The Potential Of Technopreneuship And Digital Business In Tourism Villages To Support The Special Economic Zone Of Tomini Bay, Indonesia

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Abstract

Tomini Bay Special Economic Zone aims to accelerate the development of regions spread across the provinces of Gorontalo, North Sulawesi and Central Sulawesi. Boalemo and Pohuwato regencies are classified as potential areas to become centers of export-oriented processing industries, logistics, biotechnology, new renewable energy and tourism. Tomini Bay SEZ was pioneered by the State University of Gorontalo in rural development with a focus on poverty alleviation and the creative economy that helps achieve sustainable development goals for the Independent Village and Independent Learning Campus. Micro, small and medium enterprises based on innovation and technology are seeded as the engine of regional growth.

This study aims to 1) mapping the actual condition of technopreneurship in tourist villages in Boalemo and Pohuwato Regencies; and 2) describe the potential for developing technopreneurship in tourist villages.

The research uses a qualitative approach with participatory action research methods. The object is micro and small-scale home industry actors scattered in tourist villages in Boalemo and Pohuwato regencies. Data collection using interviews and focus group discussions. The study concludes that i) technopreneurship of tourist villages in Boalemo and Pohuwato Regencies is still at an early stage of development. Generally, produces and sells processed food products, handicrafts, fashion, music and photography; ii) technopreneurship in tourist villages is still very potential to be developed due to the wealth of natural resources and the demographic bonus of the two regions. Processed food is dominated by products made from corn, bananas, peanuts, eggs, cassava, fruit, vegetables and medicinal plants. Crafts are generally made from bamboo, leather, rattan, wood and processed products from coconut trees. Processing technology is still relatively limited but marketing has been carried out digitally to reach the provinces of Gorontalo, North Sulawesi and Central Sulawesi.

Keywords: shadows; economy; tourist; digital; gorontalo

INTRODUCTION

The gradual recovery and improvement of the national economy shows a positive impact at the regional and local levels in 2021. The economy of Gorontalo Province throughout 2021 grew positively 2.41 percent (yoy), better than 2020, which was minus 0.02 percent. Improvements in supply and demand conditions are in line with the vaccination program and fiscal stimulus through the 2021 National Economic Recovery. From the demand side, the regional economy this year is still driven by household consumption, government

spending, investment and improved net exports. Household consumption is getting better in line with the gradual normalization of economic activity after social restrictions due to the COVID-19 pandemic, the increase in the provincial minimum wage and the existence of THR and the thirteenth salary by ASN. Improving the performance of the agricultural, construction, wholesale and retail trade and supply side transportation and warehousing (Bank of Indonesia, 2022).

The transformation of the regional economic structure at the provincial and district-city levels is also positive, where the contribution of the service sector has increased drastically in the last five years, followed by the industrial and agricultural sectors. The accommodation and food and drink provision, financial services education services sector recorded highest growth in the 2017-2021 period, although with a relatively small contribution to GRDP. Micro and small businesses also showed an increase in the number of units, turnover, assets and operating profits, thus contributing positively to the regional economy. The performance of micro and small businesses is able to leave the large and medium business sector, including in terms of employment and business expansion.

References and best practices state that the industrial revolution 4.0 has opened up space for economic digitization. The digitalization of the economy gives birth to many business and career opportunities that can be utilized for various purposes by anyone, anytime and anywhere. E-commerce is an electronic buying and selling transaction that is booming in Gorontalo. State University of Gorontalo pioneered Tomini Bay to become a Special Economic Zone as a contribution to rural-based development with a focus on poverty alleviation and creative economic development. Cultural values and local wisdom are the basis for strengthening human capacity and social infrastructure

which leads to assisting the achievement of sustainable development goals and Merdeka-Belajar — Kampus Merdeka. The development of SEZs aims to accelerate regional development and breakthroughs in regional development for economic growth, including industry, tourism and trade so as to create jobs. Several zones can be developed including export-oriented food processing, logistics, technology development, tourism, energy, creative industries, education, health, sports and financial services (Arham, 2020).

Tomini Bay has an area of more than 6 million hectares is the largest bay in Indonesia. Its territory includes the provinces of North Sulawesi, Central Sulawesi and Gorontalo, with 1,031 hectares of coral reef triangle area and 785.10 hectares of mangrove forest (Pramudji, 2018). The biological potentials scattered in the waters of Boalemo and Pohuwato such as squalance, omega-3, phyco-colloids, biopolymers, plankton, seaweed, micro-organisms and invertebrates healthy for the food, pharmaceutical, cosmetic and biotechnologybased industries. Both areas have the potential to become the largest marine tourism objects in the world with hundreds of world-class dive spots containing giant corals, pinnacles, towers and barracudas, colorful fish, dolphins. Corn, deep coconut, shrimp and milkfish from ponds and cattle open up opportunities for the development of a food processing industry, feed and biofuels. Various handicraft accessories, woven rattan or water hyacinth, karawo embroidered cloth, shellfish and seafood as well as culinary delights such as fish chips, shredded chicken and beef, pia and corn sticks also have the potential to become mainstay souvenirs for tourists. According to Mopangga et al (2019), the contribution of the tourism sector to the original income of the city districts in Gorontalo Province is still relatively small, but the tourism sector has a very large multiplier effect on economic growth,

especially in Boalemo and Pohuwato Regencies.

