FISHERMEN ECONOMIC DEVELOPMENT MANAGEMENT SYSTEMS IN THE SOUTH COASTAL DISTRICT OF WEST SUMATRA INDONESIA

Firwan Tan 1

1 Prof. Dr., SE., M.Ec., DEA.Eng., Andalas University Indonesia, drfirwan@yahoo.com

Abstract

In order to improve the national economic competitiveness, we have to accelerate the development process of regional economy with the objective to push it to become the engine of national economic growth. Therefore, it is necessary to empower the human resources and to create the high benefit of local economic resources; these two factors must be enhanced its values simultaneously. This research aims to study the problems of fishermen communities, to analyze the potentialities of marine fisheries in the district south coast of West Sumatra Province, and then to formulate economic development management system based on the production of fishing sea in the South Coastal District of "Kabupaten Pesisir Selatan" or "Kab.Pesisir Selatan". The Study uses descriptive analysis method and participatory planning approach. The results of study showed that the local government has to make the innovative policies in form of structural and institutional transformation. The Institutional transformation consists of four strategic programs: (1) to establish and build Coastal Areas of Kab. Pesisir Selatan as a Fishermen’s Special Strategic Zone (FSSZ) for piloting the development of fishermen economy; (2) to create a single business organizer which has its legal entity as a corporation, managed by a Board of Directors with its function is to manage the pilot project of fishermen economic development in the coastal areas FSSZ in Kab.Pesisir Selatan; (3) to establish a specific training and guidance center (STGC) as an instrument for the business organizer of FSSZ to empower and to improve quality of fishermen’s human resources; and (4) to create a local venture capital company (LVCC) as a non bank financing support or as an alternative source of financing, mainly for objective to invest in FSSZ and to provide funding for fishermen to create and develop their own business. Structural transformation consists of three strategic programs: (1) to transform fishermen's mindset or “way of thingking” to industrial orientation; (2) to transform traditional production patterns to patterns of agro-industry and agribusiness-style production (3) to transform traditional business organization patterns to patterns of SMEs/Cooperatives/Business Groups, which have clear legal entity. However, successful implementation of such transformation policies is determined strongly by level and quality of coordination between the Provincial government of West Sumatra and local government in Kab. Pesisir Selatan.

Keywords: human resources, fishermen, local economy, business, institutional and structural transformation

I. INTRODUCTION

The South Coastal District of West Sumatra Province lies in the western part of Sumatra’s Island in Indonesia, namely “Kab.Pesisir Selatan”. This coastal area faces directly with the Indonesian Ocean or Indian Ocean, it consists of 12 sub districts and 73 sub-sub districts, which are called as “nagari” (2012), see Table I.1. The length of coastal area is about 234 Km, it is the longest coastal area and the wide-ranging area of beach in West Sumatra’s Province with 448.000 inhabitants or around 80% of total population of Kab.Pesisir Selatan live here. In this coastal area there are approximately 47 pieces of small islands and some of them are relatively large size, see Map I.1. The marine potential resources are quite rich in this region; there are many-types of seafood such as super anchovies, mackerel, tuna, grouper fishes,
seaweed, pearl shell, etc. Also it has waves relatively quiet so it is suitable as a location for the aquaculture and cultivation of various types of fish and other marine production. The results of study showed that just over 30% of marine potential resources in the coastal areas of Kab.Pesisir Selatan have been explored and used by local people for their own economic development. It implies that the fishery resources in the coastal area have not yet becoming a main source of income for the welfare of fishermen (Firwan Tan, et al., 2012), moreover low productivity and irregular production activities so that it made "cash flows" of fishermen in condition unsecured and unstable. The other problems are (1) low quality of fishermen human resources since low level of their education background, most of them are graduated from primary school; (2) low productivity is due to lack of management system; (3) the other countries get added value over the comparative advantages which should be hold by West Sumatra, it is due to illegal vessels from other countries that come frequently to catch fish in the area, and they buy also the fish from local fishermen on the high seas or in areas that are not so far from the beach. There are also some foreign entrepreneurs who invest in the coastal area of Kab.Pesisir Selatan, they build the fish farming, the fish-cages by using high techniques and technology (Firwan Tan, 1994). These conditions have led to inequality levels and quality of life were conspicuous among fishing communities with those who live and reside in the highland regions such as in the city of Padang Panjang, Bukittinggi, in the district Tanah Datar, Kab.50 Kota, Sawahlunto, etc. If these problems will not be solved appropriately by local and central government, it will create an impact of growing number of people who left the coastal area and move to urban areas, then rural and coastal areas become increasingly left behind and will not be attractive to educated persons. If economic deficiencies continue to exist in fishermen communities on coastal area of Kab.Pesisir Selatan, it could be mastering the natural wealth of marine and coastal marine falling into the hands of the outsiders, including those coming from countries in the region (Wolfgang Fengler and Bert Hofman, 2009). This is certainly undesirable and may not happen in Indonesia because it will deteriorate the economic competitiveness of local communities and the economic welfare of the people of West Sumatra as well as the economic stability of the Republic of Indonesia in the long run. "In this context, this research intends to: review the fisherman community problems in the coastal area of Kab.Pesisir Selatan West Sumatra in its relation to the improvement of the economic well-being of household and the potential of marine fisheries in the district of south coast West Sumatra. Finally, to formulate fisherman economic development management system based on production of fishing sea in the coastal areas of West Sumatra" (Kab.Pesisir Selatan). 

