

Bajo Ethnopedagogic

The Strategy for Overcoming Socio-cultural Impacts Due to Modernization of Fishery on Saponda Island Konawe Regency

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Abstract. This study and research aim for mapping the aspects the socio-cultural impact due to the modernization of fishery that occurred and was introduced by the Bajo fisher of Saponda Island and this study also aim for formulating an ethnopedagogic strategy based on the Bajo Ethnic in the framework of minimizing the negative impact of fishery modernization on the socio-cultural aspects of the Bajo community on Saponda Island. This type of research is included in post positivistic research with a case study approach by raising the case of the Bajo community on Saponda Island. The method is carried out qualitatively with in-depth interview data collection techniques and direct observation. While the results of this study show, first, the impact of fishery modernization in the cultural aspect occurs in the form of local wisdom, local wisdom which is the capital, identity for the Bajo community. Local wisdom in this case is in the form of values/philosophies of life, traditions, folklore, Bajo arts, and local games. Second, the ethnopedagogic strategy as a solution to minimize the negative effects of fishery modernization from the socio-cultural aspect, especially the degradation of local cultural values, and a shift in motivation from social solidarity. The strategies are (1) Innovation of teaching materials through internalization and integration of Bajo local wisdom values, both expository strategy and social inquiry strategy. (2) Development of a fun and attractive learning model/method based on the socio-cultural potential of the Bajo, such as the integration of the pasipupukang tradition into cooperative learning. (3) Innovation of learning media based on the potential of local wisdom such as iko-iko, ngigal dance, and liligo song.

Keywords: Strategy · Social · Culture · Fishery

1 Introduction

Indonesia has many ethnicities, tribes, races and cultures in which spread in 17,508 island and those are included in the maritime territory of the Unitary State of the Republic of Indonesia. Geographically, the position of the Indonesia is very strategic in the context of international sea trade between the West and the East. It has 42 cities and 181 regencies

located in coastal areas [1]. Syam also added in [2] that Indonesia's maritime area reaches 5.8 million km² and could be a potential marine resource as one of the pillars of expectation for the future.

According to the Fisheries Law number 45 of 2009, fisher is a person or an individual whose livelihood or source of life is fishing in the sea. Meanwhile, small fisher is a person whose livelihood is fishing to fulfil their daily needs using large fishing vessels of five gross tons (5GT). This limitation indicates that fisher's lives depend directly on marine products and make fisher be the main component of the construction of the Indonesian maritime community [3]. The domestic phenomenon of the underdeveloped condition of fisher, it needs a strategic study of various parties to continue to explore the right ideas to build a fishery system, on the one hand it can encourage production optimization, on the other hand it provides welfare for all levels of fisher and still pays attention to ecological sustainability. The existence of fishery modernization should be able to stimulate welfare and improve the standard of living of fisher and it can encourage the process of transformation from a direction of change to a more advanced direction, improving various aspects of people's lives [4].

Fishery modernization as a strategic choice and the demands of the times. The government's choice at that time was very right with promote the blue revolution movement in the midst of high food demand and the availability of potential fishery resources that are not yet optimal, especially aspects of domestic income in the fishery sector. According to [5] the existence of modernization carried out by the government and the private sector is intended as a form of attention and improvement of the welfare of fisher.

The blue revolution movement is a strategic step for the government to optimize the demands for fishery modernization, which has been active nationally since the 1960s. Although historically, the motorization system and technological development had been carried out long before that, nationally the blue revolution movement was increasingly massive in the New Order era, which focused on rural and coastal development. Fishery modernization creates new challenges as well as implication problems that must be approached comprehensively. The existence of motorization and industrialization of fisheries on the one hand facilitates the management system and growth of fishery production, but on the other hand it must be supported by capacity, resources and contestation between the fishing industry and fisher or among of the fisher itself. At the same time, aspects of sustainability and ecological conditions are also problems that cannot be separated from the impacts.

According to [6] he explained that local wisdom has pedagogical value to regulate behavior that is beneficial to the common interest of the community. This study is in accordance with the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 79 In 2014 article 2 paragraph (2) which explains that Local content is taught with the aim of equipping students with attitudes, morals, knowledge, and spirituality in their area. Another goal is to preserve and develop regional advantages and wisdom that are useful for themselves and their environment in order to support national development.

