

MINAPOLITAN PROGRAM AND ITS ROLE IN THE DEVELOPMENT OF CAPTURE FISHERIES IN EAST ACEH REGENCY

JAM

16, 1

Received, September 2017

Revised, December 2017

Accepted, February 2018

Jamilah

Mawardati

Faculty of Agriculture, Universitas Malikussaleh

Abstract: This research is aimed at analyzing *the minapolitan* program and its role in the development of capture fisheries in East Aceh Regency. The method used in this study was survey method. The Regency, namely East Aceh Regency, was determined purposively as capture fisheries *minapolitan* area based on the Decree of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia Number 35/ KEPMEN-KP/ 2013. The analysis of the role of *minapolitan* programs in the development of capture fisheries of East Aceh Regency includes the achievements and obstacles faced in the implementation of the *minapolitan* program in East Aceh Regency using qualitative and quantitative descriptive approach. The results show that the capture fishery in East Aceh Regency is potential to be developed because it is located in Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT), fishery resources and infrastructure are available, and export market opportunities of fishery products are open wide. The lack of fish processing encourages local governments to improve Fish Processing Units (UPI). *Minapolitan* Area Development Program in East Aceh Regency has a positive impact on capture fisheries, such as improving infrastructures in *minapolitan* area, increasing the production of capture fisheries in *minapolitan* area, employment absorption, and fishing infrastructure, increasing capture fisheries, improving the quality and quantity of human resources (HR), and increasing capital and investment. This program needs to be done continuously to develop sustainable capture fisheries in East Aceh Regency.

Keyword: role, *minapolitan* program, capture fisheries



Journal of Applied
Management (JAM)
Volume 16 Number 1,
March 2018
Indexed in Google Scholar

Correspondence Author:
Jamilah, Faculty of
Agriculture, Universitas
Malikussaleh
DOI: [http://dx.doi.org/
10.21776/ub.jam.2018.016.
01.19](http://dx.doi.org/10.21776/ub.jam.2018.016.01.19)

East Aceh Regency has 1,683.5 km² of waters, with coastal area of 2,236 km² and the land area of 6,040.4 km². In capture fisheries, this district has one unit of Indonesian Fishery Port (PPN), 5 units of Fish-Landing Port (PPI) and Fish Auction Place (TPI), 17 units of the dock, and 8 units of fisherman's hall. There are 8,988 fishermen. Moreover, there are

121 units of motor boats, 645 units of outboard-motor boats, and 462 units of non-motor boats or canoe. The amount of fish production in East Aceh Regency from capture fisheries reached 16,620.61 tons, while the fish farming reached 8,426 tons. Therefore, the total of fish production per year is 25,046.61 tons (Department of Marine and Fisheries of East Aceh Regency, 2015). However, this resource has not been able to raise the living standards of coastal communities. In fact, 25 percents of the coastal community in Aceh are still living below the poverty line; they are not prosperous. The natural and coastal resource degradation mostly

occurs due to human actions (anthropogenic), both due to fishing activities as well as non-production activities, such as domestic and industrial waste pollution (Fauzi and Anna, 2002).

Poverty and poverty alleviation policy is a major issue of Aceh's economic development. However, the poverty of fishermen in Aceh which reflects the condition of poor household, the problems, the limited fishermen resources, and the expectation of fishermen in Aceh are not yet clearly illustrated, even the government's policies to reduce poverty has not been fully able to solve the problems faced by fishermen that trap them in poverty. Factors that cause poverty cycle in most fishermen community, especially local fishermen include limited facility and infrastructure, limited mastery of capture fisheries technology, limited access to capital sources such as a bank, and low skill and education level of fishermen. In addition, fishermen are highly dependent on seasons. This condition results in the difficulty of the community to improve their living for the better. Local fishermen as a vulnerable community living in poverty are often untouched by programs implemented by local governments. This condition is because the regional development planning program does not involve local fishermen community so that the program that is implemented is often not on target. Consequently, the need for the capital of fishermen is fulfilled by loan sharks, middlemen and *take*(CEO); in fact, in the long term, they do not help much and may even make the coastal community trapped in debt (Subri, 2007). (Subri, 2007).

