American Journal of Multidisciplinary Research & Development (AJMRD) Volume 05, Issue 12 (December-2023), PP 01-11 ISSN: 2360-821X www.ajmrd.com

Research Paper

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Shaping Local Economic Enterprising Opportunities through Environmental Analysis

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ABSTRACT

This study conducted a situational analysis through Political, Environmental, Socio-Economic, and Technological lenses in Bongao, Tawi-Tawi - the capital municipality in the southernmost province of the Philippines. The aim of this study is to draw-out potential enterprising activities for the local governance to provide better services to the locality and at the same time, increase the generation of internal revenue for the municipality. It has been determined that underlying development opportunities in the municipality are: a) Policy Reforms on the devolution of the *Chinese Pier* facility and other local docking areas to municipal management; b) establishment of fish port in the *Chinese Pier* Facility; and c) establishment of seaweed storage or buying station in the *Chinese Pier*.

Keywords: local economic enterprises, local governance, local services, internal revenue, Bongao, Tawi-Tawi

I. INTRODUCTION

The delegation of powers, authority, responsibilities and resources to a local government unit is instituted through the Republic Act No. 7160 also known as the Local Government Code of 1991 (LGC). The provisions herein decentralize the function of establishing accountable, efficient and dynamic operations and mechanisms to the LGUs, intended to meet the priority needs and service requirements of its constituents. These mechanisms may include the establishment and operation of local economic enterprise (LEE) which is defined as a public enterprise system in driving the local economy so that communities will become self-reliant and attain full potentials economically, socially and environmentally (DBM, 2016). Sections 15 and 18 of the LGC describe the dual nature of LGUs - that aside from its taxing, issuing of permits and police powers; it can also create and operate economic enterprises, charge fees for the delivery of its services, and enter into contracts. Cognizant to Section 444b of the LGC, it is a major role of the local governance, headed by the chief executive or the municipal mayor to take initiative in ensuring the delivery of basic services and facilities in the municipality and maximize alternative sources of revenue generation to augment the IRA sources of the locality. The Municipal Mayor directs the formulation and implementation of the municipal development plan with the assistance of the Sangguniang Bayan that outlines development programs such as establishments of economic enterprises in accordance to its objectives.

II. OBJECTIVES

This study was conducted to critically determine the enterprising activities in the municipality of Bongao, Tawi-Tawi, Philippines through conducting an environmental scanning that describes the current status and capacity of the locality and its local governance. Local economic enterprises are income generating modalities systematically managed by the local government unit (LGU) in generating diversified income streams. These enterprises are generally being operationalized to increase revenues of the municipality from different sources to be utilized for other projects and programs to help the community to have better facilities and other service deliveries in different aspects. Which in general, is uplifting the livelihood and socio-economic status of the people.

III. METHODS

This study conducted a situational analysis through Political, Environmental, Socio-Economic, and Technological lenses. These aspects covered the internal and external factors that may greatly affect the operations of local economic enterprising activities in the municipality of Bongao, Tawi-Tawi, Philippines. The political environment discusses the internal capacity and operations of the local governance that covers the

financial health of the municipality. The environmental aspect discusses the geographic structure and major sources of income in the province as well as some of its implications. The socio-economic factor outlined the social and economic details of the municipality. Lastly, the technological aspect described the internal capacity of the locality in terms of proficiency in IT.

Gathering of primary data is generally based on the collected official documents from respective agencies as well as interviews with the local government unit officials.

