



Minapolitan Village: Corporate Social and Environmental Efforts to Fulfill the Needs of Vulnerable Communities Through Smart and Precision Fishery Cultivation

Iwed Mulyani¹, Mukhammad Fatkhullah²(✉), and Bambang Imawan^{1,2}

¹ Universitas Gadjah Mada, Yogyakarta, Indonesia

² PT. Kilang Pertamina Internasional Unit II Dumai, Dumai, Indonesia

m.fatkhullah@mail.ugm.ac.id

Abstract. Minapolitan is a regional-based marine and fisheries economic development plan. The plan of minapolitan has been widely adapted to various regions in Indonesia, one of which is Dumai City. Dumai City with coastal characteristics has an opportunity for Minapolitan development. Minapolitan development is in synergy with the Company that is PT Kilang Pertamina Internasional Unit Dumai. The aim of this study is that to determine the strategy adopted by the Company in planning Kampung Minapolitan; besides, to see the impact of the Kampung Minapolitan program in meeting the needs of vulnerable communities. The method used was descriptive analysis, and SWOT analysis with a population analysis of 32 community members. Moreover, data was collected through questionnaires, interviews and documentation. The result shows that there is an increase in income from the two activities of fishery cultivation and quail farming by IDR 2,000,000–IDR 5,000,000 every month, and resulted in social innovations implemented by the community in the form of herbal decoctions to get rid of pond odors, organic fish feed formulations from maggot, as well as the utilization of ex-sedimentation water from the PT KPI Unit Dumai Water Treatment Plant (WTP) as a raw material for ice blocks. Total cost savings obtained from WTP's utilization equal to IDR 2,762,229. In order to make the Kampung Minapolitan program success, it is expected that the government will be able to provide a marketing strategy so that fishery and livestock products can be sustainable.

Keywords: Minapolitan · Collaboration · Social and Environmental Responsibility · Sustainable Fishery Cultivation

1 Introduction

The ministry of Maritime Affairs and Fisheries (KKP) Republic Indonesia has a vision and mission to make Indonesia the largest fishery product producing country in 2015 by launching the Minapolitan program as a regional-based marine and fisheries development plan. The purpose of planning the Minapolitan area is that to encourage the acceleration

of regional development with fishery activities as the main activity in increasing community income and welfare by encouraging rural-urban linkages; besides, the development of a competitive, people-based, sustainable and fish-based minapolitan business system and business as the main source of sustainable livelihood, income, and welfare [1].

Based on the Decree of Ministry of Maritime Affairs and Fisheries Number KEP.18/MEN/2011 concerning General Guidelines for Minapolitan (2011) [16], ideally Minapolitan has 2 main elements that are: (1) Minapolitan as a regional-based marine and fisheries sector development scheme, (2) Minapolitan as a leading economic area with the main commodity of marine products and fisheries. Meanwhile, in the main element of Minapolitan Movers, according to the Decree of the Ministry of Maritime Affairs and Fisheries Number KEP.18/MEN/2011 in the form of production and trade centers, capture fisheries, fishery cultivation, fish processing, or a combination of these three things. In addition, the main driving force of Minapolitan in the field of fishery cultivation is the center of fishery production and trade in productive cultivated lands.

Dumai Sea is an international sea transportation route. Its location, which is close to the Malacca Strait and densely populated by industrial activities, has made the government through a regulation from the Ministry of Transportation and the Ministry of Maritime Affairs and Fisheries stipulate that the Dumai sea is not a fishing ground. This regulation has an impact on local fishing communities, as they have to cover longer distances and take days to return to land. In fact, Dumai City is a coastal area whose economy is based on the marine fisheries sector, which accounts for 90% of fishery production. Unfortunately, in the period 2006–2010, fishery production decreased by 50%. Increased industrial activity puts pressure on the environment and aquatic ecosystems, which threatens the livelihoods of coastal communities. Similar conditions are not only experienced by the marine fishing community, but also the “ngokang” community—communities that barter for basic necessities such as fruit, drinks, vegetables, meat, and daily necessities to be exchanged for scrap metal and drums owned by industrial ship crews.