**II. RESEARCH METHODOLOGY**

This Study used descriptive analysis method and participatory planning approaches. For that purpose, therefore the linkages among the factors of "source" with "activity or process" and "output or results" are considered as a very important aspect in determining good management system. "The primary data" have been used more to support the analysis existing condition of fishermen economy while "secondary data" were used to fit out the analysis. Primary data were collected by using the following tools: Forum Group Discussion (FGD), Workshops, Seminars, Field observations, and In-depth interviews with stakeholders (Table II.1). The study was conducted over approximately 8 months (2012). The secondary data were taken mostly from the annually report of National and Provincial Statistical Board (BPS). Schematically, Schema II.1 can show the detailed steps of research activities.

**III. RESEARCH FINDINGS**

### 3.1. Five Categories of Fishermen in Coastal District Kab.Pesisir Selatan

a). **Fishpond Businesses** can be considered as upper medium-scale investors, they are the owners of the farm, doing fish farming for export, this class fishing are relatively advanced and produce relatively large quantities, employing 5-15 workers fishermen. In terms of marketing, distribution already quite extensive, and export oriented, its business organization relatively well structured and clear legal entities in the form of a
Limited Company (PT). This class of entrepreneurs is still very little in numbers; in the eyes of the banking, Fishpond Businessmen has been categorized as a "bankable business". Usually the owners do not live in Kab.Pesisir Selatan or West Sumatra Province, if any merely opened a representative office in Padang as capital city of West Sumatra Province. Office center or headquarter of this company takes place in Jakarta as capital city of Indonesia or in certain city abroad.

### Table II.1: Methodology of Collecting Primary Data

<table>
<thead>
<tr>
<th>Method</th>
<th>Participants/Responders</th>
<th>Purposes</th>
<th>Frequencies</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Observation</td>
<td>Task Force: we create several task forces who come from the different still and expertise</td>
<td>To observe any economic and business phenomena in the coastal area of West Sumatra Province</td>
<td>The activities were done regularly during the six months (June-October 2011)</td>
<td>Getting important facts and information that were not written or noted by the government, thereby concerning the problems of fishermen and the potentiality of coastal areas. Kab. Pesisir Selatan District and West Sumatra Province.</td>
</tr>
<tr>
<td>In-Depth Interviews</td>
<td>Responders: 240 Fishermen are selected based on random sampling method, therefore each of sub-districts (4-6 reactors) taken 30 respondents. Kab. Pesisir Selatan consists of 12 sub-districts which are located along the coastal area of Kab. Pesisir Selatan.</td>
<td>Identifying the real problems facing by fishermen community starting from the problems of fishes, catching and cultivation, proceeding to the problems of marketing.</td>
<td>8 times face to face with fishermen in each one of 12 sub-districts. We discuss with them already and openly any problem related to fishes catching and cultivation, proceeding to the problems of marketing.</td>
<td>The important wants and needs of fishermen are identified. Moreover, we were able to figure out the picture of working condition of fishermen community in Kab. Pesisir Selatan.</td>
</tr>
<tr>
<td>FGD</td>
<td>Participants: 40 persons with different knowledge and skill related to marine products from management and marketing, include the government policy and strategy in developing coastal areas.</td>
<td>To analyze deeply the problems of fishermen and the constraints facing by local government in supporting the growth of fishermen economy in the region.</td>
<td>These FGDs were organized regularly by West Sumatra Regional Development Planning Board (BAPPENDA). It has been conducted for 4 times.</td>
<td>FGDs have succeeded to raise several policy and strategic programmes in order to solve any problem of fishermen.</td>
</tr>
<tr>
<td>Workshop</td>
<td>Participants: 75 persons which represent several organizations relate to development of fishermen economy in West Sumatra Province. They consist of representation from Central Government, West Sumatra Provincial Government, Chamber of Commerce, Fisherman association, Kab. Pesisir Selatan Government, Research Institute and Research Centers, University/Higher Education.</td>
<td>To analyze deeply and understand broadly any policy and strategy possibly to underline the problems of fishermen and coastal areas. To confirm the priority programs, policies and strategies.</td>
<td>One-day Workshop was organized by BAPPENDA of West Sumatra Province.</td>
<td>The workshop has succeeded in formulating the synchonizations and integrative policy programmes Local Government Kab. Pesisir Selatan with provincial government of West Sumatra and with central government of Indonesia.</td>
</tr>
<tr>
<td>Seminar</td>
<td>Participants: 120 persons, all of stakeholder were invited to participate the conference, including those who represent Minister of Marine Affairs and Fisheries of Indonesian Republic.</td>
<td>To examine the results of research. For that purpose, any suggestion, critics for improvement the final research report are considered important.</td>
<td>One-day Seminar was organized by BAPPENDA of West Sumatra Province</td>
<td>Seminar has success to formulate the vision, mission and programmes in order to speed up the economy growth and the income per head of fishermen.</td>
</tr>
</tbody>
</table>

### Schema II.1: Participatory Planning Method

1. **Understanding of TOR/Proposal**
   - Analysis of Existing conditions: Socio-Eco & culture, Technooco, welfare & strategic policies (Secondary Data)