Minapolitan capture fisheries is a regional economic development area based on capture fisheries business developed jointly by government, private parties, and community, to create a better business climate for economic growth, employment and community income in a region (KKP, 2010). Under Law No. 31 Year 2004, the purposes of capture fisheries include; improving the living standards of fishermen, state revenues and foreign exchange earnings, encouraging the expansion of employment opportunity, increasing the availability and consumption of fish as protein source, optimizing the management of fish resources, increasing productivity,

quality, added value and competitiveness, increasing the availability of raw materials for fish processing industries, achieving the utilization of fish resources and the environment of fish resources optimally, and ensuring the sustainability of fish resources.

One of the purposes of *minapolitan* fishery program is to develop the coastal area and utilize capture fishery resources effectively and efficiently as well as to develop fishery resources. Its implementation basically refers to fishery potential and problems in capture fisheries. Most fishermen in Aceh still live below the poverty line. Abundant fishery resources have not been fully utilized by fishermen due to limited facility and infrastructure.

An important issue to be solved by *minapolitan* program managers is maintaining a balance for the sustainability of fish resources, the interests of local fishermen, the interests of related industries, and the interests of the government. Some of the current problems are 1) unfair business competition, 2) monopolistic and exploitative business practices, 3) less optimal program socialization, and 4) limited budget in program implementation. This is expected to impact on several other issues such as the lack of optimum acceleration of *minapolitan* activities, limited budget, non-optimal program socialization, the potential for monopolistic business practices, and business competition between traditional fishermen and modern fishermen.

Most of the fishermen work as small fishermen, laborers, small-scale fish farmers and small traders because they have limited investment capability. Smaller fishermen are only able to utilize resources in coastal areas; their catch is decreasing continuously as a result of competition with large ships along with the decline of coastal resource quality. The catch (fish) that can be easily damaged can weaken their bargaining position in sales transactions. In addition, the exploitative relationship between the owners of capital and laborers and fishermen, as well as seasonal and erratic fisheries business, lead to poverty and debt to shipowners. Various regulations, *qanun*, and other regulations governing environment including coastal areas are not running properly. On the other hand, until now,

the abundant potential of marine and fishery resources has not been managed and utilized optimally. In this regard, the extent to which *minapolitan* program plays a role in the development of capture fisheries in East Aceh Regency, considering that the fishery sub-sector in this district has great potential to be developed in order to realize sustainable fishery.

RESEARCH METHOD

Research Location

The determination of the regency used as the research location was done purposively, namely East Aceh Regency, as the *minapolitan* area of capture fisheries based on the Decree of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia Number 35/KEPMEN-KP/2013. The determination of the sub-district used as the research location was done through purposive sampling based on the determination of regency, namely Darul Aman Sub-district and Idi Rayeuk Sub-district of East Aceh Regency.

Analysis Method

This research used explanatory research approach with survey method. The analysis of the role of the *minapolitan* program in the development of capture fisheries in East Aceh Regency includes the achievements and obstacles faced in the implementation of the *minapolitan* program in East Aceh Regency using qualitative and quantitative descriptive approach.

FINDINGS AND DISCUSSIONS

Potential and Constraints in Capture Fisheries Development

East Aceh Regency is a center for fisheries production and development in Aceh Province. The ownership of fishery resources and strategic fishery location in Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT) is a potential for fisheries development and regional economic growth. Abundant fish resources and the international market opportunity opening wide provide an export opportunity for fishery products. Until now, fishery products

(fresh fish) of East Aceh Regency have been exported to Malaysia. To support the development of capture fisheries, this district has 1 unit of Indonesian Fishery Port (PPN) in Idi Rayeuk Sub-district; 5 units of Fish Auction Place (TPI) and traditional ports spread in several sub-districts, namely Simpang Ulim, Julok, Darul Aman, Kuala Bugak Peureulak, and Rantau Selamat; 1 unit of Coastal Fish Seed Center in Alue Bu Village, West Peureulak Sub-district; and many traditional fish hatcheries; 17 units of dock; 8 units of fishermen hall; capture fishery facilities include 121 units of motor boats, 645 units of outboard-motor boats, and 462 units of non-motor boats or canoes.

