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Empowerment of Sidoarjo Women Fishermen: Coastal Srikandi on Potential, Condition, and Intention

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Abstract

This paper is a second-year publication of research on empowerment of women fishermen in Sidoarjo regency. In this second year, the research team measured the index of empowerment and development of minapolitan areas using IPKM (Agropolitan and Minapolitan Area Development Index). After measuring index of empowerment and development of minapolitan area, the research team got data that Sedati sub-district is the highest development value area in Sidoarjo regency. While the district of Sidoarjo is the district with the lowest value. Nevertheless, the research team still sees the weak aspects in the context of the development of minapolitan area. The three aspects are 1) the aspect of human resource development, 2) the institutional development aspect, and 3) community development, the environmental certainty that supports the development of minapolitan areas to be sustainable.

Keywords: *Development, empowerment, women fishermen, minapolitan, Sidoarjo*

1. Introduction

This paper is a publication of a study that attempts to provide ideas, analysis, and explanations about empowering women fishermen in Sidoarjo Regency, East Java, Indonesia. The research that has been done two years, in the first year found that there are two factors that play an important role in the empowerment of fishermen, especially women fishermen, in Sidoarjo regency. The first factor is the willingness and level of grassroots activities of the organization/union. Like ponds farmers and other wetland farmers, grassroots organizations are a struggle that can be very effective. These organizations can be arisan, village-owned enterprises, unions, farmer groups, and others. Grassroots organizations can also prevent capitalization of the commodities they produce. In this publication, grassroots organizations are more associated with institutions, both formal and informal.

The second factor is education. Education is an important factor for self-sustainability can be created in the environment of Sidoarjo women fishermen. Not only for the sake of self-reliance, but education is also needed so that economic and social activities in the community become very "toxic". Education can also be an important instrument to the existing problems, namely the knowledge gap between people who understand the market with people who understand the product. So, education can be an iron bridge between the two, knowledge of the product (product knowledge) can be controlled also with market penetration. Thus, it can be expected that the distribution of products can directly reach consumers, as well as in that case can improve the empowerment of women fishermen.

The research team has conducted field studies related to the continuation of this research. On field research, the research team conducted interviews with some residents of Waru, Sidoarjo, Sedati, Buduran, Jabon, and Candi districts. In each sub-district the research team took samples in several villages only, namely Tambak Oso for Waru sub-district; Kalanganyar, Banjar Kemuning and Segoro Tambak for Sedati sub-district; Damarsi, Prasung, and Sawohan for Buduran sub-district; Bluru Kidul for Sidoarjo sub-district; Balongdowo and Balunggabus for the Warusub-district; and Kedung Pandan for Jabon sub-district. Each of our sub-districts interviewed 2 (two) sub-district apparatuses. As for the residents, each village research team has conducted interviews as many as 6-8 people. This interview was conducted to examine in real terms the condition and situation of fisheries and marine Sidoarjo Regency. The research team also interviewed women fishermen in the six sub-districts.

There are some notes or points that the research team concluded from the field research. Some points are closely related to the development of agropolitan and minapolitan areas. Management and sub-district/village services are still hampered by the quality of human resources of the device. So that resulted in the gradation of service quality and research permit. So far, the impression of ease of licensing and the best research service in the researchers can be from district Buduran covering three villages, namely Damarsi, Prasung, and Sawohan. Prasung village is the most potential minapolitan area in Buduran, but there is still no political willinearity from the village head and the sub-district. Prasung village is ultimately more empowering cattle or goat farms than the development of minapolitan areas. Meanwhile, the sub-districts of Jabon, Candi, Sedati are minapolitan areas with high potential. However, the pattern of community life and community culture that is still difficult to be developed so that it is expected to become support system improvement of minapolitan area. There are many farmer groups, pond farms, which were established, but still have no impact on improving the welfare of pond farmers, especially in Sedati sub-district. Farmer groups managed to attract the attention of the sponsor, but the investment received still cannot have a continuous impact on the welfare of farmers.

As stated by Kusnadi (2009), that the institutional model of community empowerment has four potential benefits. The four potential advantages are: 1) increasing the capability of resources and increasing the scale of collective economic enterprises owned by the community, 2) improving collective bargaining position in accessing market capital, technology and policy, 3) developing coordination ability and partnership cooperation in the management of collective economic activity to support the dynamics of regional economies, and 4) facilitating control of the economic journey of the collective. Based on these advantages, the team did not only get data in the form of potential, commodity, and local resources, but also qualitative and quantitative data concerning the means of pre-supporting facilities for community empowerment institution.