2. **Field Visits**
   - The First Draft of Fishermen Economic Development Management Systems in the South Coastal District of West Sumatra Indonesia
   - FGD Experts

3. **Draft Rev-1a**
   - FGD Experts
   - Field Visits-1
   - Field Visits-2
   - Workshop Stakeholders

4. **Draft Rev-1b**
   - Management System of Fishermen Economic Development Based on LBRI
   - Workshop Stakeholders

5. **Final Draft**
   - Final Draft
   - Assistance

6. **Institutionalization**
   - Institutional Supports & Regulations

7. **Fishermen Economic Development Management Systems in the South Coastal District of West Sumatra Indonesia**
   - Draft Rev-2a
   - Noisy for Rev-2a

Source: Adapted from SAR Method (Franco Maiorba and Stefano Brusoni, 2007)

ISBN: 978-605-64453-1-6
Fishermen as a skipper or “toke”, his business organization is not yet well structured and has not been legally established. The legal form of ownership is a proprietorship that is a business owned by one person. Although certain banks and other financial institutions dared to provide loans for them but are still limited in amount ranging from 50-200 million rupiah (Indonesian currency). Bank loan is usually used for buying or making a motor boat and for initial operating expenses. Fishermen Toke are still categorized as small scale entrepreneur because in average they only have a motor boat operated and employ 3-5 people fishing workers. Network marketing is merely filling the local market and the regional market. At the time of sailing, motor boat operated by 3-5 people fishing workers who will also act as the sailors. Everything required for sailing is prepared by Toke to need 10-15 days at sea such as ice stonelfish catches coolant, oil or premium or diesel for motor boats, including rice and side dishes needed during working in sea.

Fishermen as a fish catcher, fishermen in this class is the biggest in number. Most of them have their own equipment for fishing, tool used was like “a boat without a motor” or so-called “boat boards”, and there are some who have "boat with outboard motor". They often go for fishing alone and usually they cannot be too far into the sea because the boat used is very limited roaming capabilities and capacity (Table III.1).

Table III.1: Number, Type of Fishing Boats in Kab.Pesisir Selatan, 2008-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Boat without Motors</th>
<th>Boat with outboard Motors</th>
<th>Motor ship</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.001</td>
<td>431</td>
<td>492</td>
<td>1.924</td>
</tr>
<tr>
<td>2009</td>
<td>1.034</td>
<td>794</td>
<td>465</td>
<td>2.293</td>
</tr>
<tr>
<td>2010</td>
<td>1.056</td>
<td>663</td>
<td>485</td>
<td>2.204</td>
</tr>
<tr>
<td>2011</td>
<td>951</td>
<td>674</td>
<td>485</td>
<td>2.110</td>
</tr>
<tr>
<td>2012</td>
<td>487</td>
<td>1.576</td>
<td>526</td>
<td>2.58</td>
</tr>
<tr>
<td>Average</td>
<td>(16.48)</td>
<td>38.28</td>
<td>1.68</td>
<td>7.70</td>
</tr>
</tbody>
</table>

Source: PSDA DKP, 2011; Note: (...)= negative

Fishing to the Sea is normally to maintain their owned life from day to day, the fishing results not enough to make income to be set aside as savings supporting for their future family life. There are many among them who did not complete primary school education, and never received training and knowledge enhancement.

d). Fishermen as a collector or intermediate trader, even though they already have the capital but in the form of equity capital typically sourced from the family and in term of value is still relatively small. That's why purchasing power of intermediate trader is relatively small, they run alone their business and sometimes assisted by their wife or children, the amount of fishermen in this class is not many. They do not have a special place selling fish, even if there is, only one or two of them that have a separate place for storing their purchasing fishes. They usually buy directly into the catcher fishermen upon landing on the shoreline, then bring their purchasing results immediately to the local market by use two-wheeled motor vehicles. Almost of them are living within the fishing communities in coastal areas.

e). Fishermen as a worker or labor, this class of fishermen communities is the largest group in number and resides in coastal areas. They normally do not have alternative jobs except going to the sea for fishing; they just rely on their physical power or sell their services physically to obtain those limited rights and income. In general, they do not complete primary school. They were still relatively young in terms of age, averaging below 40 years. If no fishing season they are unemployed, to sustain their family life, they enforced to borrow money to their Toke or to the other relatives or families, this is mainly reason why they are often entangled in debts.
3.2. Factors Contributing to Fishermen Poverty
There are two factors are considered as the main cause of poverty in fishermen communities in South Coastal District of West Sumatra Province: socioeconomic factors and techno-economic factors (Fig. III.1):

3.2.1. Five Socioeconomic Problems Causing Fishermen Poverty

a). The existence of inequality in the sharing system: the differences in socioeconomic status of fishermen have consequences on the income difference between fishermen boat owner and laborer fishermen. Laborer fishermen tend to borrow money in advance to their Toke before fishing. These loans are used for families who stay at home during go to sea for catching fishes. After returning from the sea, the catching results are divided with Toke. The pattern of results was carried out by way of all fish catches after counting in Rupiah deducted operating costs, and the remainder divided in the ratio 2/3 for fishing workers (Ship's Men-Crew or Anak Buah Kapal-ABK and Captain Ship-CS) and the 1/3 for the ship owner or Toke. However, if the catch is not sufficient to cover the costs that have been incurred including loan of ABK and CS, therefore the shortages are calculated as the credit or debt of ABK and CS to Ship Owner. In this case there is an injustice indication due to the risks of efforts are only charged to ABK and CS.