Ethnopedagogy is very important to apply considering that Indonesia is a plural country consisting of various ethnic groups, with different social and ethnic names, which of course have different cultures. Beside that, globalization and technological

developments can cause cultural changes in Indonesian society. If learning is oriented to ethnopedagogy is not applied early on, so globalization and rapid technological developments can shift local wisdom in society, especially in the Bajo community in the future. This shift occurs because there is no clear boundary between local culture and foreign culture. This condition clearly shows that education in Indonesia needs to apply learning oriented to local wisdom.

According to [7] he stated that the educational process by making local wisdom important to be realized because local wisdom has begun to be neglected which can be seen from the behavior of everyday life which does not embody the values of local wisdom and locality is eroded by the lifestyle order which contains pragmatic-capitalist values. Meanwhile, [8] states that iko-iko as local wisdom of the people ofBajo have values, educational philosophy, norms and so on.

The problem that still arises is that the implementation of learning oriented to local wisdom has not run optimally. It is explained that so far education and the value of local wisdom have not fully merged into a new formidable force in Indonesian education. In elementary school, learning that oriented to local wisdom has not been applied optimally even though thematic learning has been implemented which in its teaching must contain local wisdom. Findings in the field, less optimal learning oriented to local wisdom is caused by not supporting the facilities and infrastructure. Therefore, this study in addition to discussing strategies to overcome the socio-cultural impact also discusses the potential of local wisdom that must be developed as facilities and infrastructure that support the implementation of local wisdom-based learning, especially in the Bajo community on Saponda Island.

The research about Bajo Ethnopedagogy as Strategy for overcoming socio-cultural impacts due to fishery modernization on Saponda Island, Konawe Regency is conducted because it has not been found the research that explores the socio-cultural impact of fisheries modernization on the Bajo community on Saponda Island, Bajo ethnopedagogic strategies in overcoming socio-cultural impacts due to the modernization of fisheries on Saponda Island. A number of studies that have been conducted have only examined the response of the fishing community to fishery modernization (a case study of the Bajo tribal fishers in the village of Lagasa, Muna Regency), and the motivation and adaptation strategy of the agricultural system in supporting sustainable food security in small islands (a case study of Binongko Island, Kabupaten Muna). wakatobi).

In other words, previous researchers only analyzed in general, regarding the Strategy to Overcome Socio-Cultural Impacts Due to Fisheries Modernization. This study does not analyze only the social impact, but in more detail the socio-cultural impact of fishery modernization on the Bajo community and the Bajo ethnopedagogic strategy in overcoming the socio-cultural impact of fishery modernization. Thus, of course, this research has differences with previous research.

Several research results related to the Strategy to Overcome the Socio-Cultural Impacts Due to Fisheries Modernization and the Bajo ethnopedagogic strategy in overcoming the socio-cultural impacts due to the modernization of fisheries contained therein, will be presented below to see the differences and novelties between this research and other studies earlier. The first study entitled "The Meaning of Hamzah's Research (2008) found that the presence of fishery modernization for fishers provided a lot of space for

activity and job differentiation which was relatively high compared to before the entry of fisheries modernization. The community phenomenon that occurs in the Bajo fishing community in Lagasa shows that the existence of motorization in addition to making it easier, faster, extending the reach, also adds new work space in each "Gae" group of fishing efforts. But the problem is that people who are far more developed are only owners of capital and those who have an economic orientation leave the socio-cultural institutions that they have held as local communities. From the aspect of meaning, it shows that the higher the fishers's understanding of the economy, the faster the adoption of technology. This study shows that there is a productive contract between the culture and the economy of fishers, one of which must be set aside.

The second research by Nur Indar (2003) found that fisheries development with the jargon of fishery moderation both in terms of fishing gear and in terms of determining capture targets (ground fishing) on the one hand provides convenience and accelerates production aspects for fishers who use it, but on the other hand creates marginalization. The contribution of alternative fishing grounds and monitoring of fishing routes that should be provided by the government is still very little done. As a result, the concentration of fishing activities cannot be avoided by relying on investment capabilities alone, so that various kinds of conflicts between fishers and fishers and between fishers and the fishing industry often occur.

