

**Actor's Social Actions and Their Dynamics in The Social System:
A Case Study of Traditional Charcoal-Making Business
in The Livelihood of The Akit Community**

***Tindakan Sosial Aktor dan Dinamikanya pada Sistem Sosial:
Studi Kasus Usaha Arang Tradisional
dalam Penghidupan Komunitas Suku Akit***

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ABSTRACT

The Akit community generally uses mangrove wood as raw material for charcoal. The purpose of this study was to analyze (a) the development of the charcoal-making business, (b) the type of social action in the Akit community's charcoal-making business, and (c) the dynamics of the charcoal-making business. This research was conducted using an ethnographic approach. The results: from the 1980s to 1994, production was initially regulated solely to meet local needs. In the era of 1995 to 2005, it experienced a high market demand for mangrove charcoal along with a flourishing business network with Malaysian toke. After 2005 the charcoal business dimmed again due to government regulations. The actors involved in the charcoal business are workers, owners of very small panglons, and owners of small panglons (tokes). The social action run the panglong business as an effort to meet their family needs, and thus they worked based on instrumental rationality. These charcoal-making entrepreneurs operated their businesses based on instrumental and traditional actions. The social action of the toke actor is instrumental rationality and value-oriented rationality. The dynamics of the charcoal business in the Akit community have experienced ups and downs.

Keywords: *Akit Community, business dynamics, mangrove charcoal, social action*



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INTRODUCTION

Mangrove wood is one of the raw materials for charcoal, which according to (Estoque et al., 2018) is widely produced in Myanmar as one of the richest mangrove worldwide. Mangrove is known to provide valuable ecosystem services to humans. O'Connell et al., (2022) held that mangroves are of critical importance to sustaining livelihoods. However, there has been deforestation of mangrove forests driven by several factors including agricultural expansion, extraction of firewood and charcoal production. Rejeki et al., (2021) further demonstrated that there had been socio-economic disintegration due to unsustainable use of mangroves. Thus, Chhetri et al., (2021) and (Olofsson, 2019) recommended that farmers should not remain dependent on forests and create a range of agricultural activities and non-agricultural jobs on their own. Several studies on mangrove wood addressed it in terms of the socio-economic aspect, local wisdom, and indigenous peoples. For example, Gowlland (2020) highlighted the local knowledge of the indigenous people of Taiwan in utilizing natural resources as a way to adapt to pressures to assimilate or generate cultural resilience.

For their main livelihood, the Akit community as the coastal community is known as a forest-resource dependent. They have long established mangrove charcoal-making as a family business and household economy from mangrove resources for generations. Interestingly, in the course of their lives, most of the Akit community members greatly take heed of their natural surroundings since they live close to nature. The Akit community has naturally indicated a pattern of social behavior and social actions governed by the socially held rules and norms that are transmitted from one generation to the next. This research addressed the social action of the Akit community, particularly on the function of the forest, livelihood capital, and regulations for the utilization of mangroves. Kweenedy (2018) pinpointed that the main obstacles in the charcoal production business are an unorganized company structure and the threat of running out of raw materials. Lujinggan & Harianto (2020) also delineated that forest farmers are required to make choices to manage forests based on economic values, trust values, and forest conservation values. On this basis, there is a need to further examine the issue of mangrove utilization from a local perspective.

The Akit community as an indigenous community resides in Riau Province and belongs to a minority group. However, in terms of number, they constitute a quite large population of 5714 people, consisting of 1472 families (Badan Pusat Statistik Kabupaten Bengkalis, 2020). According to Wenger et al., (2002), a community is a social group of several organisms that share the surrounding environment and generally have the same interests and habitats. In this context, the Akit community shares the simple system and culture as obviously seen from their pattern of housing, bathing, washing, and family latrines. This simplicity also applies to the widely held subsistent economic mindset that today's income is intended to only suffice for today's needs without any surplus for tomorrow's needs, which are to be met on the following day. The abounding mangrove forest resources have sufficed the daily needs of the Akit community since they can easily look for mangrove wood as the raw materials for making charcoal, or hunting, gathering, and catching fish for side dishes in the watershed area of the mangrove forest. Mangrove forest resources have provided the Akit community with sustainable livelihood as long as they only use them for their basic needs and allow some time for natural recovery or human-made environmental recoveries. The mangrove forest dwellers of Akit communities generally use mangrove woods as raw materials for charcoal-making (Miswadi et al., 2017).

