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# OPTIMIZATION ANALYSIS OF SALT FARMERS ACTIVITIES AND WELFARE IN PAMEKASAN DISTRICTS

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## *ABSTRACT*

*Many salt farmers who are not eager to produce salt even many farmers are switching professions. This is due to the low price of local salt and the quality is even lower the quality of imported salt is even better so that it can reduce the bargaining power of local salt. This study aims to analyze the economic activities of salt farmers in Pamekasan Districts in order to evaluate the optimization of salt farmers' activities through internal and external factors, so that development strategies can be designed so that the activities of salt farmers are more optimal and support the welfare of salt farmers in Pamekasan. This research analysis uses qualitative descriptive analysis, IFE and EFE matrix analysis and SWOT qualitative analysis. Based on the results of the study it can be concluded that the level of optimization of economic activity and welfare of salt farmers in Pamekasan Districts is in quadrant I, which is aggressive (all forms of activity will be optimal and welfare is achieved). Strategies that can be used as a policy to improve the optimization of salt farmer activities are: Expanding the salt market share, Increasing the productivity and quality of salt quality and the interests of salt farmers, Creating farmer groups and Collaboration with all parties.*

***Keywords**: Optimization; Salt Farmer Activities; Development Strategy; Welfare*

## 1. INTRODUCTION

Salt is a sea and coastal commodity that can also make a major contribution to the development of an area. Certainly it will be a driver of economic growth in coastal communities in Madura.

Entering October 2017 salt production in Pamekasan Madura Districts is still minimal due to uncertain weather due to rain that still flushed until June (Hasibuddin, 2017). While in 2018 the price of salt remains low at Rp.400,000 / ton. This is because the quality of local salt is still low, controlling the production process is also not good so the government must have to import salt from other countries based on data from the Central Statistics Agency (BPS, 2017). Many of the salt farmers have switched professions to become migrant workers abroad, the salt fields have been converted into shrimp and fish ponds even if they are on the side of the road in shops or houses.

The low price of local salt due to poor quality makes local salt farmers must surrender with low income which can reduce the productivity of salt in Pamekasan because the activity of salt farmers decreases many salt farmers who have profited, salt lands are often empty due to the enthusiasm of salt farmers decreased and even the land is used as shrimp ponds so that the activity of salt farmers in Pamekasan Districts is less than optimal.

Therefore, researchers conducted an optimization analysis of the activities of salt farmers so that salt farmers were able to optimize marine resources in salt production and development strategies to achieve prosperity as seen from the influence of the internal and external environmental economic activities of the Salt Farmers community in Pamekasan Districts.

## 2. LITERATURE REVIEW

### Folk's Salt Business

People's salt business is a business that has lasted a long time, especially for coastal and coastal areas. Businesses or mortgages, in general, are carried out using a profit sharing system. (Prihantini, Et al. 2017)

Salting business can be done in two ways, namely industrial salt business and community salt business (Efendy, Et al., 2012). In Pamekasan, the folk's salt business is generally run on a profit sharing system. About 70.5 percent of salt farmers in Pamekasan Districts are involved in profit sharing practices. The salt land productivity in Pamekasan reaches up to 135.00 tons per hectare according to the Regional Secretariat of the Pamekasan Districts, the high productivity of this salt field is apparently not the only capital to develop the salt business. The people's salt business in this area is considered a hereditary effort, which is stated by about 62.95 percent of salt farmers (District regional secretary Pamekasan, 2015 in Prihantini, Et all. 2016).

### 2.2 Salt Farming Society and Economic Behavior

Salt farmer community according to Scott's statement in Rochwulaningsih (2007) is not much different from farmers in general, namely poor people whose lives are not settled with limited income to survive. Smallholder salt farmers are small scale non-industrial salt producers and only produce in the dry season (Rachman 2011).

According to the Ministry of Fisheries Disclosure (2012), the industrialization of marine and fisheries is a process of changing the upstream and downstream production systems as an effort to increase added value, productivity, and scale of production of marine and fisheries resources. Rachman (2011) states that the industrialization process is a continuation of the stages of economic development after the agricultural sector develops.

The industrial sector plays an important role as a productive sector in maximizing development. Economic behavior is the response of producers or consumers which is shown due to changes in market power, where the response has the goal of individual or group satisfaction (Fariyanti 2008).

### 2.3 Family Welfare

The family is part of the system and interacts with a variety of environments (Sunarti 2008), family welfare is the creation of a harmonious condition and the fulfillment of physical and social needs for family members, without experiencing serious obstacles in the family environment, and in dealing with family problems will be easy to overcome together by family members so that family living standards can be realized (Iskandar 2007).