1.1 Research Question

Identification of problems that arise in the research location due to the fishery modernization in the socio-cultural aspect in general is the degradation of local cultural values both from the social and cultural aspects carried out by the Bajo community in Saponda. Utilization of local values as social capital for community development is degraded by the economic infiltration of the patron-clime system, transformation of assets, and changing people's mindsets towards being individual and materialist oriented. On the other hand, the roles of education that are expected to be a shield from the preservation and development of local Bajo ethnic values have not been running well. Whereas 99% of the people of Saponda are ethnic Bajo with local wisdom requirements. Referring to the brief description, the formulation of the problem of this study are:

- 1) How is the Socio-cultural Impact of Fishery Modernization on the Bajo Community on Saponda Island?
- 2) How is the Bajo ethnopedagogic strategy in overcoming the socio-cultural impacts of fisheries modernization on Saponda Island?

2 Method

The method is carried out qualitatively with in-depth interview data collection techniques and direct observation.

3 Results and Discussions

3.1 Socio-Cultural Impacts Due to Fishery Modernization on the Bajo Community on Saponda Island

The local values referred to in the sub-study are local wisdom which is the capital and identity of the Bajo on this island. Local wisdom in this case is in the form of values/philosophy of life, customs or traditions, folklore, Bajo singing and art, and local games. Of course, if the entire distribution is very broad, but what is seen at the research location is related to the values/philosophy of life and the customs/traditions of the Bajo, especially those related to social life as fisher.

Based on the data in 2019, Saponda Island is inhabited by approximately 1,584 residents. The population is mostly ethnic Bajo, estimated at around 95%. The rest are migrants due to work and marriage in this village. As an entity, the Bajo ethnic community of course also has a lot of local wisdom which becomes their social institutions and capital. However, along with the times, especially the phenomenon of modernization, in this case the focus of the study is that the modernization of fisheries has had a lot of influence and has an effect not only on their economic and ecological aspects but also on the socio-cultural aspects of the people on this island.

In the Bajo community, the findings of interviews and several studies have a lot of local wisdom. Some of these local wisdoms are still running and some are no longer running. In the tradition of going to sea, for example, some local wisdom that is of particular concern to researchers is "bapongka" or they usually call it "go pongka". This tradition is in the form of fishing activities or looking for marine products simultaneously, usually 10–15 boats, using traditional fishing gear, and by helping each other instead of competing with each other. They go looking for marine products within 1–2 days, bringing supplies and makeshift equipment. They help each other and make sure everyone among them has got seafood. However, nowadays, it is rarely done, looking for marine products is more dominant by walking individually or if at the same time only a few people.

In addition, there is another tradition of "Duata". According to informants in Saponda, namely the duata treatment procession, a number of traditional elders usually gather in a room and gather various types of ritual complements, such as various colored rice, incense, betel leaves, coconut, and bananas. Meanwhile, the person to be treated is taken to the sea accompanied by the singing of the Bajo people's song, namely lilligo and the ngigal dance. After leaving the sea, the sick and the traditional elders met at their original place and the treatment took place. However, these traditions are currently only carried out if there is a problem that afflicts the village such as an epidemic or mass illness that hits the residents of Saponda Village. Thus, many local values have been degraded, and this study focuses more on looking at the linkages between the existence of fisheries modernization and its effect on the sustainability of these values. And some data were found to be very impactful. There are many who experience changes in funds that are not even running anymore.

Regarding the description of the existence of some of these values, H. Talib (70 years old).