Panglong as the local term for charcoal-making kitchen is where the mangrove wood is processed into charcoal. Most of the Akit community members work as manual laborers in several charcoal *panglong* operating in their village surroundings. The household business of charcoal-making is only intended to suffice their simple needs. This condition is in line with the opinion of Soerianto (2020) who held that the existence of Charcoal *panglong* has not been able to prosper the life of the Akit community.

On this basis, it is necessary to understand the social actions of the Akit community in running their charcoal-making business by way of looking at the factors that underlie their social actions. Weber (1978) divided social actions into four types, namely (a) Instrumental action or actions determined by expectations to achieve the value of the particular goal; (b) Value-oriented rationality or actions based on beliefs about important values, such as ethics, aesthetics, religion and other values that influence human behavior in their actions; and (c) Affective actions as actions that are determined by mental conditions and individual feelings. This type of action is dominated by feelings or emotions without intellectual reflection or conscious planning. Affective actions are spontaneous, irrational, and are the emotional feelings of the individual; and (d) traditional actions, namely actions based on local habits

such as traditions or customs that are passed down from one generation to another. These actions exhibit certain behaviors due to habits acquired by ancestors, without conscious reflection or planning (Weber, 1978).

Popkin (1986) referred to farmers as rational and creative people who constantly seek progress. However, farmers are prevented from having the opportunity to do so because of their inability to access the market despite the need to improve their economy. Farmers are creative people with rational calculations who always seek access to markets. They are able to apply the practice of profit and loss. Thus, the social actions of actors and the dynamics of the charcoal business will be discussed, among others, through this concept.

Coleman (2015) rational choice theory indicated that individuals choose an action according to their personal preferences. To better understand the behavioral pattern, it is necessary to take heed of rationality and personal choice. The elements of this rational theory are a personal choice, belief, and compulsion. In its basic principle, individual action will drive a person to achieve his goal as an action determined by values or choices. A person performs an action or makes some choices to fulfill certain goals by using the available resources and maximizing the use of these resources. The rational choice theory explains that a person performs an action by utilizing goods or resources to fulfill his goals through choices. Coleman's theory, thus, contains two elements: actors and resources. Resources are any potential that exists or is owned, and thus can be in the form of natural resources derived from the existing surrounding environment or the natural potential and human resources or the potential that exists within a person. An actor is someone who performs an action. In this case, it refers to individuals who are able to utilize resources well. Culture is an important factor in supporting economic sustainability, since, in this particular case, it is related to the formation of trust within the group thereby reducing transaction costs (Casson, 1993). In the case of collectivist societies, a culture of low trust is undesirable because of the leader's inability to anticipate unwanted responses from his group members, which drives the leader to build a repressive political regime to maintain his leadership. On the other hand, in the case of individualistic societies, low trust culture is a form of competitive pressure between individuals (Casson, 1993). Rokhani et al., (2016) concluded that the collectivity dilemma of farmers arises when individual interests are more dominant than group interests. The dilemma of farmer collectivity can be "tamed" with trust between individuals as members of farmer groups. The collective action of farmer group institutions can help farmers to meet the stringent requirements of the export market. Farmer groups that can facilitate collective action are characterized by the followings: having a small number of members, formed by ties of a neighborhood, having a trader as the group leader, and providing incentives for each member of the group. An article by Chavoshbashi highlighted that the behavior of economic growth is strongly influenced by cultural values that develop in a community, nation, and state (Asmin, 2018). By relating this notion with the economic activities of the Akit community members in the charcoal business, the cultural values of the Akit indigenous community will definitely color their actions.

In this line, Katano et al., (2020) posited that rural farmland owners in Japan are still retaining their ancestral land although others have sold it at reasonable prices. This indicates that some farmers are economically rational, while others take traditional actions. The study also concluded that the variables of residence, age, education level, and land use were significant predictors for landowners holding traditional values, instead of economic values. Several studies on the actions of rationality against farmers came to a conclusion that the actions of farmers were instrumental and rational (Radjab, 2014; Mutiar et al., 2018). Meanwhile, research by Ali et al., (2018) held that the agricultural-related actions of farmers are rational, instrumental, value-based, emotional, and traditional. The instrumental actions of farmers in the process of farming are made according to the applicable rules and values or the rules of rational logic to achieve certain goals. The emotional actions of farmers are more dominantly carried out based on emotional feelings, which are greatly nuanced by the strongly held kinship relationship in the rice farming community. These studies pinpoint that various social actions taken by farmers are instrumental, emotional, value-laden, and traditional rational actions.