The dependence of coastal communities on the marine fisheries sector is contrary to the government’s vision. On the other hand, the activities of local communities in the Dumai sea are classified as high-risk activities [2]. Not only disrupting the company’s operations, but also endangering public safety.

In order to realize Kampung Minapolitan throughout Indonesia, Dumai City is part of Riau Province which has fishery cultivation potential so that it helps improve community welfare. The pioneering kampung minapolitan in Dumai City is in Tanjung Palas Village. This research examines the forms of collaboration between companies and the government, the implementation of sustainable aquaculture and its impact on society, as well as the challenges and threats faced in the process of developing Kampung Minapolitan in Dumai City.

Based on an interview with the Head of the Dumai City Fisheries Service, since Dumai is not a fishing ground area where the mobility of industrial ships is dense so that the distance for fishermen to go to sea is very far. Previously, Kampung Minapolitan pioneer was launched by the company that was Kilang Pertamina Internasional Unit Dumai through the Social and Environmental Responsibility Program (TJSL), KPI Unit Dumai made every effort to realize Kampung Minapolitan. Therefore, the effort in planning the

Kampung Minapolitan in Tanjung Palas Village is fully supported by KPI Unit Dumai and the local government.

2 Literature Review

2.1 Collaboration in the Sustainable Aquaculture Program

Collaboration is a form of social interaction. According to [3], collaboration is a social process, in which there are certain activities aimed at achieving common goals by helping each other; besides, understanding each other's activities. [4], stated that collaboration means working together in order to achieve a common goal. Moreover, collaboration mostly involves the division of tasks, where everyone does every job that is their responsibility to achieve a common goal. There are three types of collaboration (1) Primary Collaboration (2) Secondary Collaboration (3) Tertiary Collaboration. In realizing a Kampung Minapolitan with elements of sustainable fishery cultivation, the collaboration conducted by the Government, the Company and the Fishing Community is in the form of a secondary collaboration which is highly formalized and specialized, each individual only dedicating a part of his life to the unified group.

2.2 Corporate Social and Environmental Responsibility

Corporate Social Responsibility (CSR) is one of several corporate responsibilities to stakeholders. What are meant by stakeholders in this case are people or groups who can influence or be influenced by various decisions, policies, and operations of the company. Simultaneously, the company will conduct three different types of responsibilities to stakeholders, where all of those should be conducted in a balanced manner. Emphasis on only one type of responsibility will cause the company to run not optimally. The three responsibilities include: economic responsibility [5], legal responsibility and social responsibility. At least, there are six CSR models which can be implemented in companies that are: Cause Promotion, Cause Related Marketing, Corporate Societal Marketing, Corporate Philanthropy, Community Volunteering, and Socially Responsible Business Practice [6]. In addition to these activities, over time, the concept and strategy of implementing CSR has also developed. In Indonesia itself, the Partnership and Community Development Program is one part or model of CSR implementation which is commonly used by State-Owned Enterprises (BUMN), including PT. Kilang Pertamina Internasional Unit Dumai. The legal basis for PKBL is the minister of State-Owned Enterprises Regulation Number 4 of 2007, which states that each State-Owned Enterprise is required to form a special work unit which directly handles the problem of community development and empowerment where the amount of PKBL allocation is 2% of net profit. Meanwhile, issues which become the priority of PKBL include:

1. The majority of the Partnership Program with MSMEs.
2. Community Development Program, divided into:
 - a. Natural Disaster Relief

- b. Public health
- c. Community Education and Training
- d. Spiritual
- e. Public Facilities Development
- f. Natural Conservation

In addition to the Partnership and Community Development Program, another regulation relevant to the implementation of the CSR program is the minister of State-Owned Enterprises Regulation PER-05/MBU/04/2021 April 8, 2021 regarding the Social and Environmental Responsibility Program of State-Owned Enterprises. This relatively new regulation seeks to encourage the achievement of the Sustainable Development Goals (SDGs) through CSR, to make CSR integrated into business strategies in order to create shared value (CSV), and to support global agreements through the implementation of ISO 26000 on Social Responsibility and ISO 31000 on Risk Management [7].