2. Research Methods

In this second year, the work is not only aimed at obtaining data on local potentials, commodities and resources, but also qualitative and quantitative data on pre-facilities supporting community empowerment institutions (see Phan, 2015). Using the Index of Agropolitan and Minapolitan Area Development (IPKM) of East Java Province, questionnaires were conducted not only on local government apparatus, but also sampling of villagers. The index is based on two government regulations, namely 1) Regulation of the Minister of Agriculture No. 50/Permentan/CT.140/8/2012 on Guidelines for Development of Agricultural Area and 2) General Guidelines of Minapolitan Area Development of East Java Province 2015.

In the Index of Agropolitan and Minapolitan Area Development (IPKM) of East Java Province, there are 88 points that must be filled by village and subdistrict apparatus. Of the 88 points to be filled in, there are seven (7) outlines which are the focus of the questionnaire, namely 1) Scale of quality improvement of human resources (human resources) stakeholders agro/minapolitan area creative, innovative, spirited, professional; 2) Improvement of farmer/fisherman institution (poktan), and village in agro/minapolitan area; 3) Development of commodities that are in line with the condition of agro/minapolitan area; 4) Increasing the support of agro/minapolitan facilities and pre-facilities; 5) Development of agribusiness system and business in agro/minapolitan area; 6) Encouragement of open access of Minapolitan people to (1) capital, (2) technology, (3) marketing network; and 7) Increase the income of Minapolitan stakeholders especially the local community. While on the IPKAN which should be filled by the residents as sampling there are 13 components, which include 1) identification/identity of respondents, 2) identification of potential natural resources, 3) identification of social and cultural potential, 4) identification of potential infrastructure, 5) identification of potential sources (9) the condition and development of human empowerment, 10) development of the concept of superior commodities, 11) economic activities by the government, 12) community participation, and 13) community participation in empowerment programs.

IPKM is calculated on average per scale. For IPKM filled by subdistrict or village government apparatus, the maximum value for each point is 15, while the maximum value is at least 13. Thus, the calculation of the questionnaire is done on the field in six subdistricts, Sedati, Buduran, Candi, Jabon, Sidoarjo, and Waru. After obtaining the value of IPKM from each sub-district, then the next step is to compare one subdistrict with other districts. Thus, from the results of these calculations will emerge new facts and conceptual reality based on it. From the emergence of facts and data from field researches this in later a policy must be based on the analysis.

3. Result and Discussion

Based on the field research done by the research team, we got IPKM results for six sub-districts (Sedati, Buduran, Candi, Jabon, Waru, Sidoarjo). Each district's assessment has been calculated by its own tabulation. The final tabulation table is the one included in this publication. The calculation results of IPKM in six subdistricts are as follows:

IPKM District Sidoarjo, Subdistrict Sedati 2018						
Number	Assessed Elements/Indicators/Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				11.47656	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				9.666667	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				7.175641	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				5.4375	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				9.266667	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				7	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				8.45	12
Total Score					58.47304	88

Table 1: Table of IPKM District Sidoarjo, Subdistrict Sedati 2018 (Primary Source)

IPKM District Sidoarjo, Subdistrict Buduran 2018						
Number	Assessed Elements/Indicators/Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				6.785714	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				8.833333	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				7.603205	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				5.602273	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				10.06667	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				10.11111	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				8.729861	12
Total Score					57.73216	88

Table 2: Table of IPKM District Sidoarjo, Subdistrict Buduran 2018 (Primary Source)

IPKM District Sidoarjo, Subdistrict Candi 2018						
Number	Assessed Elements/Indicators/Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				6.987723	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				5.333333	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				7.733333	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				5.931818	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				9.533333	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				7	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				7.646528	12
Total Score					50.16607	88

Table 3: Table of IPKM District Sidoarjo, Subdistrict Candi 2018 (Primary Source)

IPKM District Sidoarjo, Subdistrict Jabon 2018						
Number	Assessed Elements/Indicators/Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				11.47656	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				8.833333	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				7.175641	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				5.602273	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				9.533333	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				7	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				6.111806	12
Total Score					55.73295	88

Table 4: Table of IPKM District Sidoarjo, Subdistrict Jabon 2018 (Primary Source)

IPKM District Sidoarjo, Subdistrict Waru 2018						
Number	Assessed Elements/Indicators/ Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				6.920759	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				9.666667	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				7.603205	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				5.4375	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				10.06667	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				7	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				8.45	12
Total Score					55.1448	88

