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Research Article

Women Empowerment in Selected Fisheries-Related Livelihoods In Asid Gulf, Masbate, Philippines

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ABSTRACT

Women empowerment contributes to the coastal economy and dispositions to household income. This descriptive study aimed to establish women's empowerment and their roles in the overall performance of selected fisheries-related livelihood in coastal towns of Milagros, Cawayan, Placer, and Esperanza, Masbate. It was participated by 81 women beneficiaries. A structured survey questionnaire was utilized to collect information on the sociodemographic profile and adequacy level of empowerment aligned to WEAI-5DE. It was backed up with FGDs and KIIs. The data were treated through descriptive analysis techniques using frequencies and percentages. The respondents mainly belong to the reproductive age group (15-49 years old) and are married individuals (84%). They have resulted in the dismayed of occupation because respondents are mainly housewives. The present study reveals that women achieved an adequate level of control over using income and building relationships or groups within and outside the organization; hence, women are empowered. The study also focused on the need for women's empowerment along with agricultural production, access to and control of productive resources, leadership in the community, and time allocation. These gaps and impediments may be addressed when feasible vocational/TVET training programs are introduced to women, the establishment of collaboration among concerned government agencies to channel fishery products directly to the market, and the inclusion of gender sensitivity activities to lessen gender inequality in the fishery community.

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Introduction

Women empowerment is recognized as one of the contributory factors and vital elements in the country's economic development in all areas. Empowering women and reducing inequalities are considered the priority areas in all government development policies. This aligns with the Sustainable Developmental Goals, which shall promote gender equality and improve productivity and efficiency. The word "empowerment" covers many concepts and provides a common understanding applicable to different domains and subjects. Kabeer (Kabeer, 2001) defined empowerment as developing one's capacity to formulate strategic life choices, specifically in the context where this ability was deprived. Alsop, Bertelsen, and Holland (Alsop et al., 2006) describe empowerment as the capacity of a group or individual to make a practical life choice that then transforms it into desirable actions and outcomes.

The general objective of Republic Act 9710, otherwise known as the Magna Carta of Women (MCW), is the promotion of equal participation of women in society. It seeks to eliminate deprivation and discrimination through active involvement, protection, and promotion of the rights of Filipino women. The MCW seeks to bring women as active players in resource generation, utilization, and production to limit gender discrimination in the community. Women shall attain their rights and well-being and, at the same time, reduce poverty incidence, increase productivity, economic growth, and efficiency.

The attainment of economic growth and development will start at the lower level in the rural areas. World Bank on 2021 estimated that 44 percent of the world population in 2020 constitutes rural areas. In the Philippines, this area was approximately 53 percent of the total population. The significant contributors to agriculture in rural economies are women who have met several challenges compared to men. Women have limited access to services and resources such as land, finance, training, inputs,

and equipment. Women's productivity is usually seen within their families, organizations, and communities. Unfortunately, rural women are decapitated in raising their voices, contributing to agricultural decisions, community issues, money or business, and the spending of the family income. In areas and communities that largely depend on agriculture as the source of food and income, there is a translation of gender inequality into a significant gender gap in productivity and efficiency.

The Food and Agriculture Organization based in United Nations (FAO) has estimated that women's participation in fisheries (harvest and post-harvest) occupied the overall 30% of the workforce (FAO, 2012), although this differs very much by country and by sector. Weeratunge & Snyder (Weeratunge & Snyder, 2009) asserted that women market 60% of the seafood in Asia and West Africa. This would only mean that if we consider the significant role of women and raise their empowerment state, there will be an expected increase in the number of women involved in fisheries. Women are accounted for half of the workforce in inland fisheries, while in Asia and West Africa, 60% of the seafood is marketed by women. If we consider that much of women's contributions to fisheries go unrecognized, global figures could be higher than expected, surpassing 50% of the total workforce involved in fisheries (Weeratunge & Snyder, 2009).

In response to these issues and challenges, the United Nations-International Fund for Agricultural Development (UN-IFAD) supported and financed the implementation of the Fisheries, Coastal Resources, and Livelihood (Fish-CORAL) project promoting gender equality, reducing rural poverty, and improving food security. The project aimed to make women become half of all participants to achieve empowerment and increase family income, which benefits the community and the country as a whole. IFAD has been at the forefront of gender equality in rural communities, focusing on transformative and long-lasting results. They help

rural women grow food, connect to markets, increase their incomes, and become more literate and financially skilled (IFAD, -).

