Community empowerment based on religious ecology leading to sustainable agricultural development (A case study of Isy Karima Islamic boarding school in Karanganyar, Central Java)

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Abstract. A community is a collection of human beings in which humanity can be built through understanding and progressive religious awareness of their social structure. The purpose of this research was to describe the community empowerment carried out by Isy Karima Islamic Boarding School based on religious ecology. The research method was qualitative descriptive, and the data were people's written or spoken words and observed behavior. The research approach was based on sociological and anthropological paradigms. The data analysis begins by arranging the data and organizing it into patterns, categories, and basic units of description. The data were reduced using a coding analysis in the conceptualization form or assigning new names to the informants' explanations. A coding analysis was used to explain the implementation of Isy Karima Islamic Boarding School in empowering the local community. The results show that the religious ecology developed by the Islamic boarding school was successful in inspiring community members to develop their self-potential. The presence of Islamic boarding, which plays a central role as an agent of change, can provide (economic, social-cultural, psychological, and political) empowerment for the community. This community empowerment is important as a prerequisite for achieving sustainable development.

1. Introduction

The increasing demand for food, both in terms of quantity and quality (safety and health), requires farmers with reliable skills who can implement sustainable agriculture principles. Sustainable agriculture not only rests on environmental sustainability but also aspects of social and economic sustainability in the community [1]. According to Plumecocq et al [2], models of sustainable agriculture potential to enhance farming and improve the environmental performance of conventional agricultural systems (by reducing pollution in the soil, in water resources, and in the atmosphere). This is supported by the statement of [3], who writes that there is an urgent need to accelerate the transition to sustainable systems because of the evidence that climate change, especially the shift to more extreme and more varied patterns of rainfall, has already exacerbated the consequences of practices that lead to soil erosion, water pollution, and the risk of flooding and drought. In the opinion of
Grontkowska et al [4], the use of principles of sustainable development requires broader knowledge as well as a systematic and comprehensive view of agricultural systems. Therefore, it is vital that every effort is made to encourage a shift towards sustainable agricultural systems.

In Indonesia, sustainable agricultural systems are regulated in Law Number 22 the Year 2019 about Systems of Sustainable Agricultural Cultivation, which states that systems of sustainable development need to be established in developing the farming sector through systems of agricultural cultivation, in order to achieve food sovereignty by paying attention to the carrying capacity of the ecosystem, mitigation, and adaptation to environmental change, with the aim of creating agricultural systems that are advanced, efficient, resilient, and sustainable. Nevertheless, the realization of sustainable agricultural systems has not yet been fully implemented due to problems in the various approaches used, whether sectoral or partial, so poverty remains high among farmers in rural areas. In order to overcome poverty among farmers, a number of priority programs have been formulated to provide solutions to the various problems surrounding the poverty of farmers. These community empowerment-based programs include a program to create a market for farmers, a program to establish or activate Farmers’ Groups, a program to offer aid to farmers’ groups, a program to provide a field for demonstration in every village, as well as training, counseling, networking, loans socialization, development of human resources and strengthening of rural businesses, adoption of technology and innovation in agricultural businesses, and adoption of practices of pesticide management [5].

According to Purwanto et al [6], the key to realizing sustainable agricultural development is to strengthen the development of agricultural counseling services from good counseling agencies, whether government or privately owned. The development of Islamic boarding schools at the present time is not only motivated by a concern for the poor condition of farmers but also due to the true nature of Islamic boarding schools, which are traditional Islamic educational institutions where students learn, understand, study, internalize and practice Islamic teachings by emphasizing the importance of religious morals as a guideline for everyday life [7]. The concept of education in Islam views human beings as creatures who are born with outward potential, or the potential to do good to nature and also to destroy nature and divine potential which has a non-physical function [8].

Throughout development, the existence of Islamic boarding schools has led to three main functions that are always carried out: (1) as centers that shape and form religious thinkers, (2) as institutions that create human resources, (3) as institutions that have the power to empower the community [9,10]. In the process of community empowerment, Islamic boarding schools can be positioned as centers for development counseling (health counseling, agricultural counseling etc.), centers for developing technology that is appropriate for rural communities, and centers for human resource empowerment, as well as their main function as institutions for religious (Islamic) education [11]. Therefore, in the process of empowerment, cooperation is needed with stakeholders and farmers’ groups to ensure that research and development services and transfer of technology can be carried out inclusively and in a way that is responsive to farmers’ needs [5].

The community empowerment carried out by Islamic boarding schools inserts religious values in every activity. This type of empowerment promotes Islamic education as the foundation for empowering the community [12]. This empowerment has a multiplier effect on students at the boarding school and the surrounding community. One of the effects is the sustainable empowerment for students and members of the community that is noble-minded and teaches entrepreneurship skills. The purpose of this research was to describe the religious behavior and empowerment of the community as a result of the community empowerment carried out by Isy Karima Islamic Boarding School.