The potential of these two allied districts requires technological innovation intervention and investment from upstream to downstream (HV Alam et al, 2021). Boalemo has attractions Pulo Cinta and Bolihutuo Waterpark, Ratu Beach and Ayuhulalo Waterfall, Bitila Island Marine Park, Botuhuwayo Beach and Langala Beach. Pohuwato Regency has Pulo Cinta, the floating village of the Bajo Torosiaje tribe, Molombunaye Dive Sport and Valley Permai nature tourism. Contains natural beauty, cultural arts and culinary arts in all objects based on local uniqueness which are relatively not utilized technologically, managerially and supported by government, private and foreign investment.

This study aims to: i) Map the actual condition of technopreneurship in tourist villages in Boalemo and Pohuwato Regencies; and ii) Describe the potential for developing technopreneurship in tourist villages of the two districts. The products of Gorontalo Province micro. small medium enterprises generally have low competitiveness due to the lack of mastery of business technology among actors. Innovation and technology are temporary in nature only for the purposes of regional and national exhibitions/exhibitions, not improving product quality, diversification and efficiency in the short term, increasing production sustainably, increasing turnover, profits and expanding business in the long term (Mopangga, 2014).

Micro, small and medium enterprises (MSMEs) of Boalemo Regency already understand digital-based financial literacy to increase income, but the majority are still implementing manual financial management. Information technology and social media have not been utilized (Lakoro & Sukrianto, 2021). The general problem faced by district and city tourism in Gorontalo Province is still about the difficulty of accessibility and

the lack of artistic, cultural, culinary and local production souvenirs that can be sold to tourists. Gorontalo tourism still relies on the beauty of tourist objects, so there is no other uniqueness that is added value. Even though there are not a few historical and cultural attractions that can be explored and have economic value. Gorontalo has various kinds of drama, dance and music, typical food, endemic flora and fauna as well as heritage sites from pre-historic times to the colonial era scattered in various regions (Mopangga, 2019).

Technopreneurship is not a product but a synthesis process in engineering the future of a person, organization, nation and world. This requires universities, and on-site professional development programs and training to produce strategic thinkers who will have the skills to succeed in a rapidly changing global environment. The goal of technopreneurship is the commercialization of innovations developed by academic scientists through patents, licensing, start-up creation, and university-industry partnerships (Fowosire & Opoola 2017).

Technopreneurs are entrepreneurs who develop businesses based on science and technology who are creative, innovative, courageous, dynamic, exploratory, broadminded, confident and tolerant and have a high interest in the development of science and technology (Mopangga, 2016). Technopreneurs is a new age entrepreneur who is interested in technology, creative, innovative, dynamic, dares to be different and takes an unexplored path and is very passionate about his work. Various ways and models of growing new business units that are thick with nuances of technological innovation include franchise models, partnerships, mentoring, business incubator programs and patterns of entrepreneurship education in universities and vocational schools (Niode & Mopangga, 2016).

Technopreneurship developed will have a positive impact on local tourism. With the

development of science, technology, research and best practices, there are actually so many ways, methods, approaches, measuring tools and analysis to assess the impact of tourism on development, government revenue and community income (Mopangga et al, 2019). The competitive advantage of MSMEs in Gorontalo Province can be done aggressively by developing new products, improving product quality, reaching wider market access or low prices (Niode, 2012).

METHOD

The qualitative research approach is action research that relies on the involvement of the parties who are the object of research. The objects are micro, small and medium scale home industries that are scattered in tourist villages in Boalemo and Pohuwato regencies. The nature of this research is participatory action research or action research that relies on the involvement of the parties who are the object of research. The objects are micro, small and medium scale home industries that are scattered in tourist villages in Boalemo and Pohuwato regencies.Participatory Action Research(PAR) is a process of seeking the development of practical knowledge in understanding political, social. environmental economic conditions or

(Afandi, 2015). PAR is a participatory research and development method that recognizes social relationships and the value of the reality of our experiences, thoughts and feelings.

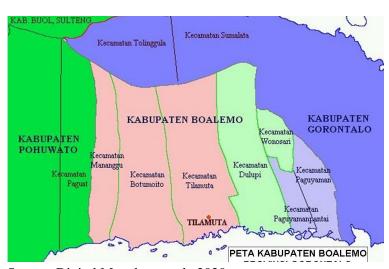
RESULTS AND DISCUSSION

Actual Condition of Technopreneurship by Regency

The regencies of Boalemo and Pohuwato are not only geographically neighbors but are also very close in terms of religious traditions and customs, as well as the socioeconomic life of the community. The long history of intimacy and common destinies of these two regions has existed since they were still in one administrative area of Gorontalo Regency.

