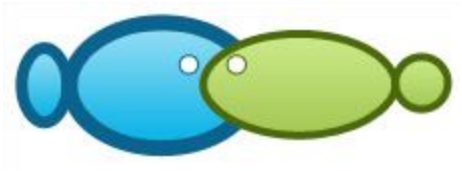

Implementation of small-scale fisheries development policies in Konawe Selatan District

[1]Adam A. Amirullah, [2]Eka Suaib, [2]Arifin Utha, [2]Jamal Bake

[1] Doctoral Program in Management, Universitas Halu Oleo, Kendari 93121, Southeast Sulawesi, Indonesia; [2] Faculty of Social and Political Sciences, Universitas Halu Oleo, Kendari 93231, Southeast Sulawesi, Indonesia. Corresponding author: A. A. Amirullah, teplan_adams@yahoo.com

Abstract. This study aimed to describe in depth the way in which small-scale fisheries development policies are implemented in Konawe Selatan District, Southeast Sulawesi, Indonesia. This study used a qualitative approach with an emphasis on in-depth interviews with key informants. The main focus was on describing the small-scale fisheries development policies and analysing policy implementation based on the theory of Edwards (1980). The results showed that the way in which small-scale fisheries development policies were implemented in Konawe Selatan District did not fulfil the essence of the four aspects of communication, bureaucratic structure, disposition and resources. The result was in fact more akin to a policy of physical assistance (equipment) which was packaged as an empowerment mission. Funds provided for fishermen groups were focused on the provision of fishing gear and not on strengthening knowledge, expertise and independence, tending to foster a culture of dependency among fishermen relying on government assistance.

Key Words: policy implementation, small-scale fisheries, capacity building, dependency.

Introduction. Indonesia is the largest archipelagic country in the world, with approximately 17,499 islands and a coastline of 95,181 km. Around three quarters (3.1 million km^2) of the 5.8 million km^2 Indonesian territory are marine waters comprising coastal waters, bays and straits as well as open seas. Indonesia also has fisheries management and utilization rights in the Exclusive Economic Zone (EEZ) of about 2.7 million km^2, and approximately 54 million ha of freshwater bodies including rivers, lakes, reservoirs, swamps and other wetlands (Kordi 2015).

Apridar & Suhana (2011) state that the extent and strategic position of the Indonesian archipelagic waters and EEZ make these waters very important in the global trading system. The ocean can also play a role as a unifying media for the nation to form a single unit of defence, security, politics and society. These waters also place Indonesia as an important provider of raw materials for the national and international community with the potential to build the Indonesian economy based on marine and fisheries resources. In particular, the coastal, small island and ocean habitats provide marine and fishery resources which are the basic capital for national economic development.

The potential value of Indonesia's fishery resources was estimated as US$ 82 million per year consisting of capture fisheries (US$ 15.1 million); mariculture (US$ 46.7 million); inland fisheries (US$ 1.1 million); brackish-water pond aquaculture (US$ 10 million); freshwater aquaculture, including rice-fish culture and floating net cages (US$ 5.2 million); and marine biotechnology (US$ 4 million) in 2016 (Anonymous 2016). Fisheries are also capable of directly absorbing a workforce of 5.35 million people consisting of 2.23 million marine fishermen and 0.47 million inland water fishermen, and 2.65 million fish farmers.

These abundant natural resources should be a blessing for the Indonesian people, especially fishermen in coastal areas. However, ironically the wealth of this maritime country is not felt by all fishermen in Indonesia. According to Ministry of Maritime Affairs

and Fisheries (MMAF) data from 2014, there were approximately 8 million poor fishermen or 25.14% of the total population living in poverty in Indonesia (Wijayani 2016).

The FAO Voluntary Guidelines in 2015 (FAO 2015) stated that 90% of the people who work directly in the capture fisheries sector are in the small scale fisheries category. Small-scale fisheries are the motor of the economy, play a role in food security, absorb a lot of labour, and trigger multiplier impacts on the local economy and at the same time become a source of livelihood for coastal communities, worldwide and in Indonesia (Teh & Sumaila 2011; FAO 2015; CEA 2018). However, the seasonal characteristics of the capture fisheries business make small fishermen intrinsically vulnerable, while climate change, which increases the frequency and intensity of extreme weather, in addition to having biophysical impacts, can also have socio-economic impacts on society, especially coastal communities (Hoegh-Guldberg et al 2007, 2009; Burke et al 2012; Brugère & De Young 2015; Ambo-Rappe & Moore 2018) The uncertainty of extreme weather can make fishermen lose many productive days at sea or even lose their assets and lives.

Fishermen who do not have alternative livelihoods are increasingly marginalized. The existing formal financial institutions are generally unable to accommodate the small-scale capture fisheries segment because of the unstable characteristics of the business and the lack of guarantees that can be provided by fishermen. This situation leads many fishermen to become highly dependent on non-formal financial institutions (Glaeser & Glaser 2011; Ferse et al 2012; Pauwelussen 2016) and often increasingly mired in debt due to the high interest rates demanded by many loan sharks (EC-PREP 2005; Varkey et al 2010; Pauwelussen 2016).

Referring to Law No. 23/2014 concerning Regional Government, small-scale fishermen are defined as traditional Indonesian fishermen who use traditional fishing materials and tools. They are not required to obtain a business license, are free from taxes, and are allowed to catch fish in all Fisheries Management Areas (FMAs) within the territory of the Republic of Indonesia. Minister of Marine Affairs and Fisheries Regulation (Permen) No. 71 of 2016 on Fishing Lanes and Placement of Fishing Gear in the Fisheries Management Areas of the Republic of Indonesia allocates waters 0-12 NM from shore to small-scale fisheries, mostly for fishing vessels less than 5 GT. Furthermore, Minister of Marine Affairs and Fisheries Regulation No. 23/2016 on Planning for the Management of Coastal Areas and Small Islands states that waters up to two NM from shore are prioritized for the livelihoods and access for small-scale and traditional fishermen. However, small-scale and traditional fishermen may also operate in areas over 2 NM from shore.

The promulgation of Law No. 23/2014 on Regional Government has greatly reduced the authority of district/city governments with respect to maritime and fisheries affairs (Ambo-Rappe & Moore 2018; Dapu 2016). The loss of jurisdiction has significantly affected the configuration and structure of institutions, personnel (ASN), public services, finance, as well as outreach and extension, surveillance and enforcement. There is also legal uncertainty as a result because several prevailing laws and regulations in the maritime and fisheries sector are contradictory to Law No. 23 of 2014 (Dapu 2016). One region affected by these changes is Konawe Selatan District in Southeast Sulawesi Province.

Similar to the national trend (CEA 2018), the Konawe Selatan District Statistics for 2018 (BPS 2018) show that 99.23% of fishing vessels had gross tonnages less than 10 GT, showing that the majority of fishermen in this area are small-scale fishers. It is therefore likely that most of these fishers operate within 4 Nm of the coast, within Fisheries Management Area (FMA) 714.