The FishCORal project was implemented in 2015 in the Philippines, targeting the 11 bays in Regions V, VIII, XIII, and Autonomous Region in Muslim Mindanao (ARMM) with the implementing agency, Bureau of Fisheries and Aquatic Resources (BFAR). In region V, Albay Gulf, Asid Gulf, and Bicol side of Ragay Gulf benefited in increasing the fisheries productivity and efficiency to a certain degree. The project included the development of women in employment, empowerment, and gender inclusivity, which highlighted their roles in the agricultural sector.

In this study, Asid Gulf comprises the coastal areas and islands in the municipality of Milagros, Cawayan, Placer, and Esperanza, Masbate. The women beneficiaries are involved in these FishCORAL livelihood projects: Aqua-silviculture and Kropek Enterprise in Milagros, Seaweeds Culture in Cawayan, Placer, and Esperanza Masbate. The general objectives of this study are to establish the level of women empowerment of the implementing organizations and examine the role of women in the overall performance of the fisheries' livelihood projects.

The study aimed to establish the level of women empowerment of the project implementing organizations and examine its role in the overall performance of the fisheries' livelihood projects. Specifically, it provides information on the socio-demographics of women

involved in the fisheries-related livelihood projects, assess the women empowerment level, examine the causes of disempowerment and possible impediments in the increase of women's productivity, and recommend measures to further enhance the productive role of women in livelihood projects.

Methods

Research Design

The study employed the qualitative-descriptive design of research. These include field surveys, Focus Group discussions (FGDs), and Key Informant Interviews (KII). It was participated by 82 women beneficiaries of the livelihood project in the Asid Gulf. The structured survey questionnaire was used in collecting the sociodemographic characteristics, profile, state of women empowerment aligned to Women's Empowerment in Agricultural Index (Alkire et al., 2013). To further validate the gathered data, FGDs and KII were performed to these beneficiaries during the visit to the fishing household.

Respondents of the Study

The respondents of this study are those women involved in selected livelihood initiatives extended to different municipalities of Milagros, Cawayan, Placer, and Esperanza. They are distributed in 19 coastal and island barangays. Participants are purposively selected because of the availability and presence being the officers, members, and non-members during the field visit.

Table 1. Distribution of Respondents per Municipality

Municipality	Coastal Barangays	Livelihood Projects	No. of Respondents
Milagros	Magsalangi, Jamorawon, Capaculan, Calumpang, Bangad, and Cayabon	Aqua-silviculture and Kropek Enterprise	25
Cawayan	Chico, Guiom, Looc, Naro, Punta Batsan, and Recodo	Seaweeds Culture	21
Placer	Nainday, Naboctot, Nagarao, Guinawayan, and Quibrada	Aqua-silviculture and Seaweeds Culture	21
Esperanza	Libertad and Rizal	Seaweeds Culture	15
Total Respondents			82

Study Site

This section presents the study area where women beneficiaries are involved in the selected livelihood project of FishCORAL. Asid Gulf is situated in the Northern region of the Visayan Sea. This area was identified as the

habitat of marine resources such as sardines, blue swimming crabs, and squid. The coastal areas and islands of the Gulf are covered by Balud, Milagros, Cawayan, Placer, and Esperanza, with a coastal length extension of 142 km.



Figure 1. Map showing the location of project implementing municipality in Asid Gulf

It is located at 12°11'9.78 north latitude and 123°27'21.99 east longitude. The fishing ground area covers about 2,475.95 km². A small portion (215.09 km² or 8.69%) is considered offshore (Belardo et al., 2019).

Analytical Designs

The quantitative data gathered on profile and sociodemographic characteristics were examined using descriptive analysis techniques such as frequencies and percentages. It was presented through tables and figures. In addition, the state of women's empowerment and the areas in which empowerment needs to be strengthened were measured using the Women's Empowerment in Agriculture Index (Alkire et al., 2013). Women empowerment was assessed under five domains (5DE), namely: (1) production, (2) resources, (3) income, (4) leadership, and (5) time.