"Indeed, there are many traditions and customs of the Bajo people, sir, if you mention them one by one, there are too many, only the main things are related to our lives as fishers. What you are asking about is that the tradition of going to sea together is called pongka or bapongka, which means going to sea to look for seafood together. Each brought their own fishing gear and supplies. Looking for fish together, we help each other, so we will not let one of us go home if there is still someone who has not caught the catch. Before going to sea, there is usually a ritual of "praying" and begging to guard the sea to provide safety and remove our sustenance from the sea. In the past, it was crowded when we went back to sea, even young people used to dance like that, and we always cultivate togetherness. Regarding the village fighting tradition, there is also a duata name. It used to be routinely done by our village leaders and shamans. Likewise, the tradition of taking care of each other is called ngampuang, which is the tradition of visiting each other, especially if we have just returned from fishing for a few days. Or come home from another island to make a living. Meanwhile, if there are common problems, there are misunderstandings, or there are things that need to be resolved together, we know it here as pasippukan. The tradition still exists sometimes, but has changed a lot. Since people know Pajoloro, the pongka has turned into fishing in groups with only one ship. We as Kalo-koli fishers go to sea for a maximum of 4-5 h, and there is no need for crowds, there are results that we can go home immediately. Even if there is a ritual, each one of us, like us old people, I still do before going to sea, of course, pray first, intending to interact with the marine guards. But the younger ones may not do it anymore. Meanwhile, pasipupukan is still usually done, especially in certain family clumps, at the village level it is usually called a community meeting or village meeting. That's where the changes (interview 8/6/2020).

Meanwhile, what is also interesting from this sub-discussion is the tradition among the wife of fishers. Nur Hayati (45 years old) said about the tradition of the fishers of Saponda, the tradition in question is "nuba" but now the tradition is experiencing a shift.

"There is a habit of the wife of fishers for a long time "nuba" which is to carry out activities to spread sea products when the water recedes "meti". This Nuba is specifically for women and cannot be interfered with by men. In the past, if you had an appointment, you immediately took a new tool and rushed down. I also don't know why only women, but it has become a tradition, maybe at that time Bajo women wanted to show that without men we can work and earn. Our target is not only around Saponda, we will comb and rotate the islands, which have many or wide areas, so that when the area is met, the area for Nuba is wide to look for. While the marine animals we are looking for are usually shellfish, sea urchins, and fish as well. We sell the results in the market, many residents on the mainland take it. But in the 2000s it started to decrease a bit. There are actually still until now, but sometimes only 5 to 6 women do it. It's different before, we used to go down with dozens of ordinary people, without such a command, it means that we don't have a leader, who starts inviting them, then the others invite each other for noodles. So actually, everyone can be a mover, what I have seen from the beginning is that it is cohesiveness. Now there may be many problems, apart from getting busier, a lot of noodles as well as other businesses, there is karamba, many children also go to school, also the political influence of different choices, including the election of village heads also shows each other's strength, not just mothers- Mothers from among men also sometimes have tension, because of different choices (interview, 9/6/2021)".

The explanation from the informant, Mrs. Nur Hayati (45) is interesting for researchers, because it turns out that the existence of women can show their role not only in the private space but also in the domestic space. In the economic field, she can support his family's income. Their existence has been established for a long time through the "nuba" tradition, namely looking for marine products by utilizing water conditions at low tide (meti) in shallow sea areas (pasi). Even through this nuba tradition they built various ideas of the Bajo women. Even the nuba participants regardless of cultural background whether from the lolo group or not, but the participants have the same position and role. Through this tradition, they return home to build interaction and foster harmony with one another.

Along with the passage of time, especially the phenomenon of fishery modernization that runs in fishing communities, data at the research location shows that it has a lot of impact on life and changes on Saponda Island, of course, not only on economic and ecological aspects, but also on socio-cultural aspects. Socio-cultural aspects, as quoted from interviews, some local values of the Saponda community have shifted and even degraded, so that many new generations, especially the millennial generation, do not understand and even practice them. The forms of shift mean that these values do not become something sacred, or are no longer intensely practiced, or undergo changes in the form of their implementation.

Regarding the description of the existence or changes in local values (local wisdom) in the Saponda community, as the effect of changes and developments, one of which is triggered by fishery modernization, the researcher formulates points in the following table form.

Looking at the description of the changes and extensions of these local values, the question and analysis of the existence of these shifts is a direct effect of the modernization of fishery. Several other studies, in other places, especially in fishing communities, give the same statement, and with the same phenomenal character. One of them is the research by Nastuti (2018) which found that the Local Wisdom of Coastal Communities in Understanding Fishery Products Technology in Larantuka, the use of local wisdom in fishing efforts is very influential for ecological sustainability and strengthening the socio-cultural community. It's just that the adoption of modern fisheries technology means that there is no integration and, in the end, it doesn't just have an impact on the environment, but also the survival of the fisherman's culture itself.