2. Research method
This research focused on the community living around Isy Karima Islamic Boarding School, in the Gerdu, Salam, and Karang Villages, in the Karangpandan District of Karanganyar Regency. A number of reasons were taken into consideration for determining the setting for the research about religious
ecology: (1) this area was formerly a high poverty area but since the empowerment from the Islamic boarding school, it has developed into a productive area; (2) there was potential for this area to develop an integrated agricultural system. Based on the problems addressed in the research, which focus more on problems of process and meaning, the appropriate type of study was qualitative descriptive, with a phenomenological approach. In a qualitative descriptive research method, the data are in the form of written or spoken words or behavior of the people observed.

This research approach was based on sociological-anthropological paradigms. The sociological approach was used to map the structure and work domain of the Islamic boarding school. The anthropological approach was used to understand the dialectical product of the human mind as the interpretation of teaching or belief. The main approach in the concept of empowerment views the community not as an object of the various development project but rather as the subject of the development effort itself [13,14]. This alternative approach has been designed to create sustainable agriculture in various locations throughout the world, to improve the living conditions of local communities, and has had a long-lasting effect, which has ultimately encouraged sustainable community development [15].

The data sources used for the research included primary data and secondary data. The primary data were obtained from the first source, through in-depth interviews with individuals and observation [16,17]. The interviewing process in this research used a technique of data collection through face-to-face interviews to obtain comprehensive, in-depth information [18,19]. The interviewing process used a semi-structured approach so that the researcher could ask additional questions outside the guidelines to obtain more detailed and comprehensive data and information [20]. The informants were village administrators, the head of Isy Karima Islamic Boarding School, the head of the young people’s Karang Taruna organization, and community representatives who participated in the empowerment process. Since the research was conducted in one regency and focused on community empowerment by the Islamic boarding school for the period March to June 2021, the technique of analysis used was a single case analysis [21]. According to [22], in single case analysis, the analysis process for every case is carried out using an interactive model of analysis. In this model of analysis, the three analysis components are data reduction, data presentation, and drawing of a conclusion or verification. The data analysis began by arranging the order of the data, organizing the data into patterns, categories, and basic units of analysis. The data reduction was carried out using a Coding Analysis in the form of conceptualization or renaming the explanations of informants. In this research, the coding analysis was used to explain the implementation of Isy Karima Islamic Boarding School in empowering the surrounding community.

3. Research results and discussion

3.1. Religious behavior and sustainable agricultural development

A community is a group of human beings in which humanity can be built through a religious understanding and progressive awareness of its social structure [23] because human beings are not inanimate objects but can change themselves through a process of empowerment. The community empowerment based on religious ecology carried out by the Islamic boarding school was found on problems that have arisen as a consequence of the environmental issues of the present time, which have seen a deviation in human behavior in their interaction with the environment. The religious ecology developed in the environment around the Islamic boarding school is proof that the relationship between people and the environment is not a relationship between predator and prey but one of the equals because both are the creations of Almighty God.

The community empowerment program implemented by Isy Karima Islamic Boarding School is a form of service to the surrounding community. Isy Karima Islamic Boarding School is both an educational institution and a boarding school which teaches religious (Islamic) values by following the developments and changes in the community proportionally and professionally. The activities carried out by Isy Karima Islamic Boarding School in the community empowerment endeavor include the
process of planning and establishing the program, and the implementation of development and management training together with the community, in the sustainable agricultural development. The role of this empowerment has proven that the community living around the Islamic boarding school can develop the potential of its area to improve the living standards of the surrounding community. Before being given an understanding about the utilization of the local area, through the community empowerment program, the majority of people in the local community earned a living as farmers and laborers, with a non-fixed source of income. This was due to their lack of knowledge about the utilization of human resources and natural potential that could be developed further to increase their income.