Ethical Considerations

This study observed the ethical considerations mandated in the APA Ethics Code (Smith,

2003). A letter of permission to conduct the study in the identified area was secured. Prior coordination was established from the Bureau of Fisheries and Aquatic Resources, Regional Office V, to the Municipal Mayors down to the lower executives. The purpose, procedures, and duration were discussed to ensure transparency and awareness relative to the conduct of the study. Moreover, the participants have the right to raise questions or decline from participating in the study. Further, it was emphasized that any information and data collected would be dealt with utmost professionalism and confidentiality.

Results and Discussion

Sociodemographic Profile of Women Beneficiaries

The active involvements of women in different livelihood projects in the Asid Gulf are dominated by the reproductive age group and a mean age of 45 years old (see Table 2). This is cognizant to PSA (PSA, 2005) that those women

ages 15 to 49 years old or one in two women are categorized under this age group. Campos, Williams, Hilomen, Jalotjot, Tusi & Alparce (Campos et al., 2006) as cited by Belardo et al. (Belardo et al., 2019) argued that the national average age of livelihood workers is 41 years old. This indicates that the participation of women in the fishery-livelihood system is the highly active workforce of the organization. Arguably, younger women are not active and acquainted to participate in this activity. In terms

of civil status, it is evident that most of the respondents are married individuals (84.2%), which indicates that they are likely to search for productive household prosperity and be involved in any programs and projects that contribute to their day to day living. It was also revealed that there are single women (3.7%) and old dependents (6.0%), which can be associated with needing additional involvement and resources to support their needs.

Table 2. Distribution of Women by Age

Sociodemographic Profile	Frequency	Percent
Age		
20 – 26	2	2.4
27 – 33	7	8.8
34 – 40	20	24.3
41 – 47	24	29.2
48 – 54	15	18.3
55 – 61	9	11.0
62 – 68	5	6.0
Civil Status		
Single	3	3.7
Married	69	84.2
Widower	2	2.4
Separated / Annulled	2	2.4
Common-Law/Live-in	6	7.3
Highest Educational Attainment		
Elementary Undergraduate	12	14.6
Elementary Graduate	24	29.3
High School Undergraduate	14	17.1
High School Graduate	17	20.7
College Undergraduate	6	7.3
College Graduate	8	9.8
Vocational / TVET	1	1.2

In terms of educational attainment, as an input for their quality and productivity roles in the project (Mahawan et al., 2021) it was revealed that 29.3% of women are elementary graduates, 20% as high school graduates, and 17.1% are high school undergraduate. It can be noted that there is a potential introduction of vocational/TVET educational training (1.2%) as manifested by one of the respondents. Perhaps, such training will aid the beneficiaries' role in managing the associations in different livelihood projects. The UNESCO-UNEVOC (UNESCO-UNEVOC, -) claimed that vocational

or TVET training offers an effective avenue and provides a pathway that significantly improves the women's quality of life and easy access in the workplace. Generally, TVET is a promising tool that will enrich women's capabilities across ages, and gender equality might be achieved.

Occupation Profile

It was revealed in the data that the majority of women who participated in the livelihood project are mainly housewives, equivalent to 38 out of 82 or 46.3% (see Figure 2). These

women have their various engagements to different livelihood assets that support their household consumption. The generated data on work-related engagements were categorized based on the PSA's (PSA, 2009) released major women occupations. It was revealed that 13 out of 82 (15.8%) relied on trades. This is evident that women beneficiaries stated they engaged in fish vendors, sari-sari stores, online selling of the produce, and livestock selling. Some beneficiaries insisted that their participation in the livelihood project is not affected as they happen to be involved in other immediate sources of income to sustain the household's daily consumption. It can be observed that 9

out of 82 (11%) are officials of the government. These include barangay aide, barangay councilor, barangay health worker, secretary, and Tanods. These roles in their respective locality provide a glimpse that women possessed a diverse capacity by providing necessary services for the community's improvement.

Unfortunately, the agricultural group, comprising 6 (3.7%) women, contradicts the expected role of running the associations productively. This is indicated in the overall failure performance of the established association because officers and members lack the capability and operational competencies for possible sustainability of the projects.