Clearly, the causes of failure of a program can be divided into two that are from an external perspective and internal perspective. The stages of a program are an internal aspect of the implementation of the CSR Program. Therefore, the existing stages become one of the central issues in this study. Knowing how a CSR program is conducted in the context of an ideal implementation is the first step to see various polemics or problems which arise later. Generally, this stage starts with planning, continues with implementation along with evaluations conducted at each stage, and ends with reporting [8].

2.2.1 Planning

The planning stage consists of three main steps that are: awareness building, CSR assessment, and CSR manual building. Awareness Building is the first step to build awareness regards to the importance of CSR and management commitment. It can be conducted through seminars etc. CSR Assessment is an effort to map the company's condition and identify aspects which need priority attention and appropriate steps to build a company structure that is conducive to effective CSR implementation. The next step is that build a manual CSR. The results of the assessment are the basis for the preparation of manuals or guidelines for CSR implementation.

2.2.2 Implementation

Implementation stage consists of three steps that are socialization, implementation, and internalization. Socialization is needed to introduce company components to various aspects related to CSR implementation; especially, regards to CSR implementation guidelines. The main purpose of this socialization is that to make CSR program which will be implemented gets full support from all components of the company. The implementation of the activities conducted basically should be in line with the existing CSR guidelines. Meanwhile, internalization is a long-term stage. It includes efforts to introduce CSR in all business processes of the company; for example, through a performance management system, etc.

2.2.3 Monitoring and Evaluation

This Monitoring/Evaluation stage is a stage which needs to be conducted consistently from time to time in order to measure the effectiveness of CSR implementation. Moreover, the evaluation mostly is divided into three parts that are evaluation at the beginning of the activity, in the middle of the activity, and evaluation at the final stage or output. Evaluation at each stage of implementation is needed as a control so that the implementation of CSR continues according to the targets and objectives which have been formulated in the planning.

2.2.4 Reporting

The reporting Stage is needed in order to build an information system both for the purposes of the decision-making process and for the disclosure of material and relevant information about the company. Reporting mostly is prepared in several different formats, according to the purpose and characteristics of the reader. In addition to functioning as a foundation in making decisions for further programs and activities, CSR reports can be used to increase brand awareness and the company's good name in the eyes of the public.

However, these four stages are only the minimal ideal stages. Meanwhile, the implementation can develop according to the needs of the community. In the context of the Kampung Minapolitan TJSL Program which involves the community and community self-reliance as a goal, the necessary steps may be developed to become more complex including: Preparation, Assessment, Planning/Alternative, Implementation, Evaluation and Termination [9].

In the end, the termination or exit program should not be forgotten since the assistance provided by PT Kilang Pertamina Internasional Unit Dumai does not last forever, and one day it can be revoked or withdrawn according to the situation and company policies. A program is called as "Exit Program" if all of these activities have been completed and resources in the form of funding are no longer channeled to support community group activities [10].

3 Method

The type of research is descriptive. The data collection techniques were carried out through questionnaires, interviews, observation, and literature studies. Questionnaires were distributed to 32 respondents, while interviews were conducted to 5 people who were determined using a purposive technique and consisted of 3 subject informants and 2 non-subject informants. Those who served as subject informants in this study were members of the Tuna and Palas Jaya Fishermen's Group. While those who act as non-subject informants are Lurah Tanjung Palas and CSR & SMEPP Officers at PT Kilang Pertamina Internasional Dumai Unit. Field observations were carried out by making direct observations of the daily activities of group members. Observation is needed to see and observe changes in social phenomena that grow and develop so that an assessment can be made [11]. The results of the observations are documented in the form of field notes with written content, as well as photographs of the observations, which will be

