

# The Analysis of Small and Medium Industries (SMIS) of Fishery Products Processing

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**Abstract.** Small and Medium Industries (SMIs) represent economy activator that being based on local wisdom which manage natural and human resource. The city of Probolinggo as one of the cities in East Java province has marine and fishery potential is extraordinary. This study aims to improve knowledge, and understanding related to the position and segmentation of SMIs processing of fishery products. The research also seeks to provide knowledge of the concept of good and mutually beneficial partnerships, providing knowledge of partnership patterns with large industries. The results showed that partnerships conducted by SMIs with large industry include several aspects, namely economic aspects, socio-cultural aspects, aspects of technology, and management aspects. The perpetrators of SMIs processing of fishery products are expected to develop themselves through partnerships with large businesses following the core plasma partnership pattern. This is because the core plasma partnership pattern resulted in big business and SMIs growing and developing together. The study also found that in exploring partnerships with large businesses networking is needed with stakeholders from both upstream and downstream sides.

**Keywords:** Small and medium industries (SMIs); Partnerships; Processing of Fishery Products

## 1 Introduction

Academician and policy makers apply SMIs definitions in terms of dichotomy between universality and standardization of a unique definition and relativity and sectorized specialization. Although there was a variance of definitions of SMIs in some countries, found that around a third of the countries covered define Micro, Small, and Medium Industries (MSMIs) as having up to 250 employees [2,3].

Department of Industry and Commerce in Master Plan of Small Medium Industry Development (RIPIKM, 2002-2004), defines a small industry as an economic activity undertaken by an individual or a household or an agency. Small industry aims to produce commercially traded goods and services, which have a net worth value of at most 200 million rupiah and have annual sales of less than or equal to 1 billion rupiah. While medium industries are economic activities undertaken by individuals or entities, aiming to produce goods or services for commercial trading that have annual sales value greater than 1 billion rupiahs but less than 50 billion rupiahs.

Small and medium industries (SMIs), is driving the national economy based on local wisdom that manages the local natural resources and the local human resources. In its development, Trade Ministry of Indonesia encourages the SMIs to utilize e-commerce to market their products [1]. Small and Medium Industries (SMIs) are grown in developing countries in particular, and can solve the local of the unemployment problem. Indeed, the research of World Bank (2011) showed that aftermath of the global financial crisis 2008-2009, SMIs have the important role in job creation and economic growth. Therefore, to increase the role of SMIs and in efforts to develop SMIs, the special strategies are needed with regard to competitive advantage and human advantage. This strategy is required even though SMIs in Indonesia are generally managed quite simply. However, the SMIs have specific strengths and weaknesses that may require special policy responses [5,8].

The city of Probolinggo is one of the cities in East Java Province that has the extraordinary potential of marine and fishery. The Small and medium industries (SMIs) in the fishery sub-sector is active in empowering the natural resources and human resources in Probolinggo area in particular. In general, the fishery products sold in the form of fresh fish with a very small added value. The lack of the use of the appropriate technology in the form of adequate cooling equipment causes the sale of fresh fish is limited by the period. Therefore, the groups of SMIs of fishery product processing that can optimize the value added of fishery products were still needed.

Small and Medium Industries (SMIs) processing of fishery products in Probolinggo in particular encountered by many obstacles in the form of limited knowledge, capital, and technology so that the SMIs entrepreneurs need to synergize with a macro business as its partner. Therefore, an analysis is required in the effort of the development of SMIs of fishery processing of Probolinggo City.

So, this research seeks to identify the position and segmentation of SMIs processing of fishery products in Probolinggo city, and to identify the concept of good partnership and mutual benefit, and the pattern of partnership with the macro business.

## **2 Research Method**

In an effort to identify in answering the research question, this research uses the stepwise method in taking primary data. As preliminary research, a presentation was made directly to SMIs of Fishery Product Processing in Probolinggo City. The model of presentation is more effective and easier to understand for the trainees. This is necessary because the trainees can directly ask to the trainer about the concepts of SMIs that described. The next method is simulation or practice by the SMIs entrepreneurs.