Table 5: Table of IPKM District Sidoarjo, Subdistrict Waru 2018 (Primary Source)

IPKM District Sidoarjo, Subdistrict Sidoarjo 2018						
Number	Assessed Elements/Indicators/Sub Items	Choose (*)	Score	Quality	Grade	Info (Number of Questions)
I	Improving the quality of human resources stakeholder minapolitan region of being creative, innovative, professional spirit (max value 15)				2.675223	16
II	Increasing the institution of farmers/fishermen and village/sub-district minapolitan area (max value 15)				4	6
III	Developing superior commodities in accordance with minapolitan area conditions (max value 14.5)				4.312821	13
IV	Improve the support of strategic minapolitan facilities and infrastructure (max value 14.5)				3.625	22
V	Developing agribusiness systems and businesses in minapolitan areas (max value 14)				3.533333	7
VI	Encouraging the opening of minapolitan public access to (1) capital (2) technology (3) marketing network (max value 14)				4.666667	12
VII	Increase the income of minapolitan stakeholders especially the local community (max value 13)				2.879861	12
Total Score					25.6929	88

Table 6: Table of IPKM District Sidoarjo, Subdistrict Sidoarjo 2018 (Primary Source)

The results of the above table are still classified again in accordance with the value obtained. The classification is 1) very bad category with value 0-25, 2) bad category with value 26-50, 3) good category with value 51-75, and 4) very good category with value 76-100. Therefore, the sub-district with good category there are four, namely Sedati, Waru, Buduran, and Jabon. While there are two districts are categorized less good, namely Sidoarjo and Candi.

Based on the results of recapitulation that has been calculated by the research team, it is found Sedati subdistrict is the district in Sidoarjo Regency which has IPKM with the highest value, that is 58.47. While Sidoarjo district is the district with the lowest IPKM value, that is 25,69. This is indeed a representation of conditions in the field, which Sedati sub-district for the development of minapolitan is very large. There are many villages in Sedati subdistrict that have a very large Minneapolitan land, namely Kalanganyar, Tambak Cemandi, Gisik Cemandi, and Banjar Kemuning. The villages are a pond area that is very close to the sea. Not only that, this area is a region with a considerable salt commodity, in addition to brackish and freshwater fish.

As for the Sidoarjo district, as we all know that the district of Sidoarjo does not have an effective agropolitan and minapolitan development area anymore. Subdistrict Sidoarjo is a metropolitan area where the urban industrial development center spins. So, the Sidoarjo area is a marketing and consumption area for products developed by other regions.

In Sedati sub-district, the highest score is in the first point, namely the improvement of creative and innovative human resources. This figure does not indicate that tambak farmers or fishermen in Sedati are the most advanced, but government and private programs related to the development of minapolitan areas that focus on improving the quality of human resources occur in this region. Farmers of fish ponds and fishermen in Sedati sub-district are the most frequent human resources grants and programs from both private and self-government. This is revealed from interviews conducted by the research team of Sedati subdistrict residents, especially in the villages of Banjar Kemuning, Tambak Cemandi, and Gisik Cemandi. Every year they always get ship assistance grants, capital money, and incentive assistance to run programs related to the development of minapolitan areas. Sedati area is also often used reference area of Kuliah Kerja Nyata (KKN) universities in Surabaya and Sidoarjo. So, for the flow of information and management of this area is a potential area. The same thing actually happened in Jabon area. Jabon is also the outermost boundary of Sidoarjo regency with the high seas. Geographical position Jabon bordering the Brantas and Pasuruan rivers make Jabon actually has a high minapolitan potential as well. Jabon Region is also developing island tourism area. The research team who went into the field also took the time to observe the docks used by Jabon village government to anchor the ships carrying passengers from Jabon village to the tourist island.

Meanwhile, minapolitan commodities between Sedati and Jabon subdistricts are relatively different. If Sedati sub-district is still covered with fish, shellfish and crab commodities, then Jabon sub-district still rely on fish and shrimp commodities. The condition has actually been captured as a potential for regional development by many field officers in the sub-district and village of Sidoarjo. However, the development of minapolitan or agropolitan areas has not been welcomed by Sidoarjo region development policies. The potential in question here is the fact that many agropolitan and minapolitan commodities have been export-qualified and have been exported to several countries. However, there are some difficulties experienced by fishpond farmers or fishermen, namely 1) water conditions increasingly polluted by household wastes and 2) the availability of infrastructure facilities agro/minapolitan commodity cultivation.