IV. RESULTS

According to Section X of the 1987 Constitution, the Philippines is subdivided into territorial and political levels, these are provinces, cities, municipalities and barangays. However, a special area is considered for autonomous regions like the Muslim Mindanao and the Cordilleras. The Muslim Mindanao, also known as the Southern Mindanao, comprises provinces of Cotabato City, Maguindanao, Lanao del Sur, Basilan, Sulu and Tawi-Tawi. The Municipality of Bongao, Tawi-Tawi is under the regional jurisdiction of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) after it replaced the ARMM administration (Republic Act 6734) as amended by Republic Act 9054 in 2019. Executive Order 425 issued on October 12, 1990 by former President Corazon C. Aquino states that:

"Placing Under the Control and Supervision of the Autonomous Regional Government the Line Agencies and Offices of the National Government within the Autonomous Region in Muslim Mindanao dealing with Labor and Employment, Local Government, Tourism, Environment and Natural Resources, Social Welfare and Development, and Science and Technology, and for other Purposes"

The BARMM administration is in a transitional phase until the year 2025. As part of its reconstruction, BARMM has replaced the DILG-ARMM with the Ministry of Local Government or MILG-BARMM. This department directly supervises the administration of its subordinating LGUs.

Section 4, Par. 1 Article XIX – Transitory Provisions of RA 6734 states that: "Upon the organization of the Autonomous Region, the line agencies and offices of the National Government dealing with local government, social services, science and technology, labor, natural resources, and tourism, including their personnel, equipment, properties and budgets, shall be immediately placed under the control and supervision of the Regional Government."

Since Bongao lies in a strategic location for BIMP-EAGA countries and is seated at the center of the provincial administrative system, its Local Government Unit plays a significant role in facilitating political, social and economic growth. It is being referred to by ARMM as a Sub-Regional Center for economic growth development (LGU-Bongao CLUP, 2017). However, due to the complications of the decentralization of the ARMM Act, several functions like the social welfare and development, agricultural, and environment and natural offices were not devolved to the municipal administration. These offices are vital in the facilitation of development in different sectors in the municipality. As mentioned, facilities to regulate the fishery industry in the municipality is a pressing need. However, the LGU did not decentralize this function on the municipal level.

Another example is the management of the seaports. There is a seaport in the Municipality of Bongao which functions as the transshipment port for the Province of Tawi-Tawi since it caters to large mechanized sea vessels. Its management is under BARMM-Regional Port Management and Authority (RPMA). However, the RPMA also took over the management of a local docking area called the "Chinese Pier" that accommodates smaller cargo or passenger motorized vessels or "lantsa" from other municipalities. The Chinese Pier is within the premises of the public market facility that could be helpful if included in the operating mechanisms of the LGU. Aside from it, there are also (5) more local docking areas in the municipality that fully operate without being regulated by the LGU or any agency. These local docking areas serve as the ingress and egress point of goods from nearby countries like Malaysia and Indonesia usually transporting rice, oil, gas, and other commodities that are being brought and distributed in the municipality.

With regards to the devolution of the management of the Chinese Pier, a Memorandum of Agreement (MOA) between ARMM and LGU-Bongao was issued in 2013. The MOA decentralizes the management of this facility to the LGU-Bongao. However, this was not carried out to implementation since the LGU-Bongao lost its copy of the MOA, according to the LGU officials.

Another situation that amplifies the need for more stringent port management is the COVID-19 pandemic. At an early phase of the pandemic, Malaysia was one of the countries in Southeast Asia that recorded the highest number of COVID cases. At an early phase of the pandemic, Malaysia also detected the newly mutated COVID-19 variant that was ten times more infectious than the original COVID-19 strain (Arirang News, 2020). It threatens the locality since it shares sea borders with very close proximity. Therefore, it is high time for the LGU to pursue the decentralization of the management of all local docking ports in the municipality.

a. Political

LGU's dependency on IRA

As shown in Table 1, the resources of an LGU come from internal and external sources. Internal sources are funds that are locally generated by the LGU, also called regular incomes. These are generated from the issuing of permits and taxes, and the service and business sector of the LGU. External sources are funds coming from the share in national taxes, and borrowings from local or foreign grants.