The Akit community is known to widely hold a simple framework of mind and is less future-oriented. Thus, they will have to search for food again the following day without any intention of saving (Saam, 2018). The simplicity of view of the life of the Akit community members is also captured from their daily basis economic survival. Such simplicity is strongly held based on the philosophy of the Riau Indigenous Tribe that the soil is a place to dump the wicked inside the graves, while the sea, forests, and rivers are places to find sustenance (Amrivo, 2014). No wonder, the Akit community mainly forages the

mangrove forest for food and suffices their daily livelihood since this philosophy of life always colors their way of thinking and determines their social actions. This background makes it necessary to study the social action of charcoal business actors in the Akit Community. This study particularly aims to analyze : (a) the development of the charcoal production business in the Akit community, (b) the types of social actions of the Akit community charcoal business actors, and (c) the dynamics of the Akit community's charcoal production business.

RESEARCH METHODS

This research was conducted in Jangkang Village and Berancah Village, Bantan SubDistrict, Bengkalis Regency for 12 months from May 2020 to May 2021. The two villages were selected purposively based on the following considerations: (a) the village is mostly inhabited by the Akit community, (b) most of the Akit community depend their livelihood on charcoal production, and (c) the location of their residence is generally on the edge of the river adjacent to the mangrove forest. Access to the highway from Berancah Village is better than that from Jangkang Village.

This is qualitative research conducted through an ethnographic approach. The ethnographic data in this study refers to the concept concocted by (Koentjaraningrat, 2002), but this study only presents six factors, including the natural environment and demography, tribal history, livelihood system, local knowledge system, and technology system (Koentjaraningrat, 2002). Data were obtained through observation, in-depth interviews, and a literature review. The interview was conducted using open interviews involving the following key research informants: Akit community head (tribal head), NGO members, five charcoal business workers, four small-scale charcoal entrepreneurs (local *toke*), and four petite charcoal entrepreneurs (panglong family business). The research informants were determined purposively based on their understanding of mangrove wood as raw material for charcoal, charcoal kitchens (panglong), panglong business actors, and charcoal marketing. Interviews were conducted on the river bank, the panglong, and in the house yard of research informants according to the possible situation and conditions. The interviews were mainly conducted using Bengkalis Malay (the Akit community generally speaks in the Malay language on a daily basis). In addition to the abovementioned key informants, the researchers also conducted an open interview with a local NGO who works in the environmental and conservation fields. The interview was mainly directed at the development of the charcoal business, the relationship between the panglong owner and the panglong worker, the activities of the family panglong owner, and the dynamics of the charcoal production business.

RESULTS AND DISCUSSION

Residence and Characteristics of Akit Community as Indigenous Peoples

The Akit community is a social group residing in the Hutan Panjang area and on the coast of Bengkalis Regency, Riau Province. This community inhabits coastal areas, especially in the mangrove forests areas for generations, and thus relies their livelihood on mangrove forests as their principal economic source, including the members of the Akit community who have inhabited the watersheds in the village of Jangkang and Liung Rivers for decades. Mangrove forest is an inseparable part of the daily life of the Akit community members. The constantly available mangrove forest resources have sustained the daily needs of the Akit community through mangrove wood foraging for raw materials for charcoal-making, hunting, and fishing. In total, the population of the Akit community amounted to 996 people, consisting of 518 men and 478 women who live in 237 households.

Most of the residents of the Akit community in Jangkang Village and Berancah Village use mangrove forest wood as raw material for charcoal-making, as can be seen from the industrial activity of charcoal *panglong* along the Jangkang River and Liung River. Charcoal *panglong* is where the raw materials are processed into ready-made charcoal. The charcoal *panglong*-making business has been around for decades and has been operating in the Akit community for generations. There are 28 units of charcoal *panglong* in Jangkang Village, and 18 units in Berancah Village owned and operated by Akit community residents. Although the two villages are the same, in Berancah Village the access to the highway is better. One of the residents of the Akit community once held that “...*The mangrove charcoal-making business has been passed down from one generation to another, from our ancestors*”. (Datuk Jantan Geben, Jangkang Village, 24/07/2020). A similar expression was also conveyed by one of the leaders of the Malay tribe in the village of Jangkang who lives side by side with the Akit community. He revealed that “...*Making charcoal is the major occupation of the Akit community for generations.*” (Mr.

Mustaufa, Jangkang Village, 26/07/2020). Charcoal production is sold to charcoal shops. Charcoal Big Boss or *toke* is a wholesaler that accommodates charcoal production from various *panglong* owners.

