DOI: https://doi.org/10.53555/nnbma.v1i3.129 **Publication URL: http://nnpub.org/index.php/BMA/article/view/129**

THE EFFORTS FOR COASTAL COMMUNITY WELFARE IMPROVEMENT AND ECONOMIC DEVELOPMENT ACCELERATION IN BALI PROVINCE

I Gede Riana[1]* Ni Luh Putu Wiagustini[2] Luh Gede Meydianawathi[3]
[1,2]Department of Management Faculty of Economy and Business University of Udayana
*[3]Department of Development Economy Faculty of Economy and Business University of Udayana**
[1]Email: gederiana@yahoo.com, [2]Email: wiagustini@yahoo.com, [3]Email: meydianawathi@ymail.com

Corresponding Author: -
Email: gederiana@yahoo.com

Abstract: -

This study aims to produce a Master Plan draft for fishery-based MSME Development in Bali. This study consists of five study processes, among potential analysis of Micro Small and medium-sized enterprises (MSMEs), and business climate analysis, an analysis of the MSME builder institution roles, and the master plan preparation of fishery-based MSMEs in Bali.

The potential of fishery-based MSMEs in Bali is poured on geographic information systems (GIS); Based on the Multiple regression analysis, it can be seen that GDP growth and labour has positive effect on the productivity levels of MSMEs; Based on Importance-Performance Analysis, there are approximately five attributes (50%) supporting the successful development of MSMEs located in quadrant III, this means that fishermen in Bali have the perception that five of these attributes are forms of government services (related institution) to the fishery-based MSMEs which should serve as the main priority; Based on AHP Analysis, it is found that the need for the fishery development in fishery-based MSMEs in Bali covers several operational, capital and market access aspects. By the potential analysis of MSMEs and development target program, it has been compiled development master plan matrix of fishery-based MSMEs and development master plan matrix for related sectors with the fishery-based MSMEs in the Bali Province 2015-2019.

Keywords: - *Master Plan, fishery MSMEs, geographic information systems, Performance-Importance Analysis*

INTRODUCTION

Economic Corridor Bali - Nusa Tenggara has become the theme of the Gate of Tourism and National Food Support. This theme is expected to improve the welfare of the people in this corridor in which 17 percent of the populations is below the poverty line and has high enough income inequality of IDR 17.7 million per capita (between the richest and poorest districts/cities in this corridor). Nevertheless, this corridor has a pretty good social condition, as seen from the high levels of life expectancy by 63 years, the literacy rate is 80 percent and the level of GDP/capita is IDR 14.9 million which is higher than the national GDP/capita of IDR 13.7 million.

Some of the problems faced by this corridor, among others are unevenly population, low levels of investment and very limited basic infrastructure availability. Therefore we need the acceleration and expansion of economic development which will be focused on three (3) main economic activities, namely: tourism, fishery and livestock.

The main economic fishery activity is one of the important activities to be developed in order to lead up the national food security. Currently, fishery products is a source of animal protein with the largest consumption rate in Indonesia with the amount of consumption of fishery products reaches 30.4 kg / capita / year which is 72 percent of the animal protein consumption per capita / year, compared to other animal protein sources such as chicken, meat and eggs. As an archipelagic country, Indonesia's geographical condition strongly supports the development of fishery activities. Indonesia has access to abundant fishery resources both marine fisheries and freshwater, which 76 percent of the surface area of Indonesia is the sea waters. In addition, there are 5,500 rivers and lakes irrigating the Indonesian mainland.

In general, fishing activities can be divided into two types, namely fisheries and aquaculture. Indonesian Fisheries Association Exposure (APSI) at the time of aspiration Networking Sector on 8-9 February 2011 reveals that the development of fishing activities in Indonesia has an average increase of 10.29 percent per year. In the period 2009 - 2010, aquaculture production increases by 16.34 percent, with the largest production obtained from cultivation in the sea. This increase is higher than capture fisheries production increased by 4.71 percent

For Economic Corridor Bali - Nusa Tenggara, the main economic activity of fisheries currently contributes 13.2 percent of GDP from the food agricultural sector. The potential of the fishery sector has triggered the emergence of other sectors both upstream and downstream, including one of them MSMEs. Fishery-based MSMEs in the Bali can potentially be superior due to two main factors. First, it has high local content in its production input. High local content occurs because of abundant raw materials; given the Bali- Nusa Tenggara is a fish producing region. Second, it produces commodities with specific local uniqueness and peculiarity which become surplus value product that make it has a higher competitiveness in the market. In philosophy, a product will have more value and competitiveness in the market when the produced product can be the best (be number one) in class or be the only one (to be the only one).

On the other hand, not only they have advantages, MSMEs are faced with several problems such as: First, the MSME production still relies on local markets and domestic demand as the earning source except for certain products. Not many MSME products , event from medium size one are able to export directly. Second, the weak ability to innovate and the satisfaction for the existing one are the factors making not strong enough ability to compete with the resulted products.

From these conditions, we need a Master Plan for the development of innovative fishery-based MSMEs, so the fishery-based MSMEs in the Bali will be able to become the economic pillar for the acceleration and expansion of coastal areas, especially in Bali.

The Research Urgency

Fishery production in Indonesia based on distribution area, Bali-Nusa Tenggara Corridor is an area that has a fairly large marine fish production in Indonesia. This shows that the fisheries sector is one of the main economic activities of Bali-Nusa Tenggara Economic Corridor, while on the other hand, people tend to buy food and fishery products that have been processed and packaged in a more luxurious form. It is a challenge, as well as the business opportunity of fishery product processing industry, for example, innovation developer of baked products, frozen products, canned products, dried products, and value added seafood (fillet of snapper, tuna loin steak).

By the concept of fishery-based MSME Development Master plan in Bali, it is possible for Bali to be the centre of production and processing of fishery products in Bali-Nusa Tenggara Corridor, so that the region will grow faster in the future. Related to these thoughts, this study entitles: "Fishery-Based MSME Masterplan To Improve The Fish Product Processing That Has Added High Value " (As the Effort to Improve the Coastal Community Welfare and Economic Development Acceleration In Bali Province), with the intention that can become a reference in the production of Master plan for Acceleration and Expansion of Indonesian's Economic Development (MP3EI). In addition, the academic results of this study contribute to the development of a model /concept MSME development that are integrated and sustainable.