A. Boalemo Regency

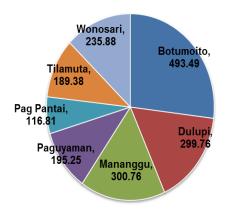
Boalemo Regency officially became a new autonomous region at the beginning of the decentralization era, based on Law 50 of 1999 concerning the Establishment of Boalemo Regency as amended by Law 10 of 2000. Pohuwato Regency was later formed based on Law 6 of 2003 concerning the Establishment of Bone Bolango Regency and Pohuwato Regency.



Source: Digital Map, by google 2020

Figure 1: Administrative Map of Boalemo . Regency

Boalemo Regency has an area of 1,831.33 km2 located below the equator in the northern peninsula of Sulawesi Island, has a sustainable forest area, a nature reserve and a wildlife reserve as well as coral reefs along the waters of Tomini Bay which is in the southern part of Boalemo Regency. Seven sub-districts in (Figure 2) have coastal areas with shorelines facing Tomini Bay, except for Wonosari District.



Source: BPS Boalemo Regency, 2022

Figure 2: Area (km2) by District of Boalemo Regency in 2021

In general, there are four sub-sectors of the creative economy supporting tourism in Boalemo Regency which were obtained from data from the Department of Industry and Trade as well as field investigations by the research team.

1. Crafts

Crafts or crafts are the hallmark of the Indonesian people, especially in Boalemo Regency. Handicraft products cannot be separated from historical, cultural and aesthetic values that are closely related to the creative economy and tourism. The types, number and distribution of craftsmen are shown in Tables 2 and 3 below:

Table 2. Number of Handicraft Industries by Business Location in Boalemo Regency, 2022

| District Name | Number of Craftsmen | (%) |
|-------------------|------------------------|-------|
| Mananggu | 2 | 1.96 |
| Botumoito | 22 | 21.56 |
| Tilamuta | 12 | 11.76 |
| Dulupi | 21 | 20.59 |
| Wonosari | 5 | 4.90 |
| Community | 14 | 13.73 |
| Beach Association | 26 | 25.49 |
| TOTAL | 102 | 100 |

Source: Department of Industry and Trade of Boalemo Regency, 2022

Handicraft products are made from leather, rattan, natural fibers, gemstones, glass, porcelain, wood, bamboo, clay and others. The most widely cultivated handicraft

products are peya-peya mat woven, derivative products of karawo embroidery and then kopiah karanji.

Table 2. Types and Number of Handicraft Industries in Boalemo Regency, 2022

| Craft Type | Number of Craftsmen | (%) |
|--|------------------------|-------|
| Peya Peya Mat Woven Mat | 43 | 42.15 |
| Karawo & Derivative Products | 19 | 18.62 |
| Copy of Karanji | 19 | 18.62 |
| Souvenir Products (Ornamental Ships, Seashell | | |
| Tissue Holders, Shell Crafts, Soap Flowers, Basket | 12 | 11.76 |
| Bags, etc.) | | |
| Palm-fiber broom | 3 | 2.94 |
| Sculpture | 2 | 1.96 |
| Mattress Craft | 2 | 1.96 |
| soap opera flower | 2 | 1.96 |
| TOTAL | 102 | 100 |

Source: Department of Industry and Trade of Boalemo Regency, 2022

2. Culinary

The culinary sub-sector contributes 30 percent to the total tourism revenue and

creative economy of Boalemo Regency. The distribution and number of food industries are:

Table 3. Number of Food Industries Based on Business Locations in Boalemo Regency, 2022

| District Name | Number of Food | (%) |
|-------------------|----------------|-------|
| | Products | |
| Mananggu | 10 | 11.23 |
| Botumoito | 9 | 10,11 |
| Tilamuta | 21 | 23.59 |
| Dulupi | 3 | 3.37 |
| Wonosari | 34 | 38,20 |
| Community | 4 | 4.49 |
| Beach Association | 8 | 8.98 |
| TOTAL | 89 | 100 |

Source: Department of Industry and Trade of Boalemo Regency, 2022

One of the basic obstacles of micro and small businesses for processed food products is that they have not obtained a food-home industry certificate or P-IRT or Home Industry Food. HIF is a kind of code listed on the outside of food packaging, a sign that the product has been declared fit for consumption and has a license to circulate. There are only 10 food businesses that have PIRT out of a total of 79, which shows basic obstacles related to the development of the local processed food industry.