Several factors motivated the boarding school to carry out empowerment in the surrounding community. First, in the field of religion, the majority of people living in the three nearby villages are Muslim, as indicated by the number of places of worship for the Muslim community, including both mosques and smaller prayer houses. The existence of this religious community made it easy to form a partnership that could be developed further, with the hope of establishing villages with their autonomy. Second, in the social and cultural field, the life of the community in this area is like that of other villages, in that the people adhere closely to values of local wisdom passed down from their ancestors, while continuing to uphold various customs and traditions, a strong sense of family, and a spirit of cooperation, or gotong royong. Some of the activities of people in the villages are influenced strongly by elements of customs and traditions that have been preserved for generations. Third, the mountainous terrain in the surrounding area on the slopes of Mount Lawu not only offers a natural beauty but has also helped this area to develop into a tourism village that attracts large numbers of visitors. The local people believe that taking care of the environment is a way of expressing their gratitude for the harmonious coexistence between the people and the environment, especially with the power of nature in the surrounding area. The local wisdom that exists in this area is quite diverse and can serve as a point of interest to attract tourists to the area, as well as having the potential to be developed further, especially in the form of sustainable agricultural systems. The local community is aware that the skills people possess to manage the natural environment are not the result of their power but a gift from Almighty God. This means that when people plant and reap an abundant harvest, it is not because they possess extraordinary skills in agricultural management, but because all that they have comes from Almighty God. This is illustrated in Surah Ibrahim 32, which reads: “It is Allah who created the heavens and the earth and sent down rain from the sky and produced thereby some fruits as provision for you and subjected for you the ships to sail through the sea by His command and subjected for you the rivers”. Messages of the Al-Qur’an about the environment are very clear and prospective. There are several passages in the Al-Qur’an related to the environment that are used as a reference by the local people in developing an ecological balance, in which the environment is a system, and it is the responsibility of human beings to take care of the living environment, while prohibiting environmental damage, as outlined in the table below.

Based on the interviews with religious leaders and also from the writer’s observation, the attitude and behavior of the community that rests on religious ecology are based on the words of the Prophet Muhammad: “Whoever plants a tree, and the tree bears fruit and the fruit is eaten by people or animals, God will offer an unending reward”. To maintain a good relationship in their interaction with the surrounding environment, people must also preserve the living environment as a realization of the manifestation of the process from the human level to the level of moral perfection: Faith, Islam, and Charity. In connection with preserving the environment, the Prophet Muhammad also spoke the following words: “Stay away from these three cursed acts: defecating in water sources, at the side of the road, and under the shade of a tree” (HR Abu Daud, Ahmad, and Ibnu Majah).
Table 1. Attitude and religious behavior in sustainable agricultural development

| Surah in the Al-Qur’an | Message | Attitude and Religious Behavior |
|------------------------|---------|---------------------------------|
| “It is Allah who created that which is on the earth for you all” (QS. Al-Baqarah :29) | Environment as a system | a. People understand that the environment is made up of biotic and abiotic elements |
| And We have spread the earth and made it into mountains, and We have grown everything according to size. And We have made for you on the earth the necessities of life, O my people, in the form of clothing, food, and a roof over your head. And We have also created creatures that not you, but We are the provider of sustenance for them.” (QS. 15: 19-20) | Development for environmental preservation | a. Development for environmental preservation People implement good farming methods, or sustainable integrated agricultural systems |
| “And to Tsamud (We sent) their brother Salih. Salih said: “O, my people, worship Allah, you have no God other than He. He brought you into being from the earth and made you dwell in it, therefore ask forgiveness of Him, then repent to Him. Surely my Lord is nigh and responsive (to the prayer of His servant.” (QS. 11: 61) | | b. The presence of human beings on the earth causes environmental problems. To preserve an ecological balance, the community around the boarding school carries out conservation |
| “And of the people is he whose speech pleases you in worldly life, and he calls Allah to witness as to what is in his heart, yet he is the fiercest of opponents. And when he goes away, he strives throughout the land to cause destruction therein and destroy crops and animals, and Allah does not like destruction.” (QS. Al-Baqarah: 2014-2015) | Prohibition of environmental damage | c. An environmentally friendly lifestyle is starting to become a habit |
| “And cause not destruction upon the earth after its reformation (by Allah) and invoke in Him fear and aspiration. Indeed the mercy of Allah is near to the doers of good.” (QS Al-A’raf: 56) | | d. Consuming environmentally friendly products is becoming a way of life |
| | | e. Prohibition of littering |

Data source: analysis of primary data through in-depth interviews
3.2. Community empowerment

The community empowerment by Isy Karima Islamic Boarding School is in line with the research of [24] which explains that an Ecological Boarding School (Eco-Pesantren) is a type of boarding school that provides deeper knowledge about the Islamic religion and also introduces students to knowledge about the environment. An Ecological Boarding School does not only provide religious knowledge but also teaches students how to take care of and preserve the environment by utilizing the land for farming under the needs of the community. In line with this, [25] describes community empowerment as the power to do something at an individual or collective level. Meanwhile, empowerment can be a useful tool for increasing the capacity and assets of the local community, both individually and collectively; community empowerment requires the involvement of members of the community and collective action rather than individual action [14,25]. In community empowerment, and the education system needs to be offered by the developer. Therefore, in good community empowerment, education is needed for the community empowerment itself [26,27]. In the development process, the community is not merely an object of the development but is also the subject or agent of the development itself [10,14]. The presence of a boarding school plays an important role as an agent of change that can bring economic, social, cultural, psychological, and political empowerment to the surrounding community. This kind of community empowerment is important because it is a prerequisite for achieving sustainable development.

