

# **International Journal of Life Sciences** Available online at http://sciencescholar.us/journal/index.php/ijls

Vol. 1 No. 2, August 2017, pages: 39~47 e-ISSN: 2550-6986, p-ISSN: 2550-6994 http://dx.doi.org/10.21744/ijls.v1i2.40



# Minapolitan Area Development Strategy: An Effort to Increase Fisherman Income, Gianyar Regency, Bali Indonesia



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Article history: Received 2 February 2017; Accepted in revised form 10 July 2017; Approved 25 July 2017; Available online 30 August 2017

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# Abstract



Keywords

Strengths; Threats; Weaknesses; Opportunities; Development Strategy; The main objective of this study was to determine: (1) external factors were the opportunities and threats for the development of traditional markets in Bali; (2) The internal factors were the strengths and weaknesses for the development of traditional market in Bali (3) traditional market development strategy. The research location was set in nine districts/municipalities in Bali. The research sample of 18 people, namely the head and secretary of the markets and traders in each district/city. In order to determine the market development strategy traditionally used a SWOT analysis (Strengths Weaknesses Opportunities Threats). The research found that traditional market opportunities in the future was the revitalization of the traditional market, stability conducive security and social concern on traditional markets, while the elements that pose a threat was the lack of information technology adoption The strength in the future was the quality of products, strategic market location, and the availability of parking areas, flexible pricing. Weaknesses fast transaction processing, promotion and cooperation with the tourism industry. Strategy development was a traditional market growth strategy.

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# 1. Introduction

The resources of the fishery sector have the potential to become the *prime mover* of the national economy, however, currently, the potential optimally has not been managed. In accordance with all field rapid changes, the fisheries development policy has been adjusted. In order to meet these expectations, a strategic policy based on reality and its problems and expected future conditions are required. The reality and problem, as well as the challenges, need to get a serious attention in the strategic policy formulation.

In order to solve the problem and answer the challenges requires innovative strategic policies and the effective breakthrough measures. In order to achieve the aim and objective required to change the way of thinking and development orientation from land to maritime with a fundamental and rapid movement, namely the *blue revolution*. In order to implement the required system development of marine and fisheries sector based on Minapolitan concept. The concept of development itself is in accordance with the general direction of the national development policy and the policy direction of the regional development and regional development as set forth in the book I RPJM in 2010 - 2014.

Gianyar Regency is one of nine regencies/cities in Bali Province, an area is 36,800 hectares or 6.53% of the total area of Bali. The situation until in 2014 the end has a land area about 14,790 hectares, supported by its territory hydrology which has a variety of the water sources for irrigation. Viewing of the land resources availability, hydrological conditions, and climatology, Gianyar Regency has a great potential for the freshwater aquaculture development. The potential of the freshwater aquaculture can not be utilized optimally due there are still many issues and problems. At the end of 2014, the ponds, pool extent approximately 171 hectares (Gianyar Dalam Angka, 2015).

In order to optimize the contribution of the fishery area towards increasing of the social income, it is a very necessary existence of the area development strategy. Through the present research, it is expected in order to: (a) improve the mechanisms for managing fisheries resources, (b) protect, conserve, utilize, and rehabilitate fisheries resources and

ecological systems sustainably, for present generations without compromising the future generations needs, c) improve the socio-economic and cultural conditions of the local societies.

The fishery resources utilization is in order to truly be done optimally and continuously requires the support of the reliable human resources and good management. In order to realize the reliable human resources and good management, the research on local cadres of the fisheries management in an integrated manner is needed. The fishery areas management in an integrated manner based on science and technology.

Based on the above problems, it is very interesting to be studied about Minapolitan area development strategy in an effort to increase the fishermen/farmers income in Gianyar regency. This study aims at supporting the development program of Minapolitan area as the economic development partner in Gianyar Regency

### 2. Research Method

### **Time and Place**

The present study is conducted within 2 years, and every year is for 10 months, from March to October 2016, and March to October 2017 in Minapolitan area, Gianyar Regency. The research location is determined by purposive sampling in Sanding Village, Tampaksiring Subdistrict, and Pering Village in Blahbatuh. Based on consideration in two villages is used as the center of fishery development in Gianyar Regency.

#### **Population and Sample**

The population in the present research is all manager, related institution, and fisherman/farmer in Minapolitan area at Gianyar regency. The research sample is determined by the census to all the head and area management staff, and the related institution of Minapolitan area and fisherman/farmer determined by simple random sampling 100 fisherman/farmer, 50 farmers/fishermen in Sanding village and 50 farmers/fishermen in Pering village. The research is conducted in two stages, first the data is collected about external factors that constitute opportunities and threats for the Minapolitan area development, and internal factors that are strengths and weaknesses for development of Minapolitani area, in the second year of the model test is Minapolitan area development strategy found in the first year combined with government policy in Gianyar Regency.