| External Sources | | |
|--|--|--|
| Aids and Allotments | | |
| Internal Revenue Allotment (IRA) | | |
| Share in National Wealth | | |
| Share in Tobacco Excise Tax | | |
| Grants | | |
| Domestic | | |
| Foreign | | |
| National Aid | | |
| Loans, Borrowings, and Transfers Loans | | |
| Transfers | | |
| Inter-local Transfers | | |
| | | |
| | | |
| | | |
| | | |

Source: Department of Finance-BLGF, 2004

The allocation is vertically and horizontally determined. For a municipality, vertical allocation is 34% from the gross internal revenue collections and horizontal allocation is based on the population (50%), land area (25%) and equal sharing (25%). The internal sources of the LGU-Bongao consist of imposed municipal taxes, fees, and charges which are constituted in the municipal revenue code. The *Sangguniang Bayan* reinforces the implementation of the revenue code and adjusts it every 5 years at a maximum of 10 percent increase.

Since the Municipality of Bongao seats the center of the administrative system of the Province of Tawi-Tawi, it is obligated to provide equal opportunities for trade and quality services not just for its direct constituents but also for the entire province and its neighboring domains. However, the LGU-Bongao has long been heavily dependent on its IRA funds with a total average of 94.29% recorded for the last (5) years. It has only a total average of 3.64% service and business income accounted for from its economic enterprise operations, primarily from operations from its public market facilities.

It is apparent that the locality of Bongao has several service requirements or priority needs that must be addressed. Since one of the major problems of the LGU is the heavy dependency on its IRA funds, the best option in meeting these public needs is to establish local economic enterprises. Through this approach, the LGU could generate service and business incomes that will cover the operating expenses of the individual economic enterprises and effectively intensify its revenue generation to augment its IRA funds.

4.2 Environmental

The Province of Tawi-Tawi is an archipelagic province composed of 106 islands and islets. It is known for its rich aquamarine grounds that serve as a home for upscale fishery and aquatic products like tuna, grass fish, flying fish, groupers, crabs, lobsters, octopus, spider shell, sea mantis, and seashells. Thus, the primary livelihood of the locals is heavily dependent on the ocean. In the Municipality of Bongao alone, there are 9,501 registered fishermen (almost 10% of the municipal population), but according to the LGU, the actual number is far higher than what was listed in the municipal records. The province produces an approximate of 1.3 tons of live marine products annually which is being transported through the seaport located in the Municipality of Bongao (LGU-Bongao CLUP, 2017).

Since fishing and aquaculture are among the major sources of income among the people of Bongao and its nearby communities, it is imperative for the LGU and other line agencies to pursue stringent coastal resource management efforts. According to DA-BFAR, the Province of Tawi-Tawi is suffering from a lack of environmental policies and proper management from responsible agencies. This may be due to a lack of education, training, or information drives for coastal resource management. The nearshore ringing reefs of Bongao are damaged due to heavy fishing and are not considered healthy in terms of fish density (BFAR, 2000). This is due to harmful catching practices and fishing of species that are prohibited or discouraged to be sold in the market.

For example, a survey on the fishery groupers (*Epinepheline*) revealed that there is a total of 38 grouper species being sold in the public market of Bongao. Three (3) are identified by the IUCN as *Vulnerable* species and seven (7) as *Near Threatened* species (Muallil et al., 2016). The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international treaty to prevent species from becoming endangered or extinct. Locally, Republic Act 8550 also known as *The Philippine Fisheries Code: National Policy for Sustainable Fisheries* emphasizes regulation on fishing practices and trade limits of classified aquatic animal fishing.

As discussed, the fishery is one of the major industries in the Municipality of Bongao. It is a prime duty of the LGU-Bongao to ensure coastal management and responsible fishing. However, the municipality does not have any facility like a fish port to properly accommodate and regulate this industry. This results in harmful fishery practices that affect both the environment and the consumers. For instance, fish catches are directly being brought by the fishermen to the public market without going through any inspection. This practice puts public health in danger and at the same time, delineates environmental resources.