Table 4. Number of Food Industries Based on Ownership of P-IRT Permits

| District Name | Number of Products Not Having P-IRT | Number of Products Have P- IRT |
|---------------|--|--------------------------------------|
| Mananggu | 9 | 1 |

| Botumoito | 9 | 0 |
|-------------------|----|----|
| Tilamuta | 17 | 4 |
| Dulupi | 3 | 0 |
| Wonosari | 30 | 4 |
| Community | 3 | 1 |
| Beach Association | 8 | 0 |
| TOTAL | 79 | 10 |

Source: Department of Industry and Trade of Boalemo Regency, 2022

3. Photography

The development of this sub-sector is supported by the increasing interest of young people in photography, along with the development of social media and the increasingly affordable price of equipment. Six photography business units in Tilamuta District and a unit in Paguyaman Pantai.

4. Fashion

Local fashion is also quite adaptive to the rapidly changing national fashion trends. This is also related to the many interests of the creative young generation who are pursuing careers to become innovative local designers.

Table 5. Number of Fashion Industries by Business Location

| District Name | Number of Business | (%) | |
|-------------------|--------------------|-------|--|
| District Name | Actors | (70) | |
| Mananggu | 30 | 14.56 | |
| Botumoito | 13 | 6.31 | |
| Tilamuta | 56 | 27.18 | |
| Dulupi | 23 | 11.17 | |
| Wonosari | 32 | 15.53 | |
| Community | 43 | 20.87 | |
| Beach Association | 9 | 4.36 | |
| TOTAL | 206 | 100 | |

Source: Department of Industry and Trade of Boalemo Regency, 2022

The pilot of the Tomini Bay Special Economic Zone which is supported by the tourism sector is reflected in the availability of regional tourism development policy products. Regional Regulation Number 1 of 2019 concerning the Regional Tourism Development Master Plan (RIPPARDA) of Boalemo Regency, with the scope of: a) tourism destination development, b) tourism marketing development, c) tourism industry development, and d) tourism institutional development. Tourism development has targets including: a) increasing the quality and quantity of tourism destinations that are

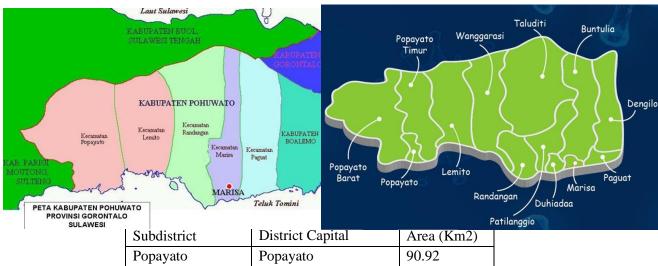
able to attract and increase the flow of foreign and domestic tourists, increase local revenue and Gross Regional Domestic Product as well as community income while maintaining environmental sustainability

B. Pohuwato Regency

Pohuwato takes 36.77 percent of the area of Gorontalo Province to be exact, 4,244.31 Km2. It contains sustainable forest areas of the Panua nature reserve, wildlife reserves and coral reefs along the waters of Tomini Bay in the south. As a Geomorphologic, Pohuwato is a three-dimensional area, ie

plains, hills and the waters of Tomini Bay. This area is the corn granary of Gorontalo Province considering the vast hexpanse of dry land suitable for plantations and livestock. The waters of Tomini Bay make

capture fisheries and aquaculture the main livelihood. Buntulia and Dengilo sub-districts contain gold mining materials so that they invite miners from various regions.



| Subdistrict | District Capital | Area (Km2) |
|------------------|------------------|------------|
| Popayato | Popayato | 90.92 |
| Western Popayato | Dudewulo | 578.24 |
| East Popayato | Maleo | 723.74 |
| Lemito | Lemito | 619.50 |
| Budget | Limbula | 188.08 |
| Marisa | Beautiful | 34.65 |
| Iviarisa | Botubilotahu | 34.03 |
| Patilanggio | Like Prosperity | 298.82 |
| Buntulia | North Buntulia | 375.64 |
| Duhiadaa | West Buntulia | 39.53 |
| Randangan | Motolohu | 331.90 |
| Taluditi | Pancakarsa II | 159.97 |
| Paguat | Buhu Jaya | 560.93 |
| Denilo | Poppy | 242.39 |
| POHUWATO | | 4,244.31 |

Source: BPS Pohuwato Regency, 2021

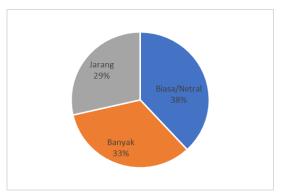
FOCUS GROUP DISCUSSION RESULTS

The study involved 21 owners creative representatives of economy businesses, micro and small industries, household scale. From the question of how long the business unit has been running or operating, 60 percent of them answered in the range of 1 to 5 years. About 30 percent answered above 5 years, and the remaining 10 percent answered less than 1 year. From

questions about the use of raw materials and labor, above 50 percent use local Boalemo areas. Furthermore, 38 percent of informants said that raw materials were obtained from outside the region, or a total of 85 percent used domestic raw materials. All business units employ local workers or 100 percent from within the Boalemo and Pohuwato areas.