The vision of the Konawe Selatan District Marine and Fisheries Service is based on the 2016-2021 annual Strategic Plan (Konawe Selatan District Marine and Fisheries Service 2016), namely to create a prosperous Konawe Selatan based on a rural area through sustainable management of marine and fisheries resources towards the prosperity of the people. Here it can be seen that this vision is very supportive for Konawe Selatan District to become one of the largest fishery product producers in Southeast Sulawesi by means of sustainable and sustainable resource management. Opportunities include aquaculture of commodities such as seaweed, fish (e.g. milkfish)

and shrimp (*Litopenaeus vannamei* and *Penaeus monodon*) as well as capture fisheries, especially pelagic and reef-associated fish.

Based on the number of Fisher Identity Cards issued, in 2018 there were 4,320 registered fishers in Konawe Selatan District (Konawe Selatan District Marine and Fisheries Service 2018). However, the true number may be larger because there are still many fishermen who have not been recorded in this program. Based on data from fishermen, the majority are full-time or part-time small-scale fishermen.

One of the major problems faced by small-scale fishing communities, including in Konawe Selatan District, is the problem of chronic or structural poverty. According to Hamdani & Wulandari (2013), poverty is a ubiquitous social phenomenon that is generally characterized by underdevelopment and low productivity which in turn leads to low income. In most countries, poverty tends to be concentrated in certain places, usually in rural areas or areas lacking natural resources. Small-scale fisheries management policies are designed and implemented with the aim of: a) supporting small fishermen; b) empowering the community in order to reduce problems such as poverty and conflict (internal and external, especially fisheries-related), and increasing the income of small fishermen; c) developing and applying the concept of sustainable marine and fisheries resource management. Such small-scale fisheries development management will certainly affect the life of the community, especially fishermen.

One key issue in Konawe Selatan District is the development of small-scale fisheries, in particular the problem of poverty among small-scale fishermen. Despite many government programs, the level of welfare of the coastal communities, especially small scale fishers, is still low. This indicates that the programs have not succeeded in achieving their goals. Reasons given include reduced income from fishing due to declining catch volumes, competition between fishermen, and government programs (e.g. provision of fishing gear and fisher empowerment activities) that rarely adopt sustainable development approaches, often fail to reach the appropriate target recipients, and can even create a culture of dependency on the government.

There is a need to investigate the implementation of policies regarding small-scale fisheries and to seek answers to the problems faced by districts/cities, in particular with respect to maintaining synergy between the central, provincial and district/city governments in managing small-scale fisheries. This study concentrates on the case of Konawe Selatan District, and aimed to answer the question of how small-scale fisheries development policies are implemented in this district.

Material and Method

Literature review. As a policy study, an important part of the research was a review of the applicable regulations and policies as well as the background. This review covered the implementation of public policies and the development of small-scale fisheries, as well as the formulation of the research framework.

Case study. The main focus of this research was to describe and analyse the implementation of small-scale fisheries development policies, adopting the Edwards approach (Edwards 1980). In the perspective of policy problems, as introduced by Edwards (1980), policy implementation is needed because there are policy problems that need to be resolved. This approach questions what factors support and hinder the successful implementation of policies. Four factors have been formulated as sources of problems as well as preconditions for the success of the implementation process: communication, resources, the attitudes of the bureaucracy or executors, and the organisational structure including the bureaucratic work flow. These four factors are criteria that need to be examined when evaluating the implementation of a policy and formed the basis or framework for this study.

The field research was conducted in Konawe Selatan District, Southeast Sulawesi Province using observation and key informant interviews to collect primary data as well as collection of secondary data from the local government agencies. Principle agencies and actors involved in the study were the Marine and Fisheries Service (DKP) of Konawe

Selatan District, the Regional Planning and Development Agency (Bappeda) of Konawe Selatan District, and fishermen from Konawe Selatan District. Respondents from the leadership of the two afore-mentioned government agencies in Konawe Selatan District included the agency head and secretary, department and section heads as well as other relevant staff. Respondents from the fishing communities included small-scale fishermen, especially those who used hook and line, gill nets, crab pots/traps and lift nets, targeting a variety of reef fish, demersal fish, pelagic fish and invertebrates, as well as fish traders/fish mongers and Konawe Selatan District fisheries extension officers.

Data analysis. Secondary data obtained from various documents and other unpublished sources (e.g. planning and policy documents from the central, province and district/city levels) were combined with data obtained from printed media and the internet and primary data. All data compiled were grouped according to the stage in the policy process and the factors involved. Data were analysed descriptively to describe and discuss policies for small-scale fisheries development, especially in the context of policy implementation.

Results and Discussion

Policy implementation. Purwanto & Sulistyastuti (2012) explains that many studies on the implementation of public policy have sought to understand the phenomena involved, including descriptive and causal models of the relationships between implementation performance and variables that influence it. Furthermore, as part of the study of public administration, the study of policy implementation cannot be separated from the development of paradigms in the science of public administration. This includes the emergence of the democratic era and the concept of governance which provides space for public participation. While in the past the government was the only actor in formulating and implementing various development policies and programs, with the emergence of the concept of governance, the government has been asked to involve other stakeholders, in particular the private sector and civil society, when using economic, political and administrative authority.

Advances in technology, especially information technology, have also had a considerable impact on the dynamics of both policy implementation and studies thereof. Information technology expands the range of variables as determinants of successful implementation. This is because information technology is changing many aspects, including the ways in which implementing organizations are organised, the relationships between actors and even which actors are involved in implementation (Purwanto & Sulistyastuti 2012). Information technology (IT) advantages for policy implementers include: simplifying coordination, supervision and data collection, opening up greater opportunities for successful implementation. In addition, IT can create opportunities for the involvement of communities/target groups in the implementation process. For example, the community can be involved in monitoring or providing feedback regarding the ongoing implementation process through a short massage service (SMS) or the internet. This community involvement opens opportunities for the community to supervise the possibility of irregularities in implementation. The involvement of the target group in conducting supervision will in turn allow early correction of implementation deviations.

According to Edwards (1980) there are four factors that influence the success or failure of implementing a policy: (1) communication, (2) resources, (3) attitude, and (4) bureaucratic structure. These four variables are related to one another (Figure 1). Communication is a human activity to convey thoughts and feelings, hopes or experiences to others. For implementation to be effective those who have the responsibility to implement a decision must know what they have to do. The policy order must be transmitted to the appropriate person(s), and it must be clear, accurate and consistent.