4.3 Socio-Economic

The municipality of Bongao is the de-facto capital of the province of Tawi-Tawi. It is a second-class municipality that has an annual total income of no more than Php 15 million. It is composed of 35 barangays and has a total population of 116,118 individuals and a total land area of 16,595 hectares (PSA, 2015). Population and land area are major components in computing the municipality's IRA. Geographically, Bongao lies in the south-western tip of Tawi-Tawi with map coordinates 5° to 5° 15' latitude and from 119° 44' to 120° longitude. As shown in Figure 1, it shares sea borders with the Malaysian State of Sabah and the Indonesian Kalimantan province. Due to its location, it is being conferred as a gateway to the BIMP-EAGA countries or Brunei, Indonesia, Malaysia and the Philippines – East ASEAN Growth Area (LGU-Bongao CDP, 2017).

Proximity is the major reason why the province can easily access goods from its neighboring countries. The consumption of products like rice, oil, flour, sugar, condiments, preserved foods, and beauty products from Malaysia and Indonesia is preferable for the locality since these products are offered at lower prices. The products are up to 40% cheaper than the prices offered in Zamboanga City (Geronimo et al., 2006). The province has long been reputed as a drop-off point for smuggled goods from its neighboring countries like Sabah Malaysia and Indonesia (De La Rosa, 2014).

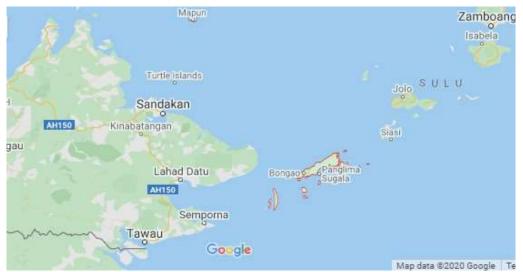


Figure 1. Location Map of Bongao, Tawi-Tawi Source: Google Map

The Municipality of Bongao is the capital town of Tawi-Tawi that serves as the center of commerce and trade in the province. It houses several significant facilities and institutions that are not available to the rest of the 10 municipalities of the province, such as banks, airport, hospitals and state universities and colleges (SUCs). Due to this, people from other municipalities usually migrate to Bongao to work or study. As presented in Table 2, this leads to significant growth of the municipal population from the year 1903 to 2015. The only exception was the year 1970 to 1975 due to the declaration of Martial Law.

As provided in Table 3, the population of Bongao is projected to increase in the succeeding years and is expected to reach 169,075 in the year 2026, an almost 54% increase from the last census in 2015. The projected increase is pro-rated to the current urbanization growth level of individual component barangays of the municipality.

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| Table 2. Historical Population and Growth Rate of Bongao, Tawi-Tawi | | | | | |
|---|------------|--------------------|-----------------------|--|--|
| Census Year | Population | Increase/ Decrease | Average Annual Growth | | |
| | | | Rate | | |
| 1903 | 1,854 | | | | |
| 1918 | 3,486 | 1,632 | 4.29 | | |
| 1939 | 4,510 | 1,024 | 1.23 | | |
| 1948 | 5,626 | 1,116 | 2.48 | | |
| 1960 | 10,161 | 5,196 | 7.53 | | |
| 1970 | 20,560 | 10,161 | 6.84 | | |
| 1975 | 20,560 | -423 | -0.41 | | |
| 1980 | 27,884 | 7,324 | 6.28 | | |
| 1990 | 37,932 | 10,048 | 3.12 | | |
| 2000 | 58,193 | 20,261 | 4.37 | | |
| 2010 | 79,362 | 21,169 | 3.15 | | |
| 2015 | 100,527 | 21,165 | 4.84 | | |