Based on the supply of raw materials, the processed food and handicraft industries originate from within the region, while fashion and photography (including music) must be supplied from outside the region. Of the questions about the availability and ease of obtaining raw materials, 33 percent said it was relatively sufficient and 29 percent said it was rare or rather difficult.

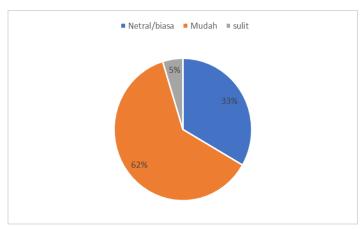
Of the questions on the level of technology used in the production process, around 40 percent answered that they had used basic-level machines and technology. Middle and advanced level equipment and technology reaches 30 percent, and another 30 percent still uses traditional and very traditional production procedures.



Source: Primary data, processed results

Figure 4: Availability of Raw Materials in Boalemo Region

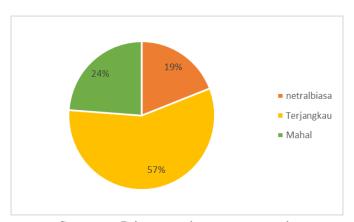
The majority of the processed food, culinary and handicraft industries (62 percent) admitted that it was easy to get raw materials for production purposes, 33 percent were neutral and 5 percent said it was difficult.



Source: Primary data, processed results

Figure 5: Ease of Obtaining Raw Materials in the Boalemo . Region

Regarding the price of raw materials, 57 percent of business actors said that the price of raw materials was still affordable to buy, 19 percent said it was neutral or normal, and 24 percent said the price of local raw materials was expensive.



Source: Primary data, processed results

Figure 6: Prices of Raw Materials in the Boalemo . Region

Marketing chain is quite simple because the path from producer to final consumer is quite concise, or there are few intermediaries. Selling products directly to the customer, while others sell them at local traditional markets, shops and mini markets. Especially for broom sticks and palm fiber craftsmen from Wonosari District, Mr. I Made Ngurah said that the marketing of their products has been in the Karsa Utama Mall of Gorontalo City and several shops in Gorontalo and Bone Bolango Regencies. The local creative industries are also technologically literate and familiar with online marketing so that some of them promote and sell their products through Facebook, WhatsApp, Instagram and YouTube. Some business actors stated that consumer interest and demand in the Boalemo and Pohuwato areas was quite high, but because the population is limited so the scale of the economy becomes small. Product circulation is relatively small so that sales

and operating profit also remain small. On the other hand, accessing a wider crossprovincial market requires licensing, coordination and collaboration of the parties as well as increasing the internal business capacity of each business unit.

The results of the creative industry in the form of handicraft products, processed food, various souvenirs and photography support the tourism sector. The Boalemo Regency Tourism Development Policy as outlined in the Regent's Regulation Number 62 of 2018 stipulates 26 villages in seven sub-districts as Tourism Village Areas.

Table 7: Name, Location and Type of Featured Tourism in Boalemo Regency

| No | Village Name | Subdistrict | Featured Type of Tour |
|----|-----------------|-------------------|-------------------------|
| 1 | Buti | Mananggu | Agrotourism |
| 2 | Kramat | Mananggu | Natural |
| 3 | Kaaruyan | Mananggu | Religious culture |
| 4 | Bolihutuo | Botumoito | Nature, Culture, Marine |
| 5 | Patoame | Botumoito | Maritime, Culture |
| 6 | Tutulo | Botumoito | Maritime, Culture |
| 7 | Hutamonu | Botumoito | Maritime, Culture |
| 8 | Dulangeya | Botumoito | Natural |
| 9 | Eastern Pentadu | Tilamuta | Culture, Maritime |
| 10 | Limbato | Tilamuta | Culture, Culinary |
| 11 | Come on | Tilamuta | Culture, Nature |
| 12 | Bajo | Tilamuta | Culture |
| 13 | Lamu | Tilamuta | Culture |
| 14 | Tenilo | Tilamuta | Marine, Nature |
| 15 | Tabongo | Dulupi | Marine, Nature |
| 16 | Норе | Wonosari | Culture, Craft |
| 17 | Bongo Dua | Wonosari | Culture, Craft |
| 18 | Three Bongo | Wonosari | Culture |
| 19 | Tri Rukun | Wonosari | Culture, Craft |
| 20 | Dimito | Wonosari | Agrotourism |
| 21 | Saritani | Wonosari | Natural |
| 22 | Proud | Beach Association | Maritime, Culinary |
| 23 | Limbathu | Beach Association | Maritime, Culinary |
| 24 | Lito | Beach Association | Nature, Marine |
| 25 | Rejonegoro | Community | Culture |
| 26 | Girisa | Community | Religion |
| | • | • | • |

Source: Regent Regulation No 62/2018 regarding Boalemo Tourism Village Area

Furthermore, the direction of regional tourism development includes: a) based on the principles of sustainable tourism development, with good governance, b) towards oriented increasing growth, increasing job opportunities, reducing poverty and preserving the environment, c) integrated across sectors, across regions and across regions. actors, d) encourage public and private sector partnerships.

