

Toward the ends of this study, a project team was formed. It consisted of an adviser, project team leader, at least three (3) sensory analyst experts to lead the sensory evaluation, Senior Grains Operations Officer for coordination, Quality Assurance Officer for the rice quality awareness campaign, and an Information Officer for the documentation.

**3.1.1 Locale of the Study.** Barangay Ermita is an island rural barangay located in Sipaway Island, San Carlos City. It covers an area of 176.21 hectares which is 36% of the total area of the City. The Barangay has a total population of 2,150 composed of 478 households.

On the west along the coastline of Sipaway Island, Barangay Ermita settlement clusters can be found. Social issues in the Barangay include lack of sanitary facilities and potable water, being prone to strong winds and big waves, transportation that is affected during bad weather, and the lack of police outpost.

This barangay is considered a marginalized population or a Geographically Isolated and Disadvantaged Area (GIDA). The island is physically isolated in terms of distance, weather situations, transportation problems, and socio-economically detached from the typical society due to high poverty incidence. These

kinds of communities are the prioritized target beneficiaries of NFA in the delivery of its quality services and is considered to be the focus of government interventions to attain fairness in resource allocation and wide-ranging growth.



**Figure 5. Sipaway Island Map**

**3.1.2 Unit of the Study.** The study generated data from primary sources. The primary sources are the consumers or constituents of Barangay Ermita, Sipaway Island. Data gathering was done through the use of questionnaires, key informant interview, and document analysis. Since the three (3)-month period to implement this action research is a constraint, and the population of Barangay Ermita of 2,150 composed of 478 households is a large sample to consider, the proponent determined the sample size using Slovin's formula to represent the large population through random sampling to capture an ideal data. Slovin's formula is computed as follows;

Where;            N = 478 total no. of households

$$n \text{ (sample size)} = \frac{N}{1 + N(0.0025)}$$

$$= \frac{478}{1 + 478(0.0025)}$$

**n = 217 no. of respondents**

**3.1.3 Data Collection Procedures.**

The researcher started by securing permission from the Administrator of NFA central office, Regional Manager II of the regional office, and Provincial Manager of the provincial office to conduct the study. The researcher primarily collected data through the use of a questionnaire.

With the approval of these identified authorities, the researcher conducted a document analysis to establish the characterization of the Agency's program. She analyzed the documents that included the accredited outlet allocation list per municipality, the standard operating procedures, and the monthly performance report on distribution.

Then, the researcher coordinated with and interviewed the DSWD and 4Ps office representatives for some data regarding the beneficiaries who were the respondents of the study.

Subsequently, key informant interview (KII) was conducted with five (5) residents of Barangay Ermita to allow a more in-depth exploration of the information that could not be captured through the survey. This data collection technique was deemed appropriate for this study that involved acquiring qualitative data or information through an extensive interview among varied persons who are familiar with what is happening in the community. These people could give insights on the societal issues and provide suggestions and answers to the existing problem (UCLA Center for Health Policy Research, Accessed March 17, 2019).

In this study, KII was conducted to generate qualitative inputs in the formulation of the proposed initiatives to enhance public confidence and social policy for the improvement in the Agency's delivery of services. Second, the researcher personally interviewed the consumers or constituents of Barangay Ermita in Sipaway Island and utilized the project team to administer the questionnaires for the pre and post perception surveys. This strategy was employed to ensure a more rapid data collection process, to attain a 100% retrieval rate, and to solicit a higher participation rate from the respondents.

In conducting the KII, the project proponent thoroughly explained the purpose of the study and the instructions to accomplish the questionnaire. She emphasized the retrieval of the accomplished questionnaire on the same day and informed the respondents that explanations would be given to respondents who needed clarifications. This strategy enhanced the quality data collection and generated a more meaningful cooperation.

Fourth, the qualitative description was supported by document review of NFA Negros Occidental, which provided information on the volume of NFA rice sold in the area and the accredited outlets established in the city.

The last stage involved the crafting of the proposed policy for the disposition of rice and recommended initiatives to ensure consumers welfare and improve public confidence in NFA rice quality particularly in Geographically Isolated and Disadvantaged Areas.

**3.1.4 Ethical Considerations.** As a public entity, the National Food Authority requires that all data gathering, study, or research conducted must secure permission for the conduct of the study. In this case, in particular, the permission of the NFA-Negros Occidental was sought to be the target locale and the location of the unit of study. The researcher obtained the approval for the study from the central, regional, as well as the provincial head of the agency involved in this research. She made a courtesy call with the Punong Barangay of the rural barangay where the study was conducted. She also secured an authority from the Regional Office to conduct the sensory evaluation intended for the Rice "Taste Tests" Activity. A smooth collection of quality data sets was facilitated by putting in place such a research protocol. The anonymity and confidentiality of the information gathered was also ensured.

**3.1.5 Measures.** The primary research instrument for this study was a structured questionnaire. One survey questionnaire for all respondents was used, and the components of the study would address the problem of the knowledge gap and low public confidence in NFA rice quality.

This study utilized the survey method. The instruments were prepared first by identifying the respondents and then seeking the primary data. Supplementary interviews were performed to enhance and clarify the answers of the respondents. The items in the questionnaire were to be answered in different ways. Part I uses a checkmark; Part II contains multiple-choice items; Part III uses a five-point Likert scale; and, Part IV is a checklist.

The perception survey questionnaire used the following scale to determine the level of consumers' perception of NFA rice quality.



Perception Survey Scale

Mean Range	Scaled Rating	Descriptive Equivalence	Interpretation
4.50-5.00	5	Strongly Agree	Statement is completely true
3.50-4.49	4	Agree	Statement is mostly true
2.50-3.49	3	Neutral	Neither agree nor disagree
1.50-2.49	2	Disagree	Statement is partly false
1.00-1.49	1	Strongly Disagree	Statement is completely false
0.00	No Knowledge		

The standard score sheet for the sensory evaluation used the following scale to determine and describe the scores of sample per characteristic in terms of acceptability.

Sensory Evaluation Scale

Mean Range	Scaled Rating	Descriptive Equivalence
5.00	5	Excellent
4.0-4.9	4	Very Good
3.0-3.9	3	Good
2.0-2.9	2	Fair
1.0-1.9	1	Poor

Reference documents, which identify the sub-populations for this study, were secured from the DSWD. From these sub-populations, the official sample and substitute samples needed for the study were determined.

A survey questionnaire was used in generating data for this study. Upon completion of the tool, the same was submitted to the faculty advisor for final comments and approval. The five-point scale established from the measures that were set is recognized to rate each item as to its validity.

In this study, the validation of the instrument was accomplished through the use of Good and Scates research evaluation form, which was the first activity carried out by the proponent.

Shaughnessy refers to reliability as the consistency of the scores that an individual obtains in a given test (Verdeprado, 2017). To ensure the steadfastness of the instrument, a dry run was conducted at Barangay 35 in Bacolod City.

**3.1.6 Tools of Analysis**

**3.1.6.1 Data Analysis.** One hundred percent (100%) of the survey questionnaires were retrieved, tabulated, summarized, and processed electronically. Results of the survey were presented in tabular and narrative forms.

For problems 1 to 9, the method that was used is descriptive.

**3.1.6.2 Statistical Treatment.** Appropriate tools such as descriptive statistics were used in interpreting the quantitative data of this study.

For problem 1 which determined the level of perception of NFA rice quality, the statistical tools used were frequency distribution for the parts I, II, and IV while in part III weighted mean was used when the respondents were taken as a whole. However, when the level of perception was assessed when the

respondents were grouped according to age, civil status, number of children, educational attainment, and family monthly income, Analysis of Variance or ANOVA was used to check differences between two or more variables.

For problem 2 that determined the dominant response in the perception of NFA rice quality among the Barangay Ermita, Sipaway Island consumers when they were grouped according to the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase, frequency distribution was used.

For problem 3 which determined the difference in the consumers' level of perception on rice quality before and after the project initiatives were conducted when the consumers were taken as a whole, T-test was used.

For problem 4 that aimed to determine a significant difference in consumers' level of perception on NFA rice quality before and after the project initiatives were conducted when they are grouped according to age, civil status, number of children in the family, educational attainment, and family monthly income, T-test was used.

For problem 5 that is aimed to determine a significant difference in consumers' level of perception on rice quality before and after the conduct of the project initiatives among the variables in the areas of a) consumption; b) awareness; c) preference; and d) purchase, Mc Nemar's Chi-Square was used.

For problem 6 that determined the difference between the sensory analysis of NFA rice as assessed by the panelists and consumers, T-test was used.

For problem 7 that aimed to determine the factors contributing to the low public confidence in NFA rice quality, frequency distribution was used.

For problems 8 and 9, descriptive statistics were used.

### **3.1.7 Framework of Analysis**

In the process of analysis and interpretation of data, findings, or results, the researcher was flexible, thereby, allowing the collection of all the data and consequently the analysis of data triangulation using analysis of variance during pre and post perception surveys, the ranking of results, interviews, and document review. Triangulation is the process of using different methods and types of samples to ensure the validity of research, to gather data on the identical topic certainly not to cross-validate data, and also to denote various extents of the same phenomenon (Kulkarni, 2013).

## **3.2 Implementation Plan**

Consumer welfare is one of the main concerns of the government, wherein it has to formulate and strengthen consumer protection through legislation, laws, regulations, and related policies.

In April 1992, Republic Act 7394 was enacted in the Philippines. It stipulates that "it is the policy of the State to protect the interests of the consumer, promote his general welfare, and to establish standards of conduct for business and industry." The following objectives provided in RA 7394 that would be addressed by this capstone project entitled NFA Rice (Responsive Initiatives for Confidence Enhancement) in the marginalized sector are as follows: 1) provision of awareness and knowledge to facilitate sound choice and proper exercise of consumer rights; and (2) consumer representation in social and economic policy formulation.

On the other hand, the enactment of RA 11203 shows the clear function of NFA in which the law requires the agency to maintain a rolling buffer stock for the country's food security. Buffer stocking is a pattern or structure where inventories are procured and stored during harvest season to avoid decreasing prices below the ideal price level, and stocks are issued during off-peak harvest to prevent increasing prices

above the targeted price level (Economics Online, 2019). Also, the government mind setting to remove the P27.00 per kilo of NFA rice and replace it with the Department of Agriculture's (DA) P38.00 per kilo commercial rice is inconsistent with the assurance to the poorest Filipinos to get access to the national staple (Cruz, 2018). However, the law implementing rules and regulations lack specific guidelines on the distribution of aging rice after the buffer stocking period. This lack of provisions needs the attention of the policymakers or legislators to avoid additional storage costs in the maintenance of buffer stocks and wastage of government funds.

It is on this aspect that this capstone project was conceptualized to ensure the consumers' confidence while accelerating their access to NFA rice through a proposed policy. The project was piloted in an island barangay in San Carlos City namely, Barangay Ermita, Sipaway Island.

### **3.2.1 Objectives of the Capstone Project**

#### **3.2.1.1 General Objective**

The primary objective of this capstone project is to ensure consumers' confidence in NFA rice quality while accelerating its accessibility down to the barangay level, where most of the vulnerable and underprivileged sector of the population resides. The strategy is to establish initiatives or interventions to enhance public confidence in the barangays not only during emergencies and calamities but at all times and to improve the agency's delivery of services.

#### **3.2.1.2 Specific Objectives**

**3.2.1.2.1** To determine the appropriateness and usefulness of the instrument to the research study;

**3.2.1.2.2** To coordinate and brief the DSWD, LGU, and Punong Barangay about the capstone project and its purpose to come up with better collaboration in the planning and development of community projects;

**3.2.1.2.3** To determine the level of perception in NFA rice quality through pre and post perception surveys to know whether the initiatives achieved the desired objective;

**3.2.1.2.4** To inform and harness the consumers' knowledge about NFA rice quality through the conduct of Information and Education Campaign (IEC) on NFA rice quality standards to address the knowledge gap;

**3.2.1.2.5** To evaluate and analyze the potential differences in rice sensory characteristics and overall acceptability by way of NFA rice sensory analysis and actual Rice "Taste Tests" Activity;

**3.2.1.2.6** To accelerate NFA rice accessibility in the marginalized sector by way of direct selling of NFA rice in the marginalized areas;

**3.2.1.2.7** To establish policy brief on NFA rice distribution after buffer stocking period to prevent additional storage and maintenance costs and wastage of funds on the part of the government, for through crafting policy, legislators realize the importance of community development projects as answers to the social issues that are currently existing;

**3.2.1.2.8** To document the capstone project implementation to establish records of concrete results of activities that were used as bases for the policy preparation.

### **3.2.2 Phases and Components of the Project**

#### **3.2.2.1 Initiation Phase**

The monitoring function of the proponent and the actual scenario about consumers' perception in the field about NFA rice that has been observed became the push factor for the researcher to pursue this study. It was further encouraged by the recent approval of RA 11203, which limits the function of the agency. Upon review of the IRR provisions, the study is an answer for the unclear guidelines of what to do with

the buffer stock if it surpasses the required storage period without being utilized for emergencies and calamities, whether natural or man-made, thereby, causing deterioration on the quality of rice.