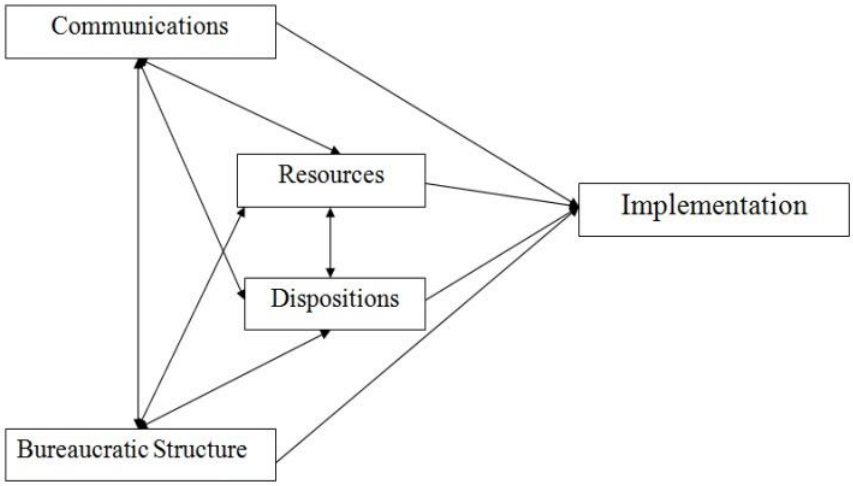

Figure 1. Implementation model according to Edwards (1980).

Resources play an important role in policy implementation, because no matter how clear and consistent the provisions of the provisions or rules of a policy are, if the personnel who are responsible for implementing the policy do not have the resources to make differences effectively, the implementation of the policy will not be effective. Resources include leaders and staff who must have the skills and abilities to be able to carry out their duties, as well as the necessary financial and material resources.

Attitude in this context is defined as the attitude of the implementers towards implementing policies. If they are to succeed effectively and efficiently, implementers must not only know what they have to do and have the ability to implement the policy, but they must also have the will to implement the policy. Even if the resources for implementing a policy are sufficient and implementers know what to do and how to do it, and they have the will to do it, implementation may still be ineffective, if the bureaucratic structure and/or standard operating procedures are inefficient or inappropriate.

Small scale fisheries development. In a developing country like Indonesia, development has always been the main focus in order to achieve success and success in every aspect of life. However, the term development is often interpreted differently depending on the context. Siagian in Suryono (2010) considers that development is a direction or a series of conscious efforts to achieve growth and change oriented towards modernity that is planned and carried out by a national or sub-national government. Meanwhile, according to Bryant and White in Suryono (2010), development is an effort to improve the ability of human beings to influence their future with five main implications. In this concept, development means: (1) optimally generating the capacity of both individuals and groups; (2) encouraging the growth of togetherness, equity and welfare; (3) empowering the community and individuals; (4) developing self-reliance and sustainability; (5) reducing the interdependence of one country on another.

Based on the above, development can be simply understood as a process of change that is carried out consciously and continuously to achieve progress and improvement in a better life towards the desired goals. Development often becomes a kind of ideology of developmentalism, the awareness of a nation that is formed through its experiences, both success and failure experiences, which determines their interpretation of development and becomes the beginning of a development paradigm shift. However, there has been widespread failure of development models in developing countries.

There is a general perception that fishermen can be divided into two groups, namely large scale fishermen and small scale fishermen (Vianna et al 2020). Large-scale fishermen tend to be organized in a manner similar to that of agro-industrial companies in developed countries, are often involved in fishing activities which are more capital intensive, tend to have higher incomes and often produce fishery products such as

canned fish and frozen fish for export purposes. Meanwhile, small-scale fishermen generally operate in a more restricted area, sometimes overlapping with areas used for aquaculture, and their activities are generally labour intensive (Teh & Sumaila 2011; Schuhbauer & Sumaila 2016). The characteristics of small-scale fishermen can also be perceived as based on the type and level of technology (fishing gear and vessels) or cultural aspects, which are often closely related to one another. These fishermen are also sometimes referred to as artisanal fishers and include subsistence fishermen whose catch is mostly destines to meet daily basic needs and not to be invested for business development .

In Indonesia, there are at least three types of fishermen and fishing businesses or units (Satria 2015). Firstly, traditional fishermen who carry out fishing activities on a subsistence basis. Production is mostly used to meet daily needs, the technology is simple and operated in coastal waters. For these fishers, being a fisherman is a way of life. The boat owner usually doubles as the captain or crew. The second comprises commercial fishermen, who are profit oriented and reinvest some of the income for the progress of their business. The technology used is usually intermediate level and vessels operate further from shore; traditional profit sharing schemes are most often still used. The business unit organization is hierarchical and needs specialists such as helmsmen, mechanics and navigators or fishing masters. Generally, the vessel owners no longer go to sea. The third comprises industrial fishing units, where production orientation is profit oriented and value added. The technological level is higher, and the vessels are designed to operate on the high seas, including international waters. The production unit organization is very hierarchical with more specialists; in general the profit sharing pattern has been abandoned and a wage pattern is used. However, none of these categories is static. In particular, the motorization of fishing vessels, even small canoes, is changing small-scale fishermen from fully traditional or artisanal fishers to semi-modern or post-traditional fishers (Satria 2009). The use of both outboard and inboard motors has opened up opportunities for fishermen to catch fish in waters further away from their base, even offshore waters, and should therefore allow them to obtain a surplus catch.

Implementation of small-scale fisheries development policy in Konawe Selatan District. Konawe Selatan District has a land are of 4514.2 km^2, with 26 small islands. Of the 22 sub-districts, 9 are coastal sub-districts with 105 coastal villages and marine fisheries potential, while the remainder have rivers and wetlands suitable for inland fisheries (Konawe Selatan District Marine and Fisheries Service 2018). The coastline of Konawe Selatan District stretches from Tinanggea Sub-District to Laonti Sub-District. The socio-economic condition of the coastal village communities is still below average both in economic terms and with respect to educational attainment. This situation has resulted in the marine and fisheries potential of Konawe Selatan District not being optimally utilized for rural progress and community welfare (Konawe Selatan District Marine and Fisheries Service 2016).

The waters around Konawe Selatan are naturally rich in fisheries resources. There are three large bays (Moramo Bay, Starling Bay and Kolono Bay) and Konawe Selatan waters are adjacent to the Tiworo Strait and the Banda Sea. The latter is suitable for fishermen with medium and large boats and fishing gear targeting large pelagic fishes such as skipjack tuna, yellowfin tuna, mackerel tuna, and mackerel scads. The reported maximum sustainable yield (MSY) of the nearby waters is around 170,000 tonnes year^{-1}, whereas the recorded landings are around 17,000 tonnes year^{-1}, or around 10% of the MSY. However, the marine and fisheries sector is part of the general agricultural sector (along with arable and livestock farming, plantations and the forestry sector), and has made a relatively minor contribution to the Gross Regional Domestic Product (GRDP) of Konawe Selatan District. GRDP data for the past 5 years shows that revenues from this sector have decreased (BPS 2019).

According to the Konawe Selatan District Marine and Fisheries Service in 2019, the low level of exploitation and low economic contribution are due to the lack of capacity in terms of both human resources (fishermen) and the fleet. The fishing fleet consists

mainly of small vessels with low technology/traditional fishing gears, meaning that most fishermen operate in the coastal zone, about 2-3 NM offshore. Therefore, the wealth of fisheries resources further offshore and in the EEZ cannot be reached by local fishermen. Furthermore, the coastal waters become increasingly turbid in the rainy season. This is thought to be due to coastal reclamation and the construction of a wharf associated with mining and a smelter. This sedimentation will result in the degradation of coastal ecosystems such as coral reefs and mangrove forests. Fishermen are therefore forced to go further out to sea to catch fish, which results in higher operational costs.

