



Research Article

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Improving Community Welfare Through the Cultivation of Coffee: A Case Study of Bondowoso's Coffee Republic, Indonesia

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Abstract

This paper seeks to examine the efforts of the Bondowoso community to grow coffee to empower and welfare the community. Community empowerment is carried out through the Coffee Republic program as a form of cooperation between local governments and communities. This research applied a qualitative approach. First, data collection is information about community empowerment in the people's coffee program in Bondowoso regency. The population and sample of this study are stakeholders who understand the 'coffee republic' program and the coffee growers. The secondary data is sociocultural information in Bondowoso Regency, East Java. The study used the perspective of human ecology and green social welfare. The first perspective explains the relationship between humans and the surrounding natural environment. While the second one is used to describe the relationship between the environment and social problem-solving resource systems, particularly in rural communities. The results of this study showed that the people's coffee program under the name of the Coffee Republic positively impacted the economic empowerment of the Bondowoso community, especially in providing more jobs and increasing income. This research contributes to giving strategic feedback to regional governments on alternative strategies for empowering a community through coffee production.

Keywords: community empowerment, poverty, people's coffee, arabica coffee, coffee republic

1. Introduction

Coffee has grown to become one of the essential plantation products in Indonesia. Arabica coffee has good taste and high prices in domestic and world markets (Sedana & Astawa, 2019). Farmers have produced various kinds of coffee in different regions in Indonesia, for example, Bali Kintamani Coffee, Flores Bajawa Coffee, Gayo Coffee, Toraja Coffee, and others. Bali, Flores, Gayo, and Toraja are the name of the region in the country where the specific coffee is produced (Fadhil et al., 2018; Happyana et al., 2020; Lisnawati et al., 2017; Yudhari et al., 2020).

Bondowoso is one of the coffee producers in Indonesia. Its hilly region is perfect for coffee plantations (Hairiah et al., 2020). With these conditions, the local government focuses on land use in mountainous areas, productive forests owned by farmers, and community land (Feintrenie et al., 2010; Hasdiansyah et al., 2021). For the economy of the Bondowoso community to increase, the local

government plays a vital role in developing its potential in the plantation sub-sector (Fadhil et al., 2018). The people's coffee plantation sector is predominantly superior because it is believed to become a commodity that can be a 'spirit' of Bondowoso district development and community empowerment. Therefore, the plantation strategy mainly focuses on the social and economic empowerment of the local community (Syahza et al., 2020).

Nevertheless, the fact shows that policies or strategies for coffee cultivation are not done to increase the profits of entrepreneurs (Milgram, 2021). Another factor is the government's tendency to dominate coffee production without community participation (Hasdiansyah et al., 2021). In addition, the cultivation and production of coffee to empower the community in an area does not consider environmental aspects, especially forests, as coffee planting places (Duffy et al., 2021; Feintrenie et al., 2010). Furthermore, people also tend to view the forest area as the cause of backwardness or poverty in the community (Lauri & Bäckström, 2019).

With that fact, this paper aims to examine the efforts of the Bondowoso community to grow coffee to empower and welfare the community. Community empowerment is carried out through the Coffee Republic program as a form of cooperation between local governments and communities. This research is significant considering that coffee cultivation in Bondowoso Regency is very concerned about the relationship between humans and the environment (Lisnawati et al., 2017). This approach places the habitat, namely forests, as a source of social problem-solving that can increase community empowerment through the Coffee Republic.

2. Literature Review

2.1 *Community Empowerment Strategy Through People's Coffee Program*

The coffee republic is a top-down program of the Bondowoso Regency government whose long-term goal is to alleviate poverty and improve the welfare of people in rural areas. The government's efforts to alleviate poverty continue to be echoed, programmed, and implemented. One of them is empowering the community through the people's coffee program model. An agroforestry program that grows coffee trees on the sidelines of productive forest trees is the best alternative to alleviate poverty in rural areas whose local potential in agricultural land and community land is still wide open.

The empowerment of rural communities can be done by providing facilities that are in accordance with the community's needs through increasing existing social and institutional capacity (Putri et al., 2020). Meanwhile, community empowerment in rural areas can be done by connecting people's knowledge, complexity, and environmental connections (Fadhil et al., 2018). The people's coffee program in Bondowoso is the right case. Like the tourism sector, community activities based on the environment according to local conditions and people result in the empathy to maintain and preserve ecological diversity and benefit from agroforestry results carried out (Bichler, 2021; Byrareddy et al., 2019; Huang et al., 2019).