b). Inadequate income: the barriers faced by traditional fishermen catcher is limited working capital, lack of facilities and infrastructure. The production equipment is still very simple: low technology and low caught capacity, less productive. Consequently, the amount of fishes catching is not maximal. Revenue received for the time to go fishing is also still very low ranging between Rp.25.000-50.000, -. Most fishermen in this class admitted that the income earned from the sea only enough to meet their minimum daily life requirement. Weather conditions become a major problem for fishermen who use a traditional fishing boat. They cannot go to sea if the weather is bad, an average of 5 days in a month and even up to 15 days due to poor weather conditions (large waves, heavy water, high winds, or storms, etc.). This such as condition makes them in difficulties to regulate regularly both their family cash flows and daily expenditures.

c). Limited capital and access to capital sources: this condition make them in difficulty to have a fishing boat and fishing gear better and more productive which are be able to sail away to the middle of the sea. To buy the modern fishing boats (motor-boats or motor-ships), require a relatively large capital. In general, catcher fishermen still use traditional rowboat, it is certainly does have limitations to engage in fishing operations, and is different from the fishermen who use a motor boat, it is definitely catching operating range can be up to a sea area that is far from the shoreline. Working capital constraints are caused by difficulty getting access to capital source from banks. In addition, traditional catcher fishermen also did not have sufficient collateral if they borrow from bank.

d). Lack of appropriate training model and guidance: the training and guidance program conducted by the local government, in fact, have not been evenly distributed well to each group of fishermen as well as fishermen as an individu. It is often occurred that the training and guidance programs are given in the area where groups of fishermen have advanced in experience of fishing activities, while in the areas that do not have yet the certain business group, SMEs, or Cooperative, etc, did not get the training and guidance. Moreover, it is found that the training models and technical guidance provided are not relevant to the needs and the fishermen’s requirements, instead often overlap occurred because the programs were done separately by some governmental bodies at the same time and with different objectives without linkages with each other. The shortage of local government’s budget is also the main constraints in conducting the program of training and guidance done by local governments.

e). Assistance unevenly, less targeted and limited: a variety of assistance ever awarded by both central
and local governments are still very limited, uneven and some times beyond the necessary target. For example, fishermen who often get help is a group of fishermen who own boats. While the highest number of fishermen is the fishing communities that only have nets and canoes as fishing gear, this group rarely received support or assistance from the government. It becomes more worse because a lot of aids disbursed less relevant to the needs and expectation of fishermen, there are several means of support that have been given already, but it never been used by fishermen because that fishing ships were too expensive for them beside very highly operational costs, and then becoming useless or wasted.

3.2.2. Six Techno economic Problems Causing Fishermen Poverty

a). There is no local governmental regulation and policy which encourage the local government to set coastal region in Kab. Pesisir Selatan as a fishermen’s special strategic zone (FSSZ) for piloting the development of fishermen economy. The local government is still reluctant to undertake groundbreaking policy programs. local policy makers (LPM) are not ready to confront the risks though that is urgently needed by the fishermen community.

b). There are no logistic intruments and accommodation facilities for “business and industrial incubator” that base on local economic resources development (LERD). The lack of innovative spirit and creativity of the individual fishermen because of unavailability institutions that act as stimulators, dynamisator and innovator for fishing communities in the region.

d). The lack of product development technology transfer activities to SMEs due to less dynamic communication between local government institutions with universities and other research institutions in the region. This had caused the difficulties for fishing businessman to enter to the technological product market and international market.

e). There are no aquaculture development of marine fishery products due to unavailability of institutional service centers, training, coaching and mentoring that work more focused to the problems of fishermen and conducted in sustainable manner.

f). There is no alternative financing sources of non-bank due to lack of policy breakthrough from local authority to initiate for establishment of local venture capital company (LVCC).

3.3. Factors Supporting The Economic Development of Fishermen in Coastal Areas Kab. Pesisir Selatan

3.3.1. Four Socio-Cultural Factors as “Social capital”

a). Culture of cooperativeness or “kegotoroyongan”, the presence of a fairly strong familial culture, visible from social interaction in everyday life, for example when they do not go to sea, they usually gather at the stalls around the beach while drinking coffee and playing chess or dominoes, joking and kidding, here there is a close relationship emotional full friendship. Similarly, when there is a boat of their comrades who had just returned from the sea and docked edge of the beach, without being asked to help, other fishermen who were there took the initiative to help the fishermen to pull the boat to the mainland, and so on. Thus, the culture of “kegotoroyongan” is a form of “social capital” which is indispensable in establishing solid working groups and joint venture enterprises.

b). The tolerant relationship between “patron and client”, the relationship between fishing worker or fishermen wage earners with catcher vessel owner or capital owner is not based on a formal employment contract, but rather a relationship based on mutual trust by a sense of family. The existence ship-owners skippers is very helpful at all for the fishermen because the skipper did not require the fishing worker to get fish as much as possible, and if the results of fishing do not produce the catch at sea because it is caused by the occurrence of something unexpected disaster therefore there is no obligation for fishermen whose task is to return the money that had been given to him by the skipper. This high tolerance is a factor of force or “social capital” when required to develop new business.

c). Ethnicity of Minangkabau, is a group of people in Indonesia who originally come from West Sumatra.