Problems raised by the respondents include the large number of government programs that have not succeeded in achieving their goals. Reasons for this poor performance include overlap between central and regional government policies, low commitment and a lack of synergy between the implementers (stakeholders), including poor communication between them, a lack of support for human resources development, inadequate aquaculture and capture fishery infrastructure, problems with budget commitments and insufficient budget allocations. Furthermore, institutional functioning and the role of fisheries communities is not optimal, seed availability is limited for fish farmers, and marketing of fisheries produce is far from optimal. The use of improper aquaculture and fishing methods has also resulted in a decrease in the environmental carrying capacity and fisheries catch per unit effort. These problems have meant that although fisheries production has increased, this has not produced significant improvements in the welfare of the marine and fisheries community, especially the small-scale fishers in Konawe Selatan District.

From Table 1, it can be seen that there has been an increase in fisheries landings in the Konawe Selatan district since 2013. However, these figures are still low compared to the estimated fisheries potential. The increase in capture fishery production in Konawe Selatan District is not significant compared with the efforts expended each year by the regional and central government as well as the private sector to increase the capacity of the fleet and fishing gear.

Table 1

Capture Fisheries Production in Konawe Selatan District 2013-2018

Year	*Tonnes*
2013	385
2014	489
2015	3,757
2016	6,652
2017	7,078
2018	6,564

Source: BPS (2019).

However, statistical information such as that in Table 1 does not provide a detailed description of the contribution of each segment of the fisheries community based on their classification. Not all small-scale fishery catch landings are reported, so that the capture fisheries statistics do not reflect the full contribution of the small-scale fisheries. The fishing fleet is still dominated by small vessels under 10 GT (Table 2) which generally operate up to 4 NM offshore. So even though the fishing fleet is large in terms of number of vessels, the total fishing capacity and catch volume are still small. Meanwhile, there were very few larger vessels above 10 GT in the District; data on these is not available in the district level statistics as they are registered at provincial (up to 30 GT) or national level (> 30 GT).

Table 2

Number of fishing vessels by type 2013-2017

No.	*Vessel type*	*2013*	*2014*	*2015*	*2016*	*2017*
I	Unmotorised vessels	2,910	2,823	2,910	2,969	2,969
	- Outrigger canoe (*jukung*)	1,390	1,375	1,390	1,443	1,443
	- Planked canoe (*perahu papan* or *body batang*)	1,520	1,448	1,520	1,526	1,526
II	Vessels with outboard motors/katinting	943	920	943	966	966
III	Vessels with inboard motors	481	490	481	497	497
	Total	4,334	4,233	4,334	4,432	4,432

Source: BPS (2018, 2019).

The District Statistics (BPS 2018, 2019) differ somewhat from the data provided by the Konawe Selatan Marine and Fisheries Service in 2018 (Table 3). One reason for the somewhat lower overall figures in Table 3 is that there are always some boats damaged. However, these data also include the larger vessels based in and legally operating from the District. These data reinforce the overall small size of vessels in the local fishing fleet, with 99.23% small-scale fishing vessels less than 10 GT. So it can be concluded that the majority of fishermen in this area are small-scale fishers who mostly fish within the coastal zones (0-4 NM offshore) within Fisheries Management Area (FMA) 714.

Table 3

Number of fishing vessels by class and tonnage (GT) in Konawe Selatan District in 2017

Vessel type	*Number of vessels*
Unmotorised vessels	
Outrigger canoe (*jukung*)	1,436
Planked canoe (*perahu papan* or *body batang*)	1,521
Motorised vessels	
Outboard motor	961
Inboard motor < 5 GT	53
Inboard motor 5-10 GT	384
Inboard motor 10-20 GT	6
Inboard motor 20-30 GT	28

Source: Konawe Selatan Marine and Fisheries Service 2018 Capture Fisheries Statistics.

Development policy implementation - communication factor. Enactment of Law No. 23/2014 on Regional Government has caused substantial legal uncertainty in the management of natural resources, especially in the marine and fisheries sector. One of the main features of the new law is that it takes over the authority of the district government in managing maritime and fisheries affairs and transfers this authority to the central and provincial governments (Dirhamsyah 2016; Ambo-Rappe & Moore 2018; Sutyawan 2019). In particular, there are many questions with regards to how the division of authority will function, both in practice and in law, between the central, provincial and district/city governments.

In Konawe Selatan District, the new division of authority has caused communication and coordination to stagnate. The large number of government programs that have not succeeded in achieving their goals is related to the low level of synergy between stakeholders is still low, including a lack of communication between sectors and stakeholder groups, vertically from local to provincial and national levels, and internally within relevant line agencies. Communication in the context of the framework set out in Edwards (1980) implies a form of openness. In addition to providing "space" or opportunities for subordinates to be able to consult regarding the various obstacles or obstacles they face in carrying out their duties, the leadership must also be willing to consult staff or subordinates, especially when facing constraints in making decisions. Communication is an important part of an empowerment process, however the members

of an empowered group may have various limitations. In practice, consultation or communication is often in reality a direction given by an actor who provides guidance to the empowered group.

The field study found that communication between superiors and subordinates with respect to implementing policies was very limited. The Head of the Service, as the person in charge in the region, had a limited understanding of the problems in the field. For example, the obstacles that arise in encouraging the formation of a Cooperative Business Group (called KUB); obstacles in achieving a common vision between regulators and policy recipients; constraints in program formulation and implementation; the advances in program progress or achievements; the behaviour of fishermen in responding to the programs; the obstacles faced by technical staff and field assistants; the way in which assistants work, and whether their work is optimal or not; and whether fishing activities have been carried out by fishermen's groups in accordance with the proposed programs.

At the other end of the scale, there were still many fishermen, especially small-scale fishermen, who did not know and/or did not understand what programs the government (in particular the Marine and Fisheries Service) had implemented or was going to implement, due to the lack of information they received. This lack of communication was recognized by the Service, where it was considered to be due to the low frequency of meetings between the Service and fishermen due to budget constraints. The Service relied heavily on teams in the field such as fisheries extension officers. However, the extension efforts were considered ineffective due to the limited number of fishery extension officers who had to cover a very large area with many fishers.

The Marine and Fisheries Service socialization program is implemented once a year and even then the budget available limits the number of sites; sometimes only 2 villages a year, at the beginning of the implementation of each annual program. It would seem that there was no information or knowledge given on how to actually empower the Fishermen's Groups. The results of the field visits indicate that, in fact, the Fisheries Service technical officers and the capture fisheries outreach and extension officers tended to "improvise" and be "creative" in carrying out their duties in the field. Indeed, field staff hardly ever consulted with their superiors regarding obstacles encountered in the field, generally they handled everything by themselves; they perceived this as the normal role and dynamics of being outreach staff. Meanwhile, the commanding officer (the Service Head) rarely if ever contacted field staff at all, not even to ask how program implementation was progressing.

