

PRACTICES OF LOCAL AQUACULTURE FISHERFOLKS IN MITIGATING THE IMPACT OF EL NIÑO IN DAVAO CITY

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ABSTRACT

El Nio is expected to develop in the tropical Pacific with an 80% likelihood and last until the first quarter of 2024. This could lead to below-average rainfall conditions, potentially causing dry spells and droughts in some areas, particularly in Davao City. Thus, the purpose of this study is to know the mitigation plans in Davao City. The researcher utilizes a qualitative method and adapted a fish vol questionnaire from the 4H Fisheries Vulnerability Assessment tool. The City Agriculture Office has prepared a mitigation plan with fisherfolk leaders. Result reveals that local fisherfolks refuses to adopt the plans due to consistent daily rainfall. Nevertheless, the City Agriculture office are still driven to conduct an educational campaign on the effects of El Niño on aquatic resources and even established 258 rainwater catchments for uplands. Furthermore, they are also identifying additional water resources and installing polyethylene pipes for irrigation facilities, solar-powered ram pumps, and other irrigation assets in Davao City.

Keywords: El Niño, Fisherfolk, mitigating, aquaculture

1. INTRODUCTION

According to CDRMO, (2023), an official announcement about the developing El Nio condition in the tropical Pacific has been made by the Philippine Atmospheric, Geophysical Astronomical Services Administration (PAGASA). El Niño may develop in the upcoming season (June to July and August) with an 80% likelihood and may last until the first quarter of 2024, according to recent data and model projections. El Niño might lead to below-average rainfall conditions, which could have severe effects like dry spells and droughts in some areas of the country, especially in Davao City, according to the Philippine Atmospheric, Geophysical Astronomical Services Administration (PAGASA).

In the study conducted by Guerrero III, (2018) there is a greater increase in the water surface temperature of the eastern tropical and central tropical Pacific during an El Niño episode relative to that of the western tropical in which El Niño generally affects fisheries in terms of production and income of the fisherfolk in the industry. The methods and mitigation strategies used by the fishermen in this article helped to better and minimize the effects and impacts of El Nino, notably on the fishermen in Davao City. The municipal and aquaculture sub-sectors produced 73% of the overall production of the fisheries sector between 2011 and 2020, according to the Bureau of Fisheries and Aquatic Resources. According to the Philippine Statistics Authority's early estimates for 2021 poverty data, fisherfolk had the highest incidence rate of poverty at 30.6 percent, up from the 26.2 percent observed in 2018.

The goal of this study is to know the readiness of the fisherfolks and aquaculture offices by examining their mitigation plan and the possible impact of El Nino in Davao City. Also, this study would like to act as a response to the importance of planning for sustainable aquaculture resources despite global climate change.

2. METHOD

This study utilizes a qualitative method through an interview of local fisherfolks and aqua culturists in a selected area of Davao City. This study used an adapted fishvol questionnaire from the 4H Fisheries Vulnerability Assessment tool by Angela Aguila and Mudjekeewis Santos provided by the National Fisheries of the Research and Development which was developed on May 23, 2018.

3. RESULT AND DISCUSSION

According to the interview conducted in City Agriculture Office, the senior agriculturist cited that their office had already prepared a mitigating plan with the fisherfolk leaders in Davao City. However, the local fisherfolks who mainly reside in the upland areas refuse to adopt the mitigating plan in preparation for the possible upcoming El Niño due to consistent daily rainfall. Thus, the office of the respondent is having a hard time implementing their plans due to the passive response of the local fisherfolks.

Nevertheless, despite the negative response of the fisherfolks in Davao City concerning the mitigation plan, the City Agriculture Office is eager to conduct an educational campaign on the effects of Eel Niño on aquatic resources. Likewise, their office has already established 258 rainwater catchments designed for those who reside in uplands. Furthermore, they are also starting to identify additional water resources and install more polyethylene pipes for

irrigation facilities, especially for those who are in vulnerable areas. In addition, solar-powered ram pumps and other irrigation assets were also prepared in preparation for this matter.

4. CONCLUSION AND RECOMMENDATION

The result shows that fisherfolks have passive toward the mitigating plans of El Nino. This indicates the fisherfolks in Davao City are not yet prepared and lack education about the effects of drought on their fisheries. Thus, this study recommends a continuous effort of local government on protecting local resources to avoid possible deficits in products due to unawareness of the effects of the global season changes (Tattao, et al., 2023)

Furthermore, according to Colina, (2023) the government should always overlook the local fish industry by intensifying the aquaculture education of the fisherfolks and providing proper and quality equipment necessary for the sustainability of the industry.

5. REFERENCES

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