**Table 1. Situational Analysis**

<b>The ideal situation (as per mandate)</b>	<b>The present or actual situation</b>
There is intensified Consumer Education and Advocacy Campaigns of the agency's major programs in compliance with the Consumers Act (Ugnayan)	Advocacy campaigns focus only on major programs, but NFA rice quality standards are not being discussed.
Sensory evaluation is conducted among the personnel as panelists for quality analysis.	Sensory evaluation is not extended to consumers for knowledge and awareness.
Rice "Taste Tests" Activity is conducted in some provinces.	Rice "Taste Tests" Activity is not a regular undertaking in the agency.
Due to the repeal of the stabilization mandate through RA 11203; the issuance of buffer stocks is only intended for emergencies and calamities.	Rice distribution is not a regular undertaking of the agency, considering that rice stocks have a required maximum storage period to avoid further deterioration and additional storage costs.
Rolling buffer stocks are intended for national food security and emergency and calamity issuances.	Aging rice after buffer stocking period should be subject to issuance at all times.

The plans and programs of the agency focus on consumers' welfare through quality delivery of services, availability, and accessibility of goods and services and attaining client satisfaction. Among the identified strategies is the crafting of policy for the distribution of rice after the buffer stocking period. This is intended to accelerate NFA rice accessibility to the barangay level with accompanying activities like awareness campaign on NFA rice quality standards, rice "taste tests" activity, and direct selling of NFA rice to address the knowledge gap and to ensure confidence among consumers in the marginalized sector.

**3.2.2.2 Planning Phase:**

From the objective tree, the different tasks and outputs were identified. A Work Breakdown Structure (WBS) with Gantt chart was prepared to organize the tasks of the project team into manageable segments that could be easily understood and to illustrate a clear schedule of individual tasks and their sequence as well as their duration that facilitates planning, coordination, and tracking of specific tasks. The members of the project team were identified, and their corresponding designation order was issued to ensure full support to the project implementation.

**Table 2. Work Breakdown Structure and Schedule**

Activity	Timeline (April to June, in weeks)											
	April				May				June			
	1	2	3	4	1	2	3	4	1	2	3	4
1.0 Validation of instrument and Reliability test	■	■										
2.0 Document Analysis	■	■										
3.0 Sensory evaluation by panelists			■	■								
4.0 Coordination and Collaboration												
4.1 Meeting with DSWD and LGU		■	■	■	■	■	■					
4.2 Meeting with the Punong Barangay and the Project site visit		■	■	■	■	■	■					
5.0 Key Informant Interview (KII)		■	■	■	■	■	■					
6.0 Pre-perception Survey			■	■	■	■	■	■				
7.0 Awareness campaign on NFA rice quality standards			■	■	■	■	■	■				
8.0 Sensory evaluation by consumers			■	■	■	■	■	■				
9.0 Rice Tasting Activity			■	■	■	■	■	■				
10.0 Post-perception Survey			■	■	■	■	■	■				
11.0 Direct Selling of NFA rice or Tagpuan Day			■	■	■	■	■	■				
12.0 Policy preparation				■	■	■	■	■	■	■	■	■
13.0 Capstone Project Report Preparation					■	■	■	■	■	■	■	■

**3.2.2.3 Implementation Phase:**

This phase is based on the project execution plan and includes the monitoring of project status. The execution phase consists of the following major activities:

**3.2.2.3.1** Validation of the research instrument and reliability test

**3.2.2.3.2** Document Analysis

**3.2.2.3.3** Coordination meeting with the DSWD, LGU and Punong Barangay

**3.2.2.3.4** Key Informant Interview (KII)

**3.2.2.3.5** Sensory evaluation by the panellists

**3.2.2.3.6** Information and education campaign on rice quality standards

**3.2.2.3.7** Pre-perception survey

**3.2.2.3.8** Sensory evaluation of the consumers

**3.2.2.3.9** Rice "Taste Tests" Activity

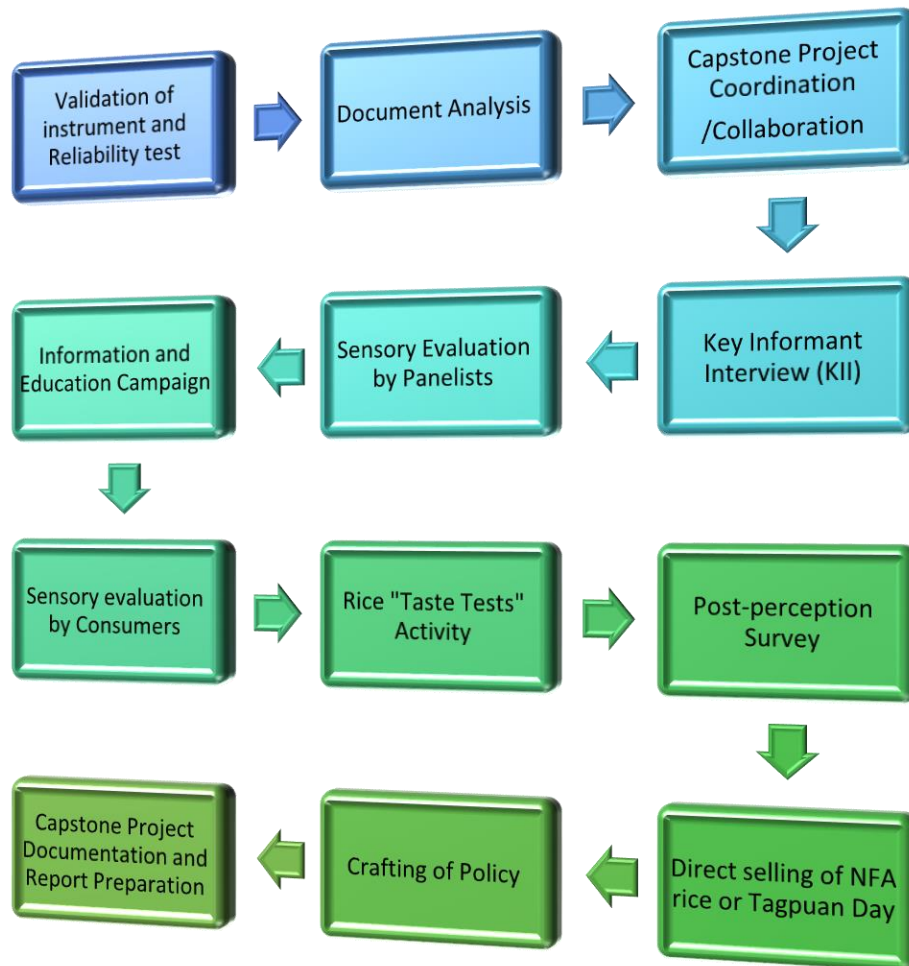
**3.2.2.3.10** Post-perception survey

**3.2.2.3.11** Direct selling of NFA rice to the marginalized area or Tagpuan Day

**3.2.2.3.12** Crafting of Policy



### 3.2.3 Process Flow



**Figure 6. CP Process Flow**

The full implementation of the capstone project deliverables was used as the basis to determine the level of confidence in NFA rice quality among the consumers and was validated through the results of the pre-perception survey before any initiatives and interventions were undertaken. Afterwards, a post perception survey was done to determine if there is a significant difference after initiatives were conducted. The CP ensured the consumers' confidence in NFA rice quality while accelerating its accessibility to the marginalized sector.

The CP process flow started after securing permission to administer the questionnaire. The instrument underwent validity and reliability tests to determine the appropriateness and usefulness of the instrument to the research study and to assess the different connections between measurement techniques and their consistency.

A document analysis was undertaken to assess the existing policies, programs, reports, and procedures of the food agency to improve the delivery of services that it directly renders to targeted beneficiaries who

are the vulnerable sector of society. The analysis would recognize the importance of the project to achieve its objectives.

Coordination of the capstone project and its purpose with other implementing agencies would give way to a proper collaboration, smooth implementation of all the expected deliverables of the project to the stakeholders, attainment of the project objectives easily and quickly, and avoidance of conflicts and delays in the implementation.

Key informant interview was performed to establish in-depth information regarding the people, the place, and its culture. The activity gathered what and how people addressed poverty in the area in their means considering that they are less privileged when it comes to government services.

As a prerequisite to the conduct of rice "taste tests" activity, sensory evaluation of the NFA rice should be done by the panelists of the agency to ensure that the stocks of NFA Negros Occidental are of good quality and are fit for human consumption.

After determining its quality through analysis, rice tasting activity could be implemented in collaboration with other government agencies, particularly the DSWD as the partner agency in the issuance of buffer stocks, and other private individuals and organizations who wish to sponsor such activity. This rice tasting would allow consumers to eat NFA rice in actuality. One of the outputs of the implementation phase was the awareness campaign on NFA rice quality standards which was conducted by the Technical Research Services Department (TRSD) from the provincial office where the project site is located. Its replication to other provinces is possible to expand awareness on NFA rice quality anywhere in the country. This information campaign was conducted to enhance awareness about NFA rice and fill in the knowledge gap among consumers.

A pre-perception survey was conducted to establish the present consumers' perception regarding NFA rice quality in terms of its attributes like color, smell, texture, and taste, particularly in the identified marginalized area.

Before the rice "taste tests" activity, another sensory evaluation had been undertaken by the project team to the consumers. This involved flexibility in terms of stocks to be tested based on age or variety to determine the differences in perception whenever factors of age and variety are being considered. The overall rice tasting activity aimed to evaluate and analyze the potential differences in the rice sensory analysis between panelists and consumers in terms of its characteristics and overall acceptability. After all the initiatives were conducted, a post-perception survey was performed to determine whether there was an increase in the level of perception of NFA rice quality among consumers in the identified marginalized area where the project was implemented.

Direct selling of NFA rice in the marginalized area or Tagpuan Day was one of the activities to be undertaken. The poor and marginalized beneficiaries could avail of an affordable and good quality NFA rice in coordination with the local barangay. This intensified strategy of rice distribution aims to make NFA rice available and accessible to more consumers. Direct selling of NFA rice to consumers in the marginalized areas aims to accelerate NFA rice accessibility in the marginalized sector.

The main deliverable of the project is the draft of policy brief (see Annex 9, page 192) to be considered in establishing the guidelines in the issuance of aging rice after the buffer stocking period. This would help policymakers understand and decide what and how to adapt the said options summarized in the policy brief not only for the advantage of the consumers but also for the government.

Lastly, these activities were documented in a detailed report for presentation and approval.

#### **3.2.2.4 Close-Out Phase:**

The close-out phase was on July 2019. Concluding all the facets of the project to the satisfaction of the top management was the purpose of this close-out phase. Moreover, ensuring that all the project aspects were appropriately finished was the project team leader's major responsibility.

The approval and adoption of the proposed draft policy took time. However, the proponent hoped that the accompanying activities were regularly a part of the agency's response in compliance with the Consumers Act, which requires the provision of awareness and consumers' knowledge to facilitate the sound choice and appropriate exercise of consumer constitutional rights.

A continuous collaboration of the following national agencies, namely, NFA, DSWD, LGUs, as well as other private organizations, sustained the project. Sustainability is a challenge addressed by the implementing agencies of RA 11203 through policy review.

The close-out is not just a matter of ending the initial phase of implementation; rather, it implies further assessment or study of the impact of the project to the society especially for those consumers residing in the marginalized areas.

### 3.2.4 Benefits to Primary Stakeholders

**Table 3. Stakeholders' Benefits**

<b>Stakeholder</b>	<b>Interest in Project</b>	<b>Positive (/) / Negative (x)</b>	<b>Degree of Influence</b>	<b>Degree of Importance</b>
Barangay Residents/ Consumers	Enhanced knowledge and awareness of NFA rice quality	/	High	High
Punong Barangay/ Barangay Council	Empowered to address a societal concern or community issues among their constituents	/	Medium	Medium
Implementing National Government Agencies (DSWD, NFA)	Competence enhancement in agency service delivery/ Provision of guidelines to address issue relative to rolling buffer stocks and aging rice	/	High	High

Accredited Retailers	Citizens empowerment in community service/ Provision of livelihood	/	Medium	High
Non-Government Organizations	Opportunity to get involved/ More vigilance to consumer issues	/	Medium	Medium
Consumers	Enhanced knowledge and awareness of NFA rice quality/ Improved access to NFA rice	/	High	High

### 3.2.5 Risk Management

**Table 4. Risk Management Matrix**

Risk/s	Possibility of occurrence	Severity	Preventive action	Contingent action
Uncooperative residents or consumers	Medium	High	Close coordination with Punong Barangay	Request for assistance with barangay officials
Unavailability of Project Team Members	Low	Medium	Dialogue with Project Team Members of the Capstone Project and its purpose	Issuance of Office Order as designated Project Team Members
Unavailability of Personnel In charge/ Mayor/ Punong Barangay	Medium	High	Advanced request for schedule of appointment	Close coordination with respective offices

Technical glitches/ Unavailability of facilities	Low	Medium	Advanced checking of the availability of facilities	Request for assistance from NFA Negros Occidental for technical facilities
Uncooperative Accredited Retailer	Low	Medium	Dialogue with an accredited retailer on the conduct of Tagpuan Day	Request for assistance from the NFA personnel assigned near the project site to facilitate and coordinate Tagpuan Day schedule
Bad Weather	Medium	High	Regular monitoring of the weather condition in the project site	Close coordination with the Punong Barangay

Risks concerning Barangay Officials were most expected to happen especially that the project is preliminary and that the barangay officials were not very well attuned to the consumer welfare programs of the government. However, the social concern, as well as the proposed project, can be an awakening measure of making them aware of their roles and responsibilities as the key players in barangay governance.

In the same way, uncooperative consumers or residents may hinder the success of the project implementation, but their influence can be controlled through the assistance of the Punong Barangay and its officials.