The Pohuwato Regency Tourism Development Policy has also been confirmed in a document namely Regional Regulation 8 of 2013 that types of tourism include marine, natural, artificial, cultural and culinary. While the tourism area of Pohuwato Regency includes:

- a) Libuo Indah Beach Area, Libuo Village, Paguat District
- b) Lalape Beach Area, Trikora Village, Popayato District
- c) Tanjung Maleo Beach Area, Maleo Village, Paguat District

- d) Bitila Island Area, Paguat . District
- e) Torosiaje Traditional Village Area, Torosiaje Village, Popayato District
- f) Panua Forest Area, Maleo Village, Paguat District
- g) Marisa City Park Area, North Marisa Village, Marisa District
- h) Tree of Love / Coconut Dua Beach Area, East Pohuwato Village, Marisa District
- i) Lomuli Waterfall Tourism Area, Lemito District and Batu Serungan Waterfall, East Popayato District

Based on data accessed from the Pohuwato Regency BPS website, it was released that the number of industrial units increased by about 26 percent from 2019 to 2020. During the same period, labor absorption for all types of industries also increased by about 7.3 percent. As for the production value, there is also an increase of more than 72 percent in the same period.

Table 8. Number of Companies, Labor and Production Value by Industry Classification in Pohuwato Regency, 2019-2020

| | Number of Companies, Manpower, and Production Value (Thousand Rupiah) by Industry Classification | | | | | |
|----------------|--|------|-------|------|----------|----------|
| Industry | Compa | ny | Labor | | Producti | on Value |
| Classification | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 |
| | | | | | 259859 | 327746 |
| Food Industry | 1518 | 1947 | 2925 | 3042 | 24 | 36 |
| Clothing | | | | | 469035 | 656538 |
| Industry | 200 | 297 | 416 | 483 | 9 | 2 |
| Chemical and | | | | | | |
| Building | | | | | | |
| Materials | | | | | 117075 | 401784 |
| Industry | 166 | 326 | 656 | 997 | 45 | 41 |
| Metal and | | | | | | |
| Electronics | | | | | | 432957 |
| Industry | 31 | 49 | 85 | 127 | 111804 | 7 |
| | | | | | 150563 | 152604 |
| Craft Industry | 501 | 423 | 1027 | 831 | 04 | 34 |
| POHUWATO | 2416 | 3042 | 5109 | 5480 | 575519 | 991084 |

Source: BPS Pohuwato Regency in Figures, 2022

Based on the industry classification in 2020, the food industry has the most units reaching almost 36 percent of all types of industry, on the contrary, the smallest is the metal industry. In terms of labor absorption, the food and metal industries are also at extreme poles in terms of numbers, the largest and the smallest. The total production value in 2020 reached more than 99 billion rupiah, of which the chemical and building materials industry was the highest at more than 40 billion rupiah, followed by the food industry with more than 32 billion rupiah.

The focus of the Group Discussion held in Pohuwato Regency saw the potential of technopreneurship to support the Tomini Bay Special Economic Zone, presenting 21 business actors representing Pohuwato Regency. The number of 21 business actors in this case respondents are business actors representing several sub-districts/villages in Pohuwato Regency. **Participants** attended the FGD had various types of businesses, such as processed food, beverages, crafts, lodging and agrotourism. They have been running businesses for various times, some have been running their business for 7 years and some have just started their business for 2 months.

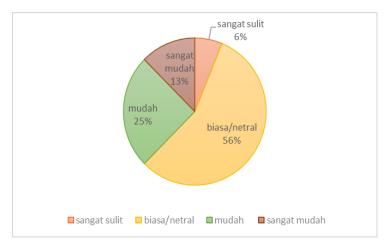
Table 9: Creative Tourism Industry Participating in FGD at Pohuwato, 2022