Theoretical Review

Overview of Small Business Development Master Plan

The Master Plan of Small Business Development is basically identical with the understanding of strategic plan, which essentially is a long-term planning by taking into account the internal and external environmental aspects in order to get survival business organization quality. Thus, the Master Plan for Integrated Development of Small and Medium Enterprises is an effort to prepare the long-term plan (generally 5 years to 10 years) by considering the internal and external environmental conditions. The MSME development policy implementation should be supported jointly by all

parties concerned, and is composed of universal policy components, namely:

a. Outlining the MSME development priority sector by the selection of business types that become the developmental focus, to be used as reference priority for institutional builder in an integrated / cross- institutional, where the choice of the institution and commodity type to be developed is adjusted to the suitable potential and prospects for growth in the concerned development are.
b. Doing empowerment activities so the business actors : (i) Having insight and entrepreneurial spirit that is resilient and professional; (Ii) Ability to identify, develop or take advantage of business opportunities; (Iii) Ability to utilize productive resources and access to markets (local, domestic or foreign); (Iv) Having the business management skills, expertise and technical skills / technology); and (v) Ability to build competitiveness (insight efficiency, productivity and quality).
c. Conducting the institution builder empowerment (technical builder institution) related to the MSMEs' development so that they: (i) Have a strong commitment to promote MSMEs which are embodied in the form of attention, resource allocation/funding, and more time for the small business development ; (Ii) Have a conceptual insight to make empowered and succeed-order MSME development program; and (iii) are consistent in the spirit of integration to jointly support/ implement the small and medium enterprise development program based on the each role, function and duty.
d. Developing the business climate to encourage, protect and give the greater flexibility for MSMEs to grow forward. The technical climate components mainly are: (i) Legal certainty and clarity / simplicity conducive regulatory requirements and does not burden the economy; (ii) The availability of adequate facilities and infrastructure supporting the economic activities (public and private investment); (iii) incentive system which can effectively stimulate economic activity by small and medium enterprises; (iv) macro-economic policies that support, in particular in terms of: availability and ease of access to capital and relatively low interest rates, and (v) technical assistance and government subsidies for priority programs.
e. Improving the excellence service delivery (facilitate) for small and medium businesses both in administration services (licensing / recording / legalization / facility statute / recommendation, information policy, etc.), and business services such as the required business information (market, business opportunities, technology, capital, etc.) as well as the systems and facilities which can dynamize and promote competitiveness.
f. Always developing innovative, realistic and grounded programs (touching the interests of market participants in the real sector), enabling to answer the actual problems faced based on the real conditions of the target object on the ground, among others: (i) Development of small business centers; (ii) Development of a pilot project in the form of a business incubator; (iii) Development of business development centre (BDC); (iv) Utilization of industrial functional extension (TFPP); and (v) design and product innovation of small and medium enterprises' competition

Economic Growth, Employment, and Investment

Generally, it is stated that there are several sources and dominant strategies determining the economic growth. One classification is the physical factor and management factor. Todaro (1997) specifically mentions three factors or major components of economic growth are capital accumulation, population growth, and things related to the increase in the labor considered positively to stimulate the economic growth. The more the workforce means more productive, while a growing number of residents will increase the potential of the domestic market. However, this depends on the economic ability to absorb the system and employ additional workers productively. Another major factor is the advancement of technology.

According to Boediono (1992), the general form of production function, which can accommodate various substitution possibilities between (K) and labour (L), is as follow:

$$Q = f(K,L)$$

This function allows the use of various combinations of K and L to obtain an output level. To measure the output progress, it is necessary to see the component growth of productivity, efficiency and elasticity.

According Soedarsono (1989: 4), when P is productivity, then

$$P = Q/L \text{ or } P = QL^{-1}$$

When L measures the magnitude of employment, the greater the work ooportunity to produce a particular product will impact the productivity decrease which is the basis for further growth to the expansion of employment opportunities which should not be lowered the productivity. Therefore, the growth of employment opportunities requires the economic growth with higher rate. When each variable is left to grow at its own rate, then the growth rate associated in the following relationship.

$$(1 + P) = \left\{ \frac{(1 + g)}{(1 + n)} \right\}$$

Notes :

p is the productivity growth rate g is the productivity growth rate n is the work opportunity growth

If the work opportunity must grow by the too high rate so it exceeds the production growth rate so its effect decreases the productivity rate.

$$\text{If } n > g; \text{ so } (1 + g) < (1 + n), \text{ until } (1 + p) < 1; \text{ so } p < 1$$

The relationship structure of three parameters shows that the productivity dynamic depends on the balance between g and n. Then, the relationship between the two parameters is stated as the elasticity index of work opportunity defines as follow:

$$E = \left\{ \begin{matrix} n \\ \text{------} \\ g \end{matrix} \right\}$$

E > 1 shows that n > g, so p < 0. The productivity growth rate (p) will be positive only when E < 1, E = 1 shows constant productivity level.
The elasticity approach of work opportunity, though it is simple and easy to be implemented but, has many weaknesses, among other is that the production can not improve if there is no additional labour with certain qualification. Not only growth rate, the productivity and elasticity of work opportunity, it is also required to know the average of annual Incremental Capital Output Ratio (ICOR) by this equation:

$$ICOR = \left\{ \frac{\hat{I}}{\delta Q} \right\}$$

Which:
I is the investment in a period, and
dQ is the difference between output in last period and the output in first period

The obtained ICOR value shows the weakness level of output production process per unit meaning also the measurement for the creation weakness of work opportunity in the sector. The higher the value of ICOR so it is required the bigger investment to increase the output per unit.

The Former Research
The APEC MSME innovation centre in 2006, conducts a study on the MSME global competitiveness in the 13 countries of APEC. Based on the study results, it shows that Indonesia is the country with low competitiveness MSME. Indonesia, along with Mexico and Russia are the countries with the smallest funding for technological development in MSMEs. Though based on the results of the same
study, it shows that the technology development is one important source of innovation, technology also means an important source for increasing competitiveness (Tambunan, 2009).
Tambunan (2010), suggests the research result of Asian Development Bank (ADB), which conducts a study to know the results of the government and private sector efforts to help non-agricultural MSMEs. Based on these results, it shows that although the government and the private sector have taken various programs, the results are not satisfactory. Most of the respondents are not aware of any public services to develop the business *(business development service/BDS)*. The result study also reports that often institutions such as BDS providers do not know what exactly is needed by MSME entrepreneurs, as they consider BDS do not establish a good working network with them. As a result, the real services provided by BDS do not correspond to the real needs of the MSME entrepreneurs.