Furthermore, Jung (2020) explains that community empowerment in rural areas can increase community land productivity and diversify the cultivation of crops and plantations to be followed by participatory. The people's coffee program is a community empowerment model that can positively impact poverty alleviation (Wijayanti et al., 2019). Similarly, community empowerment in rural areas can be done by selecting alternative programs to make local agricultural production more profitable (Huang et al., 2019). The people's coffee program is suitable for the community in Bondowoso regency. The territory is mountainous and suitable for coffee cultivation. A cooperative, innovative approach and high-value-added crops with processing from upstream to downstream can encourage and open up new jobs and accelerate people's economic activities.

As Hasdiansyah et al. (2021) claim, the empowerment of people's coffee farming communities can also improve and accelerate the economy of rural communities. It can be developed with the help of promotion and promotional innovations carried out. Consequently, people's coffee industry and

the harvest sold can reach the community and have a multiplier effect on people's economic activities (Kangile et al., 2021). In addition, coffee commodities can expand activities, increase business fields, add jobs, and absorb a lot of labour in rural areas. In the end, the people's coffee agroindustry can revive, develop, and improve the welfare of the village community as a whole (Syahza et al., 2020). Therefore, the empowerment of people's coffee farming communities significantly impacts the village's economy.

3. Method

This research uses a qualitative approach. The focus is collecting information about the people's coffee program conducted by the Bondowoso Regency government through the Bondowoso Coffee Republic program. The informants of this study are those who understand the people's coffee program (*knowledgeable on the subject*), namely those authorised to design and implement people's coffee programs. In addition, informants are also selected from coffee farmers who become community empowerment actors and get the impact of the coffee program. Unlike other studies on Indonesia's coffee, this study follows previous studies conducted in Tanzania and Costa (Brenes-Peralta et al., 2021; Kangile et al., 2021). This study identifies the importance of coffee production for empowering economic conditions and reducing poverty among coffee farmers in Bondowoso. The intended data can explain people's coffee programs and social welfare by conducting in-depth interviews with selected informants. The primary sociocultural data is then identified to look for its strategic potential to be revitalised into data that can explain people's coffee program policies.

The primary sociocultural data is then identified to be sought for the strategic potential so that it can be revitalized into data that can explain policies in the form of people's coffee programs. The primary data collected is sorted, assessed, processed, and analyzed using the perspectives of human ecology and green social work/welfare. Human ecology explains the relationship between farmers or coffee growers and their environment. At the same time, green social welfare explains the relationship between people's coffee programs and improving people's welfare. Coffee plantations are a source system for solving social welfare problems in communities around forests.

The steps are as follows: first, condensing the elements related to the policies the Bondowoso district government took in the people's coffee program. For example, how were the beginning and implementation of the people's coffee program? Second, identify the obstacles to implementing the people's coffee program and how the solution is taken. Third, collect data on increasing people's income as coffee growers after and before growing coffee. This will be known to increase the income of coffee farmers so that it can be seen as an increase in their welfare. Fourth, analysing all the data obtained from this study will develop a model of strengthening ideas, behaviours, and efforts from the Bondowoso Regency regional government in empowering the community related to the people's coffee program by increasing income and community welfare.

4. Results and Discussions

4.1 History of Bondowoso's Coffee

Since 2010, the Bondowoso district government has synergised. It continues to work hard to focus on developing arabica coffee with the Coffee and Cocoa Research Centre (*Pusat Penelitian Kopi dan Kakao/Puslitkoka*), the State Forestry Corporation (Perhutani), Banking, and the coffee farmers association (Iskandar et al., 2018). With the new vision, the city of Bondowoso has appointed coffee as its new icon, the 'Bondowoso Republic of Coffee'. Bondowoso regency has long been known for the iconic '*tape*,' so the city is also called the 'city of *tape*'. The *tape* became the primary production and has been widely known by the people of East Java. With this new coffee icon, the district, popularly known as the Horseshoe region, promotes its name to the international scene.

As a result, in 2013, Arabica Coffee Java Ijen-Raung, from Bondowoso, gained worldwide

recognition by obtaining an international certificate. Although it is not the first certification for Indonesian coffee, it does matter for the local Arabica coffee (Ibnu et al., 2018). In 2018, of the 3,000 tons of Bondowoso Arabica coffee production, one-third or 1,000 tons was exported through the world market. The rest of the national and regional markets are consumed by the community in the Bondowoso region and other districts around it. This led the Regent of Bondowoso, Amin Said Husni, to declare his district as the 'Bondowoso Republic of Coffee' in 2016.