| N | Entrepreneur | Type of | institution | Village |
|----|----------------------|-----------------|--------------------|--------------|
| 0 | Name | business | name | |
| 1 | Robin Pulumulo | craft | IKM Akhtar | Lemito |
| 2 | Yulis Widiyanti | Lodging | Leha homestay | Makati Jaya |
| 3 | Aripin Moha | | Lomuli Tourism | Lomuli |
| | | | Village | |
| 4 | Yusuf Y. Zakaria | | Lomuli Tourism | Lomuli |
| | | | Village | |
| 5 | Alpius Octavian | Restaurant | The Most Beautiful | Botubilotahu |
| | | | Gift Kitchen | |
| 6 | Moh. Saiful Hadi | Artificial Tour | BUMDes Working | Taluduyunu |
| | | | Together | |
| 7 | Ilyas Yusuf | Hotel | Irene Marisa Hotel | Duhiadaa |
| 8 | Novialistuti Masiaga | Drink | Alpucok'u | Bulli |
| 9 | Olies Amatia | Drink | Hyper Boba | Bulli |
| 10 | Iradat Share | Processed food | SME Iradat | Paguat |
| | | VCO | | |
| 11 | Fatmawati Ahmad | Frozen food | Bafina SME | Lomuli, |
| | | Processed food | | Lemito |
| 12 | Director AW Lihawa | Frozen food | Bafina SME | Lomuli, |
| | | Processed food | | Lemito |
| 13 | Samsul H. Rahim | Craft | Oliniaa Craft | Marisa |
| 14 | Farida Tantu | Processed food | Siefa SME | Duhiadaa |
| 15 | Herman Diko | Processed food | | Popayato |
| 16 | Abdul Rahman Talib | Herbal drink | Assyifa Saraba | Paguat |

| | | | Panua | |
|----|-------------------|----------------|-------------------|-----------|
| 17 | Abdul Kadir Talib | Herbal drink | Assyifa Saraba | Paguat |
| | | | Panua | |
| 19 | Andri | | GEkraf | Malango |
| 20 | Saudi Usman | Processed food | Independent Small | Randangan |
| | | | and Medium | |
| | | | Enterprises | |
| 21 | Herman Abdullah | homestay | | Marisa |

The raw materials used to manufacture products, 62 percent of the total respondents use raw materials from within the region while another 38 percent use raw materials obtained from outside

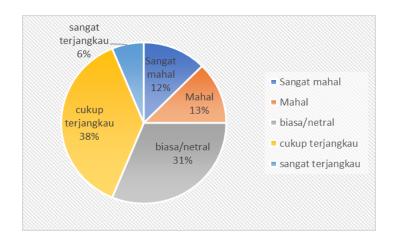
the region, while 12 of 16 respondents, 50% of the raw materials they use come from within the region. The rest are bought from outside the area.



Source: Primary data, processed results

Figure 7: Availability of Raw Materials in Pohuwato Regency

Based on survey results through questionnaires, the availability of raw materials in Pohuwato Regency is in normal condition. 56 percent of business actors said it was normal/neutral to obtain raw materials in the production process and another 25 percent said it was very easy to obtain these materials, although there were still 6 percent who found it very difficult to obtain raw materials.



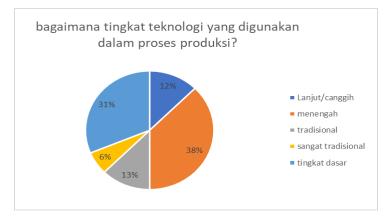
Source: Primary data, processed results

Figure 8: Market Price of Raw Materials in Pohuwato Regency

Regarding the market price of raw materials available in Pohuwato Regency, 38% of the total business actors feel it is quite affordable with the marketed price, 31% feel it is normal/neutral and then 12% of the total respondents feel that the price of raw materials is still very expensive to buy.

In the production process, MSMEs need labor for the production process.

Labor is important in the production process because it has a role in production activities that help the process of making goods or services. SMEs in Pohuwato also use local workers to help with production. Of the total 16 respondents, 2 respondents did not use assisted labor while the rest used labor assistance from within and outside the province of Gorontalo.



Source: Primary data, processed results

Figure 9: Level of Technology in Production Process in Pohuwato Regency

In the production process carried out by business actors in producing products, some business actors with a percentage of 12% have used sophisticated technological tools, while the other 31% are still using the traditional method while as many as 38% are using the method that is said to be intermediate in this case is done by using 2 ways namely traditional and sophisticated.

In today's era, business development is growing rapidly. This makes people have to keep abreast of developments and advances in technology in the world. With the rapid development of technology, making people more practical in carrying out all their activities. Likewise, MSME actors in Pohuwato Regency have marketed their products online. Presenting product they sell

through social media such as Facebook, Instagram, Whatsapp, and others. However, the majority of business actors in Pohuwato Regency use social media such as Facebook and WhatsApp. In addition to displaying products in shop windows, these business actors try to update the products they sell on social media. This method is very easy to reach by consumers, especially those from outside the region. Even though the production process and marketing strategy are sophisticated using technology, some business actors still feel that this production capacity is not optimal and still needs improvement. According to business actors in Pohuwato Regency, this is due to the limited capital they have and the limited availability of raw materials. The complaints

made by these business actors are of concern to the local government. For this reason, it is hoped that the government can provide business capital assistance. According to business actors in Pohuwato Regency, this is due to the limited capital they have and the limited availability of raw materials. The complaints made by these business actors are of concern to the local government. For this reason, it is hoped that the government can business capital provide assistance. According to business actors in Pohuwato Regency, this is due to the limited capital they have and the limited availability of raw materials. The complaints made by these business actors are of concern to the local government. For this reason, it is hoped that the government can provide business capital assistance.