Research Methodology
The Scope of Research
The scope of the research conducted in the preparation of the Master Plan in Bali includes stages as described in Appendix 1. Based on the preparation flow chart of the MP-MSMEs as outlined in Appendix 1, there are five activity processes undertaken namely: the research activity conducted by Figure 1 is (1) the potential analysis of MSMEs; (2) the business climate analysis; and (3) the identification of obstacles and challenges, (4) the institution role analysis, and (5) The Arrangement of Fishery-based MSME Development Master Plan.

Data Analysis Methods
The data analysis methods used to answer the purpose / activity of this research process include:
1) Geographic Information Systems (GIS)
GIS is a useful tool to identify which areas have fast and slow growth. GIS is essentially a type of information system, which focuses on the presentation and analysis of geographic reality. The emphasis is to manage and analyze the data with an information system. SIG principal characteristics according to Martin (in Kuncoro) include: 1) *Geography*: is related to the measurement of geography scale, and referenced by some coordinate systems at locations above the earth's surface; 2) *Information*: includes taking specific and meaningful information from a number of diverse data, and this is only possible because the data has been organized in a model in the real world; 3) *System*: is an environment that allows data to be managed and placed question. GIS should be integrated into a unified procedure for input, storage, manipulation and output of geographic information.
GIS is basically a special kind of information systems, which pay attention to the representation and manipulation of geographic reality. SIG transforms data into information by integrating a number of different data, applying analytical focus, and presenting the output in order to support decision-making (Juppenlats & Tian, 1996)

2) Linear Regression Model

In analyzing the effect of economic conditions and labor area to the fishery-based MSME productivity in Bali region, it is done by means of multiple linear regressions, while the model of analysis results can be interpreted as in Equation (1).

$$\text{Log } Y = \beta_0 + \beta_1 \log X_1 + \beta_2 \log X_2 + \varepsilon_t \quad \text{.....(1)}$$

wherein, (X_1) is the Gross Domestic Product and (X_2) is worker, whereas (Y) the Production Value Fishery-based MSMEs.

3) Analysis of Hierarchy Process (AHP)

Analysis Hierarchy Process (AHP) is a structured method problem, in the form of hierarchy and incorporate considerations to produce a relative priority scale. AHP also can solve the problem by the principle to arrange the hierarchy, the principle to set priorities, and principle of logical consistency in making a decision. In determining the value of the consistency ratio, the consistency value should be 10 percent or less and if more than 10 per cent of the considerations, so it should be in random or fixed to make good consistency level.

Analytical Hierarchy Process (AHP) is developed by Saaty (1993) and used to solve complex problems or problem without frame with very little data and statistical information on the problems. In general, the hierarchy can be divided into two types: (1) structural hierarchy that is complex issues broken down into parts or elements according to characteristics or a certain magnitude. This hierarchy is closely related to analyze complex problems by dividing the observed objects into groups smaller; (2) the functional hierarchy, outlines complex problem into their parts related to the essential relationship. This hierarchy helps overcome problems or affects complex systems to achieve the desired goal, such as setting priorities for action, the resource allocation. AHP is a decision-making system by using a mathematical model. AHP assists to determine the priority of multiple criteria to perform paired comparison analysis of each criterion. In the performance management system meant by these criteria is the Key Performance Indicator (KPI).

The weighting rules of AHP method usage in the Performance Management system states that: (1) The KPI weight value ranges between 0-1 or between 0% - 100% if we use percentages; (2) Number of total weight of all KPI should be equal to 1 (100%); (3) No weight is negative (-). Here are the steps used to determine the KPI weight by using AHP:

(i) Determining the priority value of KPI. Usually people more easily say that KPI A is more important than KPI B, KPI B is less important compared with KPI C, etc., but they have difficulty to mention how important KPI A than KPI B or how less importance KPI compared with KPI C. So, we need to create a conversion table of priority statements into figures.
(ii) Making priority comparison of each KPI comparing each. For example: If we have 4 KPIs, then we make a comparison matrix for those four KPIs.
(iii) Determining the weight of each KPI, the weight value is between 0 - 1. and total weights for each column is 1. How to calculate the weight of numbers on each box is divided by the sum of all the numbers in the same column.
(iv) Searching the weight values for each KPI. The trick is to total each priority weight value on each table row then, it is divided by the number of KPIs. Thus it is obtained the weight for each KPI.

4) The Analysis of Performance-Importance Analysis

Besides using the above approach, it also uses Performance-Importance Analysis method to answer the achieved objectives. This analysis is used to look at the gaps (gap) between the attributes of public service performance (performance) which has been done by the importance perception level (importance) of fishery-based MSME actor to the required attributes.

The importance and performance level measurement is done by distributing questionnaires for fishery-based MSME as the object study. The respondents are asked to provide an Assessment or their perceptions of the extent to which public services have been given (performance) against the fishery-based MSMEs. By providing an Assessment of the attributes which they consider most needed at this time (importance) with the assumption that the research object understands the extent to which performance attributes of public service institutions that have been made towards the development of fishery-based MSMEs.

Based on the analysis, it will be known in which Quadrant an attribute is, so it can later be used as an instrument to recommend actions or policies that should be done for the success of the public service by department / agency in the Province of Bali.

1) Maintain The Achievement (Quadrant I). It shows the attribute service factors considered to be the successful one, so the achievement or performance should be maintained. Meaning that the attributes is a service considered as the important one by fishery-based MSMEs, and this attribute in its operation has been considered to have good performance.
2) Excessive (Quadrant II). It shows some attributes of less important public institutional services for fishery-based MSME actors, but in practice these attributes seem to get more attention, which is shown by the actor perception assessing the performance of public institutions to adequately support this attribute.
3) Priority (Quadrant III). It shows the factors considered to be the important one but have less optimal service performance and need to be improved, so that it is considered disappointing by the object research (fishery-based MSME).
4) Low Priority (Quadrant IV). The attribute factors considered less important by public institutions and in the

implementation perceiving the object study (fishery-based MSME) that public institutions are less important to support the attribute success.

Results And Discussion

The Efforts for Coastal Community Welfare Improvement in the Bali Region is seen from
(1) The potential of fisheries-based MSMEs in the Bali, (2) Business Climate of fishery-based MSME development.
(3) The Constraint and Challenge Analysis. (4) The Institutional Role Analysis. (5) The Development Demand Analysis of Fishery-Based MSME conducted by Analysis Hierarchy Process (AHP).

1) The potential of the fishery-based MSMEs in Bali

The potential for the fishery-based MSME development in Bali province consists of Fresh Fish Trade Business and Fish Processing Business which each is seen based on the number of businesses, employment, value gains and capital value per Regency in Bali. The development potential of Fresh Fish Trade is presented in Table 1 and The Fish Processing Business is in Table 2.