Table 2. Historical Population and Growth Rate of Bongao, Tawi-Tawi

Source: LGU-Bongao CDP, 2017

Table 3. Projected Population of Bongao, 2017-2026

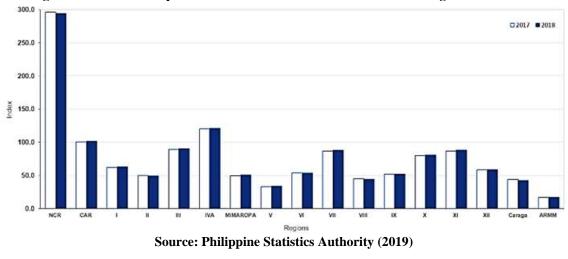
| Year | Projected Population | | |
|-------------------------------|----------------------|--|--|
| 2017 | 110,494 | | |
| 2018 | 115,841 | | |
| 2019 | 121,448 | | |
| 2020 | 127,326 | | |
| 2021 | 133,489 | | |
| 2022 | 139,950 | | |
| 2023 | 146,723 | | |
| 2024 | 153,825 | | |
| 2025 | 161,270 | | |
| 2026 | 169,075 | | |
| Sources I CII Bongoo CDD 2017 | | | |

Source: LGU-Bongao CDP, 2017

This population increase requires political actions from the LGU to advance socio- economic growth in the municipality, improve offered services and facilities, and develop an enabling environment to cater to different industries and other diverse community integration activities.

a. Major Industries in the Province

The Province of Tawi-Tawi was a component province of the now-defunct Autonomous Region in Muslim Mindanao (replaced by BARMM in 2019). In 2017 and 2018, ARMM has the lowest contribution to the national GDP with 0.8% and 0.6% GRDP as presented in Figure 2 below.





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Moreover, in 2017, ARMM's economy was reported at Php 54.5 billion. As presented in Figure 3, the Agriculture, Hunting, Forestry, and Fishing (AHFF) sector accounts for the largest contributor at 56.4%, while the service sector accounted for 37.7% and the industry sector for only 5.9%. ARMM ranks as the poorest region in the country with a 0.8% GDP contribution and 63% poverty incidence rate (PSA, 2018).

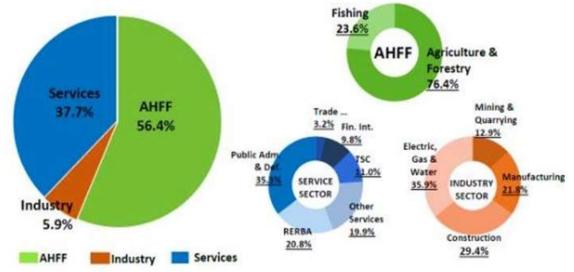


Figure 3. Percent Distribution by Industry: ARMM 2017 Source: Philippine Statistics Authority (2018)

The percent distribution of AHFF shows that there are only two economic industries that compose the sector: agriculture and forestry accounts as the largest contributor at 76.4% and fishing industry at 23.6% contribution. Under the fisheries sector, aquaculture production is the most dominant industry and accounts for 73.8% of the total fishery production in the ARMM region (PSA, 2018). As presented in Figure 4, Tawi-Tawi is the largest contributor of fisheries production in the region with 81,196.3 metric tons for the third quarter of 2017.



Figure 4. Volume of Fisheries Production by Provinces, 2016-2017 Source: PSA, 2017

In the Province of Tawi-Tawi, the population engaged in aquaculture is more dominant than those who are in fish capture. It means that the largest sector group is the seaweed culture (PSA, 2019). As shown in Table 4, the seaweed production in the ARMM region reaches 600,000-700,000 tons/year and Tawi-Tawi contributes more than half of the total production.