Since Barangay Ermita is an island barangay, one risk that might hinder the implementation was the bad weather condition. This situation might be counter-acted through close monitoring of the weather condition on the specified schedule. The given implementation period from April to July was the ideal time for the project to implement.



3.2.6 Communication Plan

Table 5. Communication Plan

Stakeholder	Message	Phase	Medium	Ideally when
Institutional Partner	Project Concept and status	Planning	Meetings/Phone calls	Weekly
Regional Management	Project Concept and status	Planning	Notice of activity/meetings	Weekly
Department of Social Welfare and Development	Identification of Capstone Project beneficiaries and status	Planning	Meetings/Phone calls	Bi-monthly
Punong Barangay	Project Concept, status, and schedule	Implementation	Meetings/Phone calls	Bi-monthly
Consumers	Awareness and additional knowledge	Implementation	Briefing/Awareness Campaign	Once a month
Accredited Retailer	Project concept in accelerating the accessibility of NFA rice	Implementation	Dialogue/Personal Visit	Once a month
Project Team Members	Project concept and active participation	Planning/ Implementation	Briefing/ Meetings	Weekly

A very important key element in project management is effective communication, for it encourages support and strong collaboration among all stakeholders of the proposed project. The success of a project depends on how to value the significance of communication in all periods of its implementation. Valuing and improving communication boost success and reduces risks.

Communication can be conveyed in many forms, but the most important thing is that the message is effectively and accurately delivered to the receiver on time. Thus, the project manager should see to it that the message is conveyed clearly and suitably directed to a particular stakeholder's need. Among the effective ways of soliciting opinions and insights is through consultation.

### 3.2.7 Capstone Project Team

#### 3.2.7.1 Composition and Functions in the CP implementation

The capstone project is a pilot plan of NFA-Regional Office VI, Iloilo City. The project is fully supported by the Regional Director, who commits his full support to the completion of the project. Initially, the project team is composed of the following personnel of NFA:

Name	Role
Frisco B. Canoy	Project Adviser
Glenda G. Paz	Team Leader
Roem J. Precioso	Team Member, IEC on Rice Quality Standards
Irah B. Razote	Team Member, Documentation
Epifanio G. Cosca, Jr.	Team Member, Coordination
Ma. Rowena T. Tagamolila	Team Member, Sensory Panelist Expert
Kasandra Joy P. Diapera	Team Member, Sensory Panelist Expert
Vaneza D. Aberde	Team Member, Sensory Panelist Expert
Sabina Agnes Q. Lozada	Team Member, Laboratory Preparation

#### 3.2.7.2 Functions of Project Team Members

Below are the project team members and their functions.

Adviser

- Receives updates from the Team Leader regarding the progress of the project.
- May propose a suggestion or recommendation for easier project implementation.

Team Leader

- Manages the overall implementation of the project.
- Conducts the capstone project orientation to the team members.
- Prepares an action plan.
- Leads in the coordination meetings with other stakeholders.
- Monitors and evaluates the status of the implementation of the project.
- Exercises control and supervision over the people involved in the project.
- Makes decisions based on issues that need interventions
- Regularly reports and updates the adviser and Punong Barangay on the status of project implementation.

Team Member for IEC on Rice Quality Standards

- Spearheads the conduct of Information and Education Campaign on Rice Quality Standards.
- Takes charge of the campaign materials and facilities.

Team Member for Documentation

- Takes charge of the documents and photos for proper recording of project implementation.
- Assists the project proponent in the conduct of the survey.

Team Members for Sensory Evaluation

- Act as panelist experts in sensory analysis.
- Perform the sensory evaluation for rice quality assurance.
- Provide ratings on sensory evaluation.

Team Member for Laboratory Preparation

- Prepares the laboratory facilities for the conduct of the sensory evaluation.
- Prepares the sensory evaluation report.

Team Member for Coordination

- Performs other coordinating functions necessary in the project implementation.
- Assists in Tagpuan Day logistics and rice supply to be sold.

The project team was briefed of the capstone project concepts, objectives and their roles during the project implementation phase.

### 3.2.7.3 Proponent's Management Plan for the Project Team

An orientation cum planning session was conducted to present the work breakdown structure (WBS) with a schedule for the implementation as well as the identified deliverables of the project. The WBS was strictly observed to accomplish the desired objectives considering that the project implementation is only for three months. The project team members were briefed of their major roles and responsibilities in the project implementation as well as the expected outputs and timelines to achieve the expected results of the project.

Since it is the major role of the proponent to monitor and evaluate the progress of the project, weekly monitoring and reporting of the project were prepared for consolidation into a monthly progress report and submission to the DAP Project Team. Feedback from stakeholders as well as the issues and concern encountered by the project team were included in the progress report. Likewise, the project was introduced to Punong Barangay, LGU, and DSWD thoroughly to gain their support and cooperation. Active involvement of the barangay officials and residents was highly encouraged through awareness advocacy for consumer welfare.

The Plan-Do-Check-Act (PDCA) cycle was strictly observed in determining the status of the project. This tool was very helpful for the proponent considering that problems encountered can be solved by the team efficiently to avoid its recurrence and encouraged people and process improvement. It allowed the team to check possible answers on a small scale, well-organized, and controlled situation (kanbanize.com, 2019).

Aside from the technical aspect of the project, the social aspect was also considered. Building relationship and strong rapport with the different stakeholders likely resulted in the successful implementation of the project. It has been recognized that effective interpersonal and communication abilities in a wide range of participatory community can enhance the responsiveness and effective work relationships in implementing a community development project (www.progressio.org.uk, 2016).

## Chapter 4

### RESULTS, ANALYSIS, AND CHALLENGES

This chapter discusses results and analysis derived from the project implementation, quantitative and qualitative data employed in the study, as well as the challenges encountered.

According to Nelson Mandela, "poverty is not an accident, like slavery and apartheid, it is man-made and can be removed by the actions of human beings." This quote inspires every person to take some efforts to help eradicate poverty among low-income families who are hopeless and reliant only on their government for some economic development efforts. In the Philippines, hunger is one of the severe effects of poverty with which Filipinos are experiencing difficulty to survive on minimal food and less money to buy it.

Nonetheless, even when the supply of food is stable, it is most accessible in other areas where people have sufficient income to purchase it. This unequal distribution of income would often result in low demand for food supplies in less developed regions or marginalized areas, a place of vulnerable or low-income residents.

One measure of poverty is the availability of food in every household. Rice, whether raw or cooked, remains the most consumed, staple, and the most common Filipino food. It is present in every household despite the rising per capita income; it is followed distantly by bread. Filipinos love to eat, and rice is one of the sources of nutrition among citizens.

Food security means making sufficient, safe, and nutritious food available, accessible, and is utilized by all people at all times to have an active and healthy life. According to FAO (2009), this concept describes the four pillars of food security, which are food availability, food access, food utilization, and food stability.

Amid poverty and hunger, hope and positive perspective which transcend circumstances are essential not only for the low-income families' survival but for their future. Numerous hungry people are trapped in severe poverty that often leads to malnutrition or other life-threatening conditions. However, there is ample food on this planet for everyone. The challenge for each person is to break the cycle and find solutions that help people overcome poverty and re-build their well-being.

The government's primary task is to deliver the number of public goods that are insufficiently produced by private sectors or non-government institutions. According to Republic Act 7394 or Consumer Act of the Philippines, "it is the policy of the State to protect the interests of the consumer, promote his general welfare and to establish standards of conduct for business and industry."

In the extent of food security, affordable goods should be made available to the poor through a sound distribution system for the public. In other ways, the chase might even entail for private commodities to be taken from a traditional privilege of citizens with or without benefit, for redistribution to the deprived or poor citizens.

The approval of Republic Act, 11203 or Rice Trade Liberalization Act, calls for the food agency to ensure national food security through buffer stock obtained from local sources and engage DSWD and LGUs in the distribution of stocks. The capstone project is planned and implemented to ensure public confidence in NFA rice while accelerating its accessibility to the marginalized sector which is considered part of the government's primary tasks in alleviating poverty which is barangay based.

The law provides that the distribution policies of NFA be limited to stock issuances during calamities and emergencies; however, this key project "NFA RICE (Responsive Initiatives for Confidence Enhancement) IN THE MARGINALIZED SECTOR" in collaboration with national agencies like DSWD and DILG would allow a more citizen-centric policy to reach a more significant number of the underprivileged sector of society, who are the targeted beneficiaries.

The project is pilot tested in San Carlos City, particularly in Barangay Ermita, Sipaway Island. This barangay was chosen because it was considered a priority distribution center of NFA rice where the marginalized population resides and also a Geographically Isolated and Disadvantaged Area (GIDA). It is an area where there is high poverty incidence. It could not be reached by some government services to address some of their social issues which include lack of sanitary facilities and potable water, transportation during lousy weather, and police outpost for their safety and security.

In April to June 2019, the project was implemented to give the identified stakeholders the confidence that the project objectives were achieved. It ensured stakeholder satisfaction that project management was successfully carried out.

#### **4.1 Results and Analysis**

##### **4.1.1 General Objectives of the Capstone Project**

**4.1.1.1** To ensure consumer welfare;

**4.1.1.2** To ensure confidence in NFA rice quality;

**4.1.1.3** To accelerate the accessibility of NFA rice in the marginalized sector; and

**4.1.1.4** To establish initiatives in ensuring public confidence in NFA rice quality while accelerating its accessibility in the marginalized sector.

The above objectives served as the guiding principles in achieving the following specific objectives and deliverables within the three months of project implementation:

##### **4.1.2 Validation of Research Instrument and Reliability Test**

The research instrument was validated to determine its appropriateness and usefulness in the conduct of the study and to assess different connections between measurement techniques and its consistency. The activity was undertaken from April 10 to 12, 2019. The period was considered due to the review of the statement of the problem and the specific questions to be answered through the instrument. It was performed by three (3) evaluators, two of whom were Senior Agriculturists from the Office of the Provincial Agriculturist since the study tackles an agricultural product, which is rice. The third evaluator is from the academe at University of Negros Occidental Recoletos who focused on the project context which is research-based to help clarify the kinds of tests and methods to use in terms of the ethical consideration, cost-effectiveness, and the assessment of the idea that would answer the problems of the study.

The result of the validity test using a research evaluation instrument by Good and Scates showed a 3.92 index, which is almost very good. Hence, it is an effective tool in the study.

After getting a validity result, the researcher performed the reliability test to 15 respondents from Barangay 35, Bacolod City, which is a poor urban area. Reliability test is not possible using a Cronbach's alpha, considering that the measure requires more than 15 questions while the instrument of this study has only comprised of five questions involving a rating scale. Relatively, the reliability tests responses were used as part of the qualitative data to validate the results of the study quantitatively.

Results showed that in an urban poor area like Barangay 35, 60% do not consume NFA rice because of its off-odor and tough texture. Non-consumption of NFA rice may be explained by the fact that the urban population is exposed to numerous varieties of commercial rice and have access to various rice traders. Among the respondents, 93% are aware of NFA rice quality because of its presence in major markets. Likewise, 67% who like NFA rice avail because it is affordable and safe. These validity and reliability tests of the research instrument were initiated to ensure that the results of the study are valid and reliable.

##### **4.1.3 Document Analysis**

The researcher performed the document analysis at NFA, Negros Occidental last April 15, 2019, to analyze and interpret existing policies, programs, reports, and procedures to give meaning and value to the capstone project as well as to contribute in crafting the distribution policy which is lacking in the approved RA 11203.

In terms of upholding the good quality of NFA rice for improved public confidence, the agency's warehousing policies and procedures requires the monitoring of compliance to good warehousing



practices to be observed by all field personnel nationwide. Conduct of quality management and food safety awareness training shall be done consistently to assure the consumers of safe and reliable rice in the market.

As stipulated in the guidelines, the application of price adjustment mechanism through sensory evaluation shall be adopted for the sale or distribution of aging stocks based on 9-6-3 grains storage policy in which 9 signifies the number of months for the issuance of palay, 6 for rice, and 3 for corn. This practice establishes a pricing protocol based on the theory that the price of rice depends on its quality, which is time reliant; therefore, pricing can be modified based on the age of stocks. This strategy shall avoid further stocks deterioration, prevent additional storage, and maintain the cost on the part of the government.

According to NFA provincial reports, as of April 15, 2019, the province had already distributed 18,349 bags of imported rice of which 97% was sold in the 170 accredited retailers around the province. Among the accredited outlets, 17 outlets are located in San Carlos City of which the only one is based in Sipaway Island, particularly in Barangay Ermita, serving the 4,373 population of the island.

#### **4.1.4 Coordination with DSWD, LGU, and Punong Barangay**

On April 25, 2019, the project was discussed and introduced by the researcher to DSWD, San Carlos City Government, and Punong Barangay of Barangay Ermita, Sipaway Island, San Carlos City who readily welcomed and supported the project implementation.

The project allowed San Carlos City government to participate in this project and to share the responsibility in managing and monitoring the national government policies and programs within their territorial jurisdiction to improve local governance.

On the part of DSWD as the implementing agency, the project aligns with their mandate in administering and implementing social welfare programs intended to improve the living condition of disadvantaged families and communities needing assistance like 4Ps beneficiaries in Barangay Ermita. Smooth flow of data collection was achieved through the proper endorsement of the researcher's project of DSWD officer to Pantawid Pamilyang Pilipino Program office wherein the data such as 167 4Ps beneficiaries in Barangay Ermita and the program coordinator whom to contact during the final activity were gathered and identified. Acknowledging the relevance of the project and the benefit it can provide to their constituents, the Punong Barangay offered the barangay facilities and structure to the project team in conducting the one-day final activity. He also allowed the council to assist in identifying the respondents for the Key Informant Interview to establish a smooth flow conduct of the study. The acceptance and support of the stakeholders is an indication that the project is very relevant to the public in general and Barangay Ermita in particular.