Table 1: The Number of Business, Labor, Profit Value, and Modal Value of Fresh Fish Trade Business in Bali Area

No	Regency	Number of Business	Labor	Profit Value	Modal Value
1	Jembrana	52	75	537.039.825	1.021.938.000
2	Tabanan	51	81	120.425.258	1.393.528.000
3	Badung	24	33	38.388.009	373.242.799
4	Gianyar	6	7	8.262.000	56.710.000
5	Klungkung	8	12	4.882.833	62.850.000
6	Bangli	10	11	6.529.334	16.695.000
7	Karangasem	17	21	14.249.701	105.860.000
8	Buleleng	103	141	95.979.598	894.159.000
9	Denpasar	5	8	8.553.900	81.175.000
	JUMLAH	276	389	834.310.458	4.006.157.799

Source: The Industrial and Trade Agency in Bali, 2013 (Processed)

Table 2: The Number of Business, Labor, Profit Value, and Modal Value of Fish Processing Business in Bali Area

No	Regency	Number of business	Labor	Profit value	Modal value
1	Jembrana	138	228	155,775,578	3,800,098,600
2	Tabanan	269	483	367,270,329	11,997,323,500
3	Badung	450	1,261	1,318,858,445	32,679,081,247
4	Gianyar	309	504	523,455,047	6,376,965,000
5	Klungkung	52	92	26,758,012	257,545,000
6	Bangli	78	235	49,308,565	483,280,000
7	Karangasem	89	154	83,796,969	2,294,388,000
8	Buleleng	441	782	666,881,384	10,286,817,000
9	Denpasar	333	846	768,280,312	14,672,317,350
	JUMLAH	2,159	4,585	3,960,384,641	82,847,815,697

Source: The Industrial and Trade Agency in Bali, 2013 (Processed)

Based on the Table 1 and Table 2, it is seen that fishery based MSME mostly are in Buleleng regency for the fresh fish and for the fish processing in Badung regency. Based on the fresh fish profit, the biggest is in Tabanan Regency and for the fish processing is in Badung Regency. The development potential of fishery-based MSME is implemented in Geography Information System.

2) The Climate Analysis of Fishery MSME Development Business

The business climate is seen from the economy macro condition like the development of Gross Regional Domestic Product (GRDP) and the labor to the fishery based MSME. Based on the analysis results of multiple linier regression, so it is obtained the multiple regression equation with each variable coefficient of Gross Domestic Product (X_1) and Labor (X_2) can be seen from the equation (2) with its output in Table 2.

$$\text{Log } Y = 6{,}5342 + 0{,}5934 \log X_1 + 1{,}1511 \log X_2 \quad \text{.....(2)}$$

Table 1. The estimation Results of Regression Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.534176	6.113375	1.068833	0.2993
LGRDP	0.593437	0.344307	1.723568	0.0119
LLABOUR	1.151085	0.301416	3.818920	0.0013
R-squared	0.472225	Mean dependent var		24.54033
Adjusted R-squared	0.413583	S.D. dependent var		2.061273
S.E. of regression	1.578479	Akaike info criterion		3.882364
Sum squared resid	44.84874	Schwarz criterion		4.031582
Log likelihood	-37.76483	F-statistic		8.052710
Durbin-Watson stat	1.511642	Prob(F-statistic)		0.003177

Dependent Variable: LNL_PROD

Based on Table 1, it shows that the regression results show that F count value is 8,05 with Probability of 0,003177, meaning that the effects of GRDP (X_1), and Labour (X_2) to the Production Value (Y) is significant. The coefficient value of research determinacy (R^2) is 0,4722, meaning that 47,22% of Production Value variable will be explained by its independent variable, namely GRDP (X_1), and Labour (X_2). The t test between LX_1 (GRDP) with LY (Production Value) shows t count = 1,7236 with Probability of 0.0119, showing the effect of LX_1 (GRDP) is significant in the error level α = 5%, meaning that the production Value can be affected significantly by GRDP. t test between LX_2 (number of labour) with LY (Production Value) shows t count = 3,8189 with probability 0.0013, showing the effect of LX_2 (number of labour) is significant in error level α = 5%, meaning that the Production Value can be affected significantly by the number of labour.

3) The Obstacle and Challenge Analysis

Based on the Focus Group Discussion (FGD), with fishery based MSME actors and builder institutions in all Regencies/cities in Bali, namely the Agency of Fishery Regency/City in Bali, coordinated by the Agency of Tourism Bali Province, so it can be identified the Development Obstacle and Challenge of Fishery Based MSME in Bali, like presented in table 4.

Table 4 : The Development Obstacle and Challenge of Fishery Based MSME in Bali

No	Obstacle and Challenge
1	The awareness of fishery-based MSME actors to implement their own business bookkeeping activities (both financial balance of business, income statement and cash flow statement). Most MSMEs have not yet implemented fishery business bookkeeping activities correctly.
2	The awareness of fishery-based MSME actors to improve the quality of production and post-production, as the excesses of weak market information, marketing network and lack of capital held in business development such as (1) Quality of products is still low, (2) Limitations of capital, (3) Packaging products, (4) Problems of marketing, (5) The product is limited to the local market.
3	Indication of cultural change and work ethic by fisheries-based MSMEs, particularly those related to discipline, willingness to work hard, cherish the time, and bond between business groups.
4	Still often mixed the businesses and household financials, both in the administrative and its use.
5	Creativity effort based on the management of fish resources are relatively abundant due to poor market absorption and still limited product introduction business such as (1) not relatively creative in fish resource processing, (2) not dare to make a breakthrough related to new products, (4) insufficient government attention, especially in seeing what the immediate needs of MSMEs.
6	There is still the desire of the community to understand and implement good management or business processing, such as (1) high enough public interest of fishery-based MSMEs. (2) This activity has been carried out for a long time and has become the foundation of life. (3) The role of government has been optimized by relevant agencies related to group formation to cultivate new MSMEs as community empowerment program (formation centres).
8	Other constraints 1) Difficult and expensive Licensing (BPOM) 2) Unavailable raw material continuously 3) The absence of raw material balance stocks (eg MSMEs located in Gianyar, but the availability of raw materials in Jembrana) 4) Capital constraints because of having no collateral 5) The absence of adequate government regulation to protect MSMEs 6) Season erratic related to catch fish

4) Institution Role Analysis

The Institution Role Analysis is conducted by the Performance-Importance Analysis, which is a an analysis to select strategic program enabling to support fishery based MSMEs progression in Bali, in addition to use FGD method, it also uses Performance-Importance Analysis (Gap Analysis).