---

Table III.2: Production and Value of Fresh Fish in Coastal Areas of Kab. Pesisir Selatan (2000-2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Ton)</th>
<th>Value (Rp Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>25,550,89</td>
<td>255,508,90</td>
</tr>
<tr>
<td>2009</td>
<td>25,575,21</td>
<td>281,327,31</td>
</tr>
<tr>
<td>2010</td>
<td>29,548,70</td>
<td>450,028,60</td>
</tr>
<tr>
<td>2011</td>
<td>29,967,50</td>
<td>460,619,90</td>
</tr>
<tr>
<td>2012</td>
<td>31,507,42</td>
<td>579,135,37</td>
</tr>
<tr>
<td>Average Growth (%)</td>
<td>4,53</td>
<td>16,47</td>
</tr>
</tbody>
</table>

Source: PSDA DKP, 2012

Table III.3: Estimation of Production and Value of Fresh Fish in Coastal Area of Kab. Pesisir Selatan, 2012-2020

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Production (Ton)</th>
<th>Value (Rp Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>31,507,420</td>
<td>570,135,37</td>
</tr>
<tr>
<td>2013</td>
<td>33,952,084</td>
<td>626,942,228</td>
</tr>
<tr>
<td>2014</td>
<td>35,382,619</td>
<td>687,796,781</td>
</tr>
<tr>
<td>2015</td>
<td>36,813,154</td>
<td>748,651,334</td>
</tr>
<tr>
<td>2016</td>
<td>38,243,689</td>
<td>809,505,887</td>
</tr>
<tr>
<td>2017</td>
<td>39,674,224</td>
<td>870,360,440</td>
</tr>
<tr>
<td>2018</td>
<td>41,104,749</td>
<td>931,214,993</td>
</tr>
<tr>
<td>2019</td>
<td>42,355,294</td>
<td>992,069,546</td>
</tr>
<tr>
<td>2020</td>
<td>43,956,829</td>
<td>1,052,924,099</td>
</tr>
</tbody>
</table>

Source: PSDA DKP, 2012
Province and often called “minang people” or “orang minang”. They are well known as the persons who like to work in the business fields, custom to wander all over the country to do trading activities. Everywhere can be found in the Indonesian archipelago minang people working as a trader and as well known as actor’s vendors. Wander culture and trade is the power base in order to enter the world of industrialization and trade. The nomads can be used as a compact partner in developing a marketing networks because among minang people existed emotional relationship or emotional connection. This such as customs is very valuable social capital.

d). The traditional community (Kaum Adat) and Muslim Scholars or Muslim Leader (Kaum Ulama), in West Sumatra or Minangkabau community, Kaum Adat and Kaum Ulama (Islamic and Muslim scholars) have the simulative and determinative roles for the progress of the region development and its people social welfare. Kaum Adat is organized by the Institute of Adat Minangkabau (LKAAM), while Muslim Scholars are gathered in the Institute of Islamic scholars or Majlis Ulama Indonesia (MUI) of West Sumatra. These institutions have a vision of anti-poverty; therefore, it continues to give attention to poverty alleviation. Some programs and funding assistance to micro-enterprises have been realized, including assistance to fishermen, for example, the purchase of a motor boat with financial support from institutions Bazda (Regional Zakat Agency). Similarly, in context of customs or Adat, the leader of clan or “ninik mamak” feel embarrassed if it turns out there is among the members of his clan are in poor condition. Instead, they try to help to find a better solution.

3.3.2. Production and Technology

The fish resource potential when grouped by type consists of pelagic fish 34,000 tons/yr and demersal 60 435 tons / yr. The entire potential of the fish resources are utilized around 31,507,420 tons/yr or 31.26% /yr of potential sustainable (annually report of DKP 2012). Potential aquaculture fish is still very large in Kab.Pesisir Selatan where the land area for marine culture ± 603.7 Ha. Table III.2 shows that the average growth in the value of production of fresh fish (16.47%) is much greater than the growth in the average number of production (4.53%), this indicates that the price of fish tends to increase. Table III.1 shows that the number of fishing without a motor boat goes down (-16.48%) while the number of fishermen who have Boat with outboard Motors and Motor ship increased (+38.28% and +1.68%), this means that over the period 2008-2012 have increased technological equipment of catching fishes. Or say that the potential for an increase in the income of fishermen are still quite large if the capture system and capture technological equipment going to be improved (Table III.3).

3.3.3. Marketing and Distribution Network

The level of per capita fish consumption in Indonesian domestic market tends to increase by an average of 16.27% per year. In ASEAN and China also shows the significant figures of consumption, except for Brunei and Thailand (Table III.4). All of this suggests that there are big potential of the fish market in domestic and international market. Therefore, it is necessary to increase the benefit of fishes sold. When the catch or aquaculture products are not sold in raw form, it must be processed first in order to have “end products” that are more competitive and more profitable if sold in the international market.