### The Technique of Collecting the Data

The data that has been collected is external factors included opportunities and threats for the Minapolitan area development in Gianyar Regency; which consists of Opportunities: government policy, employment recruitment, good condition of the social economic, science and technology development of the capture fisheries, export products, as a tourist destination. Threats: high operational costs, the number of competitors, the famine season, the fisheries declining potential, the security and public order. An internal factors that are strengths and weaknesses for the Minapolitan area development in Gianyar Regency, Strength; marketing for Bali is quite prospective, experienced human resources, the product result is a superior commodity, complete facilities, and infrastructure, open accessibility, land owned by Adat village is wide enough, the group institutional role. Weaknesses: the facilities and infrastructure utilization is optimal yet, System Rantai Dingin (SRD) implementation is still low, the management institution is less optimal, the sanitation implementation is still low. The data is collected by interview technique based on the questionnaire.

#### **Data Analysis**

The analysis is done descriptively and the data is processed with several variations of the statistical analysis. In order to know the traditional market development strategy applied SWOT analysis (Strengths Weaknesses Opportunities Threats) is completed with Internal-

External matrix approach development from General Electric model to know the Minapolitan area position business then formulated the Minapolitan area development strategy in Gianyar regency. The computer software included Minitab 11.12 (Minitab Inc., 1996) and SPSS 11.5.0 (Minitab Inc., 2002) are used to assist in analyzing the data.

# 3. Results and Analysis

# Analysis of External Matrix (EFAS) and Internal (IFAS)

The analysis and diagnosis on the external and internal strategic environment are conducted by weighting the external and internal strategic environment variable, followed by rating determination and lastly calculated total score determining the external and internal environment changes provide opportunities or threats to the fishery area development strategy in Gianyar regency. IE matrix is based on two key dimensions; total on IFAS values given weight and total on IFAS values weighted. The total of EFAS values rated 1.0 to 1.99 are considered low, values of 2.0 to 2.99 are average/moderate and 3.0 to 4.0 is high. Similarly, IFAS values rated 1.0 to 1.99 indicate weak internal position, values from 2.0 to 2.99 are considered to be moderate and 3.0 to 4.0 is strong. The research results on EFAS of fisheries area in Gianyar Regency are presented in Table 1.

Table 1.
External Factors Analysis Summary (EFAS) Minapolitan Area Development in Gianyar
Regency

No	Statement —		Answer Count			
NO.		Low	Moderate	High		
1	Government policy	20	45	35		
2	Employment recruitment	20	20	60		
3	Good economic condition of the society	30	60	10		
4	The development of the science and					
	technology Capturing fisheries	15	40	45		
5	Export products	25	55	20		
6	As a tourist destination	10	60	30		
7	High operational costs	5	65	30		
8	The number of competitors	10	65	25		
9	Famine season	15	70	15		
10	Decreasing fishing potential	40	40	20		
11	Public order and social security	5	75	20		
	Total					

The research results on IFAS Minapolitan Area Development in Gianyar Regency are presented in Table 2.

Table 2. Internal Factors Analysis Summary (IFAS) Minapolitan Area Development in Gianyar Regency

No	Statement –	Answer Count		
NO.		Low	Moderate	High
1	Marketing for Bali is quite prospective	10	55	35
2	2 Experienced human resources 10 4		40	50
3	3 The product yield is the leading commodity 2		66	32
4	4 Complete facilities and infrastructure 11 42		42	47
5	5 Open accessibility 12 52		36	
6	6 Land owned by Adat village is wide 3		67	30
7	7 The role of institutional groups 13 33		33	54
8	The facilities and infrastructure utilization is not	12	74	14

9	optimal Sistem Rantai Dingin (SRD) implementation is			
	still low	13	69	18
10	Management institution is less optimal	9	88	3
11	Sanitation implementation is still low	3	60	37
	Total			

# **IFE Matrix**

An identification of the internal section for the Minapolitan Area Development in Gianyar Regency produces an illustration or internal factors that become the strengths and weaknesses of it. Regarding the existing factors will be given weighting and rating by respondents. The result of weighting and internal factors rating will be formulated in IFE matrix form. The IFE matrix can summarize and evaluate the major strengths and weaknesses of the Minapolitan Area Development in Gianyar Regency. The IFE matrix formulation Minapolitan Area Development in Gianyar Regency can be seen in table 3 below.