Based on the questionnaire distributed to 100 respondents with proportional random sampling to the fishery based

MSMEs in Regency / City, it shows that there are 10 assistance attributes expected by the Fishery-based MSMEs, among others: (1) operational smoothness assistance; (2) assistance to market the production; (3) assistance to ease business licensing; (4) Assistance to improve the quality of human resources; (5) assistance to meet the funding needs by debts; (6) assistance to maintain the continuity of activity; (7) assistance to make investments; (8) government assistance in terms of the production result distribution; (9) recruitment assistance; (10) assistance to solve the problem of receivable account congestion. The Demand Index Assessment compared Assessment Index is presented in Table 5.

Table 5. The Demand Index Value and AssesMSMEnt Index of Each Attribute

No	Status	Demand Index	AssesMSMEnt Index	Quadrant
1	Operational smoothness assistance. (x_1)	0.90	0.50	III
2	Assistance to market the production (x_2)	0.88	0.88	I
3	Assistance to ease business licensing (x_3)	0.88	0.88	I
4	Assistance to improve the quality of human resources (x_4)	0.33	0.83	II
5	Assistance to meet the funding needs by debts (x_5)	0.95	0.35	III
6	Assistance to maintain the continuity of activity (x_6)	0.90	0.35	III
7	Assistance to make investments (x_7)	0.25	0.38	IV
8	Government assistance in terms of the production result distribution. (x_8)	0.92	0.33	III
9	Recruitment assistance (x_9)	0.25	0.88	II
10	Assistance to solve the problem of receivable account congestion. (x_10)	0.92	0.33	III
Average		0.72	0.57	

Source: The data processed results

Based on the gap analysis results, it is found 2 attributes (20%) of success supporting to the performance development of fishery-based MSME in coastal area in I quadrant, 2 attributes (20%) in II Quadrant, 5 attributes (50%) in III Quadrant, and 1 attribute (10%) in IV Quadrant. Below describes the demand and policy condition graphs which have been conducted by the government to the fishery-based MSME performance improvement in coastal area.

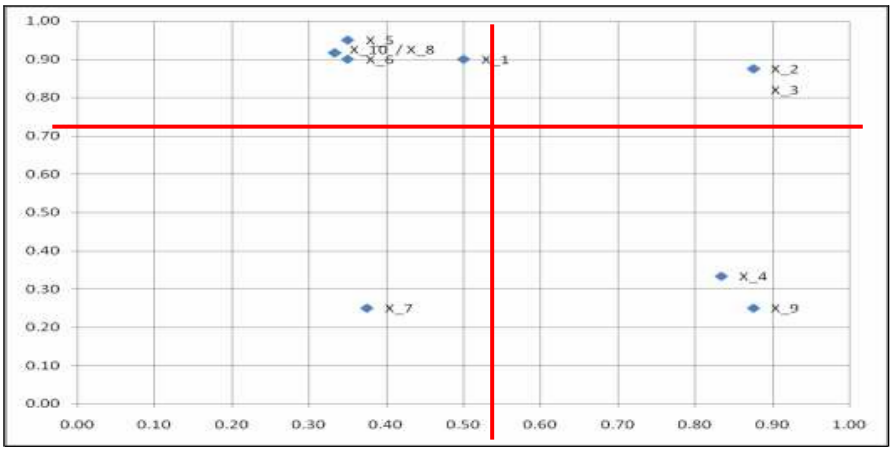


Figure 1. The Quadrant Analysis Results

(1) Attribute with Maintain Achievement Status (Quadrant I). There are 2 attributes namely assistance to market the production (X_2) and assistance to ease business licensing (X_3) in the first quadrant, this quadrant indicates that these attributes are basically considered important by fishery-based MSME in coastal areas and they also gives the good perception (assessment) on the government's performance in terms of service to business success to the fishing communities of fishery-based MSMEs in coastal areas.

(2) Attributes With Excessive Status (Quadrant II). There are 2 attributes namely Assistance to improve the quality of human resources (X_4) and recruitment assistance (X_9) in II Quadrant, this attribute indicates that they are less important attributes for fishery-based MSME in coastal areas which its implementation by the government is considered excessive from the actor viewpoint.

(3) Attributes With First Priority Status (Quadrant III). There are five attributes namely Assistance to smooth the operations (x_1); Assistance to meet the funding needs by debt (x_5); Assistance to sustain the activity (x_6) Government assistance in terms of production result distribution (x_8); and production to solve the problem of receivable account congestion (x_10) in III quadrant. These attribute are the attributes considered important from the perspective of fishery-based MSME community in coastal areas, but the actors perceive it less balanced by government services to support these attribute success.

(4) Attributes With Low Priority Status (Quadrant IV). In the 4th quadrant, there is an attribute having a level of interest considered less important from the fishery-based MSME point of view and perceived that this attribute has less

optimal care or attention from the government. In this quadrant there is one attribute, namely: investment assistance (x_7).

5) The Development Demand Analysis of Fishery-Based MSMEs

The Development Demand fishery-based MSME in the Bali Region is conducted by Analysis Hierarchy Process (AHP). AHP is a method structuring the problem, in the form of hierarchy and incorporate consideration to produce a priority. AHP also can solve the problem by preparing the principle of hierarchy, the principle of setting priorities, and principles of logical consistency in making a decision. Determining the structure built for strategic policy development models in the development of MSMEs in the area of Bali is as depicted in Figure 2.