The level of income of salt farmers will affect the patterns of household expenditure of farmers. It is possible that farmers will increase consumer spending, but there is also the possibility to increase productive expenditure so that it will increase subsequent income (Cahyono, Et all, 2007).

## 3. RESEARCH METHODS

This research was conducted in the Districts of Pademawu, Tlanakan and Galis because the area was the most potential as a salt producer but was not optimal in producing. So there is a need for research to increase salt productivity in order to improve

the welfare of the salt farmer community in Pamekasan. The data used in this study are primary data and secondary data. Primary data were obtained from direct interviews and questionnaires to respondents. Secondary data were obtained from related institutions, various libraries such as books, journals, and the internet. This type of research is a mixture of qualitative and quantitative methods with descriptive analysis.

The number of respondents taken to carry out this study were 100 respondents from three salt-producing Districts of Pamekasan Regency, namely Galis, Tlanakan and Pademawu Districts. Whereas the interview took 5 informants using purposive random sampling method with competent informants in accordance with the information needed by researchers. Analysis carried out from the results of data collection as follows:

### 3.1 Analysis of Economic Activity of Salt Farmers in Pamekasan Districts

This method is used to determine the economic activities of salt farming communities from the time of production to post-harvest salt in Pamekasan Districts. This method is also carried out to identify the economic activity activities of the Salt Farmers community by interviewing farmers who are considered capable and understand the future salt prospects. So the informants in this analysis fit the criteria.

### 3.2 Internal and external environmental analysis Optimization of economic activity and welfare of salt farmers

The second analysis is to analyze the internal and external environment of economic activity and welfare of salt farmers. In this analysis the researcher uses the Internal Factor Evaluation Matrix (IFE) and the External Factor Evaluation Matrix (EFE). The IFE Matrix is a tool used to evaluate the internal environment of economic activities and welfare of salt farmers and to reveal their strengths and weaknesses, the EFE Matrix is a tool used to examine the external environment of economic activity and welfare of salt farmers and to identify opportunities and threats that exist.

### 3.3 Formulation of strategies and policies to achieve optimization

Strategies and policies to achieve the optimization of the economic activities of the Salt Farmers community in Pamekasan Regency. One strategy that can be used in optimizing economic activities in the Coastal Mining Area is a SWOT analysis. This analysis is based on logic that can maximize Strengths and Opportunities, while simultaneously minimizing Weaknesses and Threats). Based on this analysis, it can be seen the relationship between internal factors and external factors, so as to produce the possibility of strategic alternatives.

## 4. RESULTS AND DISCUSSION

### 4.1 Result

**Economic Activity of Salt Farmers in Pamekasan Districts's**

The economic activity of salt farmers in Pamekasan Districts at the end of this year is very minimal because of the diminished enthusiasm of farmers due to cheap local salt. Utilization of salt products by the general public is used or consumed and sold at factories. There are two activities of salt farmers in Pamesan Districts, namely activities during production and post-harvest activities.

Salt production in Pamekasan Districts is carried out seasonally (depending on the weather), namely during hot weather even if the dry season salt production can be done periodically every 1 month twice or per 10 days of production. Most salt fields during the rainy season function as fish ponds. The salt production process in Pamekasan Districts is done traditionally by evaporating seawater with sunlight in the salt-making

fields, to get good salt yields with large crystals, salt farmers usually directly evaporate seawater that is channeled to the plots to produce levels baume (high density / viscosity / viscosity) which is around 20 - 25 Be (for measurement using Baumemeter) but usually for traditional farmers they only use instinct, very rarely traditional farmers use baumemeter.

Supporting facilities used as salt production in Pamekasan are land, water pumping machines, pipes / hoses, polybag, hoes, shovels and art co. After the salt is ready, the next process of production is that the salt is stored in a storage warehouse or put directly into a sack to be sold to middlemen. For salt farmers who have very extravagant land, they usually still accumulate salt until later the price of salt rises, and there are also those who save because there is a need to cover operational costs during salt production activities.