3.3.4. Source of Funding

Non-Bank Financial Institutions and Banks in Indonesia are likely to continue to grow and evolve; in almost all regions in Indonesia, we can find easily banking financial institutions. Government policies are also flush with the various loan schemes provided either directly by the ministry, local government or through state-owned companies and enterprises. The national budget for investment as well as regional budgets continues to be augmented so that the portion of the real sector development can be accelerated and propagated. Meanwhile, the sources of financing of third parties for business development are opened the door wide including the foreign sources, grant funds and assistance such as: CSR, local government revolving funds.
credit facilities for micro enterprises (KUR), financial source from Muslim’s Zakat (Bazda), a general grant allocation (DAU or Dana Alokasi Umum), a special allocation grant channel (DAK, or Dana Alokasi Khusus) etc.. There are deconcentration fund from the Ministry of Maritime Affairs and Fisheries (MMAF) which every year is always there. These facts indicate that there are sufficient sources of financing available to viable businesses.

3.3.5. Local Governance and Regional Parliaments

Local governance system, including the Regional People’s Representative Council (DPRD) or Regional Parliaments will be more and more professional. This is reflected by priority programs of development in West Sumatra Province which put the issues of solving the problems of lower income group as a very important program (Government Prov.Sumbar article No. 5 of 2011). Enhance the role of local government institutions and parliaments in the area of economic regulation is a major force to be able to make a breakthrough policies for the economic improvement of fishing communities. With the opening of Regional Autonomy (OTDA), supported by the political democratization in economic development, therefore the local government increasingly required to be more proactive in development-oriented “pro-poor” and resolve the problems of the people at the bottom, including the problems of fishermen (Fig III.1).

IV. POLICY IMPLICATIONS

In order to accelerate economic development of fishermen community in Kab.Pesisir Selatan, required 2 (two) policies breakthrough, which are interrelated and integrated with each other i.e: institutional transformation or institutional innovation and structural transformation or structural innovation:

4.1. Institutional Transformation

The problems of fishermen are not because of individual characters that are used to work with traditional patterns but also due to weak institutional support system. In fact, no one civilized society would function more productively and effectively without productive and effective governance system, supported by appropriate institutional and operational management. Four kinds of Institutional transformation policies or Institutional innovation should be prepared in order to improve the quality of fishermen economy.

a). Establishment of District Coastal Region of Kab. Pesisir Selatan West Sumatra as a Fishermen’s Special Strategic Zone (FSSZ)

A fishermen special strategic zone aims to concentrate efficiently all action programs of fishermen economic development. FSSZ takes place in one region will facilitate governmental services and supports in implementation of professional management system mainly in production and marketing activities, including in monitoring and evaluation functions. Many successful examples such as that carried out by the Niigata Prefecture-Japan as well as by some Provincial Government in China. Therefore, the coastal areas along the coast in Kab.Pesisir Selatan must be legally established as a FSSZ or “Kawasan Andalan Strategis Nelayan” shorted by “KASN” and managed by a Professional Board of Directors (BOD). This KASN should be organized by a company that has its legal form of ownership “a corporation” or Perusahaan Terbatas (PT or Ltd), it is “a business formed and owned by a group of people, called stockholders, given special rights, privileges, and limited liabilities by law”. By using, a corporation will make efficiency in managing of FSSZ because easier to organize cross-sectorial policies and strategies of development included action programs for objective to accelerate the development of fishermen economic communities. FSSZ managed by PT are also more efficient and productive in integrating between the downstream sector activities and upstream so that fishermen will be able selling end fish products that are more expensive as well as more margins and not any more selling raw fishes that less benefits.

b). The Formation Management Company FSSZ

Marine fisheries sector can essentially be used as a sector that contributes significantly to the economy of fishing families and “local government own-source revenues” or “Pendapatan Asli Daerah” (PAD). Fishing
communities in the reality today still only as a "cost center" for state and local budgets or APBN and APBD, however it can take the role as an "income center" for PAD if managed professionally. Essential problem lies in the lack of a strong policy that truly are "over-all" in managing professionally natural resources coastal areas or coastal zones. Therefore, the establishment of FSSZ must be followed by the formation a management company in form of a firm or company that has the main task and function to manage FSSZ. Since FSSZ is under authority and responsibility of local government, therefore, the right legal form is a corporation that executed by a board of directors (BOD) as a governing body FSSZ. BOD consists of professional persons who have his or her own specific knowledge and skill related to requirement. Legal entity operating company may be as either a Public Service Agency (BLU) or Limited Company (PT). This company is an integral part of FSSZ and should be in function as a “holding company” with its primary mission is to create highly competitiveness of marine products and develop social welfare of fishermen who particularly live and stay in the coastal areas of Kab. Pesiris Selatan.

c). Establishment of Special Training and Guidance Center (STGC) as an Engine of Fishermen Human Resource Development in FSSZ

Economic life of coastal communities is weak, far behind their neighbors who live in the cities. If this is allowed to happen will destabilize national security and unity of the Republic of Indonesia. Marine resources are so abundant but are not yet fully utilized by the nation itself. This is reflected in not a few cases every year Indonesian marine property theft by other nations. Therefore, we need to accelerate the process of transformation from the traditional mindset to mindset of agribusiness and agro industry development orientation. For that purpose, it is indispensable STGC or “Pusat Pelatihan dan Pengembangan, Pembinaan Terpadu Nelayan (P3TN)” as a strategic instrument that is more focused on the mission to change the "mindset" of fishing communities mainly from traditional orientation to industrial orientation, from less innovative to more innovative persons, from less productive to more productive persons.