Nevertheless, only a small number of children from the Akit community can complete elementary school and only a few continue to junior high school. These communities are still closed and inferior, and their social space is limited. Although the Akit community is not geographically isolated, they are firmly isolated socially. This condition is slightly similar to the Orang Rimba in Jambi as stated by (Muchlis et al., 2016), who concluded that changes in the cultural identity and lifestyle of the Orang Rimba were caused by state policies through the granting of forest tenure rights, industrial forest plantations, and oil palm plantations as well as transmigration programs that resulted in the marginalization of the *Orang Rimba*.

Development of Charcoal-Making Business of the Akit Community

Period of 1980 – 1994. During this period, the Akit community ran their charcoal-making business using a simple charcoal kitchen/*panglong* with a production of around two tons per production. Charcoal *panglong* is where the mangrove wood is processed into charcoal. The wood is transported by boat to be arranged in the *panglong* and burned for about 15 days. After burning, the wood is cooled for three days to be packed into plastic sacks for market distribution. Each plastic sack weighs 30 kg. Such a charcoal kitchen is usually an Akit community member with a large capital generally known as a charcoal *toke*, who is assisted by three workers from the Akit community. Charcoal *panglong* workers are woodcutters and concurrently *panglong* workers. Loggers are paid based on the number of harvests of Rp. 200 per kg. Their work as a laborer is paid daily Rp70,000/day. The division of labor is regulated by *toke* with the principle of equal distribution of work to increase the income of workers or laborers.

During this period, the charcoal products were only distributed in the Bengkalis Regency and its surroundings only to fulfill the demand of the surrounding community for charcoal fuel in the coffee shops, stalls, cafes, and restaurants. The characteristics of the charcoal business in this period on a very small scale are to meet local needs. The rules between workers and charcoal *toke* clearly indicate a patron-client relationship. The owner of the *panglong* has the power to maintain a good working relationship with the workers because they have lent money and the means of transporting wood through a boat. Patron-client relationships also occur between workers and traders because of mutual need, trust, and a sense of kinship (Badriadi et al., 2018).

Period of 1995 – 2005. During this period, the Akit community operated their charcoal-making business through a large charcoal kitchen with a charcoal production of around 10 tons per production. In the local community, a large charcoal kitchen is also known as a large *panglong*. The owner of this charcoal kitchen is a Malaysian businessman of Chinese descent. These large charcoal kitchens gradually eroded the existence of simple charcoal kitchens owned by the locals who lost their market competition in the presence of huge investors. Thus, the owner of simple charcoal kitchens generally turned into the foreman and managers of the large charcoal kitchen, who were paid by Malaysian businessmen of Chinese descent. The charcoal-making business still relied on the supplies and hard work of charcoal workers or laborers of the Akit community. The charcoal products of this period were generally distributed and marketed to other regions and abroad, such as Malaysia and Singapore. This period was known as the heyday of the charcoal-making business as indicated by the high demand for charcoal from the two countries. The characteristics of the charcoal business in this period developed rapidly due to market demand from abroad. No wonder, many members of the Akit communities were involved as workers in the charcoal-making business. The head of the neighborhood unit of Akit said “...*During the permit to establish a large panglong, many Akit community members worked as laborers in the panglong*”. (Mr. Li, 52 years old). A similar statement was conveyed by one of the former foremen of large *panglong* who held that “...*during the permit of large panglong, many Akit residents were involved as workers in panglong, so that our residents had no trouble finding other jobs*” (Mr. Nari, 60 years old).

Period of 2006 – 2014. In 2005, the large charcoal kitchen was closed or had been restricted from the operation. After the closure, the Akit community was permitted to build a small-scale charcoal kitchen with a capacity of three to five tons by taking into account the sustainability of the livelihoods of the

Akit community. The use of mangrove wood as raw material for charcoal is only permitted for the Akit community. Based on the Bengkalis Regent's Decree No. 824 of 2004 concerning community-based management of mangrove forests, the Bengkalis Regency government permitted the Akit community to establish small charcoal kitchens with a capacity of three to five tons per production to sustain the livelihood of the Akit community members. The permit for the use of mangrove wood and the establishment of the *panglong* is based on an oral permit from the Sub District Head and the Village Head. The Akit community claims about the use of mangrove forests are slightly similar to the research of (Tjoa et al., 2018), who concluded that the forest land tenure system for indigenous peoples in Honite Village includes control by the whole community, control by clan groups and control by individuals. In these three systems, various types of rights are attached to managing and utilizing forest resources.