Fishing activities in the waters of East Aceh Regency have been going on for a long time and have increased in line with the increase in population. The increase in population also affects the increasing demand for fishery products to meet the need for animal protein derived from fish. The increase in exploitation of fish resources as a result of increasing demand for these resources will have an impact on the increasing pressure on the sustainability of fish resources in the waters of East Aceh Regency. According to FAO in Fauzi A (2005), it is estimated that 47 percents of the world's fishery resources have experienced full exploited, 19 percents of the world's fishery resources are over-exploited, and 9 percents of the world's fishery resources have been depleted. Therefore, 75 percents of fish resources are critical. If it is not controlled (manage) well immediately, sooner or later the conditions above may threaten the sustainability of fish resources. However, until now, in East Aceh Regency, the condition can still be controlled properly based on *laot* customary law.

In East Aceh Regency, fish resources (SDI) are relatively abundant, with leading commodities of various kinds of pelagic and *demersal* fish, such as mackerel tuna, shortfin scad, *madidihang* (yellowfin tuna), skipjack tuna, *lisung*, cotton fish, albacore fish, black *pomfret* fish, machete fish and non-fish species such as crustaceans that are hard-skinned or soft-skinned like squid, cuttlefish and others. In terms of the use pattern, most of the seafood is marketed for consumption in the form of

fresh fish; only a small part of it in the form of traditional processed food, such as into salted fish or shrimp paste. In the future, as a part of *minapolitan* development area, Idi Rayeuk sub-district (capture fisheries development base in East Aceh Regency) is expected not only to rely on the economic activity of fresh fish sales, but it also will gradually be directed to the development of fish-based agro-industry to produce processed fish, add, and open employment for the society. To that end, the Government of East Aceh Regency has prepared a land with an area of 10 hectares, which is devoted as a central *minapolitan* region of East Aceh with one of them is allocated for Fish Processing Unit (UPI). Fish processing industry would require a large and continuous supply of fish that can be obtained by facilitating large vessels to lean, through category improvement of Idi Rayeuk Port from PPP to Indonesian Fishery Port (PPN) with 62 Ha in the area since 2013.

Table 1 Development of Fish Production and Fish Production Value, the Year 2013-2016

Year	Production (Kg)	Production Value (Rp)
2014	10.276.460	142.484.787.500
2015	16.847.282	206.147.245.500
2016	19.447.711	324.107.427.000

Source: PPN Idi, 2017.

The amount of catch in capture fishery sector in 2006 increased from 5,119.32 kg to 12,127.47 kg in 2008. However, there was a decrease, but not very significant, in 2009 to 2010, namely 10,895.99 kg and 9,764.59 kg consecutively. This is due to climate change and high sea waves so that there were many fishermen who did not go to sea (Department of Marine and Fisheries of East Aceh Regency of East Aceh Regency, 2011). Table 1 shows the increase in fish production and fish production value from 2014 to 2016. This indicates that the function of the ecosystem is going well; the recovery rate of the fish species is still running well. It is supported by *minapolitan* area development program that has

been encouraged by the Government of East Aceh Regency since 2013. Better ecosystem function leads to the less risk/ threat to sustainability (Hartono et al 2005).

Fishery resources are assets that can increase and decrease both naturally and by human intervention. The entire natural dynamics and human interventions affect the condition of fishery resources both directly and indirectly over time; therefore, achieving optimal results in the management of fishery resources cannot be separated from the dynamic system management approach. Past management decisions/ exploitation will affect the condition of fishery resources in the present and future (Fauzi and Anna 2005). Coastal areas and islands in terms of development are renewable potential resources, consisting of marine fisheries, mangrove forest, coral reef, marine biotechnology industry, and small island (Dahuri 2001).