d). Establishment of Local Venture Capital Company (LVCC)

Although the number of financial source non-banks began to increase in Indonesia such as PNM, leasing companies, mortgages, Insurances, etc. The banking institution is a source of business financing that has been widely known by the public. The Banks impose the interest rate basis to debtors, and the amount of loans or credits offered is limited that depends on value of collateral and worthless of the project funded. Such conditions often make it difficult for small and medium businesses that are potential but weak in terms of human resources and startup capital if the borrow money from Bank. It would be unfair if the economic financing system governed solely by market forces or market mechanism. The venture capital company (VCC) is a financial enterprise that is very relevant to help entrepreneurs in conditions of relatively weak human resources and less startup capital while the business conducted involving high potential resources and has the significant expected market. The main mission of “Venture Capital Company" or VCC is to invest in form of equity participation. The concept of VCC is quite different from banking institutions and other financial institutions, it runs the business on the basis of “risk sharing” but things like that cannot be found in the other financial sources and in conventional banks. In order to make the risk of investment is smallest as possible, therefore, VCC must take share in management of its investee companies, and it has to provide services for mentoring and for consultation. The different between VCC and other financial institutions presented in Table IV.1.
4.2. Structural Transformation

The main problems of individual fishermen are in term of “way of thinking” (his or her mindset). There are three kinds of strategy in order to improve the quality way of thinking for fishermen community who live in the coastal zone Kab.Pesisir Selatan, West Sumatra:

a). Transforming Fishermen’s Mindset or “Way of Thinking” to industrial orientation

The main issue of fishermen’s mindset is associated with thought patterns and habits in daily life that are still in economic subsistence and traditional way of thingking. It means that they are not yet able to work in “thought patterns of industrial orientation”. They are still weak in terms of ability, expertise, and skills in the field of industry and business, particularly in agroindustry and agribusiness. Therefore, it requires the program policies to change the “mindset” in order to stimulate fishermen for becoming the one who is able to work in the manner of industrialization or industrial way of thinking. Industrialization is not always associated with the connotation of advanced technology, simpler understanding is “Industrialization is a process to transform the input factors to the output factor so that it will have high added value either in term of intermediary products or end products and accepted by the market”. Only by industrial process any fish produced can be increased its added value as much as possible. Thus an industrialist is the one who likes to be because of his talent, diligently try and do the transformation or processing activities. It could also be an industrialist born as the result of a process of experience, education, training, coaching, guidance and mentoring which are conducted regularly, systematically and sustainable by certain professional institutions.

b). Transforming Traditional Production to Agroindustry and agribusiness.

Table IV.1: Matrix Relationships Between Policies and Strategic Programs

<table>
<thead>
<tr>
<th>Policy Programs</th>
<th>POLICY INNOVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intitutional Transformation</td>
</tr>
<tr>
<td>1</td>
<td>To establish and build Coastal Areas of Kab. Pesisir Selatan as a Fishermen’s Special Strategic Zone (FSSZ) for piloting the development of fishermen economy.</td>
</tr>
<tr>
<td>2</td>
<td>To create a single business organizer (SBO) which has its legal entity as a corporation, managed by a Board of Directors (BOD), can be in form of “state owned company” (SOC) with its function is to manage the pilot project of fishermen economic development in the coastal areas or in FSSZ of Kab.Pesisir Selatan, West Sumatra Indonesia</td>
</tr>
<tr>
<td>3</td>
<td>To create a local venture capital company (LVCC) as a non banker financing support or as an alternative source of financing, mainly for objective to speed up the acceleration of fisherman economy or business development in the coastal areas of Kab.Pesisir Selatan.</td>
</tr>
<tr>
<td>1</td>
<td>To transform fisherman’s mindset or “way of thinking” to industrial orientation</td>
</tr>
<tr>
<td>2</td>
<td>To transform traditional production patterns to patterns of agro-industry and agribusiness-style production.</td>
</tr>
<tr>
<td>3</td>
<td>To transform traditional business organization patterns to patterns of SMEs/Cooperatives/Business Groups which have its clear legal entity.</td>
</tr>
</tbody>
</table>

Production skill of fishermen can be considered still tradisional, less added values as well as less benafit gotten. They were not used to work in manner of professional manajemen system by using advanced technological products and information technological system. That why they still produce mostly in form raw fish that is low added value, even if there is processing only to the extent of the quarter finished goods. Conditions of the production process is also not so clean because it is done in a less sterile environment and moreover they do not give much attention to the quality control of their products. When they have “over fishing”, particularly in a very good catching season, the price of fishes cathed dropped drastically and
detrimental to fishermen. Therefore, it is time to improve and develop fishermen skills and their technical know-how in order to change patterns of production that solely produce raw materials (raw fish) to the production patterns that produce processed products of high added value. The way to do so is by introducing the pattern of production in the style of agro-industry and agribusiness.

c). Selecting The Suitable Legal Form of Fishermen Owned Business

The results of in-depth interviews done in the mid of 2012 have found that fishing communities in the coastal areas of coastal district Kab.Pesisir Selatan proven to have exceedingly willingness to advance their business activities.