The Akit community who runs small *panglong* is referred to as small *panglong* owners or local *toke*. The owner of this type of *panglong* generally is assisted by five to seven workers who are also members of the Akit community. Charcoal products are commonly sold to a large *toke* in Bengkalis to be distributed to the Big *Toke* market outside the region and abroad. One local *toke* once explained:

“All of my panglong workers are from the Akit community. Not a single Malay citizen works in this panglong because they are not used to working in the panglong. My panglong workers look for mangrove wood in the forest to make charcoal. During the wood preparation season in Panglong and during the charcoal-burning process, some two to three workers do not look for wood in the forest, but work in Panglong instead. After the burning process was completed” (Mr. Apeng, 47 years old, Jangkang Village, 25/07/2020).

2015 – present period. In 2015, a small charcoal production business was developed with around three to five tons per production for 30 days. This charcoal production business increases every year from an average of two to three units of charcoal *panglong*. In 2015, a very small charcoal kitchen (family scale *panglong*) was also established with a charcoal production of between one and two tons per production. In the local community, these very small charcoal kitchens are also known as family *panglong*.

The wood hunting activities are generally held in the area or plot of the respective *panglong* owner or in other regional locations. The wood hunting areas are not determined by the written rules, but based on a mutual agreement between *panglong* owners. The household rules for the distribution of family work are determined by the older head of the family who also regulates the finances for daily household expenses and other needs. The older head of the family may also move the selling of wood to other *Toke Panglong* as long as he doesn't leave any debt. Households that have family *panglong* seem to have a better economic life than charcoal *panglong* workers

Classification of Charcoal Producer Actors and Their Social Action

Charcoal producers can be classified into three groups, namely loggers. The other group is a very small *panglong* owner. The last group is the owner of the small *panglong* (*toke panglong*). The assumption of the classification of actors is that they come from the Akit community. There are big *toke* that market to other regions and abroad, but not the Akit community.

Mangrove woodworkers. The social actions of labor actors in the Akit community are aimed to meet primary needs such as food, clothing, and houses. So, the social action taken is an act of instrumental rationality. One of the *panglong* workers revealed:

“I cut wood and deposit it on toke. After the wood is weighed, I directly get paid according to the prevailing price. A widely held philosophy of the Akit community is: push with your left hand and pull with your right. In other words, when there is wood there is money. However, in the face of urgent need, for example for a particular celebration, I can borrow money from the toke which will be paid on the wood deposit of the next day” (Mr. Eca, 65 years old, Berancah Village, 23/07/2020).

Even though the Akit people depend on the natural resources of the mangrove forest, they do this type of rationality just to survive by taking enough and customary rules to only allow logging one small boat.

Very Small Panglong Owner. The owner of *Panglong* is very small also called the owner of *panglong* family. This type of actor is not assisted by any workers, since they employ their own members of the family. One of the *panglong* family owners said:

“I don't employ any workers to work in my panglong. The workers are my own members of the family, including my child and one daughter-in-law. We can't afford to pay for other people's labor because our panglong produces only enough for our daily needs. We sell charcoal to small-scale toke panglong” (Mr. Mat, 56 years old, Berancah Village, 23/07/2020).

The social action of charcoal marketing is carried out by the oldest head of the household. This action is a fulfillment of basic household needs and other needs, such as buying or repairing boats as a means of transporting mangrove wood. One of the *panglong* family owners once said:

“We have a family panglong with three number of family workers. Some of the harvests is sold to Toke for living expenses. As the eldest person in the family, I am in charge of managing household needs. In our culture and customs, our children/in-laws shall obey the family rules. In the face of an urgent need, all the harvested results must be sold to the toke or we must borrow the money from the toke” (Pak Kasim, 54 years old, Jangkang Village, 27/07/2020).

Traditional values such as customs and norms in the family are still strongly inherent in the Akit community such as help, mutual aid, and a sense of peace of mind. The cultural values of the Akit community are one of the assets that will reflect the charcoal business activities. (Kinseng, 2019) added that two livelihood assets are cultural and spiritual capital. For the Akit community, cultural capital is also an important part of the life of this community. Cultural values in the daily life of the Akit community affect the management culture of the family *panglong* business. Thus, the underlying social action is the act of instrumental rationality and traditional action. The social actions of the owners of very small *panglongs* are merely aimed to meet the needs of daily life. The business activities are still managed traditionally, which resulted in far from an optimal gain in the business profit, as indicated by unclear plans and targets for business results.