According to the Law of the Republic of Indonesia number 31 of 2004 on fisheries jo UU number 45 the year 2009, fisheries management involves a variety of complex tasks aimed at ensuring the optimal results of natural resources for the local community, region, and country, derived from sustainable use of fish resources. All this time, the management of fishery resources tends to be oriented to economic growth only by exploiting the fishery resources on a large scale without considering its sustainability aspect. This leads to the condition of fishery resources, especially in the coastal area, whose sustainability begins threatened. The amount catch of several types of fish continues to decline. Such condition can occur because of the increasing number of community utilizing resources and the more effective fishing gear used but declining carrying capacity of fishery resources. This condition can reduce the productivity level and fisherman's income, which also triggers the social impact in the form of conflict between fishermen in the coastal area (Mulyani, 2013). The future challenge in managing waters in East Aceh Regency is accommodating all interests of relevant stakeholders sustainably because economic growth will not be sustainable if ecology is not sustainable because the sustainability of recovered resources is the deter-

minant of island-based economic sustainability (Kusumastanto 2002).

Development of *Minapolitan* Area in East Aceh Regency

In order to exploit the potential of existing natural resources, especially those related to fisheries development in a broad sense, an effort is made through a product, namely development planning of area based on fish farming and capture fisheries economics (*Minapolitan*). *Minapolitan* is the concept of marine fisheries development based on economic management of the region with the motor of marine and fishery sector. The program which was started by the Government of Indonesia (RI) in 2009 is an effort to revitalize fishery and marine production centers with an emphasis on increasing people's incomes. *Minapolitan* is a realization of blue revolution program that is encouraged by the Ministry of Fisheries and the Marine Republic of Indonesia; one of the pillars is to change the mindset from the mainland into maritime.

East Aceh Regency is designated as a *minapolitan* area based on Decree of Minister of Marine Affairs and Fisheries of the Republic of Indonesia Number: 35/ KEPMEN-KP/ 2013, date: July 2, 2013, regarding the establishment of East Aceh Regency as a *Minapolitan* Area of Capture Fisheries and *Minapolitan* Area of Fish Farming, and refers to the Decree of Regent of East Aceh Number 523/510/2010 regarding determination of the location of *minapolitan* area development and Decree of Regent of East Aceh Number: 523/341/2013 regarding the establishment of work group and secretary for *minapolitan* area development, Decree of Regent of East Aceh Number: 523/336/ 2014, May 13, 2014, regarding the establishment of work group for *minapolitan* area development in East Aceh Regency.

Minapolitan areas in East Aceh Regency consist of 6 sub-districts, 15 *mukim* and 110 villages, with a total area of 755.47 km², of which 53 villages are coastal villages covering 137.66 km² (18.22%) which become core area and supporting area, while non-coastal villages and coastal villages that are not included in the *minapolitan* area

development of East Aceh Regency become buffer zones. The 6 districts included in the *minapolitan* area are:

1. Darul Aman Sub-district,
2. Idi Rayeuk Sub-district,
3. East Idi Sub-district,
4. Peudawa Sub-district,
5. West Peureulak Sub-district,
6. Peureulak Sub-district.

Development of *minapolitan* area is an approach to rural area development through efforts to accelerate marine and fishery development on production centers with integrated and efficient, effective and competitive principle. The procedure of *minapolitan* development is contained in Regulation of Minister of Marine and Fishery Number: PER.12/MEN/2010 regarding *minapolitan*, which stipulates several requirements that must be fulfilled by East Aceh Regency to become *minapolitan* area, including regional commitment, owning superior commodities and supporting facilities such as port, processing industry, road, electricity, and others. *Minapolitan* area development is implemented in an integrated manner and monitored by the workgroup. In addition, it also involves cooperation with the provincial government as a regional coordinator in the development and budgeting. The role of central government is merely to contribute to the implementation of regional development in both the production and marketing sectors of marine and fishery products.