**Result Internal Factor Evaluation Matrix (IFE) and External Factor Evaluation Matrix (EFE)**

This analysis is based on logic that can maximize strengths and opportunities, but simultaneously minimize weaknesses and threats. From the research results of the Internal Environment Economic Activity and Welfare of Salt Farmers that is:

**Table 1 EFE and IFE Matrix of Optimization Salt Farmers Activities And Welfare**

| NO | STRENGTHS | Sum | Ratting | Weight | Scor |
|---|---|---|---|---|---|
| 1 | one of the leading economic potentials of Pamekasan Regency | 303 | 2 | 0.13 | 0.2 |
| 2 | Environmental carrying capacity of Pamekasan salt farmers is very high | 315 | 2 | 0.13 | 0.2 |
| 3 | Location / land of salt making is easily accessible so that it is easy in all economic activities | 347 | 2 | 0.15 | 0.3 |
| 4 | The existence of cooperation between farmers so that the level of farmers' loyalty increases | 341 | 2 | 0.14 | 0.2 |
| | **WEAKNESS** | | | | |
| 1 | Community competence of Salt Farmers in Pamekasan which is still low | 261 | 1 | 0.11 | 0.1 |
| 2 | Salt Farmers in Pamekasan Regency are less proactive, creative and innovative | 238 | 1 | 0.10 | 0.1 |
| 3 | Knowledge about improving the quality of salt is very minimal | 347 | 2 | 0.15 | 0.3 |
| 4 | Lack of information about national salt prices to farmers | 240 | 1 | 0.10 | 0.1 |
| | **JUMLAH** | **2392** | | 1.00 | 1.5 |
| **NO** | **THREAT** | **Sum** | **Rating** | **Bobot** | **Skor** |
| 1 | Imported salt that will damage Madura Salt market share | 363 | 2 | 0.13 | 0.2 |
| 2 | The existence of environmental pollution in sea waters that will reduce the quality of natural resources | 371 | 2 | 0.14 | 0.3 |
| 3 | Many of the pledged areas are used as warehousing land, shop houses and shrimp ponds | 322 | 2 | 0.12 | 0.2 |
| 4 | Lack of interest of salt farmers to produce salt | 324 | 2 | 0.12 | 0.2 |
| | **OPPORTUNITY (O)** | | | | |
| 1 | Madura salt market share that still has a chance in the national to international markets | 358 | 2 | 0.13 | 0.2 |
| 2 | The government encourages Pamekasan Regency to become a center for the development of the salt industry | 329 | 2 | 0.12 | 0.2 |
| 3 | Indonesia's largest productive salt field is in Madura (Garam | 337 | 2 | 0.12 | 0.2 |

| | | | | | |
|---|---|---|---|---|---|
| | Island), especially Pamekasan | | | | |
| 4 | Salt is a commodity that can be developed into a creative product | 334 | 2 | 0.12 | 0.2 |
| | **JUMLAH TOTAL** | **2738** | | 1.00 | 1.7 |

Source : Data results 2019.
Score = Weight x Rating

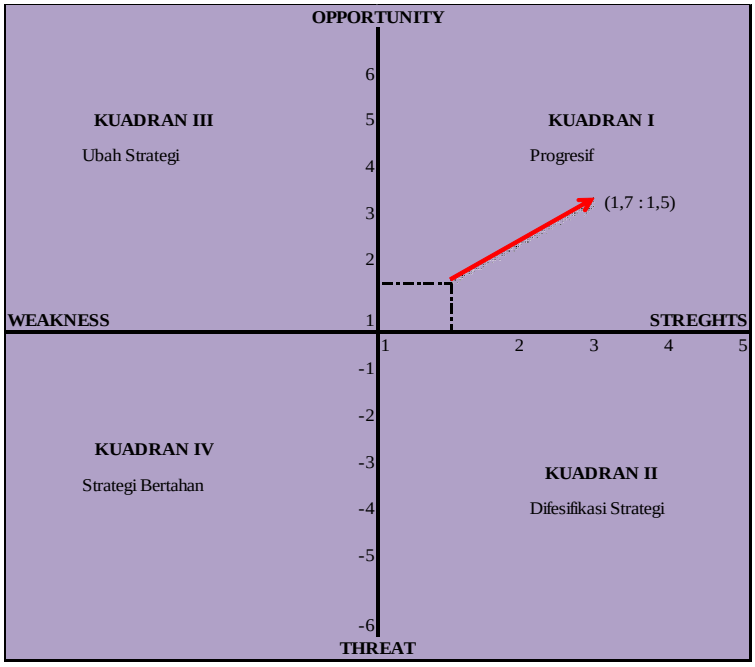
### 4.2 Discussion

**Evaluation Of Internal And External Environment Of Optimization Salt Farmers Activities And Welfare**

To evaluate the internal and external environment of economic activity and welfare of salt farmers with IFE Matrix and EFE Matrix through influential factors. to reveal their strengths and weaknesses and to examine the external environment of economic activity and welfare of salt farmers and to identify opportunities and threats that exist. The EFE and IFE matrices can be seen in Table 1. Based on the table, the most important internal factor in the economic activities and welfare of salt farmers is the location / land for making Salt easily accessible so that easy in all economic activities is a strength factor which is the most important of the other factors. While the most important weakness factor to be improved is the knowledge about improving the quality of salt is very minimal because these two factors have the highest score of 0.3. The most dominant External Factor Evaluation Matrix is the lack of interest of salt farmers to produce salt because it has the highest score of 0.3.