The simulation and practice model are done by giving the financial report data to SMIs of Fishery Product Processing in Probolinggo. The trainee was given an understanding about the partnership pattern. In the simulation, the trainees are directly involved in these activities. These activities were held at the Marine and Fisheries Office, Probolinggo City, on 10th November 2016 at 09.00a.m up to it finished.

## **3 Results and Analysis**

From the research, known that the development of coastal areas of Probolinggo more supported by means of transportation both the land and the sea. In general, people in the coastal

area of Probolinggo City, have livelihoods as fishermen, fish cultivators in ponds, and work in fish processing sector.

Furthermore, in the recent period, the level of community life of the coastal of Probolinggo City had grown. It means that the fisheries and marine sector is one of the leading commodities of Probolinggo City in particular. The Government of Probolinggo City is also trying to optimize the sector of fisheries that is through "fishery ponds", then The Government of Probolinggo began to move in the development of fishery sub-sector. An overview of the performance of the Marine and Fisheries sector in Probolinggo City can be identified based on the performance indicators as follows.

**Table 1.** The Performance Indicator of Marine and Fishery

No	Indicator	2014	2015
1	Fishery catch production (ton)	15.997,331	15.031,334
2	Fishery catch production value (Rp)	319.108.079.140	352.540.479.328
3	Fishery ponds production (ton)	492,04	447,383
4	Fishery ponds production value (Rp)	6.671.020.600	7.621.391.040
5	Fish consumption level (kg/capita/year)	31,54	41,041
6	Fishermen group conducting scope	38	39

Source: Marine and Fishery Services, 2015

Fish consumption in 2015 is increasing from the condition of 2014. It indicates that activity of fish consumption promotion and socialization had obtained positive result. Besides, Government of Probolinggo also tried to optimize the fishery of brackish water through fishery of pool and fishpond. It was still needed the active role by various stakeholders to support development program fishery sector in which has big potency. The definition of Small Middle Industries (SMIs) is very immeasurable in Indonesia.

It is because of many institutions using the different concept in defining SMIs. But all definitions indicate that SMIs represent national industry requiring development, one of them by partnership. Fishery potency in Probolinggo shows amazing result as presented in following table.

**Table 2.** The Production of The Sea Fishery According to The Type of Fish in Probolinggo City, 2015

	Name of Fish	Volume (Ton)	Value (000 Rp)
1	<i>Sebelah/Mata Miring</i>	53.72	1,450,342.83
2	<i>Lidah/Lejile</i>	0.00	0.00
3	<i>Nomei</i>	0.00	0.00
4	<i>Peperek/Perek</i>	522.06	1,827,203.46
5	<i>Manyung/Manyong</i>	7.83	93,957.12
6	<i>Beloso/Bloso/Jenggelek</i>	255.29	1,787,028.81
7	<i>Bijinangka/Jengguk2/Kuniran</i>	74.21	593,657.92
8	<i>Gerot-Gerot</i>	0.00	0.00
9	<i>Merah/Bambangan</i>	2045.07	92,028,344.67
10	<i>Kerapu/Karang</i>	656.75	44,659,189.45
11	<i>Lencam</i>	216.00	2,159,960.70
12	<i>Kakap/Kantuan/Munuk/Sawo/Seto/Telo</i>	105.26	2,947,335.16
13	<i>Kurisi/Krisi/Angjoli</i>	1715.95	51,478,520.55
14	<i>Swanggi/Mangla/Mata Lebar</i>	389.45	3,505,018.39