#### **4.1.5 Key Informant Interview**

On April 25, 2019, the researcher visited the project site to familiarize the place and its people, and what and how they surpass the economic situation in the island barangay despite being isolated and disadvantaged. The researcher also acquired in-depth information on the locale of the study, the residents' perception regarding NFA rice attributes, and the factors that contribute to low confidence in terms of its quality. Five residents were interviewed on their perception regarding the quality and the accessibility of NFA rice.

Traditionally, some residents in the area eat corn instead of rice. Despite this way of life, the interviewees were aware of and described NFA rice as good in quality, white in color, and natural in smell like other milled commercial rice. Most children in the area prefer to bring rice to school instead of corn, which is traditionally consumed by their parents. Their awareness of the following rice attributes was observed because of the existing outlet in Barangay Ermita. Some of the advantages of NFA rice is its affordability

and good quality; however, the limited stocks distributed in the area were considered a disadvantage by the consumers of NFA rice. They emphasized that there is a need for the barangay outlet to exist, considering that NFA rice is cheap yet has good quality, and they think that it should be enhanced for other 4Ps beneficiaries to avail NFA rice.

#### **4.1.6 Information and Education Campaign**

Awareness of NFA rice quality standards was campaigned on May 23, 2019 to inform and harness the consumers' knowledge in Barangay Ermita. The Barangay Council took charge of the venue and facilities during the activity while the DSWD 4Ps Coordinator responsibly coordinated with 167 4Ps beneficiaries to attend the said project implementation together with some residents and barangay officials. They gathered a total of 219 attendees.

Matters discussed during the awareness campaign are the quality parameters for grains stored at the NFA warehouses and the locally procured ones that include dryness, purity, discoloration or damage, the appearance of a new harvest, and presence of insects. Likewise, imported rice quality parameters consist of moisture content, age determination, (broken) breaks, degree of milling, discoloration or damage, and infestation. Strategies to maintain good quality stocks were further discussed comprised of the following: warehouse hygiene and sanitation; stock quality maintenance and preservation; infestation management; proper maintenance and upkeep of storage structure; and proper disposal of waste and junk materials. Provision of information and education to Barangay Ermita residents facilitated sound choice and proper exercise of consumer rights.

#### **4.1.7 Rice "Taste Tests" Activity**

Rice tasting was done with all the participants during the culminating activity at Barangay Ermita on May 23, 2019. The tasting was aimed to test the overall consumption characteristics of NFA rice and to assess its physical attributes. Taste tests are ideal for products like rice that are consumed directly by the public. Cooked NFA rice and pork adobo were served to all participants. The activity was only a single product test. Then, the participants gave their assessment of NFA rice without any knowledge of the variety of rice being served. Thus, any bias is removed that might influence and affect the results due to respondents' pre-conceived notions about NFA rice.

Consumers' preferences are determined based on numerous factors such as the product's attributes and the consumers' attitudes toward the product. Nonetheless, another factor that plays an important role is the collective and unique aspect of the product in the significant choice set they are encountering. Thus, the decision of determining what rice to buy takes into account the shared attributes of rice quality and personal characteristics of the buyer, particularly the socio-economic level. Therefore, consumers' perceptions, whether objective or subjective, about NFA rice may affect their decisions.

#### **4.1.8 Direct Selling of NFA Rice or *Tagpuan Day***

Selling of NFA rice directly to consumers was attained through the conduct of *Tagpuan Day* during the culminating activity on May 23, 2019, to accelerate NFA rice accessibility in the marginalized area. A total of 10 bags of NFA rice were sold at Barangay Ermita by an NFA outlet operator, in cooperation with Grains Retailers Confederation of San Carlos City.

Making rice available for supportable poverty can make life better for the 21 million (PSA, 2018) poor population of the country who live below the poverty line. Availability and adequate access to NFA rice of good quality, affordable, and safe at all times are ways to make people feel food security. Without relying on traders, selling directly to the market through government intervention is a good measure as prices are reasonable.

#### 4.1.9 Pre and Post Perception Survey

The researcher conducted a perception survey among the participants to determine the level of perception of NFA rice quality and its accessibility. A total of 217 attendees participated in the actual assessment. Perceptions are vital, and individual behaviors are established on perception. Perception surveys are frequently used to identify how people understand and feel about specific products and their conditions or surroundings. This undertaking is purposely to obtain information for future guidance and direction, determine the gaps between government goals and its actual policies, and design recommendations to improve what is being practiced.

The section presents the descriptive and inferential results of statistical analysis.

Variable	Before			After		
	M	SD	Interpretation	M	SD	Interpretation
Age						
15-30 years old (n=31)	3.50	0.84	Agree	4.03	0.66	Agree
31-45 years old (n=95)	3.32	1.14	Neutral	3.70	0.90	Agree
46-60 years old (n=91)	3.37	1.06	Neutral	3.60	0.89	Agree
Civil Status						
Single (n=33)	3.65	0.76	Agree	3.90	0.84	Agree
Married (n=158)	3.28	1.14	Neutral	3.71	0.89	Agree
Separated (n=14)	3.67	0.78	Agree	3.61	0.47	Agree
Widowed (n=12)	3.30	0.89	Neutral	3.18	0.96	Neutral
Number of Children						
No Child (n=24)	3.67	0.55	Agree	3.78	0.67	Agree
1-2 children (n=34)	3.21	1.17	Neutral	3.67	0.96	Agree
3-5 children (n=99)	3.42	0.96	Agree	3.76	0.85	Agree
6-10 children (n=60)	3.24	1.29	Neutral	3.60	0.94	Agree
Educational Level						

College Level (n=18)	3.3 4	0.9 2	Neutral	3.5 1	0.9 2	Agree
High School Level (n=86)	3.3 0	1.1 3	Neutral	3.5 8	0.8 2	Agree
Elementary Level (n=113)	3.4 2	1.0 4	Agree	3.8 3	0.8 9	Agree
Family Monthly Income						
Less than P5,000 monthly (n=172)	3.3 3	1.1 3	Neutral	3.6 8	0.9 1	Agree
P5,000 to P8,000 monthly (n=34)	3.3 9	0.7 9	Neutral	3.7 4	0.7 8	Agree
P8,000 to P10,000 monthly (n=3)	3.7 3	0.7 0	Agree	3.8 0	0.6 0	Agree
More than P10,000 monthly (n=8)	3.8 5	0.5 8	Agree	3.9 8	0.5 6	Agree
<b><i>As a Whole (n=217)</i></b>	<b><i>3.3 7</i></b>	<b><i>1.0 6</i></b>	<b><i>Neutral</i></b>	<b><i>3.7 0</i></b>	<b><i>0.8 7</i></b>	<b><i>Agree</i></b>

Table 6 presents the level of perception of NFA rice quality when taken as a whole as assessed by consumers in Barangay Ermita, Sipaway Island. Before the implementation of project initiatives, the level of perception as a whole ( $M=3.37$ ,  $SD=1.06$ ) was neutral, which means that they neither agreed nor disagreed with the statements. When grouped according to age, 15-30 years old ( $M=3.50$ ,  $SD=0.84$ ) gave a rating equivalent to Agree, which means that they considered the statements to be mostly true. On the other hand, the 31-45 years old ( $M=3.32$ ,  $SD=1.14$ ) and 46-60 years old ( $M=3.37$ ,  $SD=1.06$ ) rated neutral. This result means that mature persons in Barangay Ermita who were more exposed to NFA rice neither agreed nor disagreed on matters about NFA rice attributes. When grouped according to civil status, both the single ( $M=3.65$ ,  $SD=0.76$ ) and separated ( $M=3.67$ ,  $SD=0.78$ ) groups agreed while the married ( $M=3.28$ ,  $SD=1.14$ ) and widowed ( $M=3.30$ ,  $SD=0.89$ ) gave a neutral rating.

When grouped according to the number of children, the respondents without children ( $M=3.67$ ,  $SD=0.55$ ) and with 3-5 children ( $M=3.42$ ,  $SD=0.96$ ) agreed while those with only 1-2 children ( $M=3.21$ ,  $SD=1.17$ ) and 6-10 children ( $M=3.24$ ,  $SD=1.29$ ) gave a rating interpreted as neutral. When grouped according to educational level, the college level ( $M=3.34$ ,  $SD=0.92$ ) and high school level ( $M=3.30$ ,  $SD=1.13$ ) respondents rated their perception neutral; however, the elementary level ( $M=3.42$ ,  $SD=1.04$ ) agreed.

These findings explain that the well-educated residents in Barangay Ermita did not readily agree about NFA rice since they are more knowledgeable about rice attributes compared to the residents who belonged to the elementary level. The ability to comprehend and take new information regarding a given data is more reliable, and they appear to have the ability to compare data more easily because of the background knowledge stored in their memory. Persons with underprivileged knowledge and skill problems find difficulty in choosing healthy food for their households, and their ability to comprehend data on food labeling and healthy consumption is affected. More so, these poor literacy residents did not mind the specific rice attributes; instead, they tend to opt for rice as long as it is fit for human consumption.

When grouped according to family monthly income, those with less than P5,000 monthly income ( $M=3.33$ ,  $SD=1.13$ ) and P5,000 to P8,000 monthly ( $M=3.39$ ,  $SD=0.79$ ) income had neutral perception,

whereas the P8,000 to P10,000 (M=3.73, SD=0.70) and more than P10,000 monthly (M=3.85, SD=0.58) income groups agreed on the statements about NFA rice. These results suggest that families earning much and can, thus, avail of more rice agreed that the description of NFA rice is mostly true. Food also takes part in social dealings, and a lack of resources or income may restrain a person’s ability to enjoy eating and more food.

After the project initiatives were implemented, the level of perception as assessed by the consumers in Barangay Ermita, Sipaway Island when taken as a whole (M=3.70, SD=0.87) has an interpretation of agreed, which means that the respondents agreed that the descriptions about NFA rice are mostly correct. Likewise, when grouped according to the variables, all who gave a neutral rating before the implementation of the initiative agreed that most statements regarding NFA rice are true after the implementation of the project initiatives. An exception was among the civil status groups: the widows (M=3.18, SD=0.96) were not entirely convinced about NFA rice even after the project initiatives were implemented.

Table 7.A Dominant Perception on the Area of Consumption		
Consumption	n	%
Do you consume NFA rice?		
Yes	206	94.9
No	11	5.1
If Yes		
Daily	99	48.1
Weekly	72	35.0
Bi-monthly	8	3.9
Monthly	27	13.1
If No		
No Display Stocks	2	18.2
Low Quality	6	54.5
No available outlet	2	18.2
Others	1	9.1

Table 7. A describes the dominant perception in the area of consumption. Of the respondents, 206 or 94.9% answered that they were consuming NFA rice, of which 99 (48.1%) respondents eat NFA rice daily while 72 (35%) respondents answered that they consume it weekly. Low quality is the most dominant reason among the 54.5% or 6 respondents for not consuming NFA rice. The frequency of the consumers' consumption in Barangay Ermita is fairly in time for the weekly allocation of the accredited outlet although it could not sustain the entire consumption of the barangay residents.

Table 7.B Dominant Perception on the Area of Awareness		
Awareness	n	%
Did you know about NFA rice quality?		
Yes	198	91.2
No	19	8.8
If Yes		



Actual Experience	144	72.7
TV/Radio reports	20	10.1
Social Media	13	6.6
Other People	21	10.6

Table 7.B describes the dominant perception in terms of awareness. Of the total 217 respondents, 91.2% or 198 residents knew about NFA rice. Results also show that 72.7% or 144 respondents said that their awareness of NFA rice came from their own experience. NFA rice availability in the area is essential for the people to be more exposed to the quality of the product itself. Well-informed people are becoming more concerned about their society and issues concerning them, especially the residents in isolated areas who are most deprived of social services.

According to Nilsen (2015), an implementation's success or failure is better understood and explained by using theoretical approaches. Implementation science transmits further evidence-based research and practice that addressed challenges. The result of this study served as a confirmation of the gap in knowledge among consumers with regards to NFA rice quality.

Preference	n	%
Do you like NFA rice?		
Yes	203	93.5
No	14	6.5
If Yes		
Affordable	131	64.5
Good Quality	44	21.7
Accessible	9	4.4
Safe	19	9.4

Table 7.C shows dominant responses on the area of preference in which 203 respondents or 93.5% like NFA rice because of its affordability and good quality among others. Food affordability is a primary determinant in food choice, considering that rice is a significant staple cereal in the country. Among the low and middle-income families, food comprises a large part of the family budget; therefore, minor fluctuations in food prices can impact the family expenditures and diet significantly.

Purchase	n	%
Do you buy NFA rice?		
Yes	206	94.9
No	11	5.1
If Yes		
Municipal/City market	79	38.3
Barangay Accredited outlet	122	59.2
Direct millers/Traders	1	0.5
Others	4	1.9

Table 7.D depicts the dominant perception on the area of purchase, of which 206 or 94.9% of the total respondents buy NFA rice in the barangay accredited outlet. Similarly, this opportunity of having a barangay outlet in the area was emphasized by the KII interviewees. They expressed that the need to access NFA rice is of significant importance for them because Brgy. Ermita cannot be accessed easily by transport at times due to weather conditions; therefore, the city market, which is in the mainland, is the least accessible.