Table 1. Forms of Stakeholders Collaboration

Stakeholder Involvement	Planning	Implementation	Monitoring	Reporting
PT Kilang Pertamina Internasional Unit Dumai	✓	✓	✓	✓
Local Government	✓		✓	✓
Village Community Empowerment Institute	✓		✓	
Neighborhood Association (NA) and Community Figures	✓	✓	✓	
Department of Fisheries and Maritime Affairs			✓	
Gadjah Mada University	✓			
Fisheries and Maritime Polytechnic	✓	✓	✓	
Ministry of Environment and Forestry				✓
Press/Online/Offline Media		✓	✓	✓

used as media to support the analysis in the following discussion. On the other hand, this literature study is related to theoretical studies and other references that can support the research process starting from online news, books, press releases, proceedings, to scientific journals [12]. The collected data is then reduced, categorized based on the same themes, and presented in diagrams and tables, then concluded after going through a verification process. The analysis procedure involves a SWOT analysis technique, namely by comparing external factors of opportunities and threats with internal factors of strengths and weaknesses [13]. The verification technique in this study uses triangulation. This research was conducted for three (3) months, from the beginning of August to the end of October 2022.

4 Result

Sustainable fisheries development involves various interested parties, both from the planning, implementation, monitoring or evaluation, and reporting stages. Details of stakeholder involvement in each stage can be seen in Table 1.

As a provider of funds through the Social and Environmental Responsibility Program (TJSL), PT Kilang Pertamina Internasional Unit Dumai involves local governments consisting of sub-district heads and village heads and their staff. Also in the planning process were the Village Community Empowerment Institutions (LPMK), Neighborhood Association (RT) representatives, and community leaders. This activity was carried out through a Focus Group Discussion (FGD) with a theme or discussion that had been adapted to the findings of the Social Mapping conducted by Gadjah Mada University.

During the discussion, the Fisheries and Maritime Polytechnic became the supervisor so that the discussion activities ran as they should.

At the implementation stage, RT and community leaders contribute in making the activities run smoothly. Also at this stage, the Fisheries and Marine Polytechnic contributes in the form of knowledge transfer to the public, regarding the use of appropriate technology in the form of solar panels and fish finders. In the next process, namely monitoring and evaluation, almost all stakeholders are involved so that the development of Kampung Minapolitan gets meaningful input. In the end, the development of the Kampung Minapolitan program in Tanjung Palas Village was reported as the implementation of TJSL because the budget designed was mostly sourced from TJSL PT Kilang Pertamina Internasional Unit Dumai. This report has also been recognized by the regional government, as well as the Ministry of Environment and Forestry as one of the evaluation aspects of the Corporate Performance Rating Assessment Program in Environmental Management (PROPER).

Sustainable fisheries development should pay attention to the balance between social, economic and environmental aspects. Tanjung Palas Village, Dumai City in implementing sustainable fishery cultivation based on this Kampung Minapolitan has fulfilled these aspects in which on the social aspect including the community as the beneficiary. Environmental aspects include natural systems consisting of fish, ecosystem quality, and biophysical environment. After identifying these two aspects, a fishery management system is created, which includes planning, fisheries management, and fishery research. Therefore, the fishery management system contains fisheries development which pays attention to these two aspects. Furthermore, the Kampung Minapolitan Program is run by the Tuna Fishermen Group and the Fishery Cultivation Group, whose activities focus on the environment, economy, and social. In environmental activities, the group uses solar panels in aquaponic-based plant cultivation. Solar panels mostly are used for hydroponic plant systems, although hydroponics and aquaponics have similarities where plant cultivation does not use soil. However, in Dumai City itself, aquaponics with a solar panel system is the first and only thing which fulfills the element of novelty. Previously, the aquaponic which was run was still using household electricity, with the presence of solar panels in the drive system in aquaponic it succeeded in providing safety to the environment since it is known that solar panels can contribute to reducing global warming. Battery capacity of 100 watts per hour has helped save the burden of electricity emissions by 0.0003 Ton CO₂-eq/year and energy efficiency is found in solar panels that is 2.4 KWh per day. It saves water use; besides, aquaponics does not use pesticides so that it is more environmentally friendly. Therefore, it has an environmental impact due to system changes.