Economic Empowerment. In the life of a community where the majority of people earn their living as farmers, there has never been a sense of lacking, in economic terms, since the implementation of the empowerment program by the boarding school. People in the community are always grateful for whatever they get from their farming activities, and their consumption expenditure is not based on what they want but rather on what they can afford. As one member of the community said: “yen nuruti kepinginan ora ono enteke” which means if people always follow their wishes, there will be no end. The local community believes that they will never experience a shortcoming in their lives if they always work hard because nature will fulfill their food needs. They adhere to the principle that as long as they treat nature well, nature will repay them by giving them what they can use to meet their daily needs. Economic empowerment is not based on the size of a person’s income but on the extent to which they are thankful for the result of their work. It is said that income is related to work behavior. The harder a person works, the better the result. The more thankful a person is for the result of their work, the higher the level of economic empowerment.

Psychological Empowerment. It sees human beings as equals, and for this reason, it is important to give the same amount of attention to everyone. There is a well-known life saying: “Duduk sama rendah berdiri sama tinggi,” which means we all sit at the same level and stand at the same height. Whatever the way people think, they have the same right to make decisions. In a marriage, the wife should also be involved in the decision-making so that neither party feels they are more or less dominant. In the case of farming activities, women are equal to men, from the time of planting to the time of harvest. Husbands and wives have the same obligations in every stage of farming. Another indicator that shows psychological empowerment is the level of personal awareness regarding power and wealth in decision-making. The interaction between men and women is based on joint decision making, in which neither one gives or takes orders, and neither one feels more or less dominant. These various attitudes and behaviors show and prove the presence of psychological empowerment. This condition is in line with [14], who states that in the development process, people are not only the object of development but also the subject or agent of the development itself.

Social Cultural Empowerment. The local community in this area has quite a high level of mobility, which is needed to continue fulfilling their daily needs. This means there is a fairly broad interaction. Prominent social activities include arisan (regular social gatherings that are hosted in turn and include a form of rotational savings) and gatherings to study and recite the Al-Qur’an. Other social events include weddings and other parties, where husbands and wives attend as a couple. The men are always ready and willingly ready to help set up equipment for these events if needed. The interaction between people in the community upholds values that can suppress any unwanted, arbitrary behavior towards
each other. “Wong nandur bakal panen” is a local saying that means he who sows will reap the reward. People will reap good results if they do well in their daily lives, and vice versa. These values are highly effective for forming or building a human life of dignity and respectability. People have a greater fear of facing social sanctions than any other kind of sanctions. In this case, local cultural values should be viewed as an asset for development and not as something that goes against the values of modernization that are at the core of a development process [28].

Political Empowerment. Empowerment in the context of a community is the individual abilities that unite to build empowerment in the community concerned. Community empowerment is one of the fundamental elements that enable a community to survive and in a dynamic sense to develop itself and achieve progress. Political empowerment in a local community can be witnessed from the extent to which all elements of the community are involved in political decision-making. Participation in political decisions can be seen in various kinds of local community meetings (Rukun Tetangga [RT] and Rembug Dusun), meetings of the Village Representative Board, and other associations. Meetings at the level of RT discuss problems related to the field of agriculture and various social issues and provide information and guidance from the government. In the field of agriculture, for example, discussions may take place about the best time to start planting, problems of irrigation, or problems of pests and diseases the community is facing. Women also have the same opportunities to participate and play an important role in discussions about farming issues. This is because women are also largely involved in the field of farming. Social issues discussed may cover anything related to weddings and other events, or adang akeh (such as the equipment that can be used together, which usually belongs to the RT). The role of women here also includes planning the kinds of additional equipment that need to be purchased.

4. Conclusion

The community empowerment carried out by the Islamic boarding school positions the village community as the subject in the development process. Members of the community participate from the planning stage to the implementation and the maintenance or preservation. The community is facilitated by the boarding school to deal with changes that are based on considerations of the potential of existing natural resources. In order to adapt to these changes, the community itself must become more competitive in improving its skills to manage the potential of its natural resources. The religious ecology developed by the boarding school is proven to have inspired the community to develop its potential and the potential of its surrounding natural resources. The presence of the boarding school, which serves as an agent of change, has succeeded in bringing economic, social, cultural, psychological, and political empowerment to the community. This community empowerment is a prerequisite for achieving sustainable agricultural development.

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