Perception		t	df	p
Before	After			
3.37	3.70	4.785*	216	0.000
(1.06)	(0.87)			

*Note: \*the difference in the means is significant when  $p \leq 0.05$*

Dependent samples t-test was utilized to determine the difference in the level of perception before and after the project initiatives were conducted when taken as a whole. Results revealed a significant difference in the level of perception before and after [t(216)=4.785, p=0.000] the conduct of the project initiatives when taken as a whole.

Age	Perception		t	df	p
	Before	After			
15-30 years old	3.50	4.03	3.201*	30	0.003
	(0.84)	(0.66)			
31-45 years old	3.32	3.70	3.276*	94	0.001
	(1.14)	(0.90)			
46-60 years old	3.37	3.60	2.239*	90	0.028
	(1.06)	(0.89)			

*Note: \*the difference in the means is significant when  $p < 0.05$*

Dependent samples t-test was used to determine the differences in the level of perception before and after the project initiatives were conducted when assessed by the respondents grouped according to age, civil status, number of children in the family, educational attainment, and family monthly income.

When grouped according to age, there was a significant difference in the level of perception of 15-30 years old [t(30)=3.201, p=0.003], 31-45 years old [t(94)=3.276, p=0.001] and 46-60 years old [t(90)=2.239, p=0.028] before and after the project initiatives.

Civil Status	Perception		t	df	P
	Before	After			
Single	3.65	3.90	1.915	32	0.064

	(0.76)	(0.84)			
Married	3.28	3.71	4.852*	157	0.000
	(1.14)	(0.89)			
Separated	3.67	3.61	0.404	13	0.693
	(0.78)	(0.47)			
Widowed	3.30	3.18	0.343	11	0.738
	(0.89)	(0.96)			
Note: *the difference in the means is significant when $p < 0.05$					

Regarding civil status, there was a significant difference in the level of perception of the married respondents [ $t(157)=4.852, p=0.000$ ]. However, there was no significant difference in level of perception of the single [ $t(32)=1.915, p=0.064$ ], separated [ $t(13)=0.404, p=0.693$ ], and widowed [ $t(11)=0.343, p=0.738$ ] respondents before and after the project initiatives.

<b>Table 9.C</b>					
<b>Differences in Level of Perception Before and After the Project Initiatives when Assessed according to Number of Children</b>					
Number of Children	Perception		t	df	P
	Before	After			
No Child	3.67	3.78	1.016	23	0.320
	(0.55)	(0.67)			
1-2 children	3.21	3.67	2.494*	33	0.018
	(1.17)	(0.96)			
3-5 children	3.42	3.76	3.263*	98	0.002
	(0.96)	(0.85)			
6-10 children	3.24	3.60	2.347*	59	0.022
	(1.29)	(0.94)			
Note: *the difference in the means is significant when $p < 0.05$					

Concerning the number of children, there was no significant difference in level of perception among the respondents with no children [ $t(23)=1.016, p=0.320$ ]. However, there was a significant difference in the level of perception among the respondents with 1-2 children [ $t(33)=2.494, p=0.018$ ], 3-5 children [ $t(98)=3.263, p=0.002$ ], and 6-10 children [ $t(59)=2.347, p=0.022$ ] before and after the project initiatives were conducted.

<b>Table 9.D</b>					
<b>Differences in the Level of Perception Before and After the Project Initiatives when Assessed according to Educational Level</b>					
Educational Level	Perception		t	df	p
	Before	After			
College Level	3.34	3.51	1.204	17	0.245
	(0.92)	(0.92)			
High School Level	3.30	3.58	2.770*	85	0.007
	(1.13)	(0.82)			
Elementary Level	3.42	3.83	3.733*	112	0.000
	(1.04)	(0.89)			

Note: \*the difference in the means is significant when  $p < 0.05$

In terms of educational level, there was no significant difference in the level of perception among the respondents who are in college [ $t(17)=1.204, p=0.245$ ]. On the other hand, there were significant differences in the levels of perception among the respondents who are in high school [ $t(85)=2.770, p=0.007$ ] and elementary [ $t(112)=3.733, p=0.000$ ] before and after the project initiatives were conducted.

**Table 9.E**  
**Differences in Level of Perception before and after the Project Initiatives when Assessed according to Family Monthly Income**

Family Monthly Income	Perception		t	df	p
	Before	After			
Less than P5,000 monthly	3.33	3.68	4.132*	171	0.000
	(1.13)	(0.91)			
P5,000 to P8,000 monthly	3.39	3.74	2.605*	33	0.014
	(0.79)	(0.78)			
P8,000 to P10,000 monthly	3.73	3.80	1.000	2	0.423
	(0.70)	(0.60)			
More than P10,000 monthly	3.85	3.98	1.256	7	0.250
	(0.58)	(0.56)			

Note: \*the difference in the means is significant when  $p < 0.05$

As regards the family monthly income, there was no significant difference in the level of perception among the respondents who earn P8,000 to P10,000 monthly income [ $t(2)=1.000, p=0.423$ ] and more than P10,000 monthly income [ $t(7)=1.256, p=0.250$ ]. There was a significant difference in the level of perception among the respondents who earn less than P5,000 monthly income [ $t(171)=4.123, p=0.000$ ], and P5,000 to P8,000 monthly income [ $t(33)=2.605, p=0.014$ ] before and after the project initiatives were conducted.

**Table 10**  
**Differences in the Level of Perception Before and After the Project Initiatives in the Areas of Consumption, Awareness, Preference, and Purchase**

Area	$\chi^2$	df	p
Consumption	0.333	1	1.000
Awareness	2.000	1	0.289
Preference	0.667	1	0.687
Purchase	0.000	1	1.000

Note: the difference is significant when  $p \leq 0.05$

McNemar's chi-square test was performed to determine if there was a significant difference in the level of perception before and after the project initiatives in the areas of consumption, awareness, preference, and purchase. The statistical computation yielded a no significant difference in the level of perception before and after project initiatives were conducted in all the four areas of consumption [ $\chi^2(1)=0.333, p=1.000$ ],

awareness [ $\chi^2(1)=2.000$ ,  $p=0.289$ ], preference [ $\chi^2(1)=0.667$ ,  $p=0.687$ ], and purchase [ $\chi^2(1)=0.000$ ,  $p=1.000$ ].

#### 4.1.10 Sensory Evaluation

Sensory analysis was conducted to evaluate and analyze potential differences in rice sensory characteristics and its overall acceptability. It is important to note that quality develops the fundamental determinant of its sale-ability.

The sensory evaluation of NFA rice was conducted by the panelists at the NFA Region VI Training Center in Iloilo City. Likewise, an orientation among the 15 consumers and the conduct of sensory evaluation were carried out during the culminating activity for the consumers' awareness. The activity is a scientific discipline used to assess and analyze rice attributes as they are perceived by the sensory senses that play an essential role in consumers' food preference.

Variable	Rater		t	df	p
	Panelists	Consumers			
Raw	2.99	3.76	4.799*	28	0.000
	(0.25)	(0.58)			
Cooked	3.38	3.34	0.217	28	0.830
	(0.31)	(0.64)			

Note: \*the difference in the means is significant when  $p \leq 0.05$

Independent samples t-test was employed to determine the difference in the sensory analysis of NFA rice between the panelists and consumers. The results reveal that a significant difference in sensory analysis of raw NFA rice existed between the panelists and consumers [ $t(28)=4.799$ ,  $p=0.000$ ]. The difference in the results may be explained by the knowledge of the panelists and the training they have gone through on rice classification compared to consumers.

On the contrary, there was no significant difference in the sensory analysis of cooked NFA rice between the panelists and the consumers [ $t(28)=0.217$ ,  $p=0.830$ ]. This result on the assessment of the cooked rice suggests that the assessment between the panelists and consumers is similar since the physical attributes of raw NFA rice was transformed and classification is not being observed with the cooked rice.

The International Rice Research Institute (2018) determines that what offers extra value to rice finest quality traits is the aroma based on physical characteristics like chalkiness, size, and shape of grain, and rice recovery after milling. Associating sensory to quality properties depends on the inherent knowledge of the rice grain elements that influence consumer perception.

Factor	Before			After		
	n	%	Rank	n	%	Rank
Discoloration	63	29.0	4	52	24.0	5
Bad smell	77	35.5	2	65	30.0	4



Tough texture	85	39.2	1	90	41.5	1
Off-odor when cooked	51	23.5	5	71	32.7	3
Sticky when cooked	71	32.7	3	83	38.2	2

In building the stakeholders' confidence, mutual trust between the government and its citizens, commitment to service, consumer satisfaction, and good quality of relationship are requirements. The capstone project aims to improve or develop confidence in NFA rice quality for better community confidence while ensuring access to government service.

Table 12 presents the factors that caused low confidence in NFA rice quality among the consuming public in availing of the government rice. Before and after the project initiatives were implemented, the tough texture of NFA rice ranked as the top contributing factor for the low confidence and reason for non-consumption of NFA rice. Similarly, four out of five KII interviewees in Barangay Ermita also said that tough texture is observable in NFA rice. However, this is in contrast to the qualitative result of the reliability test. In the urban poor area, one attribute of NFA rice was more observed when it was cooked and 93% of the 15 respondents agreed that off-odor, when cooked, is more noticeable rather than the tough texture.

The FAO and the World Health Organization (WHO) have a keen concern on ideologies and guidelines in promoting nationwide food control methods and in manipulating the segments of the food chain scientifically. This case is precisely essential for developing countries to improve food safety, quality, and nutrition that require an excellent commitment to politics and policy.

After the results of the study were generated, the researcher proposed recommendations for the food agency to undertake to address the low confidence and improve the citizens' trust in the government. Priority recommendations were the lobbying for the approval of rice distribution policy relative to RA 11203, adoption of rice outlets in the marginalized areas (ROMA), implementation of rice issuances to Pantawid rice subsidy (RIPSU), and awareness campaign on NFA rice quality standards.

#### 4.1.11 Crafting of Policy

As cited in Erwidodo and Stringer (2009), utilizing the poverty reduction policy in the agricultural sector is vital to achieve short-term targets in developing food security. An increase in agricultural growth rates is linked with the decrease in rural poverty and improved food security.

A policy review of the Proposed Rice Distribution Policies and Procedures relative to Republic Act 11203 (see Annex 9, page 192) was concluded on 25 June 2019 at NFA-VI Iloilo Regional Office. Such review was conducted to determine if the proposed policy is up-to-date with the current laws and regulations and to find out if the changes and developments made in the existing policies improved the agency's delivery of services particularly in the marginalized areas where the most vulnerable population resides.

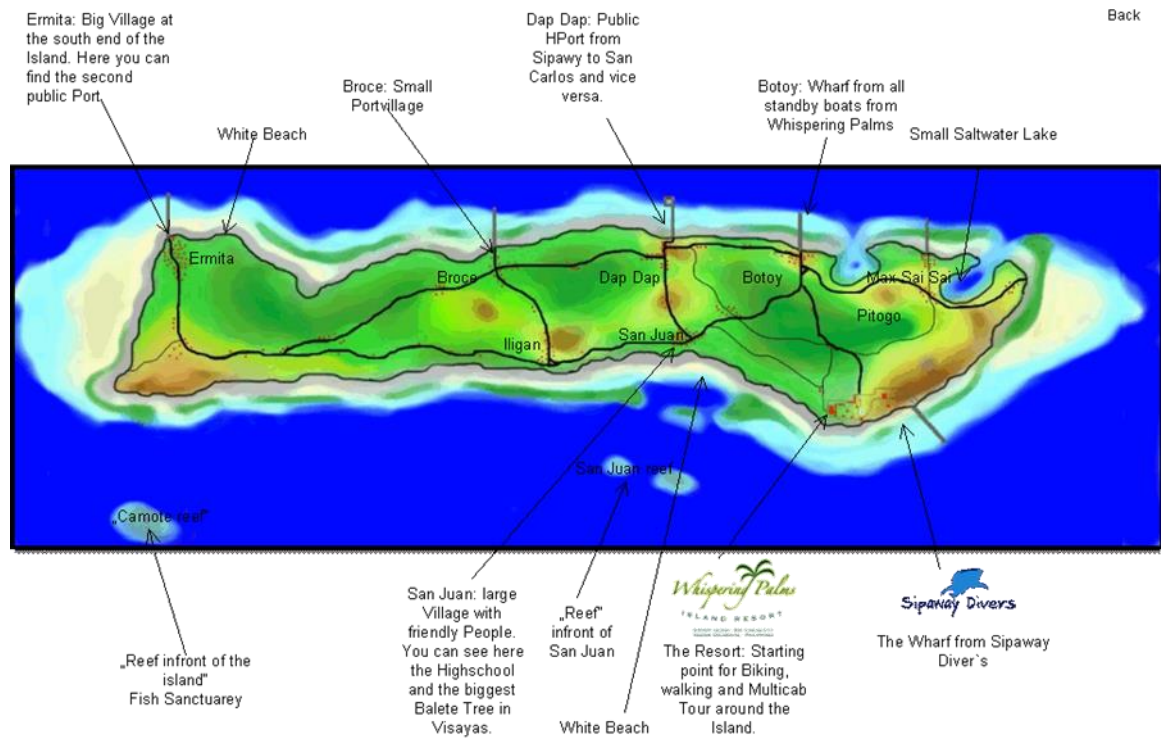
The provision of this policy in enhancing the accessibility of the marginalized sector to an affordable NFA rice and to ultimately ensure improved public confidence in NFA rice quality that encouraged household consumption.