Furthermore, to see the level of optimization of the internal and external environmental analysis of economic activity and welfare of salt farmers in Pamekasan district, it can be seen in the IE matrix (figure 1) as follows :

**Figure 1 Matrix IFE and EFE**




Source : Data results 2019

Based on the results of the IE matrix analysis (figure 1) compiled by plotting the total weighted average score of the IFE matrix (1.5) on the x-axis and EFE (1.7) on the y-axis, the optimal position of economic activity is obtained and the welfare of salt farmers in Pamekasan regency to adapt to quadrant I has a very favorable meaning, economic activity and welfare of salt farmers in Pamuapasan regency have opportunities and strengths that can be utilized so that economic activity and salt farmers in Pamekasan districts become optimal because the strategies will be applied when conditions such as this strongly supports the policy of partumbuhan aggressive of course all forms of activity will be optimal and prosperity is achieved.

**Formulation Strategies and Wisdom To Reach Optimization and welfare**

The formulation of alternative strategies for optimizing economic activities and welfare of salt farmers in Pamekasan District can be carried out with a Qualitative Strength Weakness Opportunities Threats (SWOT) Analysis with which can be explained in the following table 3:

**Table 3 SWOT Matrix Analysis**

| **External Analysis** / **Internal Analysis** | ***Threat*** | |
|---|---|---|
| | Imported salt that will damage Madura Salt market share (T1) | Madura salt market share that still has a chance in the national to international markets (O1) |
| | The existence of environmental pollution in sea waters that will reduce the quality of natural resources (T2) | The government encourages Pamekasan to become a center for the development of the salt industry (O2) |
| | Many of the pledged areas are used as warehousing land, shop houses and shrimp ponds (T3) | Indonesia's largest productive salt field is in Madura (Garam Island), especially Pamekasan (O3) |
| | Lack of interest of salt farmers to produce salt (T4) | Salt is a commodity that can be developed into a creative product (O4) |
| **Strenght (S)** | **Stretegy S-T** | **Stretegy S-O** |
| one of the leading economic potentials of Pamekasan Regency (S1) | Improving Salt Quality in Pamekasan so that the market share position is above imported salt, and Exporting Local Salt Overseas (S1, S2, T1) | Increasing Salt market share with excellent potential Pamekasan economic commodities to become industrial centers (S1, O1) |
| Environmental carrying capacity of Pamekasan salt farmers is very high (S2) | | Increase the amount of production of higher quality salt to become industrial salt (S2, S3 O2, O3) |
| Location / land of salt making is easily accessible so that it is easy in all economic activities (S3) | Increase productivity and interest of Salt Farmers to produce high quality salt with a clearer price prospect (S3, S4, T2, T3) | Creating farmer groups to increase the productivity of salt farmers with the loyalty of each farmer (S4, O4) |
| The existence of cooperation between farmers so that the level of farmers' loyalty increases (S4) | Cooperation with all parties not to pollute the environment (S4, T4) | |
| **Weakness (W)** | **Stretegi W-T** | **Stretegi W-O** |
| Community competence of Salt Farmers in Pamekasan which is still low (W1) | Increasing Salt Farmers' Competitiveness Potential to expand market share (W1, T1) | Train yourself to be more competitive, proactive, creative and innovative in order to add insight to improve the quality of salt until it can be marketed to the international market (W1, W2, W3, O1, O2, O3, O4) |
| Salt Farmers in Pamekasan Regency are less proactive, creative and innovative (W2) | Increasing Salt Farmers' Competitiveness Potential to expand market share (W2, T2) | |

| | | |
|---|---|---|
| Knowledge about improving the quality of salt is very minimal (W3 | Salt farmers must be up to date on national salt prices and control the quality of salt (W3, W4 dan T3, T4) | |
| Lack of information about national salt prices to farmers (W4) | | Arrange good management, especially developing good information through farmer groups (W4, O4) |

## 5. CONCLUSION

Based on the results of the study it can be concluded that the most important internal factor in the economic activities and welfare of salt farmers is the location / land to make Salt easily accessible so that it is easy in all economic activities. While the most important weakness factor to improve is knowledge about improving the quality of salt is very minimal. This is because these two factors have the highest score of 0.3. The most dominant External Factor Evaluation Matrix (EFE) is the lack of interest of salt farmers to produce salt. Furthermore, to see the level of optimization of internal and external environmental analysis of economic activities and welfare of salt farmers in Pamekasan I Regency in quadrant I, which is aggressive, of course, all forms of activities will be optimal and prosperity achieved.