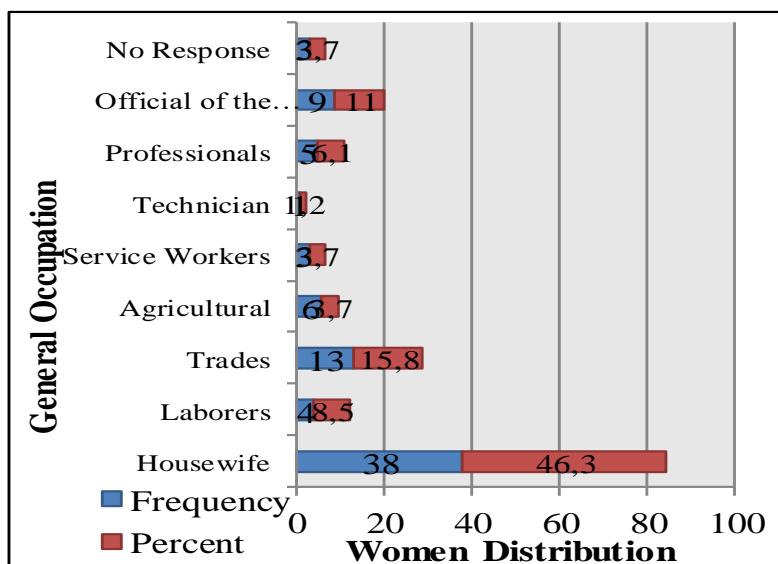


Figure 2. Distribution of Women by Occupation

Monthly Income

The generated income of women is presented in Figure 3. It was revealed that 63 out of 82 (76.8%) belong to no income up to ₱ 3 999 monthly income. Velza, Ibañez, Belardo, & Dioneda, Sr. (Velza et al., 2021) reported that 91% or 31 out of 34 families in aqua-silviculture in Milagros and Cawayan experienced poverty based on the income approach. In the report of Labayo (Labayo, 2021) using the income approach to households in Kropék livelihood in Cayabon, Milagros, it was found out that 7 out of 10 households were considered poor. Similarly, Ibañez, Velza, Belardo, & Dioneda (Ibañez et al., 2021) asserted that the household beneficiaries of the inter-island

seaweeds culture showed an 87.13% of poverty incidence in the towns Cawayan and Placer. In the case of Esperanza, poverty occurrence was also measured, which is 86% of the household beneficiaries involved in seaweeds culture (Mahawan et al., 2021). This indicates that women's monthly income is a contributory factor to the downside of poverty incidence in every household. For instance, an average monthly income of ₱ 5,999.50 was occupied by 14 out of 82 women, or 17.2%, ₱ 9,999.50 or 2 out of 82 (2.4%), and ₱ 15,999.50 for 2 (2.4%). Hence, the data showed that an income of below ₱ 10 957 is considered poor (Domingo, 2020), 78 out of 82 or 95% of the respondents.

Generally, there is a need for women's empowerment in the areas of livelihood income generation. This may include the capacity-building of women in the production of fisheries-related activities that will yield higher income to attain sustainable family consumption.

The current income of women is insufficient to withstand their daily needs. Reasons may include unstable job opportunities. Livelihood production is affected by natural and anthropogenic disturbances, mediocre skills, and capabilities in managing the project efficiently.