The very small charcoal business owners produce mangrove charcoal only to fulfill their daily needs and this activity has been going on for generations. One owner of a very small charcoal business once explained:

“We take enough mangroves from the wood and it will never run out because we always apply some rules, such as cutting down the mangrove only with a machete and generating only a small boat of harvest each day. In fact, what we are worried about is the clearing of mangroves by outsiders because they use beko (heavy excavators) to build shrimp ponds. We take mangroves from one place to another and so on. Afterward, we returned to the previous area where the mangroves are high enough to cut down” (Mr. Kasim, 54 years old, Jangkang Village, 28/07/2020).

Small Scale Charcoal Owner. The main source of livelihood for small-scale charcoal entrepreneurs is as a charcoal producer, also known as a local *toke*. Laborers sell the wood to tokes and the price of wood is determined by tokes. Labor is powerless to bargain and accept prices without protest. In determining the price of the toke, it still pays attention to the benefits to be obtained and maintains relations with workers. The *toke* is directed by rational social actions. In other words, they are not only oriented toward multiple profits, but also toward gaining a sense of kinship. The adaptation of a sense of kinship in economic activities generates a more intimate social relation, instead of a mere transactional. In determining the rational action of *tokes* based on (Weber, 1978).

The social action of the *toke* is shown in another rule that in case the workers have a large debt, they must repay it in installments. This social action is reinforced by the *Toke* action which accepts family members (wife/children) as daily workers at *Panglong*. An interview with one of the small *toke panglong* revealed that:

“If the workers borrow money, we will provide them. The loan will be repaid with a timber deposit the next day. We realize that the income of the loggers is far from sufficient. Therefore, we also accept workers' wives as day laborers in our Panglong. If the stock of charcoal in the location is large, we can borrow money from big toke. Because of this sense of mutual help, we don't sell our wood to other tokens, meaning that we remain loyal to the same token (Mr. Anto, 52 years old, Jangkang Village, 21/07/2020).

There were several studies that examine social action, including research by (Muhartono & Nurlaili, 2018). They concluded that the cooperative relationship between fishermen and 'pengambe' leads to an

advantage since 'pengambe' serves as the helper in business capital and fish marketing. On the other hand, it may also lead to negative sides since fishermen do not have a bargaining position in determining prices and selling to others because they are already bound by debt. (Popkin, 1986) emphasized that the moralistic assumption in the Patron-client relationship is rather exaggerated. Behind the patron's assistance to the client, there are considerations concerning his own interests. The assistance is an investment in maintaining the client's own dependence, and thus, in this way exploitation is not impossible. Popkin's opinion also suits the relations between *panglong* and charcoal workers in the Akit community. However, there is a sense of mutual help by accepting family members to work in *Panglong*. This way, the occurring rational action is instrumental rationale and value-oriented rationale because of the value of mutual help between *toke* and laborers. Hence, some of Popkin's assumptions are true, particularly in the *toke* investment to maintain client dependence, but it is necessary to highlight the value-oriented rationale for mutual assistance between *toke* and labor.

The action of *toke* in the charcoal-making business is purely an action to meet the family's economic needs and financial gain. For the continuity of the charcoal-making business, *Toke* also maintains and cares for *Panglong* workers with mutual assistance. *Toke* determines the price of buying wood from laborers by calculating the profit and loss. However, pricing is not only oriented towards multiple profits but also considers family values, for example hiring a laborer's wife in *panglong* and providing loans if the laborer needs them. Thus, the rational action used is instrumental rational action and value-oriented rational action.

The rational action of the local *token* is similar to the results of (Syukur et al., 2014), who concluded that the economic activity of the Wajo weavers is the dimension of the moral economy and rational economy of the weavers called "mix-rationality". Research on the Akit community found that the rationality actions of small-scale charcoal business owners (local *toke*) were instrumental rational acts and value-oriented rational actions. Meanwhile, Lenggono et al., (2012) posited that the emergence of the local capitalist entrepreneur group that drives the formation of the local economy, "The hidden blessing" for allowing the state to manage development and the local economy that is formed is "a hybrid economic building". For the Akit community, mangrove forest serves a function of economic value. The small *panglongs* serve as a source of livelihood for workers, both as mangrove loggers and as *panglong* workers.