Achievements of *Minapolitan* Program

The achievements of the implementation of *minapolitan* area development program in East Aceh Regency are:

1. Improving the Infrastructure of *Minapolitan* Area

Infrastructure development of area aims at optimizing the existing fishery facility and infrastructure by improving and adding new facility and infrastructure so as to encourage the productivity of fishermen in order to improve the welfare of fishermen. Infrastructure development is an indicator that can serve as one benchmark of the development of

a region. East Aceh Regency has several facilities to load and unload goods and fishery products at the Indonesian Fishery Port (PPN) Idi. Some infra-

structure which has been built over the past 2 (two) years include:

Table 2 Development of Infrastructure Construction in *Minapolitan* Area

No.	Infrastructure Development	Location	Benefit	Implication for Society
1	PPN	Idi Rayeuk Sub-district	All fishermen's needs are available	All fishermen's needs are available, both in the place to dock the ship and loading and unloading activities. The place for product transaction and other supporting needs are available
2	Cool Storage	Idi Rayeuk Sub-district	Fish storage is available	The base price of fish sale is stable.
3	Port	All sub-districts in <i>minapolitan</i> area	Boat/ ship mooring is available	Loading and unloading process run smoothly.
4	PPI/TPI	Rantau Seulamat Sub-district and. Darul Aman Sub-district	Auction place is available	A place for the transaction and other supporting needs are available.
5	Fisherman's Hall	Idi Rayeuk Sub-district, Peureulak Sub-district, and Darul Aman Sub-district	Meeting room for fish farmers and fishermen is available	Decision-making process runs smoothly
6	SPDN	Idi Rayeuk Sub-district	Fuel is available	Needs for fuel supply is met
7	Salt warehouse	Darul Aman Sub-district	Infrastructure for salt storage is available	Salt sale process is good, resulting in increase in income
8	Fisherman's workshop	Idi Rayeuk Sub-district	Fishermen's needs are available	Fishermen's needs in terms of machine are available
9	Boat mooring	Sub-district in <i>Minapolitan</i> Area	Space to lean fisherman's boat is available	Loading and unloading process is good.

Source: Department of Marine and Fisheries of East Aceh Regency, 2017

2. Increase in Capture Fisheries Production in *Minapolitan* Area

Capture fishery products obtained by fishermen in East Aceh Regency are economical and important fish species; they are superior products of *the minapolitan* area. Capture fisheries production tends to fluctuate (Table 3). The highest fish production in

Idi Rayeuk Sub-district ranged from 14,296.65 kg to 17,826.03 kg, while Darul Aman Sub-district occupied the second position with the production of between 845.82 kg to 3,097.25 kg.

The main commodities are various kinds of leading commodities of various kinds of pelagic and *demersal* fish, such as mackerel tuna, short finscad,

madidihang (yellowfin tuna), skipjack tuna, *lisung*, cotton fish, albacore fish, black *pomfret* fish, machete fish and non-fish species such as crustaceans that are hard-skinned or soft-skinned like squid, cuttlefish and others. In terms of the pattern of the use, the most of seafoods marketed for consumption, in the form of fresh fish; only a small part of them is in the form of traditional processed products such as salted fish and shrimp paste.

Table 3 Development of Capture Fisheries Production in East Aceh Regency, the Year 2011-2015

Year	Fish Production (Kg)
2011	17.662,00
2012	21.473,51
2013	20.065,75
2014	20.065,75
2015	20.031,34

Source: Department of Marine and Fisheries of East Aceh Regency, 2016.

Most of the fresh fish (about 60%) is marketed outside the regency and exported to Malaysia; only a small portion is marketed in East Aceh Regency. In the future, as a part of *the minapolitan* development area, Idi Rayeuk Sub-district is expected to not only rely on the economy from fresh fish sales, but also develops fish-based agro-industry to produce processed fish, increase added value, and create jobs for the community. To that end, the Government of East Aceh Regency has prepared the land area of 10 hectares, which is devoted as the

Table 4 Development of Fishermen, the Year 2012 – 2015

No	Fisherman	Number of Fisherman			
		2012	2013	2014	2015
1	Full-time fisherman	5.047	5.265	5.271	5.271
2	Part-time fisherman	4.695	4.862	4.862	4.862
3	Fishing as a side job	-	-	3.083	3.083
Total		9.742	10.127	13.216	13.216

Source: Department of Marine and Fisheries of East Aceh Regency, 2016.

center of *the minapolitan* area of East Aceh Regency, one of which is allocated for Fish Processing Unit (UPI).

3. Labor Absorption

The benchmark for the development of labor absorption in the field of capture fisheries in East Aceh Regency can be seen from the increase in the number of fishermen as presented in Table 4. Types of fisherman consist of a full-time fisherman, part-time fisherman, and fishing as a side job. This increase is estimated as a transfer of profession from fish farmer to fishermen.