Solar panel-based aquaponics also creates added value in value chain changes for other CSR programs that is the Fishery Cultivation Program by the Palas Jaya Group and the Program for Improving the Quality of Human Resources towards Tourism Villages by the Keberkahan Bersama Group. In fulfilling this catfish cultivation feed, it is obtained from the Palas Jaya Fish Cultivation Group, where this group makes independent feed in the form of maggot. This feed directly has a good impact on fish and their horticultural plants since it provides added value to product services. Maggot made by members for catfish cultivation with a total of 4,000 fish costs IDR 16,200,000 for 6 months. After the

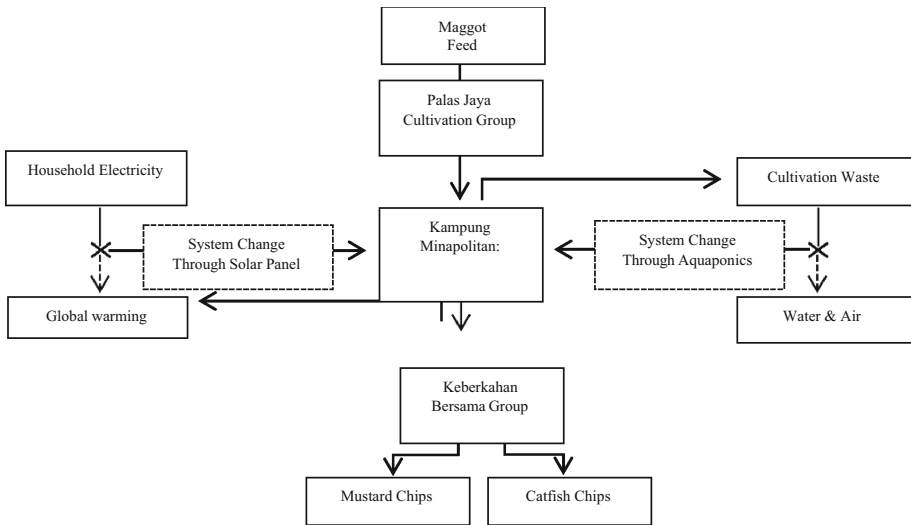


Fig. 1. Innovation and Value Chain in Kampung Minapolitan, Tanjung Palas Village

group manages their own catfish feed by utilizing maggot, they can save IDR 10,000,000. Meanwhile, the members of Keberkahan Bersama group in the program of improving the quality of resources towards tourism villages process plant products (mustard) into mustard chips, and there is cost efficiency from the implementation of the cultivation.

In the past, waste in RT 02 Tanjung Palas Village was delivered to TPS, but after training on processing waste into maggot, now organic waste is processed into feed. Thus, it provides added value to behavioral changes in preserving the environment conducted by members of Tuna Fishermen Group and Palas Jaya.

Apart from various economic benefits, the application of appropriate innovation and technology provides new knowledge and insights for the community. This can be seen from the increase in knowledge of how to work from 39% to 93%, operation from 14% to 94%, and maintenance from 14% to 95%. Thus, 75% of beneficiaries said they were very satisfied with the implementation of the program and another 25% said they were satisfied [14].

5 Discussion

Based on the result of study conducted by researchers, in the sustainability of aquaculture in Kampung Minapolitan, the strategy used was collaboration. Collaboration in the development of the aquaculture minapolitan area of Tanjung Palas Village was conducted well. It can be seen from the existence of cultivation results in the form of group income and the resulting innovation. The collaboration that occurs between the community and is fully supported by a company that has a Social and Environmental Responsibility Program (TJSL), namely PT Kilang Pertamina Internasional Unit Dumai, from upstream to downstream. Through the research results there is also a SWOT analysis which is

Table 2. Strength, weakness, opportunity, and threat in the development of Kampung minapolitan in Tanjung Palas Village