Local *toke* rational action represents the Kinseng statement (2017), which narrates that the agency concept emphasizes the ability of a person (actor/agent) to think, act and behave independently, freely, and autonomously, according to his own will. Structure and agency are dualistic, and both influence the actions of actors. The concept of structure has various meanings, covering six forms, including discourse, rules such as norms or customs, social actors other than the actors themselves, concrete actions of social actors (including patterns of behavior, collective action, relations and networks between actors) social stratification and social groups, and resources. *Toke's* rational action also has the same elements as those revealed by Priyatna et al., (2013), they concluded that the access mechanism is structural and relational based on the configuration of technology, capital, markets, knowledge, authority, social identity, and social relations.

The social action of charcoal business workers is indicated by an individual action to fulfill their daily life based on an act of instrumental rationality. The social actions of very small charcoal business owners are aimed at fulfilling their daily life by involving all adult family members, including the males and females, in the traditional management of the business. On this basis, the actions of very small charcoal business owners are acts of instrumental rationality and traditional actions. The social action of the *toke* of small-scale charcoal business is to meet the needs of the family, but they also make an attempt to make a profit gain by running their own charcoal business-making by still maintaining the sense of kinship value with their fellow Akit community members by employing them in Charcoal *Panglong*. Thus their rational action is mainly instrumental rational action and value-oriented rational action. Therefore, the types of rational actions of actors involved in charcoal-making business for Akit community members are instrumental rationality actions, instrumental rationality actions, and traditional actions, as well as instrumental rational actions and value-oriented rational actions.

The Dynamics of Charcoal Production Business

The dynamics of the charcoal production business can be explained through the following points: (a) at the initial stage, the charcoal production business was aimed at meeting the needs of the local market. (b) Since 1995, there was a rapid demand for charcoal due to the establishment of a business network

with Malaysian citizens. (c) large *panglongs* was closed by the government and the role of big *toke* was replaced with local *toke* that has limited marketing access, not as wide as before. (d) the government allows the establishment of *panglong* only for the Akit community as the indigenous community with the intention of only for survival. The small *panglongs* existed only based on permission from the Subdistrict and Village Head (interview with Miswadi-member of an environmental NGO on 10 June 2021). (e) the issuance of Law no. 27 of 2007 concerning the management of coastal and small islands, as the state regulation, shows the role of the state in protecting and granting power over coastal resources to certain parties. Following the expiry of the HPH permit that automatically restricts the utilization and processing of mangrove wood on a large scale in large *panglongs* in 2003 by the government. The large *panglongs* which were still operating until 2005 were closed because it was deemed illegal. (f) in 2006, a small *panglong* was established for the sustainability of the livelihoods of the Akit community members to survive. The existence of small *panglongs* relies on the Bengkalis Regent's Decree No. 824 of 2004 concerning community-based management of mangrove forests. The dynamics of the charcoal production business for the residents of the Akit community is a fairly long history in the utilization of mangrove forests. Such a story is also experienced by other forest-reliant indigenous communities in Jambi based on Budiandrian et al., (2017), who concluded that a long series of changes in access to the *Taman Hutan Raya* area in Jambi (1933, 1987, 1999, and 2001) have significantly changed legal rights, actual rights, and land/resource use practices within and between various forest reliant groups through mechanisms access that is carried out both legally and illegally.

The utilization of mangrove forests has been threatened by the emergence of shrimp ponds and oil palm plantations, which leads to ecological and social pressures that may generate the decline of mangrove forests. The Akit community members are worried that the rapid development of shrimp ponds will threaten the mangrove ecosystem. One of the leaders of the RW Dusun Akit community stated that:

“Along with the constant expansion of the shrimp ponds every year, we are finding it even more difficult to obtain the mangrove wood. Currently, we may have not felt the direct effects of the shrimp pond expansion. However, it is clear that the excavators to start shrimp pond cultivation has destroyed the mangroves, while our residents only cut the mangroves using machetes” (Mr. Martius, 53 years old, Jangkang Village, 26/07/2020).

Dharmawan & Nissa (2020) concluded that there are four types of stressors faced by small farmers and small fishing households in maintaining their livelihoods, namely plantations and large-scale capital expansion, infrastructure development, climate variability, and the emergence of competition and social conflict. This business vulnerability applies to all levels of charcoal-making business, both small-scale charcoal-making businesses and family charcoal *panglong*. This situation clearly marks a general problem experienced by rural communities in terms of low economic resilience. Suryawati et al., (2011) well portrayed such similar situation through a conclusion that there were a number of socio-economic problems in the case of Segara Laguna Anakan, namely land use conflicts, economic competition, deforestation, and land, which resulted in low resilience or high vulnerability. To reduce this vulnerability, Niaz, (2021) recommended microfinance assistance as a positive contribution to sustainable livelihoods, multidimensional poverty reduction, and living standards. Sustainable development highlights the importance of poverty alleviation and calls for the implementation of policies that lead to the socio-economic development of the poor.