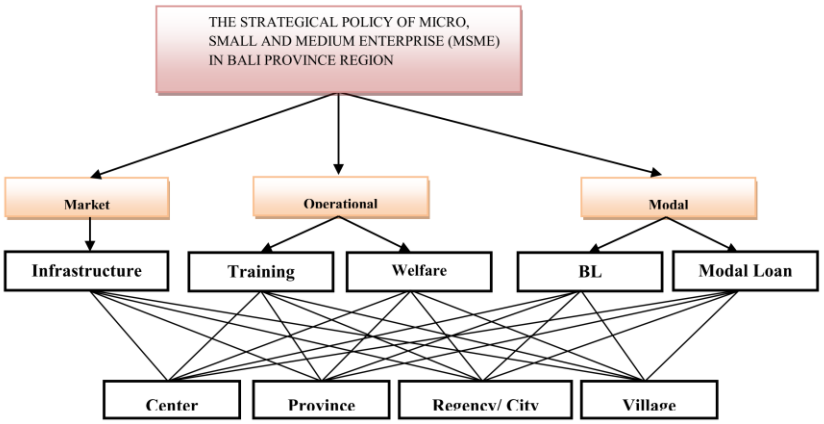


Figure 2. The Policy Hierarchy Structure with AHP model

The calculation Results of determining factor used in the strategic policy of MSME development in Bali province by Analysis Hierarchy Process (AHP) with Expert Choice program version 9.0, show that: (1) The Demand Market Aspect absolutely required is building infrastructures, especially at the village level ; (2) The Operational Aspect as the very dominant factor to affect or want is 75% of Welfare and 25% of training, furthermore based on an analysis it shows that the institutional interest degree at the village level has a value of 76%, followed by institutions at the district / city and province. Meanwhile, when the training is needed to improve the abilities and skills of small entrepreneurs, then the analysis results indicate that the central government institutions are more effective in making their program and the training forms. (3) The Capital Aspect as the dominant factor influencing or wanting is in the form of soft capital grants or loans with the degree of interest by 73%, while direct assistance only has the interest degree value of 27%. While the institutions with more effective to be able to provide a loan for the development of MSMEs are institutional in rural areas, for example by other micro finance, with institutional interest degree at the village level has a value of 74%, followed by institutions at the district / city and province.

Conclusion

1) The development potential for fishery-based MSME in Bali is a Business Trade of Fresh Fish and Fish Processing Business is seen from the number of businesses, employment and capital value and modal value of each district in Bali. Potential development of fisheries-based MSMEs is implemented in a Geographic Information System.
2) Business Climate such as the development of Gross Regional Domestic Product (GRDP) and labor has positive effect on the development of Fishery-based MSMEs in the Bali province, in which 47.22% of Production Value will be explained by GRDP and labor.

3) Strategic Program as the Development Supporting the fishery-based MSMEs is seen from the role of related institutions / government (based on the gap analysis results) are:

(1) The government role to help marketing the MSME production results and ease of licensing is considered good according to fishery-based MSMEs.
(2) The government role to help improving the quality of human resources and recruitment fishery- based MSMEs is considered less important for the implementation by the government is considered excessive by fishery-based MSMEs
(3) The Government role to help the operational smoothness meeting the funding demand, the production result distribution, maintains business continuity, and solves the problem of receivable account congestion is considered important for fishery-based MSMEs, but feeling not to obtain optimal service for the government.
(4) The government role to help making investments is considered less important for fishery-based MSMEs, the government also does not provide services to it.

4) The development demand of fishery-based MSMEs in Bali includes:

(1) The market access aspect shows that absolutely required demand is infrastructure building, especially at the village level.
(2) Operational aspect shows that the institutional aspect at the local level is more effective in improving the welfare of

the fishery-based SME entrepreneurs than at the central institutions level. Meanwhile, when the training is needed to improve the abilities and skills of small entrepreneurs, so the central government institutions are more effective in making its training program and form. This is because the training programs at central level are better and use appropriate technologies for the needs of small and medium-sized businesses;

(3) Capital aspect shows that the loan capital or capital support has significant effect in increasing the manager role to improve the local economy than direct assistance. Furthermore, the financial institutions at the local level (especially rural) are more effective in providing access to working capital than the institutions at the central level.

5) Based on the potential and program analysis of fishery-based MSMEs development in Bali Province, it has been prepared the development masterplan matrix of fishery-based MSME in Bali Province 2015- 2019 and development masterplan matrix of related sectors with fishery-based MSME 2015-2019 in Bali Province.

Advice

Based on the description in the previous chapters and conclusion, so it may be advisable for the Department of Fisheries and Marine Bali Province government and the whole Regency / city government in Bali, that they should conduct the fishery-based SME development based on the objectives, programs and matrices that have been compiled in this study.

Reference

[1].Arsyad, Lincolin, 1999, Pengantar Perencanaan dan Pembangunan Ekonomi Daerah, Edisi Pertama Penerbit BPFE, Yogyakarta.

[2].Baswir, Revrisond, 1995, "Industri Kecil dan Konlomerasi di Indonesia", Prisma Vol. XXIV, No. 10: 83 – 91.

[3].Direktorat Jendral Industri Kecil Departemen Perindustrian, Petunjuk Teknis Manuskrip Standart SII Unit Pelaksanaan Pengendalian Mutu Isolator Keramik.

[4].Irawan, Pengantar Ekonomi Perusahaan, Pusat Antar Universitas studi Ekonomi, UGM, Yogyakarta. Kuncoro, Mudrajad, 1997, Ekonomi Pembangunan: Teori, Masalah, danKebijakan, EdisiPertama, Penerbit

[5].YKPN, Yogyakarta. 1997, "Pengembangan Industri Pedesaaan Melalui Koperasi dan Usaha Kecil: Suatu Studi Kasus di Kalimantan Timur", Analisis CSIS, Tahun XXVI, No. 1: 77 – 97.

[6].Marbun B. N, 1996, Manajemen Perusahan Kecil, Lembaga Pendidikandan Pembinaan Manajemen, Jakarta. Rahardjo, M. Dawam, 1990, Transformasi Pertanian, Industrialisasi dan Kesempatan Kerja, cet.3, UI-Press,

[7].Jakarta.

[8].Riana, I Gede., Ni Luh Putu Wiagustini., dan Luh Gede Meydianawathi. 2014. Master Plan UMKM Berbasis Perikanan untuk Meningkatkan Pengolahan Produk Ikan yang Memiliki Nilai Tambah Tinggi. *Jurnal Ekonomi Kuantitatif Terapan.* Volume 7 Nomor 2 Agustus 2014: pp 102-129.

[9].Sato, Yuri, 2000, "Lingkage Formation by Small Firm: The Case Rural Cluster in Indonesia", Bulletin of Indonesian Economic Studies, Vol. 36 No.1: 137-166