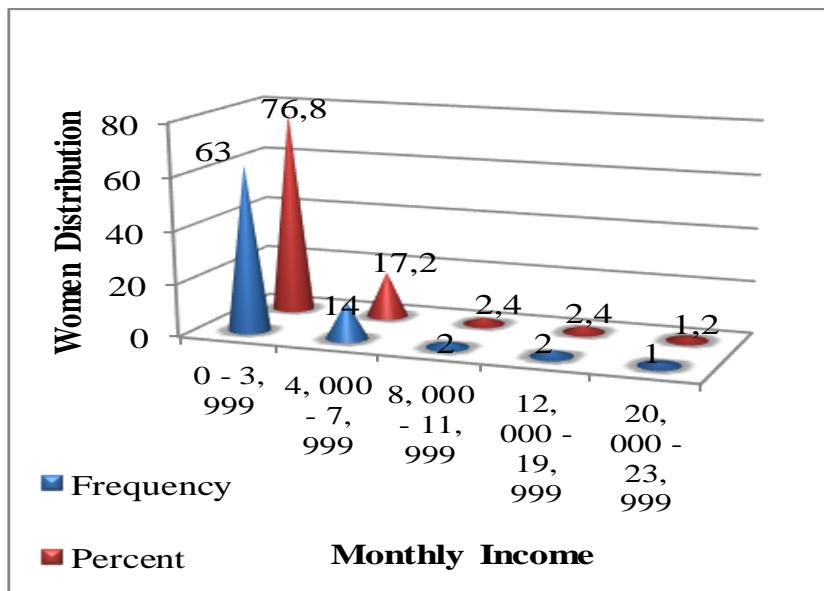


Figure 3. Distribution of Women by Monthly Income

Position in the Organization

The livelihood projects are extended to the fisherfolks across the towns in the Asid Gulf.

One of the requirements is the establishment of accredited and recognized organizations, associations, and federations.

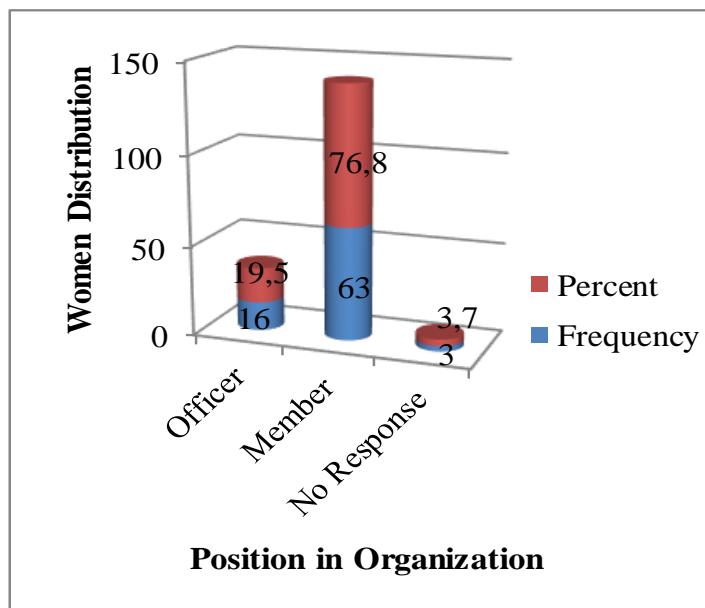


Figure 4. Distribution of Women by Position in Livelihood Organization

It is revealed that the majority of women (76.8%) are members of their respective organizations. In figure 4, 16 out of 82 (19.5%) showed that women could become officers in organizations. It was observed that women hold some of the positions as President, Treasurer, Secretary, and Auditor. This is a measure for productivity enhancement and sustainability planning programs to promote and increase the number of women to participate in managing livelihood fisheries resources.

Analysis of Women Empowerment

This study adopted the Woman Empowerment in Agriculture Index (WEAI) (Alkire et al., 2013). Included is how women are empowered in five domains of empowerment (5DE) in agriculture. These domains are (1) decisions about agricultural production, (2) access to and decision-making power about resource productivity, (3) control over the use of income, (4) leadership in the community, and (5) time allocation. Women are empowered who achieved "adequacy" in 80% or more of the weighted indicators.

The data revealed that women in the selected fishery-livelihood project achieved the adequacy level of 0.91 (91%), indicating that

they are highly empowered regarding income (see Table 3). The domain on "control over the use of income" showed that women have a high degree of input into the decision-making process in using their income. This is evident that women are mainly housewives, and their mechanism to derive income is through engagements to food crops, livestock production, and other non-farm activities. Women showed personal decisions regarding their income and were not affected by other family members spending for major and minor household needs. This means that women are exercising their choice; for instance, their income from nonfarm activities does not directly affect the use of either their husband or other family members.

Similarly, women achieved the empowerment ratio of 0.87 (87%) under the leadership domain. This is an indication that they are an active member of economic and social groups. It is reflected that the majority of women are members of the fisherfolk associations. The data showed that women along this line give value and recognize that one of the primary sources of social capital is building groups towards the members of the associations.