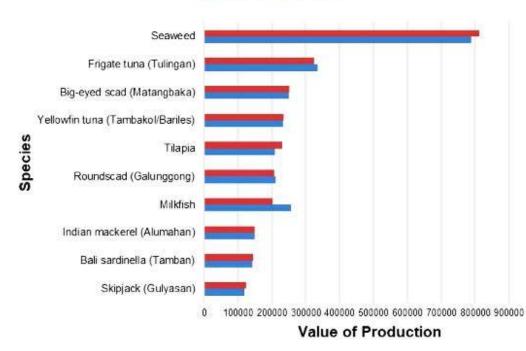
| Table 4. Aquaculture Production by Type in Province | | | | | | | |
|---|---------|-----------|-------|-------|---------|-------|--------|
| Туре | Maguin- | Lanao del | Basi- | Sulu | Tawi- | Total | % |
| | danao | Sur | lan | | Tawi | | |
| Marine | | | | | | | |
| Culture | 0 | 0 | 6 | 0 | 0 | 6 | 0.001 |
| Brackish- | | | | | | | |
| water | | | | | | | |
| culture | 3,399 | 4 | 265 | 0 | 0 | 3,667 | 0.600 |
| Fresh- | | | | | | | |
| Water | | | | | | | |
| Culture | 6,793 | 16 | 0.3 | 0 | 0 | 6,809 | 1.100 |
| Seaweed | | | | | | | |
| Culture | 90,928 | 0 | 6,629 | 220,4 | 305,000 | 622,9 | 98.300 |
| | | | | 40 | | 96 | |
| Total | | | | | | | |
| | 101,120 | 20 | 6,922 | 305,0 | 305,000 | 633,4 | 100.00 |
| | | | | 00 | | 77 | |

Table 4. Aquaculture Production by Type in Province

Figure 5 shows the top 10 species of fisheries in ARMM in terms of value production. In the second quarter of 2019, about 69.37% of the total value of fisheries production were comprised of seaweeds with a total of Php 812,440,130.00 (PSA, 2019).

Figure 5. Value of Production of Top 10 Species of Fisheries in ARMM Source: Philippine Statistics Authority (2019)

Figure 5. Value of Production of Top 10 Species of Fisheries in ARMM Source: Philippine Statistics Authority (2019)



Q2 2019 Q2 2018

The geographical location of the municipality of Bongao makes it susceptible to migration and largescale smuggling from neighboring countries like Malaysia and Indonesia. Migration is one of the causes of the municipality's growing population that has a projection of a 54% increase in the year 2026. This must be an alarming notion for the LGU since the municipality belongs to the region that has an inferior reputation in terms of GDP and GRDP contributions and high poverty incidence. This must require the LGU to capitalize and develop support programs for the major industries in the province by addressing issues and problems that delineates the socio-economic status of the local populace.

4.4 Technological

The province of Tawi-Tawi has long been suffering from a weak internet signal provided by two major internet providers in the country. In the first quarter of 2023, Starlink by SpaceX, a satellite-based internet was introduced and well-adopted by the province. Since then, better internet access is being experienced in the locality.

However, due to the weak interconnectivity in the past years, the people of Tawi-Tawi have been deprived of the benefits that other localities are enjoying through to a strong internet access. This includes information, technological skill enhancement, virtual opportunities, and establishment of internet-based services.

In the area of education, especially in public schools, computer education is generally weak since facilities like laboratories or digital libraries are not well established. Thus, computer literacy is not well developed or inculcated in the learning process of the students. This contributes to low employment rates since computer proficiency is required in most job positions nowadays.

In government offices, it is usual to have a lot of employees who are not proficient in using the computer, especially those who are well advanced in age. The local government is also hampered by the weak internet connection thus, public services are not delivered efficiently or effectively via online channels. The form of local government in the municipality is still traditional. Transactions are done face-to-face and through pen-and-paper.

On the other hand, prominent business enterprises in the municipality are buy-and-sell, grocery stores, retail clothing, hotels, and restaurants. There is no mall or franchise of famous fast-food chains. Business services are also offered in a conventional way. There are no online services offered through Grab or FoodPanda which are mobile apps that provide services like deliveries, transportation, financial services, and many more.