15	<i>Ekor Kuning</i>	6.06	109,044.00
16	<i>Gulamah/Glomo/Gulama</i>	187.87	1,502,961.98
17	<i>Cucut</i>	0.00	0.00
18	<i>Pari/Pare</i>	73.76	885,055.27
19	<i>Bawal Hitam/Bawal</i>	72.92	1,822,893.95
20	<i>Bawal Putih/Dorang</i>	29.22	730,416.88
21	<i>Alu-Alu/Kacang/Kocol2</i>	36.97	369,704.70
22	<i>Layang/Cokelatan/Benggol</i>	861.98	6,895,814.96
23	<i>Selar/Petak Selar</i>	4.72	80,234.56
24	<i>Kuwe/Putihan/Angkue</i>	503.52	11,077,526.82
25	<i>Tengtekek</i>	0.00	0.00
26	<i>Daun Bambu/Talang</i>	53.15	372,026.82
27	<i>Sunglir</i>	0.00	0.00
28	<i>Terbang</i>	0.00	0.00
29	<i>Belanak</i>	16.07	128,545.73
30	<i>Kuro/Senangi</i>	217.41	8,696,481.96
31	<i>Julung-Julung</i>	0.00	0.00
32	<i>Teri</i>	27.20	664,889.18
33	<i>Japuh</i>	0.00	0.00
34	<i>Tembang</i>	0.00	0.00
35	<i>Lemuru/Caek/Sisik/Teros</i>	372.28	1,978,275.12
36	<i>Golok-Golok</i>	51.13	511,304.20
37	<i>Terubuk</i>	0.00	0.00
38	<i>Kembung/Medai</i>	38.49	538,840.96
39	<i>Tengiri Papan</i>	0.00	0.00
40	<i>Tengiri</i>	628.79	25,151,488.08
41	<i>Layur</i>	66.75	867,711.00
42	<i>Tuna</i>	28.36	935,748.00
43	<i>Cakalang/Tongkol</i>	163.72	2,784,125.11
44	<i>Layaran</i>	0.00	0.00
45	<i>Suro</i>	487.02	4,383,189.00
46	<i>Kerong-Kerong</i>	11.90	107,104.41
47	<i>Sembilang</i>	0.00	0.00
48	<i>Cendro</i>	0.00	0.00
49	<i>Beronang/Musader</i>	0.00	0.00
50	<i>Kapas-Kapas/Kapasan</i>	51.59	722,322.16
51	<i>Kulit Pasir</i>	0.00	0.00
52	<i>Buntak/Buntal</i>	56.66	396,644.22
53	<i>Cunang</i>	0.00	0.00
54	<i>Rajungan</i>	12.49	499,700.00
55	<i>Kepiting</i>	5.56	222,217.20
56	<i>Udang Barong</i>	0.00	0.00
57	<i>Udang Windhu</i>	0.00	0.00
58	<i>Udang Putih</i>	2.15	85,960.00
59	<i>Udang Dogol</i>	0.00	0.00
60	<i>Udang Rebon</i>	0.46	10,511.00
61	<i>Udang Lainnya</i>	0.00	0.00
62	<i>Tiram</i>	28.79	86,364.00

63	<i>Simping</i>	0.00	0.00
64	<i>Remis</i>	0.00	0.00
65	<i>Kerang Darah</i>	3.31	23,180.50
66	<i>Kerang Hijau</i>	0.67	4,014.00
67	<i>Cumi Cumi</i>	102.70	4,591,642.40
74	Others	4778.00	71,669,224.13
Total		15023.26	351,435,721.36

Source: BPS, 2016

The management of fishery as abundance natural resources in Probolinggo requires the treatment from available human resources that involve into Fishery Product Processing. Therefore, fishery SMIs need partnership with big and steady industry to be more developed. Partnership is an effort entangling various sector, society group, government agency and also non-government, to work along in reaching a target of with pursuant to agreement of each role and principle. Thereby to develop strong partnership, each party has to fulfill some conditions that are attention, trust, and respecting each other trusting, realizing the importance of partner, agreement of mission, vision, target, value/principles, at the same basis, and readiness to sacrifice.