Israel (2018) studied the growing requests for community-academic collaboration to enhance the capability of partners to accept the new policy. He has shown that community-based participatory research (CBPR) is a shared methodology that can enhance capacity building and policy modification through the reasonable engagement of different partners.

Likewise, Fox (2018) has illustrated that vertical integration is required to monitor the different actors simultaneously, so that sovereign society achieves active monitoring of community policy developments.

He defines the vertical amalgamation across varying levels of the policy process in coordination with policy monitoring and public interest.

#### 4.1.12 Project Site



**Figure 7. Sipaway Island Street Map**

Barangay ERMITA is located in the southeast tip of Sipaway Island, San Carlos City, Negros Occidental. It has a total population of 2,150, composed of 478 households who are mostly Cebuano speaking residents. It is recorded that 275 households, which is 57.5% of the total households, have an income below the poverty threshold.

The atmosphere of the area is warm due to its geostrategic location, which is surrounded by seawater. It is one of the 18 barangays of San Carlos City, which is composed of five puroks. Ermita is known for its natural beauty with the white beaches surrounding the coastal area of the island that captivates nature lovers. Its inhabitants' usual banquet consists of boiled rice or ground corn, vegetables, fresh, or salted fish and fruits. A locally made beverage is "tuba," a fermented coconut wine.

**Table 13 List of Barangay Ermita Officials & corresponding Committee Chairmanship**

NAME	POSITION	COMMITTEE CHAIRMANSHIP
Crisanto L. Broce	Punong Barangay	Barangay Physical Fitness and Sports Development Council Barangay Ecological Solid Waste Management Committee (BESWMC)
Valentina R. Fuerzas	Barangay Kagawad	

Rito L. Dionaldo	Barangay Kagawad	Barangay Risk Reduction and Management Committee (BRRMC)
Bonifacio A. Racaza	Barangay Kagawad	
Apolinar P. Montano	Barangay Kagawad	Peace and Order
Epifania R. Dacumos	Barangay Kagawad	
Juan R. Patoc	Barangay Kagawad	Barangay Council for Protection of Children (BCPC)
Pompio C. Gasalatan	Barangay Kagawad	Barangay Nutrition Council (BNC)
Kade D. Caballero	SK Chairman	
Ma. Vanessa J. Melmida	Barangay Secretary	
Ma. Dalisay L. Montano	Barangay Treasurer	

#### 4.1.13 Planned Activities, Targets, and Actual Implementation

**Table 14.A Target vs. Actual for the Validity Test**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
1. Validation of the Research Instrument and conduct of the Reliability Test	1.1 Validity Evaluation	Planned: 1 <sup>st</sup> to 2 <sup>nd</sup> Week of April  Actual: April 10 to 12, 2019	The research instrument was validated by two (2) Senior Agriculturists from the Office of Provincial Agriculturist and one (1) from academe to determine the instrument's appropriateness and usefulness in the conduct of the study.	Evaluators: Dr. Armando Abano Dr. Mary Ann Ordinario Dr. Richelle Verdeprado

**Table 14.B Target vs. Actual for the Reliability Test**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
1. Validation of the Research Instrument and conduct of the Reliability Test	1.2 Reliability Test	Planned: 1 <sup>st</sup> to 2 <sup>nd</sup> Week of April  Actual: April 13, 2019	Reliability test was conducted in Barangay#35, Bacolod City, an urban poor area, to assess the quality of the measurement	Fifteen (15) respondents were interviewed.

			procedure used to collect data.	
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**Table 14.C Target vs. Actual for the Document Analysis**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
2. Undertaking the Document Analysis	Document Analysis	Planned: 1 <sup>st</sup> to 2 <sup>nd</sup> Week of April  Actual: April 15, 2019	Documents were analyzed in the NFA Negros Occidental office to give meaning and value to the capstone project.	Standard Operating Procedure on rice distribution was formulated. Grains Situation Report Monitoring of Compliance to Good Warehousing Practices was conducted.

**Table 14.D Target vs. Actual for the Sensory Evaluation by the Panelists**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
3. Performing the Sensory Evaluation	3.1 Sensory Evaluation by Panelists	Planned: 3rd to 4th Week of April  Actual: April 29, 2019	The Capstone Project was introduced to the sensory panelists during the orientation at NFA Region VI Training Center, Iloilo City and sensory evaluation followed.	Participated by 15 sensory panelists

**Table 14.E Target vs. Actual for the Sensory Evaluation by the Consumers**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
3. Performing the Sensory Evaluation	3.2 Sensory Evaluation by Consumers	Planned:	Sensory analysis was conducted to evaluate and analyze	The sensory evaluation was participated by 15

		4th Week of April to 2 <sup>nd</sup> Week of May  Actual: May 23, 2019	the potential differences in the rice sensory characteristics and its overall acceptability.	4Ps beneficiaries of Barangay Ermita. Orientation on sensory evaluation was conducted by Grains Operations Officer II Ma. Rowena Tagamolila of NFA-Region VI.
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**Table 14.F Target vs. Actual for the Coordination with DSWD, LGU, and Punong Barangay**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
4. Coordination with DSWD, LGU, and Punong Barangay	4. Coordinated the CP with DSWD, LGU, and Punong Barangay	Planned: 2nd to 3rd Week of April  Actual: April 25, 2019	The Capstone Project was presented to DSWD, LGU, and Punong Barangay and acquired their acceptance and full support.	Executive Assistant III Maian Burgos (San Carlos City Govt.), Administrative Officer III Elmer Artillaga (DSWD), Social Welfare Assistant Peter Paul Parreño (4Ps) and acquired full support of Punong Barangay Crisanto Broce and its council.

**Table 14.G Target vs. Actual for the Key Informant Interview**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
5. Conduct of the Key Informant Interview (KII) and Project Site Visit	5. Key Informant Interview	Planned: 2nd to 3rd Week of April  Actual: April 25, 2019	Visit to the project site to familiarize and acquire in-depth information about the locale of the study was conducted. KII was conducted afterwards.	Five (5) interviewees for KII were considered.

**Table 14.H Target vs. Actual for the Perception Survey**

<b>Deliverable #</b>	<b>Activity</b>	<b>Date</b>	<b>Results of Actual Implementation</b>	<b>Remarks</b>
6. Perception Survey	6.1 Pre-perception Survey	Planned: 4th Week of April to 2nd Week of May	Perception survey among the participants was conducted to determine the level of perception in NFA rice quality.	A total of 217 attendees participated in the survey.
	6.2 Post perception Survey	Actual: May 23, 2019		

**Table 14.I Target vs. Actual for the Awareness Campaign on NFA rice quality standards**

<b>Deliverable #</b>	<b>Activity</b>	<b>Date</b>	<b>Results of Actual Implementation</b>	<b>Remarks</b>
7. Awareness Campaign on NFA rice quality standards	7. Information and Education Campaign	Planned: 4th Week of April to 2nd Week of May	Awareness of NFA rice quality standards was campaigned to inform and harness the consumers' knowledge.	Campaign was conducted by Grains Operations Officer III Roem Precioso of NFA Negros Occidental
		Actual: May 23, 2019		

**Table 14.J Target vs. Actual for the Rice "Taste Tests" Activity**

<b>Deliverable #</b>	<b>Activity</b>	<b>Date</b>	<b>Results of Actual Implementation</b>	<b>Remarks</b>
8. Conduct of the Rice "Taste Tests" Activity	8. The rice tasting activity to all participants	Planned: 4th Week of April to 2nd Week of May	Rice tasting was conducted to all participants to test the overall eating quality of rice and to assess its the appearance, whiteness, hardness, stickiness, taste, and texture.	Cooked NFA rice and pork adobo were served to all participants.
		Actual: May 23, 2019		



**Table 14.K Target vs. Actual for the Direct selling of NFA rice or *Tagpuan Day***

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
9. Direct selling of NFA rice or <i>Tagpuan Day</i>	9. NFA Rice Retailing	Planned: 4th Week of April to 2nd Week of May  Actual: May 23, 2019	Selling of NFA rice directly to consumers was attained through the conduct of <i>Tagpuan Day</i> to accelerate NFA rice accessibility in the marginalized area.	Ten (10) bags of NFA rice were sold by NFA outlet operator, Rhoda Albia, in cooperation of Grains Retailers Confederation of San Carlos City.

**Table 14. Public Information of Capstone Project**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
Culminating Activities	Awareness Campaign, Perception Survey, Consumer Sensory Evaluation, Rice Tasting and <i>Tagpuan Day</i>	Actual: June 18, 2019	Sunstar Bacolod published an article in its Business News Feature and its website to inform the public of the initiatives being studied to enhance public confidence in NFA rice quality while accelerating its accessibility in the marginalized sector.	Article was written by correspondent Erwin Nicavera.

**Table 14.M Target vs. Actual for the Crafting of Policy**

Deliverable #	Activity	Date	Results of Actual Implementation	Remarks
10. Policy on NFA rice distribution	10. Crafting of Policy	Planned: May to June  Actual: June 25, 2019	A Policy review on the Proposed Rice Distribution Policies and Procedures relative to Republic Act 11203 was conducted to determine if the proposed policy is	Review was conducted by the project proponent together with Regional Director John Robert Hermano and Regional SGOO Ma. Theresa O. Alarcon.

			<p>up-to-date with the current laws and regulations and to find out if the changes and developments made in the existing policies have improved the agency’s delivery of services.</p>	
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**4.1.14 Facilitative factors to the project accomplishment**

Numerous factors have contributed to the accomplishment of the project, and they are mostly the influences that sped up the execution of activities. The opportunity to achieve a project on time was accomplished by adopting practices and techniques in effective project management.

Initially, the encouragement of the NFA management and the cooperation of the project team members have made the implementation less heavy and difficult. The rationality of having a project relevant to the office mandate and to the top priority sustainable development goal of the country to eradicate poverty has earned the attention and full support not only of the food agency management but also of the other stakeholders of the project.

The creation of the project team has helped a lot, and good teamwork has mattered. Getting the right people into the team was an effective strategy. Identifying them based on their knowledgeable expertise and skills was quite an advantage. Since part of the project is technical, the food agency technical personnel rendered the activity based on the required standards. Recognition and appreciation of the project team members' efforts has inspired all, and they successfully provided a legacy intended particularly to needy families, which is the essence of genuine public service. Preparation of visual timeline of activities had also been very useful in monitoring the next steps to do during the implementation phase.

Proper coordination with the heads and representatives of other implementing agencies and offices was of utmost importance. It was obligatory to consider the proper protocols in getting the acceptance, cooperation, and support of other stakeholders. Constant communication and consultation regarding the progress of the project implementation provided emphasis on the critical roles of the stakeholders.

Appropriate collaboration strategies were formulated to get the support of the Barangay Council of Barangay Ermita. Sincere engagement with the Punong Barangay established a link among the barangay officials and the residents of the pilot barangay. The culminating activity which was attended by 219 residents, representing 478 households, demonstrates that the 4Ps beneficiaries and other residents were convinced that the project is very relevant and beneficial to the community. Moreover, the unique project characteristic has exhibited its originality and essential purpose directly to the residents and has acquired the acceptance and support of the community in return.

## 4.2 Challenges in Implementation

### 4.2.1 Coordination with Barangay Officials

The first challenge that troubled the implementation was the coordination with the Punong Barangay. During the project implementation phase, dissemination of the information was being done through phone calls, the only communication channel or medium in coordinating directly with Barangay Ermita. Considering that it is an island barangay, the communication line is very thin. Aside from the weak signal, the Punong Barangay also has a hearing difficulty. This struggle made the project team more sensitive and assertive in conveying the information.

#### Scholar's Response

As a project team leader, the scholar-researcher pursued the coordination with the Punong Barangay, for she believes that speaking with him over the phone would convince him of the sincerity to implement the project. She influenced the Punong Barangay and the council to accept and support this collaborative project because it is basically for the welfare of its constituents, particularly the 4Ps beneficiaries of the community.

### 4.2.2 Language Barrier

Barangay Ermita residents are mostly Cebuano speaking people. The language barrier hindered the communication between them and the team. The project team had difficulty explaining the content of the perception survey, especially to residents who are not well-educated.

#### Scholar's Response

To give clear direction and explain the flow of implementation simply to the participants during the culminating activity, the scholar assumed as the host during the event. Using Tagalog as the language for the entire activity made it easier to explain things since the participants are mostly familiar with the national language. To conduct the perception survey in an orderly manner, the scholar adopted a classroom survey type to enable the participants to follow instructions systematically.

### 4.2.3 Time Management

Another challenge was time management. Implementing the project for three months required proper and effective time management. Missing to anticipate the holy week season during the plotting of activities and timeline was a major drawback, causing a backlog of a week-long activity.

#### Scholar's Response

Prioritization and delegation of some of the tasks to the project team members as well as squeezing in some activities to keep the project within the timeline were the strategies. Employing proper time management, the scholar was able to accomplish all tasks before the project implementation deadline. Furthermore, accomplishing more tasks in a short period led to less stress, more free time, and more time to focus on policy writing, which is the main deliverable of the project.

### 4.2.4 Cooperation of 4Ps beneficiaries

Requiring 4Ps beneficiaries' attendance to the final activity of the project implementation caused worries and uncertainties to the scholar because the one-day activity would capture all significant deliverables of the project. Apprehensions of getting the required number of attendees who would be the respondents to the perception survey were becoming evident, especially when the set schedule was approaching.