Bondowoso Coffee Commodities, especially coffee clusters, developed on Mount Ijen and Raung (Izzah et al., 2020). The product is sold in raw or bulk form and can be enjoyed in beverages. Various Arabica coffee shops from coffee plantations owned by PTPN and the community can be enjoyed. Many coffee shops have sprung up along the road to the Ijen crater from Bondowoso City. This is related to community empowerment programs related to people's coffee plantations. The local government and all communities in the Bondowoso Regency area intend to make the coffee republic a reality.

History has shown that since the 19th century, coffee plantations managed by PT Perkebunan Kopi have made this region a leading producer of coffee, especially Arabica coffee (Izzah et al., 2020; Tarno et al., 2018). The coffee commodity has long been the flagship of Bondowoso and Indonesian commodities. This is inseparable from coffee products from PTPN XII, which has been legendary and known to the international community. With a plantation area of more than 4,000 hectares on Mount Ijen and Mount Raung, the productivity level is relatively high, which produces coffee products of 1,000 tons annually.

Bondowoso area is now known as the 'Arabica Coffee Cluster,' which involves local government, businesses, and farmers (Candelo et al., 2018). From 2018 until now, residents along the road to Ijen crater committed to making the region's characteristics with coffee. Some become local entrepreneurs by selling coffee commodities and shops (Marinello et al., 2021). The location seemed deserted, only people passed by, both residents and tourists who visited the Ijen crater. The drastic change is thanks to the initiation of the community to capture business opportunities and diversify related to the coffee commodities they produce. At least until this number, more than 30 coffee shops have sprung up, opened up job opportunities, absorbed labour, and accelerated the economy of rural communities.

4.2 People's Coffee

The popularity of coffee commodities through the people's coffee plantation program attracts the attention of business people or entrepreneurs and the Bondowoso Regency government. The Bondowoso local government and its community are believed to increase their economic capacity (Syahza et al., 2020). Communities in various countries have carried out various development efforts with significant objectives, such as worldwide economic improvement and poverty reduction. (Jung, 2020).

The people's coffee plantation cluster program in Bondowoso Regency resulted from the local government (Jember Puslitkoka) in 2011. The initial study results obtained data that in the Bondowoso district area, there are 5 (five) groups of farmers. Then, in 2017 it rose to 43 groups. The area of people's coffee plantations also grows along with agricultural land used for *agroforestry*, between forest plants and people's coffee plants. This *agroforestry* system reduces potential risks to the forest (Hairiah et al., 2020). Currently, the area of people's coffee plantations reaches 14,000 hectares. In that way, farmers successfully cooperate with local governments through Puslitkoka, protecting forests and benefiting economically (Iskandar et al., 2018).

Through training, coffee farmers know the procedures for processing coffee correctly and well to produce high-quality and good coffee beans (Candelo et al., 2018; See also Jung, 2020). People's coffee commodities become more fragrant, have a sweet taste, are spicy, contain the taste of chocolate, and there is a little caramel. With such quality, people's coffee commodity is priced higher than before. At the very least, people's coffee commodities from coffee production are priced at least

Rp. 100,000, - per kilogram. Previously, folk coffee of origin quality was priced at only Rp 40,000, - per kg. However, with better quality, some are higher than Rp. 100,000 - more, depending on coffee beans' quality, shape, and appearance produced by people's coffee farmers.

In responding to the increasing development, the government expands and multiplies the results of coffee commodity products, especially those produced by the people or communities. The program is through developing a cluster of people's coffee plantations. To strengthen and realise the sovereignty of coffee farmers through the vision of the Coffee Republic, the Bondowoso Regency Government targets the area of people's coffee plantations to reach 20,000 hectares by 2020.

4.3 Community Empowerment

Community empowerment of coffee farmers in the Bondowoso region starts with holding training and counseling. The local government conducts the program through related agencies, the government at the sub-district level, and the village government (Mulyoutami et al., 2020). With training related to the procedures for planting, harvesting, and processing post-harvest coffee products, farmers have sufficient knowledge. Engaging in training made farmers increase the volume and variety of their crop production and diversification (Duffy et al., 2021; Pratiwi & Suzuki, 2019).