The problem was not with the delegation of authority to carry out tasks but rather with the lack of "dialogue" between section leaders and their superiors in program implementation. This lack of dialogue was replicated at the lower levels, e.g. between the technical teams and the outreach and extension teams. Interaction occurred when there was a need for funds to be released or if the technical team needed data on program activities. However, matters related to the level of progress with the program were hardly ever touched on in communication with policy regulators. Furthermore, at the level of providing guidance to fishermen, challenged with vehicular access to fishing communities were a further constraint experienced by the technical and outreach officers.

From these results it can be argued that basically the communication process is not working properly or even lacking. Similar to the previous aspects, a root cause is that the regional implementers perceive capture fisheries policy as the joint responsibility of the central and regional governments, that must be implemented at the regional level, but once again the "sense" of the Capture Fisheries policy is very limited. However, on the other hand, this description also shows that there are serious problems with the small-scale fishermen's groups themselves which needs to be addressed urgently. Once again the problem is with the mind-set of these fishermen. The guidance and instructions given by the outreach officers during the course of the process were not fully implemented. The most salient example of this was the lack of seriousness attempts by the fishermen to develop their abilities and expertise in the marine sector, in particular the lack of maintenance of equipment purchased from program funds.

Development policy implementation - resource factor. Based on the normative structure, the Head of the Konawe Selatan District Marine and Fisheries Service (MFS) is the Head of the Outreach and Extension Team (OET), and therefore responsible for capacity building of staff involved in technical and community outreach. The field observations show that capacity-building to enable personnel to provide more effective outreach and extension services to fishermen's groups mainly involved providing the field workers (technical and fisheries outreach/extension personnel) with knowledge regarding the programs through socialization and explanatory material regarding Program Implementation Guidelines issued by the Ministry of Marine Affairs and Fisheries. These guidelines lay out the duties and responsibilities of all parties involved and technical guidelines for the implementation.

When carrying out outreach and extension duties in the field, the technical team from the capture fisheries division (CFD) and field extension officers only communicate directly with the FMS Head and the Head of the Technical Team in this case the CFD head. The ability of field facilitators to provide assistance is mostly based on their individual accumulated experience. After investigating in more depth, it appeared that the low level of contribution from the FMS Head was due to his heavy workload with many other responsibilities. The FMS Head is responsible for all aspects of marine and fisheries sector development in Konawe Selatan District. On the one hand, the District FMS has its own programs agreed at the local level. On the other had, the FMS is tasked with implementing the programs or policies set by the Ministry of Marine Affairs and the Provincial FMS. In addition, the FMS Head is responsible to the District Head for all aspects of the performance of the Service he leads.

As a consequence of this heavy workload, the Konawe Selatan District MFS Head cannot pay special or detailed attention to small scale fishermen with regards to program implementation. As a consequence of this situation, the implementers in the field, especially field officers, must be able to develop their abilities while in the field, in order to be able to encourage and guide fishermen's groups so that they in turn are able to follow the directions given and achieve the anticipated program targets. The time management difficulties experienced by the MFS Head also resulted in a lack of technical capacity, for example providing training of trainers (TOT) on the implementation of outreach activities, monitoring and control, and effective tools to record and evaluate the level of program achievement, as well as knowledge on how to determine indicators of program outcome success.

The CFD Head of Division and his staff could not contribute more fully to the transfer of knowledge to the technical team and fisheries extension officers because they were limited by the scope of their authority (duties and functions, referred to by the acronym TUPOKSI), the absence of empowerment modules from the Ministry and limited funds.

Field assistants were mostly self-taught, learning and developing skills in mentoring on the job, and advances in their ability depended on their own intellectual drive and capacity. Normatively, community outreach and empowerment employs specific methods or models which the experts continue to develop every year. However, the field officers had not received formal training on how to carry out these tasks.

From the human resources aspect, the Konawe Selatan District FMS could be considered understaffed (in terms of both office and field staff) in relation to the statutory duties and functions (TUPOKSI) of the Service and the extent of the marine and fishery resources of the area. As a result, often a single staff member would be involved in or running several activities or programs concurrently, including activities funded at both the regional and central levels. As a result, the implementation of these activities was often not effective and/or not on time and sometimes they could not be implemented at all due to limited personnel, funds and the logistical challenges of any activities at sites very far from the district capital.

In addition, financial resources in the form of budgetary allocations from local and central governments were not only limited but had actually declined in recent years (Table 4). This is in contradiction with one of the main stated objectives of Konawe Selatan District which is to make the Marine and Fisheries Sector one of the drivers of

development and a major contributor to local government revenue. To support this goal, from 2011 to 2016 Konawe Selatan was declared a Minapolitan District. The noticeable decrease after 2016 has affected the implementation of marine and fisheries programs, especially capture fisheries.

Table 4

Konawe Selatan District Marine and Fisheries Service Budget Allocations 2015-2019

Year	*Budget before adjustment*		*Budget after adjustment*	
	Service	*Capture fisheries*	*Service*	*Capture fisheries*
2015	11,718,655,774	2,761,880,000	10,599,914,961	2,461,880,000
2016	22,105,442,439	5,659,956,000	16,737,841,491	5,125,596,000
2017	7,335,265,718	2,193,706,750	6,579,551,258	1,042,177,750
2018	7,112,639,865	1,042,100,000	7,667,076,364	968,250,000
2019	5,245,500,000	1,143,730,000	4,495,500,000	1,048,120,000

Source: Budget Allocation Documents (DPA) of the Konawe Selatan District Marine and Fisheries Service 2015-2019.

Fisheries potential is high, as evidenced by the length of the coastline, and the three large bays (Moramo, Starling and Kolono) as well as the position of Konawe Selatan facing the Tiworo Strait and the Banda Sea. This situation offers many opportunities for fishermen with medium and large vessels and fishing gear, in particular with respect to large pelagic fishes such as skipjack tuna, mackerel tuna, yellowfin tuna and mackerel scads.

The data in Table 1 do show an increase in recorded fisheries catch landings in Konawe Selatan District, although this could be partially at least due to improvements in data collection and reporting systems in recent years, and in the most recent year the catch declined slightly compared to the previous year. However, when compared to the potential capture fisheries resources which should be accessible, the catch volume is still low, so it can be considered that the exploitation of fisheries resources is not optimal, or at least is not providing optimal benefits to the District.

Interviews with Tasrul, a fisherman from Panambeabarata Village and Muchtar, a fisherman from Wawosunggu Village, both in Moramo Sub-District, revealed that in recent years their catch volume had decreased and they had to travel to fishing grounds further away from their villages. As a result of catching less fish and higher fuel costs their income had decreased. In addition, in the fishing grounds they had to compete with fishermen from outside the area (so-called *andon* fishers) using larger fishing vessels and gear. Furthermore, Tasrul explained that he was a net fisherman who had been registered with two fishermen's groups (one in 2015, which he eventually left, then joined another group in 2019) and had received government assistance in 2015 and 2019. Initially the fishermen formed a group to obtain assistance under the Capture Fisheries Rural Business Development Program (PUMP) from the government in 2015, but they felt the assistance was not sufficient because they were only given 1 net per person. Apart from that, another perceived problem was that the MFS did not provide routine guidance and training to fishermen.