The essential of partnership is recognized with mutual assistance, term or cooperation from various parties, either through individually and in the group. Partnership is a formal cooperation in the same job/activity between individuals, organizations or groups to reach specific target. Partnership elements are: existence of cooperation, existence of equality, existence of transparency, existence of mutual benefit [4].

From the survey, it is known that the purpose of partnerships implemented to IKM processing fisheries Probolinggo City includes several aspects:

a. The purpose of the Economic Aspect

In the ideal conditions, the objectives to be achieved in the implementation of partnership more concretely is to increase the appropriation of small-scale enterprises and communities, and increase the acquisition of added value for partners. The purpose of the economic aspect recognizes three types of efficiency. First, the technical efficiency is the most effective way in the use of a scarce resource (labor, raw materials, machinery and so on) or a number of sources in a particular job.

Secondly, static efficiency includes technical efficiency that reflects the allocation of existing resources in a given time series, in other words, economic efficiency is obtained when there is no possibility of reallocation of other sources that can increase the output of other products. Third, the dynamic efficiency, on the other hand, links economic growth to an increase in sources that should lead to this growth. Therefore, even though two economies may have increased capital and labor stocks by the same percentage, the national growth rate in both cases may be very different. Further research is needed to identify it.

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other hand, links economic growth to an increase in sources that should lead to this growth. So even though two economies may have increased capital and labor stocks by the same percentage, the national growth rate in both cases may be very different. Further research is needed to identify it.

b. The Purpose of Social and Cultural Aspects

Business partnerships are designed as the part of efforts to empower small businesses. Large entrepreneurs act as a factor of accelerating the empowerment of small businesses according to their ability and competence in supporting their business partners towards business independence. The business partnerships that undertaken by large entrepreneurs who have been established with small entrepreneurs can be regarded as the social responsibility of big entrepreneurs to participate in empowering small businesses to grow into independent and big entrepreneurs. As a form of social responsibility, it can be a form of guidance and coaching to small entrepreneurs. The continuous guidance is expected to help small entrepreneurs grow and develop as a strong and independent economic component.

c. The Purpose of the Aspect of Technology

The Small businesses usually have a small scale of business from the side of capital, the use of labor, and market orientation. The small businesses of Fishery Processing in Probolinggo City have some characteristics, they are personal or kinship business status, the local worker, simplicity in adopting technology, management, and administrative, and the capital structure is depended on the fixed capital. With regard to the limitations of technology in small-scale enterprises, therefore it needs the guidance and the provision of technological. The technology guidance is concerned with production techniques to improve productivity and efficiency.

d. The Purpose of the Management Aspect

Management is a process done by one or more individuals to coordinate various other activities in achieving the outcome. There are 2 (two) things that become the center of attention are: First, increase the productivity of individuals who carry out work, and second, the increase of organizational productivity in the work undertaken. Therefore, through business partnerships are expected to provide management improvements, improving the quality of human resources and organizational stabilization for the small entrepreneurs who generally have low level of business management. In the implementation of the partnership, big businesses are prohibited to own and/or control the SMIs of their business partners, and medium businesses are prohibited from owning or controlling micro and / or small business partners.

In Article 27 of the Law on Small Enterprises, the patterns of partnership are determined.

a. The Core of Plasma

The core of plasma is a partnership relationship between a small business or a medium-sized enterprise or a large enterprise in which there is a medium or large business acting as nucleus and small-scale enterprises as plasma. The core companies carry out coaching starting from the provision of production facilities, technical guidance, to marketing the production.

b. Subcontract

The pattern of subcontracting is a partnership relationship between a small business or a medium-sized enterprise or a large enterprise in which a small enterprise produces the components required by a medium or large-scale enterprise as part of its production. The weakness of this subcontracting pattern is the existence of a relatively high dependence of small entrepreneurs to medium. This can have a negative impact on the independence and benefits gained by small entrepreneurs.