Table 3. Women Empowerment Ratios

Indicators	Adequacy Level	
	Empowerment Ratio	Disempowerment Ratio
Production		
Input in productive decisions	0.46	0.54
Autonomy in production	0.18	0.82
Resources		
Ownership of assets	0.66	0.34
Purchase, sale, or transfer for assets	0.50	0.50
Access to and decisions on credit	0.71	0.29
Income		
Control over the use of income	0.91	0.09
Leadership		
Group member	0.87	0.13
Speaking in public	0.76	0.24
Time		
Workload	0.70	0.30
Leisure	0.78	0.22
Disempowerment Headcount Ratio	0.61	
Empowerment Headcount Ratio	0.39	

Source: Author's calculations

Narayan (Narayan, 2002) insisted that the leadership domain captures the concept of inclusivity, participation, accountability, and local organizing capability as a critical element of empowerment.

Hence, the empowerment headcount ratio of 0.39 (39%) of the participants showed inadequacy than the disempowerment ratio of 0.61 (61%). This means that WEAI – 5DE cut-off was not achieved, and there is a reasonable indicator that needs improvement.

Analysis in Causes of Disempowerment

Table 3 showed that women showed inadequacy in the domains of production, resources, and time. In agricultural production, the indicators "input in productive decisions" "autonomy in production" obtained an empowerment ratio of 0.54 (54%) and 0.82 (82%) respectively. In the domain of the resources, the respondents showed the lower ratio in the indicators; "ownership of asset" 0.34 (34%), "purchase, sale, or transfer for assets" 0.50 (50%), and "access to and decisions on credit" 0.29 (29%). The leadership domain occupied inadequacy in one of the indicators which are 0.24 (24%) for "speaking in public." Lastly, the domain that showed nearly empowerment is time with a disempowerment ratio of 0.30 (30%).

The Focus Group Discussions (FGDs) and Key Informant Interviews (KII) results were utilized to generate the causes of disempowerment.

Agricultural Production

The first indicator, input in productive decisions, inhibits the women respondents' participation and decision-making in the livelihood operations. It was found out that women are disregarded to get involved in the livelihood decisions when their husbands are officers of the organization. The majority of women in the Gulf are members of the organization. They are also limited to engaging in crop farming, livestock raising, and other agricultural production activities. They stated that the reason why they are bound to decide on agricultural productivity is that men would insist that their role is to take good care of their child, attend to the men's fish catch, and being involved in other productive activities will not contribute

immediately to the household income as men would claim. Women also insisted that their decision to plant crops, select varieties to plant, and raise livestock such as chicken or pig are affected by men. They claimed that when women participate in such activities, assistance such as preparing food and doing everyday household activities will be affected.

The second indicator, autonomy in production, showed a high disempowerment level. This indicates that women are being constructed to decide based on the decisions of men. This is the case that to avoid disturbances, disputes, and punishment, women shall follow men's decisions. This is supported by Chirkov, Ryan, and Deci (Chirkov et al., 2011) that the consequences affect the establishment of autonomy. Hence, if women would disagree with men's decisions in making actions towards production, there is a tendency that punishment will occur.

Access to and Control of Productive Resources

The first indicator, ownership of assets, was observed that women in the Gulf do not benefit from their physical assets. This indicates that the respondent does not own small livestock, farm equipment, household durables, cellular phones, motorcycles, motorboats/Banca. Even their house and parcel of land are not considered to own because they just asked the owner to dwell in their areas. A natural asset like land ownership showed an empowered woman. However, in this case, they are likely to be more disempowered. Bomuhangi, Doss, and Meinen-Dick (Bomuhangi et al., 2011) claimed that if women are in joint ownership of land, they are more empowered; hence, when asked either solely or jointly, the respondents stated no positive response.

In terms of purchase, sale, or transfer of assets, women showed disempowerment. It was observed that women are controlled to decide the sales of fish caught by men. For instance, the derived income from seaweeds culture, aqua silviculture, and Kropek making are affected by men on what to purchase for the household consumption. Similarly, men would interrupt them when they decide to purchase farming tools and equipment for possible crop

farming. The last indicator is access to and credit decisions.

It was found out that financial assets such as government transfers, nongovernment organizations, lenders, friends and relatives, and credit associations served as their credit sources. This is an indication of the sustainability of family consumption. Women are disempowered in this indicator because it is men who will decide the proceeds of the credit. The respondents stated that even though they plan to engage in sari-sari stores using the money from lenders and nongovernment organizations, their husbands would prioritize using the money to purchase fishing tools, equipment, and other livelihood materials.