There is also the fact that, once they had received the aid packages, some fishermen's groups did not carry out any significant activity, most of them took the attitude that "the important thing is to receive aid", but they did not want to change their ways. An example of this is a case where, after receiving a net, it turned out that after 3 months the net was gone. When asked for a report, the report was not made, and a site visit six months later showed there was no activity. For groups like this, assistance in the form of advice is still given, but they are very unlikely to receive any further financial aid.

Another interviewee was Yamin in Lapuko Moramo Village, who operates one of the 6 floating liftnets (*bagang*) still operating in Moramo Bay. His group received aid in the form of *bagang* lift net units in 2012 but they were not used and were eventually damaged due to conflicts of interest over asset management. Yamin explained that the number of lift nets and the catch volume had declined as a result of the establishment of

the Tonasa cement packaging factory at the Lapuko jetty. The lights from this installation were brighter than the lights (powered by car batteries) used by the liftnet fishermen to attract phototaxis positive fish at night. In addition, the large number of fish attracting devices (FADs) set by other fishermen in front of Moramo Bay mean that very few fish now enter the Bay. The data show that the number of fishing gear and vessels has not changed much, because, although every year there are many new vessels added to the fishing fleet, the number of damaged vessels taken out of service is also large; furthermore, the vessels and gear used have remained predominantly small-scale.

The field observations show that the implementation of small-scale fisheries development policies in Konawe Selatan is a continuation of the empowerment programs for coastal communities that are considered synonymous with poor fishermen. The main change is that the small-scale fisheries development policy program is more often in the form of business capital assistance to fishermen. Under this change, fishermen are expected to be able to independently draw up business plans, then implement them in groups and be responsible for the activities carried out. This change of orientation also requires the technical implementing staff and outreach/extension officers in the field to have sufficient knowledge and skills to be able to assist the selected Joint Business Groups (acronym KUB) formed throughout all stages of the program. Their tasks include overseeing the initiation of group formation, group verification, assisting groups in designing activities, assisting fishermen's groups in implementing activities, and providing various forms of knowledge and skills to these groups. Therefore, this new pattern also requires building strong and relevant capacity among the technical and outreach facilitators involved in the field.

Another finding in the field was that the capacity building outreach programs for the fishermen began with guidance on how to make proposals and reports, both technical reports and financial reports. Apart from that, they were given training sessions, taken for benchmarking study tours to other fishermen's groups that were working well, or sent to other areas. An example of this type of activity was a training in making "*karamba*" (a kind of FAD), groups of beginners (still small-scale) were sent to learn from groups that are already considered "intermediate" to learn about fisheries, catch management, and group institutional development. Experts were invited for some training events; these experts were sought out by the MFS technical team.

Field observations revealed that the fishermen often did not take optimal advantage of all the "empowerment" activities available to them. There was generally no real innovation in their daily work routines. Their fishing patterns were still similar to those of most small fishermen in general; they would "go to sea" with equipment they already considered good, relying on the season and "good luck" for their catch, which they sold through local traditional markets or to fish middlemen (*juragan*) at the fish auction site. They did not make additional efforts such as processing fish after coming home from the sea, they did not think about making FADs at sea, or forming a cooperative that could manage fish sales independently of the middlemen. To make ends meet, they were more likely to take part in other activities outside the fisheries sector. Some chose to become brock-layers or other construction workers, while others become drivers of city transportation.

These facts show that the fishermen who had become members of the various Joint Business Groups (KUB) did not respond to or take on board the knowledge imparted to them through the various capacity building efforts. The training events were rarely followed by the implementation of innovative activities in the fisheries sector. FADs built with program funding were already broken. More in-depth observations on these matters revealed a lack of creativity and little desire to increase capacity in the marine sector. The "strongest" perception that emerged from their perspectives on the sea was that fishing in the sea is intrinsically linked to shortfalls and limitations.

Development policy implementation - bureaucratic attitude factor. If they are to succeed effectively and efficiently, implementers must not only know what they have to do and have the ability to implement the policy, but they must also have the will to implement the policy. With regard to the policies adopted (commitment), we found that

the level of implementation was low. This is indicated by the inconsistency between the contents of the master plan (as an element of intention) with the level of attention given to actualising or achieving the goals and objectives of fisheries development. This was especially so in the case of small-scale fisheries and fishermen. Realizing development goals and objectives in fishing areas or communities was only carried out by the staff of the Capture Fisheries Division (CFD) at the Marine and Fisheries Service (MFS), comprising the department head, three section heads, one civil service staff member and two contract staff. The involvement of these staff members was not full-time, because of the limited number of personnel and the wide variety of programs and other activities from both the central and regional levels of government that had to be carried out with limited funds in relation to the activities. Therefore, performance and achievements in providing guidance to fishermen were often neglected.

The low level of commitment impacted the communication, resources and bureaucratic structure aspects. Therefore, there is a need for small-scale fisheries development in Konawe District to be managed professionally with a strong will and support as a form of commitment from the bureaucratic leadership, as the mainstay for successful fisheries development implementation in the District.

With regards to the implementation of small-scale fisheries development policies, the data obtained show that some fishermen were given direct financial assistance under a program called Community Direct Assistance (acronym BLM) where the funds were given directly to the groups formed. These fund funds were intended to assist small-scale fishermen in the procurement of fishing gear and rehabilitation of small fishing boats. Each group had a maximum of 10 members, including the officers (Chairman, Secretary, Treasurer and 7 members). These funds were paid into the group bank accounts which were in the names of 2 people, the Chairman and Treasurer. In addition to this cash funding, there are also funds provided for the rehabilitation of small fishing vessels (fishing boats) with a maximum of IDR 50 million. According to one of the field technical assistants, there was a rush to form fishermen's groups after the BLM program was started. However, to be able to receive funds, the group must have already carried out some activities. This means that not all of these fishermen's groups have received assistance from the program.

Observations in the field showed that most of the fishermen's groups used the BLM funding to purchase small long-shaft outboard motors (locally called *mesin katinting*) suited to the size of their boats. The term *katinting* is the local term for the smallest vessels that are often used by fishermen to find fish, and the name has been given to the engines used to power these craft. Another common use was the purchase of improved hook and line fishing gear. The small-scale fishermen who are members of the KUB fishermen's groups mostly use traditional fishing gear such as handlines fitted with hooks. Some fishermen also used the funds to buy or repair fishing vessels.

Another type of facility provided by the Konawe Selatan District MFS is the subsidised fuel (diesel) for fishermen through "Solar Package Dealers" (SPD). The fishermen can buy subsidised diesel from the SPDs which are located at fish landing sites where there are also other special facilities for fishermen, making it easier for small fishermen to obtain fuel.