V. DISCUSSION

Based on the environmental scanning, this study concluded three local economic enterprising opportunities for the municipality, these are:

a. Policy Reforms on the Devolution of the Chinese Pier Facility and other local docking areas to Municipal Management

One potential opportunity that can be optimized by the LGU-Bongao in addressing the issues and problems in the socio-economic, environmental, political, and financial settings is to take control over the management of the Chinese Pier facility and other local docking areas. As previously discussed, these piers accommodate the motorboats and ferries/ "lantsa" carrying passengers and cargoes from other municipalities of the province and serves as the major transport area for imported goods from Malaysia and Indonesia. These commodities are being transhipped and distributed through the borders of the municipality without being taxed or regulated. Operations in this facility highly contribute to the smuggling in the province and neighbouring cities like Zamboanga City.

The local government may exercise its authorities over all the motorboats and ferries coming in and out of the municipality. It can generate income while delivering its services and implementing policies to ensure the economic development of the municipality. Moreover, in times like the pandemic, it can also easily employ stringent measures while generating income to cover its expenses over the supervision of the facilities' operations. Some of the fees that can be collected from its operations are as follows: port dues and charges from docking, loading and unloading of cargoes, arrester's share from handling cargoes and parking fees on the vehicles within the premises of the port. Other fees shall be subjected to the decision of the SB. This policy reform is expected to effectively increase the service and business income of the LGU.

Since BARMM-RPMA is in a transitory phase, it can only grace this study with several monthly financial statements. The latest of which is the statement of financial performance of RPMA for November 2020 as shown in Table 5 which covers the operations of Bongao Port and Chinese Pier. Since the financial statement below contains a lump figure of the (2) respective ports, the RPMA declared that the income from the Chinese Pier constitutes around 40% of the reflected total income. Based on the RPMA's financial report in November 2020, there were no collections from passenger terminal fee, permit fees, anchorage, port dues, mooring and other port-related income.

| Particulars | Income (In Php) |
|----------------------|-----------------|
| Wharfage | 622,856 |
| Usage Fee | 113,267 |
| Gate Pass Collection | 14,750 |
| TOTAL | 750,873 |

 Table 5. RPMA Monthly Statement of Financial Performance (November, 2020)

b. Establishment of Fish Port in the Chinese Pier Facility

Another potential opportunity for revenue generation of the LGU-Bongao is to establish a fish port facility within the Chinese Pier or one of the (5) local ports in the area. As discussed in the environmental issues, a fish port facility was identified as a priority need in the municipality since local fishermen usually sell their catches directly to the public market or deliver them to warehouses that transports them directly to Zamboanga and other cities in the country (Figure 6). All these catches are distributed and consumed without passing any inspection or regulatory procedures.



Figure 6. Map of the Central Market and Fish Warehouses

Source: Muallil et al., (2016)

If developed, the fish port could be a channel in providing precautionary measures about the current status of marine products and regulate fishing practices. This would result in conservation and protection of the aquatic resources and limit detrimental effects on the environment. A fish port facility may also serve as a hub for economic activities, a venue for skills training, information generation, a center for sharing sustainable and disaster-resilient fishery-based livelihoods and resource management, and for monitoring fish catch stocks assessment.

Table 6 presents the quantity of transported fish and other marine products from Bongao, Tawi-Tawi. It shows a total of 3,803,820 kg of aquamarine products transported to the cities of Zamboanga, Manila, Cebu, Davao and Pagadian from January to June, 2019.

| Table 0. Transported Marine Troducts from Dongao, Tawi-Tawi (January to June 2017) | | | | | |
|--|---------------------|---------------------|---------------|----------------|--|
| Item | Destination | Quantity (kilos) | Values (peso) | Transportation | |
| Dried Seaweeds | ZC/Manila | 2,586,521 | 177,768,533 | boat | |
| | Pagadian/Da vao/ ZC | | | | |
| Dried Fish | | 525,347 | 88,290,088 | boat | |
| Fresh Octopus | Zamboanga | 133,380 | 24,226,200 | boat | |
| Fresh Fish | Zamboanga | 283,707 | 44,678,900 | plane/boat | |