The strategies that can be used as policies to improve the optimization of salt farmer activities in Pamekasan Regency are as follows:

1) Expand Salt market share with leading potential Pamekasan economic commodities to become the center of the salt industry
2) Increasing productivity, the amount of higher quality salt production and the interest of salt farmers to produce high quality salt with a clearer price prospect
3) Creating a farmer group with loyalty in order to arrange management for developing information so farmers are more competitive, proactive, creative and innovative
4) Increase the Potential of Competitiveness of Salt Farmers with good contractions to be more up to date on national salt prices and control of salt quality for the development of the salt industry
5) Cooperation with all parties not to pollute the environment

## REFERENCES

Badan Pusat Statistik (BPS) Kabupaten Pamekasan. (2016). *tenaga kerja batik*

Cahyono, A. Nugroho, N.P. & Indrajaya Y. (2007). *alokasi pengeluaran rumah tangga penyadap penyedap getah pinus di desa somagede kabupaten kebumen Jawa tengah*. Jurnal ilmu kehutanan Vol 1 no 1

Efendy, M., F. F. Muhsoni, S. F. Shidiq dan A. Heryanto. (2012_. *Garam Rakyat: Potensi dan Permasalahannya. Bangkalan (ID*): UTM Press.

Hasibuddin. (2017). *Produksi garam Pamekasan masih minim* (online) https://portalmadura.com/2017-produksi-garam-pamekasan-masih-minim-106062

Iskandar (2007). Analisis Kesejahteraan dan Manajemen Sumberdaya Keluarga di Kota dan Kabupaten *Bogo*r. *[disertasi]*. Bogor : Sekolah Pasca Sarjana Institut Pertanian Bogor

Lucellia. (2013). Perilaku Ekonomi Petani Garam Dalam Kerangka Industrialisasi

Kelautan *(tesis)* Bogor : Sekolah Pacasarjana Institut Pertanian Bogor

Peraturan Menteri kelautan dan perikanan republik Indonesia Nomor per.27/men/2012 *Tentang Pedoman umum industrialisasi kelautan dan perikanan*

Peraturan pemerintah republik Indonesia. 2014. *tentang perkembangan kependudukandan pembangunan keluarga, keluarga berencana, dan sistem informasi keluarga.* nomor87 Pasal 1

Prihantini, C.I., Y. Syaukat dan A. Fariyanti.. (2017). Perbandingan Keuntungan Dengan Sistem Bagi Hasil Pada Usaha Garam Rakyat di Kabupaten Pamekasan. *J. Sosek KP Vol. 12 No. 1 Juni 2017: 63-76*

Prihantini, C.I., Y. Syaukat dan A. Fariyanti... (2016). analisis pinjaman dan biaya pinjaman dalam pola bagi hasil usaha garam rakyat di kabupaten pamekasan, jawa timur. *J. Sosek KP Vol. 11 No. 1 Juni 2016: 109-119*

Rachman. (2011). Evaluasi kinerja usaha petani garam rakyat (studi kasus di KabupatenBima, Nusa Tenggara Barat). *(tesis)*. Bogor : Sekolah Pacasarjana Institut Pertanian Bogor

Rambe. (2004). Alokasi Pengeluaran Rumah Tangga dan Tingkat Kesejahteraan. ( *tesis)*. Bogor : Sekolah Pacasarjana Institut Pertanian Bogor

Rochwulaningsih, Yety. (2007). Petani Garam dalam Jeratan Kapitalisme: Analisis Kasus Petani Garam di Rembang Jawa Tengah. *Jurnal Masyarakat Kebudayaan*. Tahun XX No. 3 Juli 2007

Sunarti. (2008). Program Pemerintah Terkait Kesejahteraan dan Pemberdayaan Keluarga. *Paper Kuliah Kerja Profesi*. Bogor: Fakultas Ekologi Manusia, Institut Pertanian Bogor

Undang-Undang Republik Indonesia Nomor 11 Tahun 2009 *Tentang Kesejahteraan Sosial*