The benefits that small entrepreneurs gain through this subcontracting pattern are in terms of the opportunity to work on some production and / or components; the widest possible

opportunity to obtain raw materials; guidance and technical capabilities of production and or management; the acquisition, mastery, and improvement of the technology used; and Financing.

c. General Trading

A general trading pattern is a partnership relationship between a small business or a medium-sized enterprise or a large enterprise in which there is a medium or large business that markets the production of a small business, or a small enterprise supplying the needs required by a medium-sized or large-scale business partner.

d. Franchising

A franchise pattern is a partnership relationship in which there is a medium or large business franchisor giving the right to use the company's brand license and distribution channel to the franchise's small business accompanied by assistance and management guidance. Detailed arrangements regarding this franchise business partnership arrangement have been set forth in Government Regulation No. 26/1997 on franchising.

In the government regulation of partnership itself there is a special arrangement on franchising, among others in Article 7 which provides those large businesses and / or businesses medium enterprises that want to expand their business can be done by franchising; provide opportunities and prioritize small businesses that have the ability to act as franchise recipients for the business concerned. The business expansion by large and/or medium-sized businesses with the franchising method in districts or municipalities outside the provincial capital can only be done through partnerships with small businesses.

e. Agency

The agency pattern is a partnership relationship in which there is a small business that is granted a special right to market the goods and services of its medium-sized or large-scale business partners. The sense of the agent is almost the same as the distributor because they both become intermediaries in marketing goods and services of medium or large companies (principal). However, it is legally different because it has different legal characteristics and responsibilities.

f. Venture Capital

Venture Capital can be defined in various versions. Basically, the various definitions refer to a notion of venture capital that is a financing by a company to its spouses through the principle of financing is equity participation. Although the principle of venture capital is "inclusion" but it does not mean that the formal form of financing is always inclusion. The form of financing can be a bond or even a loan, but the bond or loan is not the same as a regular bond or loan because it has a special nature that essentially has a return of the terms and soft repayment services.

In fact, the small businesses still cannot realize their roles and abilities in the national economy. That is because Small Business still faces various obstacles and constraints, both external and internal, in the field of production and processing, marketing, capital, human resources, and technology, and business climate that has not supported for its development. The small enterprises need to empower themselves and be empowered based on the framework of national law based on Pancasila and the 1945 Constitution for the realization of economic democracy based on the principle of kinship. Small Business Empowerment is done through Supporting Business Climate for Small Enterprise Development and business partnerships.

To produce the optimal level of efficiency and productivity is required a synergy between parties who have strong capital, advanced technology, modern management with parties who have raw materials, labor and land. The synergy in the use of bonds or loans is not the same as a regular bond or loan because it has a special nature that essentially has a return requirements

and more tender services. The resulting partnership is a process that is needed jointly by parties who partner with the goal of obtaining added value. Through mutually beneficial partnerships, mutual need and mutual strengthening the business world, both small and medium enterprises will be able to increase business competition.

## 4 Conclusion

After identifying SMI Fishery Product Processing in Probolinggo City, can be concluded that SMI Fishery represent the effort of many households owning which have the same business activity that is production. SMI Fishery in general base is labor intensive production method so that it can employs many workers. Partnership effort represent desire of the various sector, society group, government agency and also non-government, to work along in reaching a target with pursuant to each partner agreement of principle and role.

Partnership is a formal cooperation in the same job/activity between individuals, organizations or groups to reach specific target. Partnership is a formal cooperation in the same job/activity between individuals, organizations or groups to reach specific target. Partnership elements are existence of cooperation, existence of equality, existence of transparency, existence of mutual benefit. Type of partnership which suitable for SMI Fishery are core of plasma, subcontract, common trade, franchise, agency and joint venture.

From the result of research, there are suggestions which may suitable to be implemented in SMI Fishery. First, suggestion to people in SMI Fishery Product Processing are expected can develop themself without or with partnership of big industry in core of plasma pattern. Because of this kind of partnership, SMI Fishery and big industry can support each other and grow together. The big industry can also expand into new field of business.

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