The use of mangroves by residents of the Akit community without written permission is almost the same as the condition captured by Bulan et al., (2019), who insinuated the complexity of the rules in managing permits for the use of timber forest products. The Akit community also felt the same way as reflected by one of the locals “...Our local people do not even complete primary education. Thus, we will not be able to afford the process of applying for permits for the use of mangrove wood.” (Mr. Bat, Berancah Village, 30/07/2020). In other words, the condition of lack of education has led to difficulties in applying for a permit to use mangrove forests. In a similar vein, the results of research on the Kucur Village Community of Malang Regency interpret the forest as a symbol of social, economic, and ecological investment for the next generation (Satmoko et al., 2019). Although there is no social movement in the Akit community to demand rights regarding the use of mangroves, they are also worried that they will be restricted from entering the mangrove forest. This is almost the same as the research findings of Taib et al., (2010), which revealed some factors that trigger the birth of new social movements, such as lost farmland, lost residential land, lost access to forest areas, loss of customary land rights, loss of houses or settlements, loss of sources of livelihood or income, loss of plantation land, and graves. Likewise the research of Hapsari et al., (2020) regarding the prohibition on the use of fishing gear, where the policy

has disturbed fishermen in their business activities. The residents of the Akit community interpret mangrove forests as an economic source or source of livelihood. Thus, the rationality action taken by the business actors of the Akit community, especially the workers, is purely instrumental rationality to meet the necessities of life. The increasingly high social pressure may pose threat to their source of livelihood.

Several studies have concluded that indigenous people in Malaysia tend to remain poor due to insufficient access to basic education and the inability to work and receive housing and other infrastructure support (Saifullah et al., 2021). The socio-economic needs of the Orang Asli are not handled properly (Ismail et al., 2019). In this line, the characteristics of the Akit community in Riau share some similarities with those of the Orang Asli in Malaysia, such as insufficient access to basic education, lack of support for housing facilities, lack of road infrastructure, and lack of guidance on socio-economic needs. The head of Dusun Akit said, "...the roads in our village are poorly unpaved. Some of the roads between neighborhoods are cemented roads, while some of the other roads are merely paved with gravels" (Mr. Martius, Jangkang Village, 26/07/2020). To improve natural resource management, Basyuni et al., (2022) suggested adapting community-based activities in monitoring and management activities to improve mangrove restoration.

CONCLUSION

The development of the charcoal business in the Akit community has had its ups and downs. From the 1980s to 1994, charcoal production was initially carried out in a simple manner with a maximum production of 2 tons per production. From 1995 to 2005, there was a high market demand for mangrove charcoal because the business network with Malaysian citizens of Chinese descent developed into big *panglongs*. Within 10 years, *Panglong Besar* operated and was finally closed in 2005 by the government. In its subsequence, in 2006, the government permitted small *panglongs* to return to operation only for a living. The granting of the permit was given orally specifically for the Akit community members as indigenous people.

The social action of *panglong* workers is directed to fulfill basic household needs and other needs and thus the most dominant rationality for this actor is instrumental rationality. This action has an impact on economic life to meet the minimum standard of household needs for survival. The social action of very small charcoal entrepreneurs positions the charcoal business as an activity that provides charcoal stock for the main livelihood. So, the social action of very small charcoal entrepreneurs is an act of instrumental rationality and traditional action. The rationality of the owner of this family *panglong* has had an impact on the fulfillment of the economic needs of their extended family. Thus far, this rationality has not had a negative impact on the mangrove forest environment. The action of the *toke panglong* actors is more oriented towards commercial activities, but they still contain some widely held values, such as providing loans and employing family members as their workers. On this basis, the social action of the *toke* actor is a combination of instrumental rationality and value-oriented rationality.

The dynamics of the charcoal production business in the Akit community were initially a charcoal production business to meet the needs of the local market and network with foreign dealers. The existence of the charcoal business is based on the recognition of the Akit community as indigenous people only as subsistence. The establishment of *panglong* families is a path to household independence for Akit community residents who need support and guidance from various parties. The contribution of the results of this research to the field of science is that the charcoal business is one of the identities of the Akit community. The limitation of this study is that it has not studied the influence of ecological pressures and social pressures on the existence of charcoal businesses which is a challenge for future research.

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