Then the same phenomenon also Obie (2016) who found that the entry of the fishery modernization movement, the intervention of various government programs in the form of establishing conservation areas with the ideology of natural resource protection on the one hand, as well as private institutions through HPH, HGU, and fishpond businesses that pursue as much as possible. The magnitude of the economic benefits has caused the social system of the Bajo Tribe community to be shaken in the form of the diminishing role of traditional leaders and the loss of the power of local culture to the life of the Bajo.

This phenomenon has a correlation in the research location, generally saying that changes and government policies after the existence of modernization, especially fishery technology have a view of influencing or having an impact on the continuity of community culture, especially in this study the Bajo community. Specifically, this study shows a

pattern of identification that is more and juxtaposes between changes in society after the input of fisheries modernization and its effect on local values on the island of Saponda.

As an overview of this sub-discussion, several summary findings can be drawn that the modernization of fishery on the island of Saponda not only has a positive or negative impact on the ecological and economic aspects of the community, but also has an impact on socio-cultural aspects in the form of a shift in some local values or wisdom. The people on this island are; bapongka tradition, duata tradition, tradition, pasipupukang, ngampuang tradition, nuba tradition, and iko-iko tradition. According to the informants, the socio-cultural shift has more negative impacts than positive ones. Because there is degradation not in creation and development. Some values that have been created, such as bapongka, are created in the form of ngkuru-ngkuru and gae fishing systems, but the character of belief in protecting the sea as a cargo inherent in this tradition is lost. Likewise for other traditions, the focus of the community in the research location is more directed to strengthening the economy mindset changes and policies of the "blue revolution movement" (Table 1).

3.2 Bajo's Ethnopedagogic Strategy Through Educational Institutions in Overcoming the Socio-cultural Impact of Fishery Modernization on Saponda Island

Ethnopedagogic is an approach in education based on the development and utilization of local (ethnic) community culture. The objectives are: first, to empower local genius and local wisdom through the disclosure of cultural values, as an educational practice in various domains that emphasizes local wisdom as a source of innovation and skills that can be empowered for the welfare of the community. Second, to realize the goals of education as a whole through the reconstruction of education by integrating cultural values into the learning process. Third, to preserve local culture, maintain a good culture, develop culture to be productive, and build human civilization without destroying local genius and local wisdom (Suardika: 2011).

No	Forms of local Wisdom	Purpose and Objective	Forms of Shifting
1	Bapongka	Sailing for a living or marine products to a certain area, for several days. Bapongka is a fishing activity typical of the Bajo or Bajau people on Saponda Island that has been carried out for a long time. Go in groups. Each group consists of five to nine boats, each boat containing one person or at most two adults. The purpose of this activity is to maintain the continuity of life together while maintaining their togetherness. While the tools used are relatively simple and environmentally friendly, namely fishing rods, spears, and drag nets.	It is rarely done, even if there are bapongka, there are only a few boats (koli-koli) in one relative and the longest time is 1 day because they are just looking for fish. The spirit of bapongka has changed in the form of a gae or ngkuru-ngkuru system for now. In Saponda mentions it with pajoloro. The pajooloro system has 5–7 members with relatively managed work <i>procedures</i> , there is a structure and division of roles, and the rules of the game (norms) in the system.

Table 1. Forms of local Wisdom and its shift in Saponda Island

(continued)

 Table 1. (continued)