<table>
<thead>
<tr>
<th>Table IV.2: Matrix Relationships Between the Functions or Tasks of Institutions with Strategic Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions Strategic Programs</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

Notes: 1=Education; 2=Training; 3=Creation & Development; 4=Mentoring; 5=Investment; 6=Syndications & Coordination; 7=Stimulation & Expansion; 8=Transfer Technology; 9=Financing; 10=Network Development; 11=Business & Strategic Management; V=Functions or Tasks; STGC=Special Training and Guidance Centers; LVCC=Local Venture Capital Company; SBO-FSSZ=Special Business Organizer of Fishermen’s Special Strategic Zone that managed by a Board of Directors.

The problem are, the condition of existing business organization owned, can not support if they are going to enlarge their own businesses to a professional manner because fishermen community dominated by the activities of individuals, not organized in the form of a formal business organization. This condition makes
them in difficulties to obtain financing sources from formal financial institutions such as Banks, VCC, Government Grants, etc. On the other hand also makes it difficult to get sufficient aids and grants from government (central and local). Therefore, traditional fishermen have to be facilitated in order to construct their fishing activities in form of business organization that has a clear its legality. Thus it is very important to select the suitable legal form of business organization for fishermen individually and in groups. There are mainly three kinds of legal form such as partnerships (a voluntary association of two or more persons to carry on as co-owners a business for profit, it can be in form of CV or Fa); corporations (a business formed and owned by a group of people, called stockholders, given special rights, privileges, and limited liabilities by law, it can be in form of PT) and proprietorships (a business that is owned by one person). However, in case of micro enterprises and cooperatives, including fishermen’s business groups (kelompok usaha bersama), is enough only holding a business license (surat izin usaha) from local government.

4.3. Matrix Relationships and Scheme of Policy Implications

The linkages between policies and programs can be simplified by using “linkage matrix” and “scheme” as illustrated in Table IV.1, Table IV.2 and Scheme IV.1.

V. CONCLUSION AND RECOMMENDATION

5.1. Conclusion

a) The study found that the conditions of daily life of fishermen in the coastal areas South Coastal District (Kab.Pesisir Selatan) of West Sumatra Indonesia is very sad indeed. It is very unreasonable because marine resources are available and extremely abundant.

b) The study also found that marine resources in the coastal areas was more widely exploited by outsiders, especially those coming from neighboring countries, illegal fishing was still a lot going on with the use of fishing gears that are more modern than the used by local people or local fishing communities in Kab.Pesisir Selatan.

c) Local government policy intervention is very important and urgently needed. However studies have found that Indonesian governments (at district level as well as at provincial level, including at national level) have not yet clear, concrete and containing policy programs in order to resolve the fishermen’s problems firmly and thoroughly in this coastal areas of Kab.Pesisir Selatan, West Sumatera. Therefore, it is very necessary policies that can encourage and facilitate co-operation among local governmental bodies and co-operation with third parties or private companies.

d) By using the descriptive methods analysis and the participatory planning approaches. The results of research indicated that local government must be courageous to create a policy breakthrough in order to improve the economic condition of fishing communities in coastal areas Kab.Pesisir Selatan. For this purpose, there are two kinds of policy breakthrough, i.e: the Institutional Transformation Policy (ITP) and the Structural Transformation Policy (STP), both must be applied and implemented at the same time in parallel and integrated with each other.

e) ITP consists of four strategic programs: (1) to establish and build Coastal Areas of Kab. Pesisir Selatan as a Fishermen’s Special Strategic Zone (FSSZ) for piloting the development of fishermen economy; (2) To create a single business organizer (SBO) which has its legal entity as a corporation, managed by a Board of Directors (BOD), can be in form of “state owned company” (SOC) with its function is to manage the pilot project of fishermen economic development in the coastal areas or in FSSZ of Kab.Pesisir Selatan, West Sumatra Indonesia; (3) To establish a specific training and guidance center (STGC) as an strategic instrument of FSSZ in order to empower and to improve quality of fishermen’s human resources; (4) To create a local venture capital company (LVCC) as a non bank financing support or as an alternative source of financing, mainly for objective to speed up the acceleration of fishermen economy or business development in the coastal areas of Kab.Pesisir Selatan.

f) STP consists of 3 strategic programs: (1) To transform fishermen’s mindset or “way of thinking” to industrial orientation; (2) To Transform traditional production patterns to patterns of agro-industry and agribusiness-style production; (3) To transform traditional business organization patterns to patterns of SMEs/Cooperatives/Business Groups which have its clear legal entity.
5.2. Recommendation

This study is not yet complete because the research results did not yet reach at composing a business action plan. The research study did evaluation, exploration of information and concepts, assessment policies and strategies breakthrough in order to resolve the existing problems of fishermen in coastal areas. For further research is still required much sharper and detailed so that business actions plan can be developed for each of policy and strategic programs that are proposed by the results of this research.

REFERENCES


LaporanTahunan DKP Sumatera Barat (2010-2013)


RITTS (2000), Final Report, Regional Innovation and Technology Transfer Strategies, Published by Rhineland-Palatine (1-35).