The field research revealed that the facilitation provided by the MFS to the fishermen's groups in the District was limited to the matters described above. There was little or no attention to or action regarding the sustainability of the capture fisheries sector. One example is the question of stabilising the selling price of fish. This was seen to be an important issue because the position and power of the fish traders/middlemen (*juragan*) enabled to dominate the fishermen, controlling the price of fish even at the fish auction site. The fishermen were very dependent on them; this situation of dependence was deliberately created by the *juragan*, in particular through making cash advances even when the fishermen had not yet "deposited" the fish.

Based on the situation described above, it can be concluded that attitude is a major factor which needs strengthening for successful policy implementation. Commitment needs to be developed from a moral perspective. *Akhlakul karimah* (praiseworthy attitude) consists of four elements, integrating the personality and worthy

deeds of policy implementers, namely: 1) spiritual need; 2) intelligence (IQ, EQ, SQ); 3) integrity; and 4) working hard to the best of one's ability while accepting human limitations and the will of God (*ikthiar* and *tawakal*). This recommendation is a reconstruction of the theory of Edwards (1980).

Development policy implementation - bureaucratic structure factor. Even if the resources for implementing a policy are sufficient, the implementers know what to do and how to do it, and they have the desire to do it, implementation may still be ineffective, due to the inefficiency of the existing bureaucratic structure. Each organisational unit tasked with making policies and/or controlling their implementation must develop standard operating procedures (SOPs) to address and manage routine conditions, which must be accepted and applied regularly.

Furthermore, when discussing aspects of the bureaucratic structure, it should be remembered that in the context of the Edwards (1980) framework, support specifically refers to support from leaders to their subordinates. A leader should provide full support for their subordinates to enable them to carry out their duties. With respect to this research, the support aspect is interpreted as all forms of support provided by the Head of the MFS to the MFS staff connection with relevant activities (e.g. in the context of capacity building), as well as support from the MFS as an organisation to the fishermen's groups or fisheries business groups (KUB) receiving outreach and extension services or included in the capacity building programs implemented by the MFS.

From the combined results of this study, it was found that the main problems resulting in the sub-optimal implementation of small-scale fisheries policies arise from the policy implementing organization itself. Internal capacity building was almost non-existent. The four aspects of implementation proposed by Edwards (1980) were almost non-existent at the level of the policy regulator. There were also weaknesses at the level of the policy recipients, in particular the issues of character and "values" common among fishermen, resulting in fisheries policies not producing the expected results. Five underlying paradigms of policy ineffectiveness were identified:

Lack of vision. Edwards (1980) argues that an important element in implementation is a strong, empowering vision. This vision must be built or driven by those who will carry out the policy. One weakness in the implementation of the small-scale fisheries programs in Konawe Selatan District was the lack of envisionment before the program was implemented. The root cause of this lack of vision was the misperception of regional policy implementers who viewed the policies or programs as no more than a "duty" of the subordinates to their superiors.

Policy recipient's attitudes. Most recipients (fishermen belonging to assisted groups) lacked the drive or motivation for sustained efforts to improve their lives and livelihoods in their profession as fishermen. The activity of "going to sea" was seen as a routine, not an opportunity to create change. The various treatments (programs/activities) provided were seen as routine activities that should be carried out by the government. They did not develop anything from what they received. This problem of mentality actually caused several programs that were already running to come to a halt part way through.

Social ties. Fishermen have a high level of dependency on the middlemen/lenders called "*juragan*". The fishermen often take money up-front from the *juragan* before they have caught and delivered the fish, as advance payment and/or as loans to be repaid in fish. Meanwhile the catch volume is not constant and depends on many factors. This condition resulted in strong ties and a high dependency of fishermen on the *juragan*, with the fishermen often chronically in debt.

Lifestyle. The field research found that the quality of life of the group members had not changed, one reason being the lifestyle and way of life of the fishermen themselves. Fishermen who joined a Joint Business Group (KUB) were basically traditional fishermen, who generally have a consumptive lifestyle. They tend to spend any income they receive

on secondary needs (consumer goods and entertainment) rather than primary needs (e.g. food, accommodation, clothes, children's education, health). They do not have savings because they tend to see income as an "opportunity" to gratify their desire for secondary goods. Examples include buying a motorbike, household entertainment equipment such as a sound system, and other audio-visual equipment that they do not yet have.

Implementation processes. Root causes of the sub-optimal implementation of small-scale fisheries policies were detected within the policy implementing organisation itself, i.e. the Konawe Selatan District Marine and Fisheries Service. Capacity building or other strengthening processes for the lower-level staff actually implementing the policies were extremely rare, and highly dependent on the availability of (generally insufficient) funds.

Conclusions. The implementation of small-scale fisheries development policies in Konawe Selatan District did not fulfil the four criteria of implementation of communication, bureaucratic structure, attitude and resources. Communication was often misdirected, with minimal and ineffective socialization of program activities in the field, giving an impression that communication channels were inaccessible or closed. Resources provided were not proportional to the planned activities and targets, in terms of budget allocations, human resources, and infrastructure. With respect to attitude, the implementers lacked commitment, as indicated by the miss-match between the ambitious plans for the fisheries sector in the master plan (as an element of intention) and the lack of seriousness displayed in realizing the goals and objectives of small-scale fisheries development. The bureaucratic structure had no clear operational standards in relation to small-scale fisheries development, so there was no benchmark for assessing efficient implementation and performance levels in realizing goals and objectives. The existing implementation of the small-scale fisheries policies was in effect more akin to a physical assistance policy (e.g. providing equipment), packaged in ways which were easy to administer rather than as an empowerment mission. The provision of funds for fishermen groups focused on procuring tools and not on strengthening knowledge, expertise and independence. In addition, the impact of small-scale fisheries development policies in Konawe Selatan District has not been significant because the number of beneficiaries is relatively small, with benefits unevenly distributed in an unstructured manner.

In order to address these issues, the form and content of fisheries policy and its implementation should lead to the provision of knowledge, expertise, and character building, backed by appropriate infrastructure and support for the distribution of fisheries catch. The people in charge of policy in the region must be given realistic time-frames in which to implement appropriate and realistic policies, supported by adequate teams with appropriate expertise and appropriate budgeting allocations and systems. Furthermore, it is not enough to expect the field staff to be able to implementation activities in the field on their own; supervision and involvement from the highest level of the implementing organizations are required to ensure that empowerment activities are managed effectively and efficiently and can achieve the goals and targets set.

References

Ambo-Rappe R., Moore A. M., 2018 Sulawesi seas, Indonesia. In: World seas: an environmental evaluation. Vol. II: The Indian Ocean to the Pacific. 2nd edition. Sheppard C. (ed), Elsevier Academic Press, London, pp. 559-582.