IFE Matrix of the Minapolitan Area Development in Ganyar Regency				
Internal Factor		Weight	Rating	Score Total
Stre	Strength			
1.	Marketing for Bali is quite prospective	0,10	2	0,19
2.	Experienced human resources	0,10	4	0,41
3.	The product yield is the leading commodity	0,10	3	0,30
4.	Complete facilities and infrastructure	0,10	4	0,41
5.	Open accessibility	0,10	2	0,19
6.	Land owned by Adat village is wide	0,10	3	0,29
7.	The role of institutional groups	0,10	4	0,42
Weaknesses				
1.	The facilities and infrastructure utilization is not			
	optimal	0,09	1	0,09
2.	Sistem Rantai Dingin (SRD) implementation is still			
	low	0,09	1	0,09
3.	Management institution is less optimal	0,08	1	0,08
4.	Sanitation implementation is still low	0,10	3	0,30
Tot	al	1,00		2,78

 Table 3.

 IFE Matrix of the Minapolitan Area Development in Gianvar Regency.

Source: Primary data processed

IFE matrix above shows the results of the respondent's assessment to the Minapolitan Area Development in Gianyar Regency at utilizing the strength and minimize the weakness has a total weighted value is 2.78 wherein it can be stated that the Gianyar Regency Minapolitan Area has the average ability. The greatest strength of the Gianyar Regency Minapolitan Area lies in the institutional role of the group with a weighted value is 0.42. It then for the second strength is the experienced human resources and complete infrastructure facilities with a weighted value are 0.41.

Whereas, the main weakness has been seen from the value on the lowest score weight. The main weaknesses for the Minapolitan Area in Gianyar Regency is a management agency that has not been optimal with 0.08 score value. Then for the second weakness is the utilization of facilities and infrastructure that has not been optimal and Sistem Rantai Dingin (SRD) implementation is still low with 0.09 total score.

# **EFE Matrix**

The identification of the external factors for the Minapolitan Area in Gianyar regency resulted in some strategic external factors included the opportunities and threats faced by them. After that to each factor is given weighting and rating by each respondent. EFE matrix formulation on the Minapolitan area of Gianyar Regency can be illustrated in Table 4 below.

External Factor	Weight	Rating	Score Total
Opportunities			
1. Government policy	0,09	3	0,28
2. Employment recruitment	0,10	4	0,41
3. Good economic condition of the society	0,08	1	0,08
4. Development of science and technology of the			
capturing fishery	0,10	4	0,40
5. Export products	0,08	1	0,08
6. As a tourist destination area	0,10	3	0,29
Threats			
1. High operational cost	0,10	4	0,39
2. Number of competitors	0,09	3	0,28
3. Famine season	0,09	2	0,17
4. Decreasing of fishery potential	0,08	1	0,08
5. Public order and social security	0,09	3	0,28
Total	1,00		2,73

Table 4. EFE Matrix of Minapolitan Area in Gianvar Regency

Source: Primary data processed

EFE Matrix on the Minapolitan area in Gianyar regency shows the total weighted value is 2.73 wherein it can be mentioned. It has a high enough capability in exploiting the existing opportunities and tackling the threats come. The greatest opportunity is the employment recruitment has the same value about 0.41. Whereas, the highest threat that comes in the Minapolitan Area in Gianyar Regency is decreasing of the fishery potential with 0.08 score value.

# I-E Matrix

IE matrix function is to know the position location of the Minapolitan Area in Gianyar Regency. Knowing it will be easier to take or choose the strategy used refers to the internal strength and external opportunities. Based on the IFE matrix formulation owned in the Minapolitan Area, the total weighted value is 2.78 which indicates that the Minapolitan Area in Gianyar Regency has average ability to utilize the strength and minimize weakness. Whereas, in the EFE matrix, it has a total value about 2.73 which is the Minapolitan Area has a high enough ability to get the advantage of an existing opportunity and try to suppress or cope with threats come. If the two weighted values are found then they will be on V cell of the IE matrix i.e. the growth column included the concentration through the horizontal integration. Here is an illustration showing the position of the Minapolitan Area in Gianyar Regency on IE matrix in the following figure.



Figure 1. The Position of the Minapolitan Area in Gianyar regency.

Growth Strategy is designed to achieve a growth, whether in sales, assets, profits, or a combination of all three. This can be achieved by lowering prices, developing new products, adding quality products or services, or increasing access to wider markets. The efforts that can be done is to minimize the cost, therefore, unlike to increase a profit. This is the most important strategy if it is in rapid growth and there is a tendency for competitors to engage in price range attempt to increase a marketing. Thus, the companies that have not reached a critical mass (get a profit from the large-scale production) will be defeat, unless the company can focus on a particular market that is profitable.