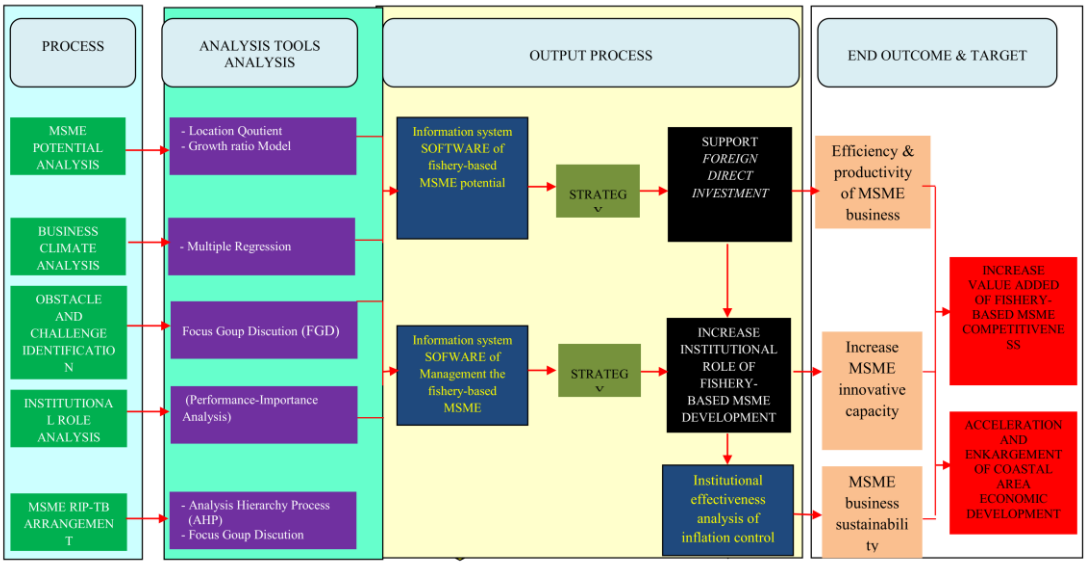
[10]. Tambunan, Tulus, 1993, "Kontribusi Industri Skala Kecil Terhadap Ekonomi Lokal", Prisma Vol. XXII, No. 3: 83-92.

[11]. Wie, Thee. K, 1993, Industrialisasi di Indonesia: Beberapa Kajian, Penerbit LP3ES, Jakarta.

[12]. Vernon, A Musselmen – John H. Jackson, 1988, Pengantar Ekonomi Perusahaan, Terjemahan, Kusmawariadisastra, Erlangga, Jakarta.

Appendix 1

Arrangement Flow Chart of Masterplan MSME Development in Bali Province



Appendix 2

Targets and Development Programs of Fishery-Based MSMEs

No	Targets	Programs
1	Improve the ability of fishery-based mSMEs in obtaining long-term capital funding sources.	1.1 Increase capacity of fishery-based MSMEs in obtaining long-term funding sources.
2	Improve easy procedure to obtain a loan.	2.1 Improve easy procedure to obtain loan.
3	Increase the use of appropriate technology in the implementation process fishery based MSME.	3.1 Increase technology usage of fishery-based MSMEs in implementation activity
4	Improve marketing capabilities and the local market or domestic specifications for fish processed products	4.1 The provision of market information for fishery-based MSMEs
		4.2 Increase the small businesses ability in the utilization of market information.
		4.3 Increase ability to understand local and domestic market for fishery-based MSMEs
5	Improve the ability of business marketing, especially the demand cycle management.	5.1 Increase ability of entrepreneurs in anticipation seasonal demand factors.
6	Increase promotion activity of processed products by fishery-based MSMEs and improve the ability of the actors to do promotion.	6.1 Increase promotion activities of cooperative products
		6.2 Upgrade cooperative marketing ability, especially in the offered product availability
7	The formation of different type of fishery-based MSMEs in every center or the coastal region in Bali province.	7.1 Establishment of fishery-based SMEs types adapted to social conditions and demand scale of surrounding coastal communities in one district
8	Improve the ability of fishery-based MSMEs in doing investment.	8.1 The provision of investment facilities and infrastructure for fishery-based SMEs.
9	Increase the business smoothness operation.	9.1 The increase in promotion facility and infrastructure
10	Improve the ability of fishery-based MSMEs in human resource development and creativity in product creation.	10.1 Increase capacity in the management, promotion and offer variety of fishery-based products
11	Improve the administration ability of fishery-based MSMEs.	11.1 Improve administrative capabilities of small businesses, especially fishery-based MSMEs administration.
12	Increase the ability of fishery-based MSMEs in competition with large enterprises' products.	12.1 Increase ability to compete by standard quality improvement.
13	Increase knowledge of fisheries-based MSMEs in HRM science particularly in terms of the ability to delegate authority and overcome labor turnover	13.1 Improve human resource management.
No	Targets	Programs
14	Increase ability of entrepreneurs in creating product differentiation as alternative advantages besides low price.	4.1 Increase ability of entrepreneurs in the creation of product differentiation
15	Increase ability of fishery-based MSMEs in the product creation including the ability to obtain new product procurement according to people's characteristics	15.1 Easy procurement of products based on the characteristics of surrounding communities
		15.2 Improve the ability of cooperatives in product quality control and production processes
		15.3 Enhance the entrepreneur capacity in production field.
16	Increase the innovation ability of fishery-based MSMEs.	16.1 Increase fishery-based MSME actor ability in making product innovations.
17	Increase surveillance to the type and robustness of fishery based MSME products.	21.1 Introduction of Indonesian National Standard (SNI) to the fishery-based MSMEs.
18	Easy business licensing.	2.1 Arrangement of system and licensing procedures to fishery-based MSMEs.
		2.2 Provision of information in relation to the business licensing.
19	Increase the ability of fishery-based MSMEs in investing activities.	6.1 Increase investment planning capabilities.
		6.2 Provision of information on investment opportunities to fishery
		6.3 Increase ability too get investment fund.