Leadership in the Community

In this domain, women are disempowered in the second indicator which is, speaking in public. The common cause of inadequacy of women is, instead of participating in public, raising their voice to public works, they instead spend time in livelihood income generation so that at the end of the day, there will be food for the table. The respondents showed respect and withdrew their selves to those persons in authority. For instance, the president of one association is also a Barangay official; hence, they tend not to protest any misbehavior. Hence, women of selected fishery-livelihood in the Asid Gulf are not comfortable speaking up in public, which contributed to their disempowerment.

Time Allocation

In this domain, women are disempowered in the second indicator which is, speaking in public. The common cause of inadequacy of women is, instead of participating in public, raising their voice to public works, they instead spend time in livelihood income generation so that at the end of the day, there will be food for the table. The respondents showed respect and withdrew their selves to those persons in authority. For instance, the president of one association is also a Barangay official; hence, they tend not to protest any misbehavior. Hence, women of selected fishery-livelihood in the Asid Gulf are not comfortable speaking up in

public, which contributed to their disempowerment.

Conclusion

Women empowerment along livelihood fishery-related projects is one of the aims of the Fisheries, Coastal Resources and Livelihood (FishCORAL) of the International Fund for Agricultural Development (IFAD). It was prompted in this study to establish the level of women empowerment in project implementing organizations and examine its role in the overall performance of the projects.

The sociodemographic profile of women beneficiaries found out that the reproductive age group dominates the selected-fishery livelihood projects with a mean age of 45. It showed that these are the highly active workforce of the organization. There are single women beneficiaries but are likely to be inactive in their role in the project. Most of the members are married individuals, which indicates that being involved in the projects will contribute to the livelihood income to sustain the family's day-to-day food consumption. In terms of the highest educational attainment, women are elementary graduates, high school graduates, and high school undergraduates. This human asset is diverse resulting in the possibility of quality and productive operations of the project. Since formal schooling is not feasible based on the age group of women, enrichment in vocational or TVET training will likely help manage the projects.

In terms of the occupation profile, it was found that most women are housewives but are engaged in different livelihood and non-agricultural roles to support daily household consumption. Women participated in trades, fish vendors, sari-sari stores, online selling, and livestock selling. Some women played an active role in different offices in their Barangays as Councillor, Secretary, Health Worker, and Tanods. Moreover, women are less engaged in agricultural groups, which implies that the organization's performance is affected, as showed by the members' lack of capability and operational competencies. Poverty reduction is not attained as indicated that most women in the Gulf have no income, and some generate up

to ₱ 3 999 monthly. The majority of women are members of the fisherfolk association.

Women achieved an adequacy level in terms of control over the use of income and building relationships or groups within or outside the organization. This means that women exercise their choice and display a high degree of input into decision-making in using their income. It is also found out that inclusivity, participation, accountability, and local organizing capability are manifested, so women are empowered in these areas.

Generally, women are disempowered in agricultural production, access to and control of productive resources, leadership in the community, speaking in public, and time allocation. The primary cause, along with traditional roles of women at home, limited access to physical, social, and natural assets, and excessive workloads, are directly affected by the decisions of their husbands/men.

Recommendations

Based on the results, findings, and conclusions it is recommended to implement feasible vocational or TVET training programs to increase and capacitate their competencies in the operations of livelihood projects. Programs aligned to the current livelihood projects implemented in the towns of Milagros, Cawayan, Placer, and Esperanza, establish collaboration and linkage between the Bureau of Fisheries and Aquatic Resources (BFAR) project with the Department of Industry (DTI) or between fisherfolk associations and DTI in providing a channel of the fishery products from the farm to the market. This will help the women direct the distribution of products and generate more income as they are engaged in a diverse form of livelihood, conduct gender sensitivity and literacy assessments to the fishing households and members of the implementing project associations to generate baseline data in introducing training and workshop in Asid Gulf fishing families. This will increase women's empowerment level along with the areas of WEAI-5DE where women are inadequate, and a more comprehensive study may be conducted regarding the gender parity index between men and women to establish intrahousehold gender equality.