4. Addition of Facility and Infrastructure

Facility and infrastructure of capture fisheries in East Aceh Regency consist of Indonesian Fishery Port of (PPN), Fish-Landing Port, pier,

Table 5 Development of Infrastructure of Capture Fisheries in East Aceh Regency, the Year 2012-2015

No	Infrastructure	Location	Number of Infrastructures			
			2012	2013	2014	2015
1	PPP (changed into PPN in 2016)	Core <i>Minapolitan</i> Area	1	1	1	1
2	PPI	<i>Minapolitan</i> Area	2	2	2	2
3	Port	All Sub-districts in <i>Minapolitan</i> Area	18	18	18	18
4	Fisherman's Hall	All Sub-districts in <i>Minapolitan</i> Area	8	8	8	8
5	Fisherman's Workshop	Darul Aman Sub-districts	-	-	-	1
6	Boat mooring	<i>Minapolitan</i> Buffer Zone	5	5	5	6
7	Building for net repair	Peureulak Sub-districts	-	-	-	1
Total			34	34	34	37

Source: Department of Marine and Fisheries of East Aceh Regency, the Year 2016.

fisherman's hall, fisherman's workshop, boat mooring, and building for net repair as shown in Table 5.

During 2012 to 2015, there was no significant change in fishing facility and infrastructure, except for the addition of workshops, boat moorings, and building for net repair. So far, the focus has been on road repair to facilitate product distribution and provide fleet. In 2012, the number of motor boats from 1,218 units increased to 1,486 units (2015); the number of outboard-motor boats from 645 increased to 713 units (2015), and the number of non-motor boats from 2,325 units increased to 2,753 units (2015). The fishing gear used consists of gillnet, longline, fishing rod, trammel net, purse seine, and troll line.

5. Improvement in Capture Fisheries Business

Improvement in capture fisheries business includes quality improvement, value added, and fisheries technological innovation, through an increase in the capacity of Fish Processing Unit (UPI), revitalization of ice factory, cold storage, and improvement of fishery business efficiency.

6. Improvement of the Quality and Quantity of Human Resources (HR)

In order to improve the quality of human resources in the fisheries sector, through the *minapolitan* program, the government provides capital assistance and training to fisherman group/KUB, salt business groups, training for salt farmers, training for fishermen, and the establishment of fishery cooperative institutions. In the future, the improvement of human resources in fishery sector is focused on the ability of fishermen to operate the modern ship, communication and navigation equipment, including certification of boat captains by establishing a Training Center for Fishermen and Crew. Public awareness of gender justice is increased through people's active participation in social life, equity of employment opportunities, and raising public awareness of non-violence against women and children.

7. Increase in Capital and Investment

The Government of East Aceh Regency provides largest opportunity to the private sector in the

form of investment in Fish Processing Industry (UPI) sector so as to increase the added value of fishery products, shipbuilding industry, and boat repair services, ice factory, cold storage, clean water, and sector of fishery production facility or fishery equipment. Thereby, the system and business of *minabusiness* in the *minapolitan* area are expected to develop.

Constraints in the Implementation of Minapolitan Program

In the development of capture fisheries, *minapolitan* program is experiencing various problems, namely: traditional business pattern, the lack of investment and experts in the field of fish processing, most of the fish is marketed in the form of fresh fish, low quality of human resources in fish farming who do not understand the technology of modern fish farming. The quality and quantity of human resources in the *minapolitan* area have not shown a significant increase. This is due to the lack of extension program to the fishing community. The lack of training required by the fisherman community is hampered by problems in funding and the lack of experts in the region. The involvement of stakeholders across sectors is one of the main factors in accelerating the development process through meeting such as workgroup meeting and FGD, which is expected to increase awareness and cooperation among departments. This needs to be addressed more wisely by local governments.