Appendix 3

Masterplan Matrix of Fishery-Based MSME Development in Bali Province

No	Target	Program		Years					Implementer Agencies
				2015	2016	2017	2018	2019	
1	Easy business licensing.	1.1	Arrangement of system and licensing procedures to fishery-based SMEs.						Cooperative And MSME Agency.
		1.2	Provision of information in relation to the business licensing.						Cooperative And MSME Agency.
2	Improve the ability of fishery-based mSMEs in obtaining long-term capital funding sources.	2.1	Increase capacity of fishery-based MSMEs in obtaining long-term funding sources.						
3	Improve easy procedure to obtain a loan.	3.1	Improve easy procedure to obtain loan						Cooperative And MSME Agency.
4	Increase the use of appropriate technology in the implementation process fishery based MSME.	4.1	Increase technology usage of fishery-based MSMEs in implementation activity						Cooperative And MSME Agency.
5	Improve marketing capabilities and the local market or domestic specifications for fish processed products	5.1	The provision of market information for fishery-based MSMEs						Industry and Trade Agency Cooperative And MSME Agency
		5.2	Increase the small businesses ability in the utilization of market information.						Industry and Trade Agency Cooperative And MSME Agency
		5.3	Increase ability to understand local and domestic market for fishery-based MSMEs						Industry and Trade Agency Cooperative And MSME Agency.
6	Improve the ability of business marketing, especially the demand cycle management	6.1	Increase ability of entrepreneurs in anticipation seasonal demand factors.						Industry and Trade Agency MSME Agency
7	Increase promotion activity of processed products by fishery-based MSMEs and improve the ability of the actors to do promotion.	7.1	Increase promotion activities of cooperative products						Industry and Trade Agency Cooperative And MSME Agency
		7.2	Upgrade cooperative marketing ability, especially in the offered product availability						Industry and Trade Agency Cooperative And MSME Agency.
8	The formation of different type of fishery-based MSMEs in every center or the coastal region in Bali province	8.1	Establishment of fishery-based SMEs types adapted to social conditions and demand scale of surrounding coastal communities in one district.						Industry and Trade Agency Cooperative And MSME Agency
9	Improve the ability of fishery-based MSMEs in doing investment.	9.1	The provision of investment facilities and infrastructure for fishery-based SMEs.						MSME Agency Social Work Agency
10	Increase the business smoothness operation.	10.1	The increase in promotion facility and infrastructure						Industry and Trade Agency
11	Improve the ability of fishery-based MSMEs in human resource development and creativity in product creation.	11.1	Increase capacity in the management, promotion and offer variety of fishery-based products						Industry and Trade Agency
12	Improve the administration ability of fishery-based MSMEs.	12.1	Improve administrative capabilities of small businesses, especially fishery-based MSMEs administration						Industry and Trade Agency
13	Increase the ability of fishery-based MSMEs in competition with large enterprises' products	13.1	Increase ability to compete by standard quality improvement.						Industry and Trade Agency
14	Increase knowledge of fisheries-based MSMEs in HRM science particularly in terms of the ability to delegate authority and overcome labor turnover	14.1	Improve human resource management						Industry and Trade Agency Cooperative And MSME Agency
15	Increase ability of entrepreneurs in creating product differentiation as alternative advantages besides low price.	15.1	Increase ability of entrepreneurs in the creation of product differentiation						Industry and Trade Agency Cooperative And MSME Agency
16	Increase ability of fishery-based MSMEs in the product creation including the ability to obtain new product procurement according to people's characteristics	16.1	Easy procurement of products based on the characteristics of surrounding communities						Industry and Trade Agency MSME Agency
		16.2	Improve the ability of cooperatives in product quality control and production processes						Industry and Trade Agency Cooperative And MSME Agency
		16.3	Enhance the entrepreneur capacity in production field.						Industry and Trade Agency . Cooperative and MSME
17	Increase the innovation ability of fishery-based MSMEs.	17.1	Increase fishery-based MSME actor ability in making product innovations.						Industry and Trade Agency
18	Increase surveillance to the type and robustness of fishery based MSME products.	18.1	Introduction of Indonesian National Standard (SNI) to the fishery-based MSMEs.						Industry and Trade Agency MSME Agency
19	Increase the ability of fishery-based MSMEs in investing activities.	19.1	Increase investment planning capabilities.						Industry and Trade Agency Cooperative And MSME Agency
		19.1	Provision of information on investment opportunities to fishery						Industry and Trade Agency Cooperative And MSME Agency
			Increase ability too get investment fund.						Industry and Trade Agency Cooperative And MSME Agency.

Appendix 4

Master plan Matrix of Related Sector Development with Fishery-Based MSME in Bali Province

No	Sectors	Target		Program		Years					Implementer Agencies
						2015	2016	2017	2018	2019	
1	Fishery	1	Improve the fishery actor ability in getting additional modal by loan	1.1	Increase of loan proposal procedure service						Fishery and Maritime Agency. Provincial regional Planning agency Cooperative and MSME Agency.
				1.2	Increase credit provision distribution for fishery business						Fishery and Maritime Agency. Provincial regional Planning agency Cooperative and MSME Agency.
		2	Improve individual ability to invest	2.1	Introduction of investment programs in fishery field						Fishery and Maritime Agency
				2.2	Introduction of appropriate technology in fishery business						Fishery and Maritime Agency
		3	Improve HRM quality	3.1	Increase entrepreneurship ability						Fishery and Maritime Agency
		4	Improve the fishery business continuity	4.1	Implementation of fishery business technology transfer						Fishery and Maritime Agency
				4.2	Formation of fishery business center						Fishery and Maritime Agency
				4.3	Increase of environmental and water pollution control efforts						Fishery and Maritime Agency
		5	Improve the ability to market the business products	5.1	The provision of facility and infrastructure for production and marketing						Fishery and Maritime Agency, Cooperative and MSME Agency
				5.2	The provision of potential market information such as the local, regional and international ones.						Fishery and Maritime Agency. Cooperative and MSME Agency.
				5.3	Cooperation and partnership programs with big entrepreneur						Fishery and Maritime Agency. Cooperative and MSME Agency.
		6	Easy business licensing	6.1	Increase of license processing service process						Licensing and Modal Investment Agency
				6.2	The provision of information and easy processing of fishery business license						Licensing and Modal Investment Agency
2	Cooperative	1	Improve the fishermen cooperative ability in product procurement	1.1	Increase of fishermen cooperative ability in technical and operational management field.						Cooperative and MSME Agency
				1.2	Increase of fishermen cooperative ability in work modal procurement						Cooperative and MSME Agency
		2	Easy license of fishermen cooperative business	2.1	Arrangement of fishermen cooperative business license procedure and system						Licensing Service Agency
				2.2	Information provision in its relation to the business license						Licensing Service Agency
		3	Improve the human resource quality	3.1	Increase of cooperative managerial ability						Cooperative and MSME Agency
				3.2	Improve of administration ability and financial insight						Cooperative and MSME Agency
				3.3	Increase the insights of technology information system and computerization						Cooperative and MSME Agency
		4	Improve the fishermen cooperative ability meeting procurement by external sources	4.1	Increase of easy procedure services of lean proposal						Cooperative and MSME Agency. Provincial regional Planning agency
				4.2	Improve access distribution or scope of soft credit provision for cooperative						Cooperative and MSME Agency. Provincial regional Planning agency
		5	Improve business continuity for fishermen cooperative business	5.1	Increase of distribution channel and marketing scope						Cooperative and MSME Agency
				5.2	Mapping program of fishermen cooperative type specially members having commitment to Fishermen cooperative						Cooperative and MSME Agency
		6	Improve the cooperative ability in investment activity	6.1	Increase of investment planning ability						Cooperative and MSME Agency
				6.2	Information provision on investment chance						Cooperative and MSME Agency
				6.3	Increase of ability getting investment funds						Cooperative and MSME Agency