The two barriers mentioned above are also experienced by the Buduran sub-district. As stated by the Buduran District Fisheries Department that the industry and aquaculture, both ponds and rivers and open seas, are also experiencing barriers to water conditions and the availability of facilities and infrastructure. Buduran area also develops ponds for shrimp and freshwater fish. However, the thing that many complained about is not supporting the condition of the abundant water from rivers that are often polluted by household waste. The problem became various, ranging from increasing mortality of fish/shrimp to the destruction of the composition of the soil which then impact on polluted pond water.

The research team found the similarities of the conditions related to the institutionalization and empowerment of women fishermen in the region of Sidoarjo, Sedati, Jabon, Buduran, Waru, and Candi. The contours of women empowerment that occurred in six areas are relatively the same. Empowerment of women fishermen in six areas is still minimal. Empowerment of women fishermen still only berkutat around the role of secondary to women. The secondary role is to make women as processors of raw materials obtained from the sea and ponds. Not only as a raw material processor, but also most women also become vendors of processed products sold in stores.

The research process of empowering women fishermen, therefore, has been through the process of stage look, but still not through the process of think and act as expressed by Didiek et al (2017). The process of the research stage also considers the basic concept of resource utilization as expressed by Baiquni in Andarini et al (2014) and Santosa's entrepreneurial priority in Andarini et al (2014). Based on the stages of the look that has been done, the research team assessed that there are some weak points in empowering the fishermen women and the empowerment of the fishermen as a whole, namely 1) community development, 2) human resources development, and 3) institution development.

There are many empowerment programs, both government and private, that then provide skill values to scale up minapolitan production. However, the forgotten of these programs is the aspect of sustainability (Wesely and Dublon, 2015). As the research team got when conducting interviews with Banjar Kemuning and Gisik Cemandi residents who then necessitated the slum environment. So that development and growth are not aligned with environmental sustainability. This is also affirmed by the low level of IPKM aspects of the environment in each subdistrict. For human resources development, the research team still see the lack of both quantity and quality of the management of the development efforts of minapolitan and agropolitan areas. Indeed, the value of IPKM aspect I in each region recorded a satisfactory value. However, again, the value reflects not only the quality of human resource development, but also the low agro/minapolitan human resources that exist prior to the HR development process. As for institutional development, in six areas that have been studied by the research team, it can still be seen that the role of BUMDes has not been so maximized. BUMDes can indeed improve the quality of management of village and sub-district commodities. However, BUMDes still cannot provide innovations that can lift the growth of agropolitan and minapolitan commodity production in Sidoarjo regency. This last thing is also affirmed by the low of IPKM of each sub-district in aspect II.

4. Conclusion

In the second year of this study, the research team began conducting field studies to measure the index of agro/minapolitan area development as well as the direction of empowerment of women fishermen. The research team used IPKM or Agropolitan and Minapolitan Area Development Index (IPKM). The use of IPKM is not only to measure the development of minapolitan and agropolitan areas, but also to measure the empowerment of fishermen in a region, especially for six districts in Sidoarjo Regency. The measurements of IPKM were conducted on six districts in Sidoarjo regency, Sedati, Buduran, Waru, Sidoarjo, Candi, and Jabon subdistricts.

After the research team did field research and measurement of IPKM to six sub-districts in Sidoarjo Regency, then got the result from each sub-district. Subdistrict with highest score of IPKM is Sedati subdistrict. While the district with the lowest IPKM value exists in Sidoarjo subdistrict. There are some notes on the results of the index measurement, some of which are 1) the weakness of human resources in the development of agro/minapolitan area, 2) the management of the area that still does not support the independence of agro/minapolitan development, and 3) government support for facilities and infrastructure which is still lacking.

Another thing that can be drawn from IPKM measurement results in six sub-districts is still weak development of agro/minapolitan area in three aspects, namely 1) human resources development, 2) institutional development, and 3) environmental development. These three aspects are actually the most crucial aspects in the development of agro/minapolitan areas as well as the empowerment of women fishermen, but the average surveyed subdistrict still scored low on these three aspects. Therefore, the most important suggestion of this second-year research result is 1) strengthening of human resources both in quantity and quality, 2) strengthening village or local finance institution as a motor of development and empowerment of agro/minapolitan area, and 3) recovery of the agro/minapolitan environment to create sustainable socio-economic activities.

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