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References

- Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G., Vaz, A., (2013) The women's empowerment in agriculture index. *World Development*, 52, 71-91. <https://doi.org/10.1016/j.worlddev.2013.06.007>
- Alsop, R., M. Bertelsen, and J. Holland. (2006) Empowerment in practice from analysis to implementation. *World Bank*, Washington, DC:
- Belardo, S.B., Candelaria A.P., & Dioneda, R.R. (2019) Catch and Effort Assessment of Fisheries in Asid Gulf, Philippines, pp. 87-104. In Dioneda, R.R., Naz, GAA & Torres, E.E. (Eds), *Participatory Resource and Socio-Economic Assessment of Asid Gulf*. Terminal report submitted for the Fisheries, Coastal Resources and Livelihood Project, Department of Agriculture Bureau of Fisheries and Aquatic Resources, Quezon City. Bicol University Center for Policy Studies and Development, Legazpi City. 144 pp.
- Bomuhangi, A., Doss, C., and Meinzen-Dick, R., (2011) Who owns the land? Perspectives from rural Ugandans and implications for land acquisitions. IFPRI Discussion Paper 1136. International Food Policy Research Institute, Washington, DC. www.ifpri.org/sites/default/files/publications/ifpridp01136.pdf
- Campos, M.A., J.B. Williams, V.V. Hilomen, H.C. Jalotjot, P.A. Tusi, & O.P.A. Alparce. (2006) Post Resource and Socioeconomic Assessment Monitoring of Ragay Gulf. Terminal Report.

- Chirkov, V., Ryan, R.M. and Deci, E.L., (2011) Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being. *Cross-Cultural Advancements in Positive Psychology*, Dordrecht, the Netherlands: Springer.
- Domingo, K., (2020) Who are identified rich, poor? Gov't shows income class bracket in PH. ABS CBN News. <https://news.abs-cbn.com/news/09/17/20/who-are-identified-rich-poor-govt-shows-income-class-brackets-in-ph>
- FAO, (2012) The state of world fisheries and aquaculture 2012. Food and Agriculture Organization, Rome. 209.
- Ibañez, R., Velza, J.F., Belardo, S., & Dioneda, R. Sr. (2021) Impact assessment of seaweeds culture of the inter-island seaweeds association in Cawayan-Placer, Masbate. Rapid Project Impact Assessment of Asid Gulf. Terminal Report.
- IFAD, (n.d.). <https://www.ifad.org/en/gender>
- Kabeer, N. (2001) Reflections on the measurement of women's empowerment—Theory and practice. In *Discussing Women's Empowerment—Theory and Practice*, edited by A. Sisask, 17–54. Stockholm, Sweden.
- Labayo, C. (2021) Evaluation of Cayabon active women's association kropek enterprise in Milagros, Masbate, Philippines. Rapid Project Impact Assessment of Asid Gulf. Terminal Report.
- Mahawan, A.M., Belardo, S.B., & Dioneda, S.Sr., (2021) Evaluation of Esperanza seaweeds culture-enterprise federation: A livelihood project in Masbate, Philippines.
- Narayan, D. (2002) Empowerment and Poverty Reduction. Washington, DC: World Bank.
- PSA, (2005). Women 15 to 49 years old. <https://psa.gov.ph/content/women-15-49-years-old>
- PSA, (2009) Laborers and unskilled workers are the major occupation of women. <https://psa.gov.ph/content/employed-women>
- Rapid Project Impact Assessment of Asid Gulf. Terminal Report
- Smith, D. (2003) Five principles for research ethics. American Psychological Association, 34(1), 56. <https://www.apa.org/monitor/jan03/principles>
- UNESCO-UNEVOC (n.d.) Empowering women through TVET: Insights from the UNEVOC network. UNESCO International Centre for Technical and Vocational Education and Training. <https://unevoc.unesco.org/home/IWD+2019+Expert+Insights>
- Velza, J. F., Ibañez, R., Belardo, S., & Dioneda, R. Sr., (2021) Impact assessment of aqua silviculture of Milagros and Placer, Masbate. Rapid Project Impact Assessment of Asid Gulf. Terminal Report.
- Weeratunge, N. & Snyder, K. (2009) Gleaner, fisher, trader, processor: Understanding gendered employment in the fisheries and aquaculture sector. Conference: FAO-IFAD-ILO Workshop, Rome, Italy. https://www.researchgate.net/publication/237301068_Gleaner_fisher_trader_processor_understanding_gendered_employment_in_the_fisheries_and_aquaculture_sector