MSME actors in Pohuwato Regency have high hopes for the Pohuwato Regency local government to contribute in supporting the businesses they run such as assisting in promotion and publication, helping MSME actors to get sufficient business capital assistance, providing a forum for MSME actors, implementing programs to increase business, as well as provide avenues for expanding access to marketing for MSME actors.

Success in improving the quality and empowering MSMEs in the region can increase the local tourism sector. There are many sectors that influence tourism development, namely agriculture, fisheries, forestry, transportation and accommodation. MSMEs play a very important role in the development of tourism.

Digital Business Characteristics of Gorontalo Province

Digital business can be associated with the informal sector where institutionally it can quickly grow and develop but has the risk of declining and dying quickly if it is not able to be managed carefully, professionally and strategically. Digital businesses can also

accommodate or be established individuals and households so that they are more flexible in participating in job creation and community income compared to the formal sector. Digital business can be defined as a set of activities that can stand alone or combine from production, distribution, marketing and after-sales that utilize information technology facilities. Digital business in Gorontalo Province is relatively new and has been in a booming phase for less than the last decade.

The high potential for digital economic growth in Gorontalo Province is due to changes in people's consumption behavior. During the Covid-19 pandemic, the number consumers increased digital has significantly since January 2021. enormous potential of the digital economy must be seized as an opportunity. The hope of the majority of business people is that they are not just users of digital platforms for multi-national companies, but more than that, namely as developers and able to sell original digital platforms to international markets.

The common household-scale microenterprises and easy to find production and marketing centers are:

- 1) types of snacks (snacks) such as pies, sticks and chips,
- 2) types of woven handicraft souvenirs such as skullcap baskets (local language: upiya karanji), mats (local: amongo)
- 3) types of clothing souvenirs such as shirts, dresses and filigree embroidered sarongs (local: karawo)
- 4) the type of culinary business of milu siram or a kind of corn soup (local: binthe biluhuta)

These four types of household-scale micro-enterprises that enter the informal sector in a number of online reviews by tourists are called selling products (souvenirs and food) without labels/brochures/price lists. They determine the price at will, especially for foreign tourists. Even though their type of business can also be a special

attraction, namely culinary tourism, shopping tourism and cultural arts.

Constraint

Production capacity for MSME products is optimal according to market demand, but still needs to be increased again to expand and increase production capacity. The reach of the marketing area is not optimal and still needs to be improved. After further breakdown of the conditions faced by MSME actors in Boalemo Regency, MSME actors stated some of the obstacles they faced in developing their business. The problems faced by MSME actors are still classic, such limited capital, relatively limited availability of raw materials, raw material prices, quality of labor, production methods, traditional relatively production equipment. In addition, the problem faced by the actors is that there are no outlets to sell MSME products.

Technopreneurship developed will have a positive impact on local tourism. With the development of science, technology, research and best practices, there are actually so many ways, methods, approaches, measuring tools and analysis to assess the impact of tourism on development, government revenue and community income. As stated by Niode (2012) that the competitive advantage of SMEs in Gorontalo Province can be done aggressively by developing new products, improving product quality, reaching wider market access or low prices. Furthermore, Mopangga and Niode (2016) also revealed that socialization and research activities related to efforts to develop new technologybased entrepreneurs in Gorontalo Province have also been intensively carried out in recent years. In internal UNG, integrated learning based on research results and student-centered learning.

The importance of pentahelix collaboration is also needed in the development of SMEs in Boalemo and Pohuwato Regencies. The pentahelix

collaboration involves elements of business, government, media/press, community and the involvement of academics, namely from universities. The government and the media are considered to have the most influential role in the development of MSME business.

The MSME actors Boalemo and Pohuwato expect the government to play an important role in supporting the business development of these actors by expanding access to capital for MSME actors who are just starting out by giving them the opportunity to get People's Business Credit. In addition to the government, MSME actors also expect support from entrepreneurs or business people who are experienced with large-scale businesses to cooperate with MSME actors in Boalemo Regency.

CONCLUSION

The research concludes: i) technopreneurship of tourist villages in Boalemo and Pohuwato Regencies is still at an early stage of development. Generally, produces and sells processed food products, handicrafts, fashion. music and photography; technopreneurship in tourist villages is still very potential to be developed due to the wealth of natural resources and demographic bonus of the two regions. Processed food is dominated by products made from corn, bananas, peanuts, eggs, cassava, fruit, vegetables and medicinal plants. Crafts are generally made from bamboo, leather, rattan, wood and processed products from coconut trees. Processing technology is still relatively limited but marketing has been carried out digitally to reach the Provinces of Gorontalo, North Sulawesi and Central Sulawesi.

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