As a producer of people's coffee, the Bondowoso people's coffee produces more than 3.000 tons, which is undoubtedly very much and will make abundant coffee skins for a superior product at the village, subdistrict, and even Bondowoso district level. People's coffee plants are spread evenly in the Bondowoso district, including Sumber Wringing, Pakem, Maesan, and Tlogosari districts (see Table 1). There are two types developed, namely Arabica and Robusta coffee.

Table 1. Bondowoso People's Coffee Types and Productivity

Type of Coffee	Area (Ha)	Production (Tons)	Productivity
People's Arabica	182	137	0,83
Perhutani's Arabica	180	119	0,70
People's Robusta	1.006,8	780,7	0,98
Perhutani's Robusta	3.072	1.967	1,0

Source: Bondowoso Region Plantation Office, 2018

Coffee production produced by Bondowoso regency has two types, namely, in the form of bulk and ground coffee. The form of bulk coffee for export is in the form of marketing powder in the district of Jember, Situbondo, and the people of the Bondowoso region. The Bondowoso Regency government encourages the coffee farming community to produce coffee commodities produced into coffee grounds through coffee farming groups. This is to provide added value for coffee commodity products made by the community, as for some farming groups that have produced quite a lot of coffee grounds and can be enjoyed by the community in the form of packaging.

Table 2. Group of Farmers of Packaged Coffee Producers

Group name	Type of Coffee	Capacity (In Quintal)	Brand	Packaging	Marketing
Tunas Harapan, Wringin Desa Sumber	Arabica, Robusta	1.5	Rajawali, Jatayu, Garuda, Jago	200 grams, 100 grams	Bondowoso, Jember, Situbondo
Harapan Makmur, Desa Rejoagung	Robusta	0.5	Gunung Raung	200 grams, 100 grams	Bondowoso, Jember, Situbondo
Usaha Tani, Desa Sukorejo	Robusta	1	Melati, Makadamia	200 grams, 100 grams	Bondowoso, Jember, Situbondo

Group name	Type of Coffee	Capacity (In Quintal)	Brand	Packaging	Marketing
Tunas Harapan II, Desa Sumber Gading	Arabica, Robusta	1.5	Nuri, Gelatik	200 grams, 100 grams	Bondowoso, Jember, Situbondo
Sumber Karya, Desa Sukorejo	Robusta, Arabica	1	Putri Gunung	200 grams, 100 grams	Bondowoso, Jember, Situbondo

Source: Bondowoso Region Forest Service, 2018

In Banyuwangi, especially in Gombengsari, people's coffee plantations develop on the initiative of the community itself rather than the *agroforestry* system initiated by the government by facilitating and using agricultural land (Dewi et al., 2017). Gombengsari community uses local community land, which is around private coffee plantations, to be used as coffee plantations. Local people also open coffee shops in the village that can accelerate the community's economic activities (Campera et al., 2021). Research in other areas in Indonesia has also found the role of coffee in community empowerment, such as farmers in Pattongko village, Sinjai, and South Sulawesi (Hasdiansyah et al., 2021).

With community empowerment through the cultivation of people's coffee supported by the 'Coffee Republic' program, the welfare of people in rural areas can be improved. Furthermore, improving the welfare of coffee farmers encourages increased cooperation and participation among coffee farmers in the program (Lecoutere & Wuyts, 2021). This can be seen in general from PDRB from 2016 to 2020 continues to increase.



Figure 1: Poor Residents of Bondowoso Regency in 2016 – 2020

Similarly, the development of business fields from 2016 to 2020 also increased. It also happened that the number of poor people from 2016 to 2020 also decreased. Lastly, the social welfare of the people of the Bondowoso regency can be seen from the Human Development Index (HDI) also increased (see Figure 1). The Republic of Coffee is one of Bondowoso's regencies' strategic programs to empower rural communities. With the program 'Bondowoso Coffee Republic,' rural communities are empowered through the people's coffee cultivation program.

5. Conclusion

The study found that the Coffee Republic successfully raised the people's coffee program and increased economic empowerment in Bondowoso. The program could provide more jobs, raise incomes, and reduce poverty. Rural communities are empowered through people's coffee cultivation

programs, agroforestry programs using agricultural land, and coffee cultivation on community land. This research contributes to giving strategic feedback to regional governments on alternative strategies for empowering a community through coffee production.

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