Anonymous, 2016 Potensi sumberdaya kelautan dan perikanan. Available at: https://www.ikannila.com/2016/09/potensi-sumber-daya-perikanan-dan.html. Accessed: November, 2018. [in Indonesian]

Apridar K. M., Suhana, 2011 Ekonomi kelautan dan pesisir. Yogyakarta: Graha Ilmu, 230 pp. [in Indonesian]

BPS, 2018 Kabupaten Konawe Selatan dalam angka 2018. Andoolo: Biro Pusat Statistik (BPS) Kabupaten Konawe Selatan, 438 pp. [in Indonesian]

BPS, 2019 Kabupaten Konawe Selatan dalam angka 2019. Andoolo: Biro Pusat Statistik (BPS) Kabupaten Konawe Selatan, 392 pp. [in Indonesian]
Brugère C., De Young C., 2015 Assessing climate change vulnerability in fisheries and aquaculture: available methodologies and their relevance for the sector. FAO, Rome, Technical Paper No. 597:98 pp.
Burke L., Reytar K., Spalding M., Perry A., Knight M., Kushner B., Starkhouse B., Waite R., White A., 2012 Reefs at risk revisited in the coral triangle. World Resources Institute, Washington DC, 86 pp.
CEA, 2018 Trends in marine resources and fisheries management in Indonesia: a 2018 review. San Franciso: California Environmental Associates and The David and Lucille Packard Foundation, 146 pp.
Dapu Y. M., 2016 Implikasi UU No. 23 Tahun 2014 terhadap Kewenangan Urusan Pemerintahan Daerah di Bidang Kelautan dan Perikanan. Lex et Societatis 4(8):68-75. [in Indonesian]
Dirhamsyah, 2016 Setbacks in the development of marine protected areas in Indonesia. Australian Journal of Maritime & Ocean Affairs 8(2):87-100.
EC-PREP, 2005 The Indonesian ornamental fish trade: case studies and options for improving livelihoods while promoting sustainability in Banggai and Banyuwangi. Bangkok: Network of Aquaculture Centres in Asia, Support to Regional Aquatic Resources Management, 286 pp.
Edwards G. C., 1980 Implementing public policy. Washington D.C.: Congressional Quarterly Press, 181 pp.
FAO, 2015 Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication: at a glance. FAO, Rome, 20 pp.
Ferse S. C. A., Knittweis L., Krause G., Maddusila A., Glaser M., 2012 Livelihoods of ornamental coral fishermen in South Sulawesi/Indonesia: implications for management. Coastal Management 40(5):525-555.
Glaeser B., Glaser M., 2011 People, fish and coral reefs in Indonesia: a contribution to social-ecological research. Gaia 20(2):139-141.
Hamdani H., Wulandari K., 2013 Faktor penyebab kemiskinan nelayan tradisional. Jember: Universitas Jember, Artikel Ilmiah Hasil Penelitian Mahasiswa, 8 pp. [in Indonesian]
Hoegh-Guldberg O., Mumby P. J., Hooten A. J., Steneck R. S., Greenfield P., Gomez E., Harvell C. D., Sale P. F., Edwards A. J., Caldeira K., Knowlton N., Eakin C. M., Iglesias-Prieto R., Muthiga N., Bradbury R. H., Dubi A., Hatziolos M. E., 2007 Coral reefs under rapid climate change and ocean acidification. Science 318(5857):1737-1742.
Hoegh-Guldberg O., Hoegh-Guldberg H., Veron J. E. N., et al., 2009 The coral triangle and climate change: ecosystems, people and societies at risk. WWF Australia: Brisbane, 276 pp.
Konawe Selatan District Marine and Fisheries Service, 2016 Rencana Strategis (Renstra) Tahun 2016-2021. Andoolo: Dinas Kelautan dan Perikanan Kabupaten Konawe Selatan, 65 pp. [in Indonesian]
Konawe Selatan District Marine and Fisheries Service, 2018 Data Statistik Perikanan Dinas Kelautan dan Perikanan Kabupaten Konawe Selatan. Andoolo: Dinas Kelautan dan Perikanan Kabupaten Konawe Selatan, 17 pp. [in Indonesian]
Kordi G. H., 2015 Pengelolaan perikanan Indonesia [Indonesian Fisheries Management]. Penerbit: Pustaka Baru Press, 306 pp. [in Indonesian]
Pauwelussen A., 2016 Community as network: exploring a relational approach to social resilience in coastal Indonesia. Maritime Studies 15:2.
Purwanto E. A., Sulistyastuti D. R., 2012 Implementasi kebijakan publik: konsep dan aplikasinya di Indonesia [Implementation of public policy: concepts and application in Indonesia]. Yogyakarta: Gava Media, 194 pp. [in Indonesian]
Satria A., 2009 Ekologi politik nelayan. Yogyakarta: LKIS, 410 pp. [in Indonesian]
Satria A., 2015 Politik kelautan dan perikanan. Yogyakarta: Yayasan Pustaka Obor Indonesia, 189 pp. [in Indonesian]

Schuhbauer A., Sumaila U. R., 2016 Economic viability and small-scale fisheries - a review. Ecological Economics 124:69-75.
Suryono A., 2010 Dimensi-dimensi prima teori pembangunan. Malang: UB Press, 286 pp. [in Indonesian]
Sutyawan F., 2019 Federalism in marine fisheries governance in Indonesia: an analysis of the stakeholders' perceptions. Doctoral Dissertation, University of Rhode Island, 233 pp.
Teh L. C. L, Sumaila U. R., 2011 Contribution of marine fisheries to worldwide employment. Fish and Fisheries 14(1):77-88.
Varkey D. A., Ainsworth C. H., Pitcher T. J., Goram Y., Sumaila R., 2010 Illegal, unreported and unregulated fisheries catch in Raja Ampat Regency, Eastern Indonesia. Marine Policy 34(2):228-236.
Vianna G. M. S., Zeller D., Pauly D., 2020 Fisheries and policy implications for human nutrition. Current Environmental Health Reports 7:161-169.
Wijayani F., 2016 Strategi keluarga nelayan dalam mengatasi kemiskinan. Artikel E-Journal. Bachelor Thesis, Yogyakarta: Universitas Negeri Yogyakarta, 157 pp. [in Indonesian]

Received: 18 October 2020. Accepted: 11 January 2021. Published online: 25 February 2021.
Authors:
Adam Azhar Amirullah, Doctoral Program in Management, Faculty of Management, Universitas Halu Oleo, Kendari 93121, Southeast Sulawesi, Indonesia, e-mail: teplan_adams@yahoo.com
Eka Suaib, Faculty of Social and Political Sciences, Universitas Halu Oleo, Kendari 93231, Southeast Sulawesi, Indonesia, e-mail: ekasuaib1966@gmail.com
Arifin Utha, Faculty of Social and Political Sciences, Universitas Halu Oleo, Kendari 93231, Southeast Sulawesi, Indonesia, e-mail: arifinutha6@gmail.com
Jamal Bake, Faculty of Social and Political Sciences, Universitas Halu Oleo, Kendari 93231, Southeast Sulawesi, Indonesia, e-mail: jamalbake@yahoo.com

How to cite this article:
Amirullah A. A., Suaib E., Utha A., Bake J., 2021 Implementation of small-scale fisheries development policies in Konawe Selatan District. AACL Bioflux 14(1):371-387.