CONCLUSION AND SUGGESTION

Conclusion

- a. Capture Fisheries in East Aceh Regency has great potential to be developed as it is located in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT), fishery resources and infrastructure are available, and export market opportunity for fishery products is open wide. The lack of fish processing encourages local governments to improve Fish Processing Units (UPI).
- b. The *Minapolitan* Area Development Program has a positive impact on the fisheries sector in East Aceh Regency, such as the improvement

of *minapolitan* area infrastructure, increase in capture fishery production in the *minapolitan* area, great labor absorption, the addition of fishery facilities and infrastructure, improvement of capture fishery business, improvement of the quality and quantity of human resources, and increase in capital and investment. This program needs to be done on an ongoing basis in order to develop sustainable fisheries sector in East Aceh Regency.

- c. In the implementation of capture fisheries development, *minapolitan* program is experiencing various problems, including traditional pattern of business, lack of investment and experts in the field of fish processing, which causes many fish is marketed in the form of fresh fish (unprocessed), the lack of synergy among across-sector stakeholders in the development process, and limited funds, which lead to minimal counseling and training; consequently, the quality and quantity of human resources in the *minapolitan* area has not shown any significant improvement.

Suggestion

Given the large contribution of the *minapolitan* program to fisheries development in East Aceh Regency, in order to improve the access of fishermen in fishing, it is expected that local governments can provide assistance in the form of ship/ boat using a revolving credit system and encouraging private sector participation in increasing investment in fish processing.

REFERENCES

Dahuri, R. 2002. *Strategi Pengelolaan Kawasan Pesisir Indonesia*. PKSPL. Institut Pertanian Bogor. Bogor. Dinas Kelautan dan Perikanan Kabupaten Aceh Timur.

2016. *Laporan Tahunan Program Minapolitan Kabupaten Aceh Timur*. Dinas Kelautan dan Perikanan Kabupaten Aceh Timur. Idi Rayeuk.
- Dinas Kelautan dan Perikanan Kabupaten Aceh Timur. 2017. *Kabupaten Aceh Timur Dalam Angka 2017*. Dinas Kelautan dan Perikanan Kabupaten Aceh Timur. Idi Rayeuk.
- Fauzi A. 2000. Persepsi Terhadap Nilai Ekonomi Sumberdaya. Pelatihan Untuk Pelatih Pengelolaan Wilayah Pesisir Terpadu. Kerjasama Antara Pusat Kajian Sumberdaya Pesisir dan Kelautan Institut Pertanian Bogor dengan Proyek Pesisir *Coastal Resources Center University Of Rhode Island*.
- Fauzi A dan S Anna. 2002. Evaluasi Status Keberlanjutan Pembangunan Perikanan : Aplikasi Pendekatan Rappfish (Studi Kasus Perairan Pesisir DKI Jakarta). *Jurnal Pesisir dan Lautan Indonesia* Vol 4 (2) pp: 36-49.
- Fauzi A dan S Anna. 2005. *Pemodelan Sumberdaya Perikanan dan Kelautan untuk Analisis Kebijakan*. Jakarta. PT Gramedia Pustaka Utama. 343 hal.
- Hartono et al. Pengembangan Teknik Rapid Appraisal for Fisheries (RAPFISH) untuk Penentuan Indikator Kinerja Perikanan Tangkap Berkelanjutan di Indonesia. *Buletin Ekonomi Perikanan* Vol. VI Nomor 1 Tahun 2005.
- [KKP]. 2010. *Pengembangan minapolitan perikanan tangkap*. Direktorat Jenderal Perikanan Tangkap Kementerian Kelautan dan Perikanan. http://www.pupi.kkp.go.id/index.php?option=com_content&view=article&id=95&Itemid=103. [29 Jul 2011].
- Kusumastanto. 2002. *Reposisi Ocean Policy* dalam Pembangunan Ekonomi Indonesia di Era Otonomi Daerah. *Orasi Ilmiah Guru Besar Tetap Bidang Kebijakan Ekonomi Perikanan dan Kelautan*, Fakultas Perikanan dan Ilmu Kelautan, Institut Pertanian Bogor.
- Mulyani AT. 2013. *Kebijakan Pengembangan Ekonomi Perikanan Tangkap Berkelanjutan di Provinsi DKI Jakarta*. Tesis. Institut Pertanian Bogor. Bogor.