# 4. Conclusion

Based on the research results of the Minapolitan Area Improvement can be concluded:

- 1. The highest strength that is owned is the role of institutional groups and experienced human resources
- 2. The main weakness is the management institution that has not been optimal as well as the utilization of facilities and infrastructure that has not been optimal too, and Sistem Rantai Dingin (SRD) implementation is still low.
- 3. The highest opportunity is an employment recruitment and the highest threat that comes at decreasing of the fishery potential
- 4. The Minapolitan Area in Gianyar Regency has an average ability to the harness strength and minimize weaknesses

### Acknowledgement

The author would like to express gratitude to the following parties: honorable Director of *DRPM (Direktorat Penelitian dan Pengabdian kepada Masyarakat) Ditjen Dikti*, who has funded the PTUPT (*Penelitian Terapan Unggulan Perguruan Tinggi*) research grant, Rector and Head of LPPM Mahasaraswati University in Denpasar for the opportunities, trust, support, and cooperation, as well as government in Gianyar regency and the society leaders, for their cooperation and support on PTUPT research program.

### References

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- Antony Jiju. 2012. A SWOT analysis on Six Sigmasome perspectives from leading academics and practitioners, International Journal of Productivity and Performance Management, Vol.61 No.6, pp.691-698.
- Arcentales, G. A. T., Lucas, M. A. P., Guerrero, J. A. C., & Gordín, R. G. (2017). Evaluation for the Reduction of NH3 Contamination Risks. International Journal of Life Sciences (IJLS), 1(2), 10-17.
- Arnawa, I Ketut, Gede Mekse Korri Arisena. 2013. Potential Power Supports the Development of Minapolitan Areas in Gianyar Regency, Bali. Journal of Agriekonomika Volume 2 Number 2. Faculty of Agriculture University of Trunojoyo, Madura.
- Arnawa, I Ketut, Gede Mekse Korri Arisena. 2014. Impact Assistance of Fishing Facilities Capture Can Increase Fisherman Income in Gianyar Regency, Bali. Journal of Agriekonomika Volume 3 Number 1. Faculty of Agriculture University of Trunojoyo, Madura.
- Arnawa, I Ketut. 2012. Determination of Superior Product at Minapolitan Area in Gianyar Regency. Journal of Agrimeta Volume.02 No.03. Faculty of Agriculture Mahasaraswati University Denpasar.
- Arnawa, I. K., Sukerta, I. M., Martiningsih, N. G. A. E., & Astuti, P. S. (2017). Minapolitan Area Development Strategy: An Effort to Increase Fisherman Income, Gianyar Regency, Bali Indonesia. International Journal of Life Sciences (IJLS), 1(2), 39-47.
- Badan Pusat Statistik Kabupaten Gianyar, 2015. Gianyar In Figures Gianyar. In Figures 2015.
- Carlsen Jack and Andersson Tommy D, 2011, Strategic SWOT analysis of public, private and notfor-profit festival organizations, International Journal of Event and Festival Management, Vol. 2 No.1,pp.83-97
- Jain, P., Jain, A., Singhai, R., & Jain, S. (2017). Effect of Biodegradation and Non Degradable Substances in Environment. International Journal of Life Sciences (IJLS), 1(1), 58-64.
- Jurado, W. C. C., Pérez, A. V. P., Quiroz, A. M. V., & Gámez, M. R. (2017). Environmental Impact On Electrical Networks Near The Manabita Litoral. International Journal of Life Sciences (IJLS), 1(2), 18-27.
- Ogu, G. I., & Orjiakor, P. I. (2017). Microbiological and Nutritional Qualities of Fermented Melon Seed Shells. International Journal of Life Sciences (IJLS), 1(2), 1-9.
- Ogunsiji, A. S., & Ladanu, W. K. (2017). A Theoretical Study of Performance Measures in the Strategic and Corporate Entrepreneurship of Firms. International Journal of Life Sciences (IJLS), 1(1), 49-57.
- Omer, A. M. (2017). Identifying, Developing, and Moving Sustainable Communities through Application of Bioenergy for Energy or Materials: Future Perspective through Energy Efficiency. International Journal of Life Sciences (IJLS), 1(1), 9-39.
- Saxena, A. (2017). The Impact of Nutrition on the Overall Quality of Life Adolescent Girls are Living Across the City of Kota. International Journal of Life Sciences (IJLS), 1(1), 40-48.
- Singh, D. (2017). Leaf Phenology of Cassia Sieberiana L. in KSUSTA Campus of Kebbi State, Nigeria. International Journal of Life Sciences (IJLS), 1(1), 1-8.
- Sulistiawati, N. P. A., Kartini, L., & Yuliartini, M. S. (2017). Identification of Development Phases and Changes Shoots Flowering Orange Siam Plants. International Journal of Life Sciences (IJLS), 1(2), 28-38.

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