#### Scholar's Response

Consistent coordination with the 4Ps coordinator of San Carlos City was seriously and persistently done to make sure that the beneficiaries were well-informed of the schedule of the final activity and to assure them that the activity is beneficial and relevant to their families. This was so especially because they are

Pantawid Pamilyang Pilipino Program beneficiaries and DSWD is the implementing agency of this particular project, if the policy were to be adopted.

## Chapter 5

### CONCLUSIONS AND RECOMMENDATIONS

This chapter discusses the summary of capstone project, strategic implications to development management, as well as the project sustainability.

#### 5.1 Summary

According to Bobby Unser (2019), success is where preparation and opportunity meet. Putting them all together for a successful project implementation requires determination not only from the project team leader but also from the entire project team. Some lessons emerged from the initiation phase until the implementation phase, which are appreciated. The significant insights extended by the upper management would be beneficial in future endeavors that would eventually be undertaken in the course of providing quality public service.

**Get Buy-In.** Clear objectives are essential, and these were adequately defined in the capstone project; hence, the planned tasks led to the desired goal. It was vital that the members of the project team and the stakeholders had known and understood what to accomplish for them to know what to contribute.

**Social Intelligence.** Awareness of social circumstances and dynamics and the capability to perform effectively in a diversity of social situations are critically significant to be an effective public manager. The result of the study showed the optimistic consumers' perception in Barangay Ermita towards NFA rice. Hence, this societal state requires government intervention, which addresses their priority needs on food, particularly rice as a basic commodity.

**Be Flexible.** The challenges along the way directed the project team to be more flexible. Flexibility in managing the project permitted the project team members to be more responsible, for it is believed that shared responsibility involved in teamwork is significant for success. In executing the deliverables, the team was open and responded to the changes in workloads that occurred during the implementation stage.

**Team Effort.** In the capstone project, successful engagement has helped transform the stakeholders' need to a project goal, which is ultimately to ensure consumer welfare. As a project team leader, the researcher relied on how the stakeholders responded to the benefits and outputs that the project had provided. Since the people of Barangay Ermita and other implementing agencies had responded and accepted the project positively; thus, objectives and intended goals were smoothly achieved.

**Celebrate.** Celebrating small triumphs and milestones in this project as public servants was one way of enhancing the morale and optimism of the project team members and fostering harmonious relationships with the other stakeholders.

**Leadership Skill.** Finally, the capstone project has flourished because of appropriate leadership. Performing leadership is establishing an example of professionalism for the project team members and having the motivation to achieve the project objectives. In doing so, the scholar was able to stay connected with them, but she acted professionally by recognizing the expertise of individuals and allowing that expertise to be utilized for the betterment of the project implementation.

## **5.2 Strategic Implications to Development Management**

### **5.2.1 Strengthened Commitment to Consumer Welfare**

The capstone project gave way to strengthen the team members' commitment to consumer welfare as part of the bureaucracy. Through the project, the team was able to sincerely convey the commitment to the Punong Barangay and the council. It also encouraged other stakeholders in partaking the duties of recognizing and appreciating the true essence of consumer welfare.

A strong commitment to a noble cause is very vital, especially to those involved in the implementation since the project is purposely for socio-economic development. The persistent follow-ups and determined efforts to make the implementation smooth and light made the success of the project more likely to be achieved.

### **5.2.2 Supported Collaboration Endeavors**

The capstone project has imparted to the project team an opportunity to understand that government must work collectively to implement projects effectively. The realization that collaboration among government agencies is more strategic than sponsorship. Appropriate partnership implies ownership of accomplishments and the sharing of responsibilities while sponsorship or funding promotes reliance or dependency. Also, the collaborative team was supportive despite their diverse areas of expertise; everyone shares similar goals, resources, and leadership.

### **5.2.3 Enhanced Campaign for Support**

The capstone project has inspired the project team to be persistent. They made aggressive efforts in getting acceptance and support from the residents and other stakeholders. Lobbying support is challenging; thus, an authentic and high-spirited outlook was essential to persuade the stakeholders of the significance and relevance of the project not only to the citizens but to the government as well.

Suitable communication means, as well as good media relationships, were the key factors in facilitating optimistic acceptability of the project. Continuous feedback collection as to the benefits gained from the project must be coordinated appropriately with all stakeholders.

### **5.2.4 Persuasion Produces Favorable Results**

The capstone project has created timely accomplishments through expressiveness or persuasiveness. The following persuasive personalities possessed by the team members like intelligence, trustworthiness, status, expertise, and likability. These traits coupled with consistent communication have influenced the attention and decision of the barangay officials to support and accept the project because of its advantages and benefits to their constituents. Slight challenges encountered during the implementation were addressed through immediate discussion of alternative solutions.

### **5.2.5 Recognition of Individual Potentials**

The capstone project allowed the project team members to recognize their potentials to provide voluntary endeavors for the common good. It enabled the team to discover the essence and relevance of genuine public service and to put a value and purpose to the commitment to serve the public and social obligations. To increase awareness and confidence, they recognized the skills of the stakeholders; therefore, collaboration or cooperation, information exchange, and support should be present. It also unleashed individual capabilities and skills to show and utilize its utmost potential.

### **5.2.6 Value of Time**

The capstone project has presented the project team the value of time, especially that the implementation is time-bounded and considering that project team members and stakeholders are busy in their individual offices and domestic concerns. Proper scheduling of activities should be well-coordinated to avoid delays

or postponements. Project implementation requires proper time management and sufficient monitoring strategies to be continually on track in the attainment of deliverables.

### **5.2.7 Be Positive and Move Forward**

The capstone project has empowered the project team to be more optimistic and to keep moving forward despite the minimal challenges that they came across during the implementation, like the local election and the holy week that were not considered during the project planning. The excitement and enthusiasm of the project team members sustained the spirit to keep going. Motivation and appreciation of the stakeholders and project team members mattered even in simple achievements and milestones to uphold the high-spirited attitude.

### **5.2.8 Opportunity-based Operational Innovation**

According to Albert Einstein (2019), in the middle of every difficulty lies an opportunity. Thus, the capstone project has provided the project team an opportunity to innovate the food agency operations, especially on its distribution, considering the recent approval of the Rice Trade Liberalization Law that limits the agency's mandate. It has encouraged the scholar to establish a rice distribution policy wherein intensified establishment of rice outlets in the geographically isolated and disadvantaged areas enhanced the accessibility of the vulnerable to affordable good quality rice, to improve the family socioeconomic status, and eventually improve public confidence on NFA rice quality.

## **5.3 Project Sustainability**

After the research had been conducted, the researcher observed that more exposure to NFA rice would improve consumer confidence of its quality. The results revealed that their access to the barangay outlet gave the consumers the opportunity to assess the rice attributes or characteristics by themselves, instead of believing what others perceived about NFA rice. Therefore, accelerating NFA rice access in the marginalized sector would sustain the project of enhancing the public confidence in NFA rice quality to increase household consumption and eventually eradicate poverty in this poor sector of society.

Sustainability of a project denotes the continuation of the project accomplishments and sustenance of project results after the initial implementation of the capstone project in Barangay Ermita. The relevance of the capstone project ensures a long term impact in the community, especially that it is a barangay-based project which requires regular monitoring of the implementing agencies. The following recommendations were proposed to keep the project going:

### **5.3.1 Promoting and lobbying of the capstone project by NFA to legislators or policymakers**

The NFA and its employees shall continue endorsing and lobbying to legislators and representatives the relevance and benefits of the project concerning Republic Act 11203. Developing a strong communication strategy can help in generating support from relevant stakeholders of this policy. The approval of the policy strengthens the financial sustainability of the project by ensuring a steady flow of funds from DSWD. On the part of NFA, to ensure organizational sustainability by safeguarding the quality of stocks, and on the part of the government, to prevent high storage and maintenance costs of NFA rice.

### **5.3.2 Adoption of rice distribution policies and procedures relative to Republic Act 11203**

For the legislators and policymakers, the approval and implementation of the rice distribution policy around the country is an option to alleviate poverty among the marginalized sector of society. The establishment of rice outlets in GIDA areas would mean social development, to allow low-income families to save part of their budget as a result of their access to cheaper rice. Similarly, increasing household consumption is a driver of economic development.



### **5.3.3 Acceptance of Rice Outlets in Marginalized Areas (ROMA) as a regular barangay project anchored on one of the committees for budget allocation**

For the Local Government Units and Barangay Council, the inclusion of the capstone project, particularly the establishment of ROMA as one of the committee projects, would somehow empower the committee chairman/kagawad to continue the project for budget allocation. If a project has a budgetary requirement, the creation of livelihood for outlet operator is feasible, and constant or regular monitoring of the project from the barangay official/kagawad would be practicable.

The approval and acceptance of the ROMA project can be communicated by the ABC President to a broad audience to obtain support from a range of stakeholders and to propose an ordinance to be issued for barangay-wide implementation of the project. Likewise, DILG can require the LGUs to issue a city or municipal ordinance to adopt the ROMA project after the policy approval.

Community involvement is fundamental to ensure a project long term impact. Involving the community at various project phases promotes ownership of the project, and since it is participatory, the abilities and knowledge that the project team members have gained can be transferred and replicated.

### **5.3.4 Continuous collaboration with other implementing agencies (DSWD and DILG)**

For the DSWD and DILG, the sustainability of the project implies continuous performance and delivery of project benefits to the primary target recipients like 4Ps beneficiaries. RIPSU or Rice Issuances to Pantawid Rice Subsidy requires budgetary allocation from DSWD for the payment of rice stocks and as a support to continue the project.

Moreover, after the approval and adoption of the policy, DILG can oblige the LGUs to facilitate the withdrawal of rice subsidy stocks from NFA for easier issuance of stocks to the intended barangay 4Ps beneficiaries.

Participation of local agencies and government guarantee have improved access to government projects. As these organizations are permanent, they assist in sustaining the project initiatives. The community-based participatory project can enhance capacity building and policy modification through the thoughtful engagement of different partners.

### **5.3.5 Incessant communication of the capstone project**

After the approval of the policy, the NFA shall intensify the dissemination of the capstone project to the different stakeholders in order to widen the awareness of the public regarding the new distribution policies, its relevance, and benefits to the country, particularly during Ugnayan activities with farmers, consumers, and other sectors of society.

Briefing the community about the advantages of the project and, then, introducing policy advocacy can ensure sustainability in the long run.

### **5.3.6 Information and education campaign on NFA rice quality standards**

The NFA shall establish standardized information campaign materials for the conduct of regular IEC on NFA rice quality standards and launch a tri-media campaign to widen consumer awareness and improve public confidence towards NFA rice.

### **5.3.7 Sensory analysis administered by a layman or other researchers**

The NFA shall allow a layman or non-NFA personnel to administer the sensory analysis among consumers on behalf of the food agency to avoid social desirability bias responses. A respondent, having an idea who administered the sensory analysis, intended to provide replies or reactions which are positive or favorable to the NFA personnel conducting it instead of being true to his or her perception. Hence, it would affect

the truthfulness of the results. The manner of questionnaire administration is the primary choice to be made in the conduct of the survey to achieve the main objective of the study.

### **5.3.8 Conduct or administer NFA rice perception surveys in the local dialect**

The NFA shall construct questionnaires translated into eight (8) major dialects of the country such as Bicolano, Cebuano, Hiligaynon (Ilonggo), Ilocano, Kapampangan, Pangasinan, Tagalog, and Waray (Pelagio, 2019). The respondents may have difficulty understanding the meaning of some questions in the questionnaire in English, resulting in a miscommunication that can lead to distorted outcomes.

In order to effectively prevent this situation, it is necessary to generate simple and translated questions that are easy to answer or accomplish. Refining the comparability implies that errors due to translation would be reduced. The purpose of questionnaire translation for multi-cultural and regional assessments is to attain a level of comparability through all local versions.

### **5.3.9 Inclusion of rice policies and procedures to NFA Process as required by ISO 9001: 2015 Standards**

For the NFA regional office, updates on rice distribution policies shall be included in the ISO 9001:2015 standards Quality Management System for proper implementation to provide and deliver standardized quality service.

### **5.3.10 Organizing a short course/training on proper store management for the accredited rice outlet operators of ROMA**

For the NFA provincial offices to ensure the sustainability of the store operation, they shall conduct a short course/training on the proper store management for the accredited rice outlet operators. The rice outlet operators must also be briefed on the features of the programs including the NFA rules and regulations that were applied under the program (i.e., use of passbook by the beneficiary, use of ledger, rice issuance, and payment scheme, among others) before operationalization.

### **5.3.11 Upgrade public auction system**

For the NFA Central Office, a higher version software shall be procured to improve the programming capabilities of the existing software and render faster generation/reproduction of the different types of reports. More personnel, both at the Central and Field Offices, shall be trained in the installation of the software and the use of electronics during auctions.

### **5.3.12 Tap the corporate social responsibility (CSR) programs of the large industries to support the Rice Outlets in the Marginalized Areas (ROMA) project**

Corporate social responsibility (CSR) programs of large industries are intended for citizen-centric projects; hence, there is a high possibility of adopting the project. Sponsors, local government units, and barangay officials can be tapped to lobby the project to industry management.

### **5.3.13 Encourage researchers to study the consumers' perception of NFA rice based on age and conduct a comparative study on the sensory analysis between NFA rice and commercial rice**

For the researchers to conduct studies on NFA rice based on age, the consumers' perception may vary because the main concern shall be the age and quality of the stocks. They are also encouraged to conduct comparative studies on the sensory analysis between NFA rice and commercial rice. Results of these studies shall ensure the appropriate modification and formulation of policies in the disposal of NFA rice.