Internal	
Strength	Weakness
<ul style="list-style-type: none"> • There is an institution in the form of an active fishing group • There is awareness regarding the risks and vulnerabilities of fishing groups; especially, the elderly 	<ul style="list-style-type: none"> • The income earned is less than fishing, although it has more stable range • Lack of knowledge and experience in dealing with outbreaks and diseases in fishery cultivation
External	
Opportunity	Threat
<ul style="list-style-type: none"> • There is a flow of water from the company which can be used for fishery cultivation • There are many yards which have not been used properly and they can be used as community economic fields through aquaculture • There is a market which is ready to accept and accommodate aquaculture products 	<ul style="list-style-type: none"> • Unfavorable acidic water conditions for fisheries • Purchasing water makes the cost of cultivating freshwater fish expensive so that it makes less competitive • The selling price of aquaculture products fluctuates according to the market

carried out by comparing the external factors of opportunities and threats with the internal factors of strengths and weaknesses.

Basically, fishermen groups understand the high risk in their work. People cannot leave jobs that are full of risks due to lack of skills and low-income levels. On the other hand, the unfavorable conditions of acidic water for fisheries have made the development of Kampung Minapolitan, especially in the Tanjung Palas Sub-District, increasingly difficult. If possible, the community must allocate a budget to purchase clean water, making their products tend to be more expensive than other fish farming products. PT Kilang Pertamina Internasional Unit Dumai managed to accommodate weaknesses and threats by looking at the potential and opportunities that exist. Where, there is a flow of ex-sedimentation water from the company's Water Treatment Plant which can be used for fish farming. Apart from being the main medium for cultivation in the Palas Jaya Group, the Tuna Fishermen Group has also succeeded in utilizing this water as an ingredient for making ice cubes. That way, the fish they get from the sea can last longer, so they have flexibility in making sales without reducing the selling value of the fish they catch. Through this synergy, the Tuna and Palas Jaya Fishermen's Group have succeeded in reducing the use of waste by 194.4 m³ from 2021 to 2022. With a conversion factor of Rp. 14,209 per m³, the total cost savings gained from reducing water use are Rp. 2,762.229, -

Until now, there are no specific regulations that can minimize fluctuations in the price of aquaculture products. The government through the Dumai City Fisheries Service should be able to provide solutions to the threats faced by local cultivators through a policy of limiting the supply of fish from outside the city, as well as other protection policies. Because after all, the government through the Fisheries and Marine Services must be involved and contribute to community empowerment efforts [15].

6 Conclusion

The development of Kampung Minapolitan involves local governments, companies, and educational institutions as program development consultants. Its implementation involves the community, and consultants from the Maritime and Fisheries Polytechnic. At the evaluation stage, almost all stakeholders were involved to provide helpful input. As for the reporting sought by the company as a TJSL program to the Ministry of Environment and Forestry.

The Kampung Minapolitan program is run by the Tuna Fishermen Group and the Palas Jaya Group, whose activities focus on the environment, economy, and social issues. The use of solar panels with a battery capacity of 100 watts per hour has helped save electricity emissions by 0.0003 Ton CO₂-eq/year and energy efficiency is found in solar panels, which is 2.4 KWh per day. In addition, this innovation is able to minimize the use of water and pesticides so that it is more environmentally friendly. The savings that can be achieved through waste processing by the two groups is IDR 10,000,000 for 6 months. Apart from various economic benefits, the application of appropriate innovation and technology provides new knowledge and insights for the community. This can be seen from the increase in knowledge of how to work from 39% to 93%, operation from 14% to 94%, and maintenance from 14% to 95%.

PT Kilang Pertamina Internasional Unit Dumai managed to accommodate weaknesses and threats by looking at the potential and opportunities that exist. Where, there is a flow of ex- sedimentation water from the company's Water Treatment Plant which can be used for fish farming. Apart from being the main medium for cultivation in the Palas Jaya Group, the Tuna Fishermen Group has also succeeded in utilizing this water as an ingredient for making ice cubes. This synergy has succeeded in reducing waste usage by 194.4 m³ from 2021 to 2022. With a conversion factor of IDR 14,209 per m³, the total cost savings obtained from reducing water use are IDR 2,762,229.