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| ZC/Manila | 19,481 | 22,909,400 | plane | |
|-------------|---|---|---|--|
| Cebu/ZC | 24,881 | 13,260,200 | plane/boat | |
| Cebu/ZC | 41,246 | 570,045 | plane/boat | |
| Zamboanga | 21,625 | 2,135,250 | boat | |
| ZC/Manila | 5,130 | 4,919,510 | plane | |
| Zamboanga | 13,775 | 26,523,750 | plane/boat | |
| Zamboanga | 97,376 | 3,035,768 | boat | |
| Zamboanga | 2,956 | 629,970 | plane/boat | |
| Zamboanga | 19,865 | 3,370,600 | boat | |
| Zamboanga | 1,047 | 511,890 | boat | |
| ZC/Pagadian | 16,530 | 1,123,300 | boat | |
| Zamboanga | 370 | 37,000 | boat | |
| Zamboanga | 1,580 | 82,400 | boat | |
| Zamboanga | 917 | 605,150 | boat | |
| Zamboanga | 885 | 7,080 | boat | |
| ZC/Pagadian | 4,290 | 2,200,000 | boat | |
| Zamboanga | 2,825 | 1,265,700 | boat | |
| ZC/Manila | 86 | 222,600 | boat | |
| | Cebu/ZC Cebu/ZC Zamboanga ZC/Manila Zamboanga Zamboanga Zamboanga Zamboanga Zamboanga ZC/Pagadian Zamboanga Zamboanga Zamboanga Zamboanga Zamboanga | Cebu/ZC24,881Cebu/ZC41,246Zamboanga21,625ZC/Manila5,130Zamboanga13,775Zamboanga97,376Zamboanga2,956Zamboanga19,865Zamboanga1,047ZC/Pagadian16,530Zamboanga370Zamboanga917Zamboanga917Zamboanga2,825 | Cebu/ZC24,88113,260,200Cebu/ZC41,246570,045Zamboanga21,6252,135,250ZC/Manila5,1304,919,510Zamboanga13,77526,523,750Zamboanga97,3763,035,768Zamboanga2,956629,970Zamboanga19,8653,370,600Zamboanga16,5301,123,300Zamboanga37037,000Zamboanga917605,150Zamboanga917605,150Zamboanga8857,080ZC/Pagadian4,2902,200,000Zc/Pagadian2,8251,265,700 | |

Shaping Local Economic Enterprising Opportunities through Environmental Analysis

Source: DA-BFAR Tawi-Tawi, 2019

The establishment of a fish port may also generate other potential revenues that may benefit the formal and informal sectors of the municipality from transactions such as:

- 1. unloading of products by the fish producers or boat operators;
- 2. transshipment of traders/" viajero" buying marine products directly from fish port to be transported outside the locality;
- 3. market fees between brokers and suppliers/producer;
- 4. selling of ice inside the port area;
- 5. selling of fuel from external suppliers, entrance fee/parking fees of land vehicles;
- 6. wharfage of commodities like rice, copra, cassava, fertilizer, soft drinks, liquors, heavy material and livestock;
- 7. berthing of commercial and municipal vessels;
- 8. space rental for market stalls and land use;
- 9. use of water supply in the fish port; and

10. Accreditation fee for any person who wishes to be accredited as fish port client.

c. Establishment of Seaweed Storage or Buying Station in the Chinese Pier Facility

Moreover, the LGU-Bongao can also construct a seaweed storage or buying station within the Chinese Pier or other local docking areas, since it serves as a docking area to cargo motorboats from other municipalities. It may also offer a post-harvest facility to accommodate raw dried seaweeds from different parts of the province. Fees that will be imposed and budget allocation will be prepared and developed by the Municipal Council.

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