### **5.3.14 Encourage researchers to conduct further studies for sensory analysis of what consumers value more in the determination of NFA rice acceptability**

The NFA shall persuade, encourage, and assist researchers in conducting further studies among rice attributes that consumers' value more in terms of its general acceptability, to fully capture emotional

responses or feelings instead of pre-determined percentile for each rice attribute. Their responses will help the food agency to create new strategies, benchmark on improving rice quality, and follow perception trends among consumers.

#### **5.3.14 Promote in future similar studies the use of Focus Group Discussions (FGDs) instead of pencil and paper method**

The researcher should encourage other researchers of future similar studies with the use of Focus Group Discussions (FGDs) instead of pencil and paper method to acquire and discuss more in-depth multifaceted ideas from consumers. The presence of different persons motivate deliberations, produce supplementary ideas, and encourage considerations of opinions. However, these methods of gathering data require the expertise of a facilitator.

### **5.4 Sustainability Plan**

This section presents the proposed sustainability program for NFA RICE (Responsive Initiatives for Confidence Enhancement) IN THE MARGINALIZED SECTOR. This proposed sustainability program is an outcome of a data triangulation from key informant interviews, document analysis, and quantitative research.

Several think that in today's varying economic and political situation, the responsibilities of putting development programs in order may shift from the government to the society; however, this change is handing over of responsibility on the end of the government.

In this capstone project, it is in this perspective that the implementers have motivated the consumers to move towards participatory development. Development programs are likely to succeed if a well-planned approach to enhance participation is integrated into the program planning.

Development planning plays a vital role in determining development goals and priorities. A program is a useful development instrument only when the potential stakeholders have helped to create such a plan. In the development planning process, it is essential to form a true and valid partnership among the governments as well as with the citizens.

NFA is one of the most significant policy instrumentalities of the Philippine government with regards to national food security. NFA is mandated to maintain optimal buffer stocks and distribute rice during calamities and emergencies under Republic Act 11203. Despite its name, the government-owned and controlled corporation deals mainly with rice, the country's leading food grain with a prime share in the food basket of the average Filipino consumer.

#### **5.4.1 Program Goal**

The goal of the program is to ensure consumer welfare particularly in the marginalized sector.

#### **5.4.2 Program Objectives**

The program aims to:

**5.4.2.1** Develop public confidence about NFA rice;

**5.4.2.2** Ensure stakeholders sense of ownership and commitment to the program;

**5.4.2.3** Enhance stakeholders' technical skills on grains quality standards;

**5.4.2.4** Enhance NFA rice accessibility; and,

**5.4.2.5** Provide and encourage high integrity NFA rice distribution policy.

The proposed program or intervention has been realized and has resulted from assessment outcomes validated from established internal, external, construct, and statistical conclusion. This study conducted

precautionary field tests that indicate various program implementations across different settings, compromised, and influences outcomes.

The NFA as an implementing agency also requires a transparent and sufficient capacity to implement policy strategies successfully. This capacity or capability includes supportive and robust leadership, a comprehensive approach, sound practices, and the efficient utilization of resources. A holistic plan necessitates the use of consultative governance and coordination or participatory planning designed to employ relevant skills and expertise from within the agency, the expansive public sector, and externally, as necessary.

At every stage of policy development, implementation issues are a shared responsibility—precisely, it is essential that there is a vivid understanding of the policy goals and intended outcomes. Establishing good relationships and the capacity to engage effectively with other parties entail individual leadership (Australian Government Website, 2014).

In conclusion, the objective of every government is to create an improvement in the standard of living of its people and to uphold development. Achieving these noble goals entails not only the planning of policies but also the effective implementation of the policy by the public bureaucracy.

## Chapter 6

### THE LEADERSHIP AND MANAGEMENT JOURNEY

This chapter discusses the leadership and management competencies demonstrated in the capstone project. The lessons obtained during the capstone project implementation revealed positive involvements and negative experiences. The good experiences are worthy ideas and initiatives which develop productivity. However, the negative experiences are those that were not anticipated to happen. Nonetheless, these experiences were very inspiring, not only to the researcher's profession as a public servant but also to her personal life.

Managing the capstone project for three months was a unique opportunity to undertake, and it exhausted the researcher's highest potential as a public manager.

The KSAs of learning, such as knowledge, skills, and attitudes that the researcher has developed in 20 years as a public servant have influenced her determination to propose a development plan as a public manager. These competencies have helped the researcher in carrying out the capstone project successfully and in making it acceptable to all stakeholders.

#### 6.1 STRATEGIC PLANNING AND MANAGEMENT

For a project manager, putting a time-bounded project into action is an essential step connecting the planning phase to the ultimate attainment of strategic objectives, which make the project implementation of utmost significance to strategic planning endeavors.

In this particular undertaking, the researcher employed a Plan-Do-Study-Act (PDSA) improvement cycle, which facilitated the evaluation of the project effectiveness. The data gathered together with the established results of the study through the PDSA process were then utilized to develop essential strategies for its sustainability, lessen barriers, set in solutions, and develop intended outcomes. These improvement cycles would permit the analysis if new policy changes, procedures, and practices would serve the desired functions and were applied as intended in terms of form and function.

During the planning stage, an initial site inspection was conducted to get first-hand information of the project site and the actual situation in Barangay Ermita. Aside from the site visit, studies had already been

performed on the economic profile of the barangay, its political leaders, its uniqueness, and developments as compared to other barangays. These would serve as a guide if project deliverables were possibly achieved in the expected time.

Establishing realistic objectives and conceptualizing concrete and practical strategies with the project team pushed the researcher to create an action plan that is tailored specifically to the locale of the study as GIDA considering its geographical, political, and economic situations. The action plan was made flexible upon consultation with the viewpoints of the project team members and the Barangay Council members who were the main actors and stakeholders of the project, respectively.

As a leadership skill, prudence was a virtue which came from being considerate of others' perspectives and assessments in achieving common goals.

Appropriate and clear delegation of tasks as stated in the action plan were an efficient way of systematizing and prioritizing the work. This opportunity allowed the researcher to utilize the strengths of the project team members to make the teamwork better. It also provided a back-up plan when some things did not turn out as foreseen by the team that was still responsible for the plans. However, despite the organized task management, glitches and hitches have surfaced unexpectedly but were addressed adequately through immediate discussion so as not to hamper the implementation.

## **6.2 SOLUTION-FOCUSED LEADERSHIP**

The capstone project implementation was merely among the several tasks the researcher had to undertake; however, solution-focused leadership provided the support to align the project activities with the significant Key Result Areas (KRAs) that were developed during the planning phase.

In managing the project team, the researcher had to focus on the execution of the deliverables for the attainment of the desired outcomes. Crafting a planning perspective is making a project layout at the maximum level by indicating the increased level of uncertainty during the project implementation and accelerating it as the project continues.

Integrating the solution-focused leadership approach reinforced the researcher in increasing the team members' decision making and judgment on the minimal challenges encountered during the implementation. Creating a culture of motivation among the team members encouraged them to focus on what is succeeding, how to do it more effectively, and how to become experts in what works.

## **6.3 TIME AND COST MANAGEMENT**

Schedule and budget are the two main supports of the project constraint polygon, in which the project manager does not know the project status without the planned schedule completion and budget performance. Stakeholders evaluate the project based on how they are delivered or executed within the project constraints.

In the capstone project implementation, the Gantt chart and Work Breakdown Structure were of great help considering that the researcher was able to review the activities regularly to determine project success in terms of schedule and budget. Identifying the activities that are finished and updating the chart enabled the researcher to determine whether they are completed within the original duration. However, sometime in the implementation, the researcher determined a critical path in the schedule, but the team members were able to look for ways to cope and get back on track.

On the other hand, the project implementation was not included in the agency budget allocation; thus, it worked on limited resources. With optimism that the activity shall not incur such costs, the researcher



tapped some private individuals and organizations to seek sponsorship. True to its sense, the researcher received sponsors on some costs like food expenses during the culminating activity, sea transport, and accommodation of the project team in the island barangay. Also, the scholar's agency provided the transport services to the guest speakers and project team coming from Bacolod. These productive advantages signify the benefits and values of sociability or in short, social capital.

Most public managers frequently feel a sense of pride or success when they accomplish everything they set out to do. Since the researcher managed the time and money well, she had a spare time that allowed her to finish the project without rush, worries, and anxiety. This implies that both time and cost management could reduce the stress level.

#### **6.4 COMMITMENT TO INTEGRITY AND DEDICATED PUBLIC SERVICE**

A public service built on integrity involves approaches that define universal ethics and concrete standards that public servants are expected to observe and practice. Integrity has something to do with the quality of the individual's character and the observed consistency of engagements, ethics, principles, and outcomes towards stakeholders. The community whom the project team has interacted and worked with during the capstone project implementation observed and expected honesty and truthfulness in the team's intentions to implement the project and serve the general public.

From the initial coordination until the implementation of the project, the project team has already laid down the support they expected from the stakeholders and the advantages and benefits the project would provide. Sincerity to commitment resulted in pure acceptance and full support from the residents of Barangay Ermita as well as from other implementing agencies as shown in the culminating activity, which was successfully undertaken.

#### **6.5 PEOPLE-ORIENTED AND PRODUCTIVITY**

People empowerment is crucial in accelerating productivity to the maximum organizational advantage in a way the human resource is strategically managed. Giving people some control over what they do and accomplish in life gives them motivation.

In the context of this study, as a public manager, the researcher believes that people are the critical element to achieve success in project implementation. Human resources must be treated well so that they would be motivated to give their best in achieving project objectives.

The capstone project implementation does not only deal with realizing the objectives but also enabling people to do more and be aware of their roles in the community and the capability to share in developing a better society. Managing the project team, which were composed of technical personnel who possessed technical expertise was an inspiring task. The researcher ensured that they acquired the opportunity to utilize their abilities and potentials fully and gave each of them a chance to improve and prove themselves in this project. As a people-oriented project leader, she focused on building complete success by creating lasting relationships with the team.

Likewise, the project team tried to demonstrate attentiveness and efficiency. In every activity they carried out, they encouraged the barangay officials and residents to absorb those values and be more productive. Despite the residents' belief and cultural background, the project itself empowered the people in Barangay Ermita to be more aware and conscious in facing the various challenges in their lives, especially their need for food.



The conduct of awareness campaign on NFA rice quality standards is basically for consumer empowerment and for inspiring them to be more aware of their rights and responsibilities as consumers. In doing so, the barangay officials had somehow understood their duty in sharing the task of enhancing consumer protection at the barangay level while the residents acquired responsible consumerism awareness.

## 6.6 CREATE OPEN COMMUNICATION AND WORKING RELATIONSHIPS

Open and honest communication is essential in building relationships professionally and personally, especially in implementing the scholar's capstone project. The project team tried to develop a certain level of working relationships with barangay stakeholders. In selecting the project team members, the researcher considered the personal attitude in establishing connections with other people aside from individual expertise.

Communication in a relationship is exceptionally important. Effective communication enabled the project team to sort the slight challenges together while having fun at the same time. Effective communication with the team has strengthened the trust, honesty, and respect within the group.

Building a working relationship with the other stakeholders is like creating a network that enhances social capital. It has provided the researcher a link to groups and individuals with reliable social contacts, and has earned the trust needed to successfully work together especially during incoming and outgoing consultations and to regularly provide feedback regarding the project status.

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## GLOSSARY

**Advocacy.** It relates to the provision of vital information of NFA rice quality to consumers in barangay Ermita, Sipaway Island done by the National Food Authority in Negros Occidental.

**Assessment.** It is the evaluation of the level of perception and customer satisfaction of the respondents concerning NFA rice quality and the accredited retailers' distribution practices.

**Buffer Stock.** It refers to the optimal level of rice stocks to be maintained by NFA equivalent to 15 or 30 days of national rice consumption at any given time to be released by the government for emergency and disaster-related situations during natural and man-made calamities.

**Consumers.** The word applies to the one who pays to consume the goods and services produced. As such, consumers play a vital role in the economic system of a nation (Lumenlearning.com, Accessed January 28, 2019). In this study, it refers to the persons residing in the marginalized sector and who consumes rice.

**Consumer Welfare.** In this study, it refers to the benefits gained by a person who consumes NFA rice and avail agency's services.

**National Food Authority.** Refers to a national agency vested the tasks of ensuring food security ([www.nfa.gov.ph](http://www.nfa.gov.ph), Accessed January 28, 2019). In this study, it is the agency mandated to maintain buffer stocks and to distribute NFA rice to the public during emergencies and calamities (RA 11203, 2019).

**Perception.** In this study, it refers to how consumers perceived NFA rice quality as to value or importance, existence and its physical attributes.

**Policy.** It refers to any government enactment that addresses concerns of populace well-being (Herrick, June 2013). In this study, it refers to the guidelines on how to distribute aging NFA rice after buffer stocking period.

**Quality Standards.** In this study, it is a set of specifications adopted for extensive use or repeated utilization. These defined along with the parameters of classification, variety, and grades.

**Rice.** In this study, it refers to the government rice maintained by National Food Authority as food security stocks and intended to be released during emergencies and calamities.

**Satisfaction.** In this study, it refers to the confidence gained by consumers in NFA rice quality.

**Sensory Evaluation.** In this study, it refers to the scientific method of analyzing and measuring rice characteristics observed by the senses.