References

1. Prabowo, D. S. (2014, January 11). *Program Mina Wisata Padukan Konsep Perikanan dan Pariwisata*. Retrieved from TribunNews: <https://www.tribunnews.com/nasional/2014/01/11/program-mina-wisata-padukan-konsep-perikanan-dan-pariwisata>.
2. Fatkhullah, M., Habib, M. A., & Nisa, K. K. (2022). Identifikasi dan Manajemen Risiko untuk Mereduksi Kerentanan Pada Masyarakat. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, 3(4), 856–867. Retrieved from <http://ejurnal.seminar-id.com/index.php/ekuitas/article/view/1529>
3. Abdulsyani. (1994). *Sosiologi: Skematika, Teori, dan Terapan*. Jakarta: Bumi Aksara.
4. Roucek, S., & Warren, L. (1984). *Pengantar Sosiologi*. Jakarta: Bina Aksara.
5. Habib, M. A., Nisa, K. K., Fatkhullah, M., Al Ursah, C. R., & Budita, A. K. (2022). *SOSIOLOGI EKONOMI: Kajian Teoretis dan Contoh Penerapan*. Tulungagung: Akademia Pustaka.
6. Kotler, P., & Lee, N. (2005). *Corporate Social Responsibility: Doing the Most Good for Company and Your Cause*. New Jersey: John Wiley & Sons, Inc.
7. Radyati, M. R. (2021, May 7). *Kepemimpinan BUMN untuk CSR yang Holistik*. Retrieved from Media Indonesia: <https://mediaindonesia.com/opini/403653/kepemimpinan-bumn-untuk-csr-yang-holistis>

8. Wibisono, Y. (2007). *Membedah Konsep & Aplikasi CSR: Corporate Social Responsibility*. Gresik: Fascho Publishing.
9. Soekanto, S. (1987). *Sosial Suatu Pengantar*. Jakarta: Rajawali Press.
10. Rogers, L. B., & Macias, K. E. (2004). FOOD POLICY AND APPLIED NUTRITION PROGRAM. *Program Graduation and Exit Strategies: Title II Program Experiences and Related Research*. TUFTS Nutrition.
11. Margono, S. (2007). *Metodologi Penelitian Pendidikan: Komponen MKDK*. Jakarta: Rineka Cipta.
12. Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT. Alfabet.
13. Rangkuti, F. (2006). *Analisis SWOT: Teknik Membedah Kasus Bisnis*. Jakarta: Gramedia.
14. Demeianto, B., Yaqin, R. I., Arkham, M. N., Imawan, B., Bastian, K., & Mulyani, I. (2021). EDUKASI TEKNOLOGI PANEL SURYA SEBAGAI SUMBER ENERGI LISTRIK AQUAPONIK DI KELURAHAN TANJUNG PALAS KOTA DUMAI. *AL KHIDMAT: JURNAL ILMIAH PENGABDIAN KEPADA MASYARAKAT*, 4(2), 86–93. doi: <https://doi.org/10.15575/jak.v4i2.12287>.
15. Sitorus, S. H., & Fatkhullah, M. (2022). PEMBERDAYAAN MASYARAKAT NELAYAN; PERAN DAN KONTRIBUSI DINAS PERIKANAN DAN KELAUTAN. *Masyarakat Madani: Jurnal Kajian Islam dan Pengembangan Masyarakat*, 7(1), 1–19. Retrieved from <https://ejournal.uin-suska.ac.id/index.php/jmm/article/view/16264>
16. Menteri Kelautan dan Perikanan. (2011). Keputusan Menteri Kelautan dan Perikanan Republik Indonesia Nomor. Kep.18/MEN/2011. *Pedoman Umum Minapolitan*. Jakarta: Departemen Kelautan dan Perikanan.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