No	Forms of local Wisdom	Purpose and Objective	Forms of Shifting
2	Duata	The sea ritual which is carried out in the form of collective prayer and gives messages of respect and gratitude to the creator and owner of the sea (sea prophet) who, according to them, has the authority to determine whether or not there are many marine products and can cause accidents if they do this. Actions that destroy nature. This ritual is led by traditional leaders and village priests and followed by fishers.	As a result of this duata tradition, the Bajo fishers in Saponda believe that there will be consequences for actions that cause marine violations, respect and protect the sea, so they do parika (restoking fish that are feared to be extinct), making the "pamali" tradition in certain locations to maintain sustainability, an area. Along with the development and changing times, modernization of fisheries came in, traditions shifted and even experienced degradation. Many adult Bajo children in Saponda do not understand the meaning of duata anymore, and duata is only done when there is a disaster in the village, or the village head has a political agenda to gather residents. As a result of this shift in values, since the 1990s, Bajo fishers have recognized the fish and potassium bombs, causing a lot of damage to the environment, especially the coral reefs on this island.
3	Pasipupukang	This tradition is in the form of sitting together or joint deliberation involving interested parties and Bajo community leaders. Aims to talk about something or find solutions to existing problems. Any problems that exist on this island are solved by means of pasipupukang	The shift that occurs in the community's deliberation is mostly drawn to more formal meetings and deliberation led by village heads and traditional leaders. The aspects and cases discussed in the <i>first</i> more about village issues such as village assistance issues, village services, and village development. <i>Second</i> , the conflicts that occurred, if in the past everything was resolved amicably through pasipupukang, now there are several cases that have continued to law enforcement. <i>Third</i> , the small problems experienced by fishers are certainly more resolved individually, undergoing changes along with changes in the form of community solidarity that leads to individualism.
4	Ngampuang	The tradition of the Bajo people, which used to be carried out by the Saponda people, usually finished doing the pongka tradition, which is looking for marine products for weeks, when they returned home in Saponda, they made visits to the houses of their relatives, with the aim of establishing and strengthening interactions, telling stories. Experience (sharing) and rebuilding kinship.	Experiencing a shift because most Saponda fishers spend their time at sea using the shuttle mobility model, namely looking for fish, when they can immediately return. So, there is no need to carry out the ngampuang tradition. The ngampuang tradition is currently only carried out by islanders who have just returned from working in an area, when they return to Saponda, they will visit and stay in touch with families on this island.

(continued)

Table 1. (continued)

No	Forms of local Wisdom	Purpose and Objective	Forms of Shifting
5	Nuba	Tradition of women or groups of women in large numbers, who together carry out counseling activities, namely looking for marine products when the sea water recedes (meti) in areas of low depth (pasi), if the water recedes it will look like a stretch broad. Species sought such as coral, crabs, sea urchins, and fish.	The shifting aspect is that the number of women involved is smaller, from the observations made only about 10 to 12 people, sometimes it can also be smaller than that. This, he said, is because other activities are more open, many Bajo girls are also continuing their education, some are working as clerks in several factories in the Kendari Bay area. So that currently only mothers are doing "nuba".
6	Iko-Iko	The iko-iko tradition is speech in the form of songs or humming stories that parents present to their children. Sometimes it is also served by traditional leaders at village events. Contains the nature of life, human relations with supernatural beings including God, and stories about the expertise of their ancestors as sea people.	It tends to be no inheritance, many young bajo people on this island don't know how to sing iko-iko. The iko-iko tradition is only played by certain characters who are still presented at village or village events. However, new households admitted that they could not sing and also did not know the contents of the icons. Whereas iko-iko can be a medium for character education for Bajo children.

Thus, empowerment based on local ethnicity, both through a community-based resource management approach and partnership approach, the purposes are the use of local wisdom as social capital in supporting the educational process and resources for the children of Bajo fishers. The aim is simply to place education as an important instrument for (a) cultural preservation, (b) cultural development itself, and (c) cultural transformation to a more relevant and productive one, (Anwar Hafid, 2003). These three roles must be carried out by educational institutions to overcome the problem of socio-cultural degradation due to the modernization of fisheries in fishing settlement areas, especially the Bajo community.

On the island of Saponda, the only formal educational institutions available are elementary school, which was built in 1990, and One Junior High School which was inaugurated in 2008. The available teachers are 3 civil servants in SD and 3 in SATAP SMP with civil servants. Non-formal educational institutions are also not running, as in other rural areas. The training received by the community, especially fishers are minimal. Azis (55 years old) Head of Saponda Laut Village said "the existing trainings are very minimal and even if there are trainings it looks like it's just a formality, and the service seems to just drop their obligations. As a result, there is no perceived effect for the development of its community".

This phenomenon shows the weakness of educational instruments and community development. The same data is corroborated by the results of Ketut Suardika's research (2011) that the education of the children of Bajo fishers on Saponda Island is still marginalized. This marginalization of education is more influenced by external factors, namely there is no form of educational empowerment either from the government or other institutions. Educational institutions that are expected to be the motor of empowering the Bajo community's cultural education have yet to run. So, the only hope is for formal

educational institutions through intervention and strengthening the capacity of their educators in learning innovation through the Bajo ethnopedagogic strategy. The process of fishery modernization continues and is introduced by the community, but forms of preservation and development of local culture are maintained.

Through a design and process involving the Bajo Saponda community (participatory) will result in: first, there is a program to strengthen education and human resources for Bajo children which is designed jointly among stakeholders, namely educational institutions, community leaders, teachers, NGOs, and other partnerships that support both government and business. Second, there is a network of partnerships that have commitment and concern for education in marginalized communities such as the Bajo community in Saponda. Facilitator groups such as NGOs and the government can play a role in developing the partnership concept. Third, there are forms of preservation and reproduction of local wisdom in people's lives, especially from the aspect of educational empowerment. Fourth, there are various forms of alternative designs to support the process of learning activities in schools, both in terms of media, methods and learning content that adopt local wisdom. This strategy is of course to build enthusiasm for learning and student motivation which in turn can reduce the dropout rate for Bajo children.

Specifically, the plans of the strategy design for the use of local wisdom in educational activities (Strategic Ethnopegagogic) refers to Pendais (2015) with a focus on

Table 2. Strategy and Program Strategy

Strategy	Program Strategy
Innovation of teaching materials/materials through internalization and integration of Bajo local wisdom values, both expository strategy and social inquiry strategy.	Development of literacy competencies/materials; reading, writing, speaking, and arithmetic in the lower class with symbols that are close to the culture of the Bajo people, such as; bangka, koli-koli, fish, agar, etc. Development of conceptual, procedural, and related knowledge competencies in solving Mathematics and Natural Sciences (IPA) problems and their application in everyday life in the marine environment, for example first, mapping the concepts of Palibu, Pongka, Sakai, Lima as wisdom related to areas and fishing gear in the marine realm and secondly, pamali as wisdom related to conservation areas and restricted areas in the marine and coastal realms. Development of conceptual, procedural and attitude knowledge competencies, and their interrelationships in solving social studies and Civics problems and their application in everyday life in the socio-cultural environment of the community as well as in the village government system. For example, first exploration of various kinds and forms of customary institutions and social systems of the Bajo tribe (1) Ngampuan is a concept of interaction and socialization (2) Duata is a fishing tradition that is closely related to human relations with nature, (3) lolo bajo is a concept of social stratification that is mutually exclusive. Influence. Second, developing
	attitudes by revitalizing and realizing these values in the classroom and outside the classroom

(continued)

Table 2. (continued)

Strategy	Program Strategy
Development of a fun and attractive Learning Model/Method based on the socio-cultural potential of the Bajo community	Design a local model through replication and integration of the Cooperative Learning Model Pasipupukang in learning The design of this model makes it easier for students to understand the process, terms, and on the other hand the local values are embedded. The goal of this model is solving learning problems, discussing materials that are considered difficult, and building togetherness both in class and outside the classroom by sitting together and in groups model Ngampuan in learning is visiting each other between groups to teach each other a material. This concept can be done in the classroom or outside the classroom. Conceptually, cooperative learning theory recognizes the JIGSAW type, namely dividing the group into two parts, namely the expert group and the original group. The practice of this model is also mutual visits so that by adopting the wisdom of Ngampuan it can be integrated into this type of cooperative model, so that students are easier to understand and have fun. learning method telling story into the setting of the iko-iko method for language or social studies/culture learning. An oral tradition about the story of life among the Bajo people The technique is that students can conduct searches and interviews with their parents or those who still introduce the story, remember it, and tell it in turn to their friends.
Learning media innovation based on the potential of Bajo local wisdom	Develop the concept of literacy/literacy of Bajo arts culture media, for example through the lilligo song and ngigal dance. Singing liligo certainly contains appeal and is easy to understand because it uses its own language. Develop an abacus counting tool with raw materials from the sea such as shellfish. Recognizing the environment and natural damage from the field of science studies by analyzing pictures taken together around the island of Saponda. Learning values and literacy through the ngigal dance tradition. Students are encouraged to be able to do all processes related to this dance. One of them is that students must be able to rhyme. This tradition has begun to fade so that students have the enthusiasm to dig back and play through rhymes, poetry and tunes. In addition, it also swings some movements that already have procedures. The output of this media can build students' motivation

two learning strategies adopted from (Merta Hadi, 2014) namely expository learning strategies and social inquiry. So, these potentials can be integrated into various learning strategies. The case in Saponda Island, the development strategy can be described as follows (Table 2):

4 Conclusion

Referring to the discussion, the conclusions of this study are as follows:

- The impact of fishery modernization in the cultural aspect occurs in the form of local values referred to in the sub study are local wisdom which is the capital and identity Bajo on this island. Local wisdom in this case is in the form of values/philosophy of life, customs or traditions, oral speech (folklore), Bajo singing and art, and local games.
- 2. Ethnopedagogic strategy as a solution in minimizing the negative effects of fishery modernization from the socio-cultural aspect, especially the degradation of local cultural values, and the shift in motivation from community social solidarity. The strategies are (1) Innovation of teaching materials/materials through internalization and integration of Bajo local wisdom values, both expository strategy and social inquiry strategy. (2) Development of fun and attractive learning models/methods based on the socio-cultural potential of the Bajo, such as the integration of the pasipupukang tradition into cooperative learning. (3) Innovation of learning media based on the potential of local wisdom such as iko-iko and ngigal dance, and liligo song.

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References

- 1. K. Kusumastanto, Reposisi Ocean Policy dalam Pembangunan Ekonomi Indonesia di Era Otonomi Daerah, Institut Pertanian Bogor, 2002.
- Suhartini, A. Halim, I. Khambali, A. Basyid, Model Model Pemberdayaan Masyarakat. Pustaka Pesantren, 2005.
- 3. A. Helmi, A. Satria, Strategi Adaptasi Nelayan Terhadap Perubahan Ekologis, Hubs-Asia, 16(1), (2013), https://doi.org/10.7454/mssh.v16i1.38
- 4. E. Rosana, Modernisasi dan Perubahan Sosial, TAPIs, 7(.12), pp. 1–30, (2011).
- A. Hamzah, Respons Komunitas Nelayan terhadap Modernisasi Perikanan: Studi Kasus Nelayan Suku Bajo di Desa Lagasa Kabupaten Muna Provinsi Sulawesi Tenggara, Jurnal AGRISEP, 8(2), pp. 1–11, (2008), https://doi.org/10.31186/jagrisep.8.2.1-11
- 6. H.A.R. Tilaar, Pedagogik Teoritis untuk Indonesia, Kompas, 2015.
- 7. S. Sularso, Revitalisasi Kearifan Lokal Dalam Pendidikan Dasar, Jurnal Pendidikan Sekolah Dasar, 2 (1), pp. 73-79. 2016.
- I.K. Suardika, A. Hafid, Peran Tradisi Lisan Iko-Iko Berbasis Sastra Melayu dalam Penguatan Komunitas Etnis Bajo, Mudra Jurnal Seni Budaya, 31(1), pp. 87–97, (2021). https://doi.org/ 10.31091/mudra.v31i1.251
- A. H. Haji, J. Ahiri, P. Haq, Konsep Dasar Ilmu Pendidikan: Dilengkapi dengan Undang-Undang Sistem Pendidikan Nasional, Alfabeta, 2014.
- M. Ridwan, Kurikulum 2013 dan Pendidikan Nilai Kearifan Lokal di Sekolah Dasar, Prosiding Seminar Nasional Pendidikan tema Implementasi Kurikulum 2013 dan Problematikanya, Pascasarjana UNESA, pp. 102–108, 2014
- 11. I.K. Suardika, Keterpinggiran Pendidikan Dasar dalam Masyarakat Suku Bajo Di Desa Saponda Kec. Soropia Kabupaten Konawe, Doctoral Dissertation, Universitas Udayana, 2011.
- 12. E.S. Wiyono, Strategi Adaptasi Nelayan Cirebon, Buletin PSP, 17(3), pp. 356-361, (2008).

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