

Rural Identity and Its Roles in Boosting Local Economic Sustainability in Nglanggeran Village of Yogyakarta

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ABSTRACT Contemporary studies on rural areas often focus on rural areas' disadvantages and inability to accelerate economic growth and stimulate regional development. Within this dominant perspective, local identity or culture is often seen as obstacles to development. In contrast, this article unpacks how rural identity can develop the local economy and then achieve sustainability in a rural area, which allows us to situate the constructive roles of rural community in regional development. Drawing from field observation and unstructured interviews with resource persons from Nglanggeran Village in Gunung Kidul Regency, Yogyakarta, we found a reciprocal relationship between rural identity and local economy, of which it forms and reinforces rural sustainability. Our findings emphasize the importance of creating rural identity-based policy to bolster regional economy and development.

KEYWORDS Local Economy; Rural Identity; Nglanggeran Village; Sustainability.

INTRODUCTION

Sustainability, defined as the capacity to maintain and even increase the availability of resources or to achieve the desired condition in the long term, has become a central question on development agendas (Harrington, 2016). This is because threats to the sustainability of human life arise along with increasing pressure on the environment's capacity to provide for all human needs (Bruckmeier & Tovey, 2009). The concept of sustainability balances the three main pillars of development: environmental, economic, and social. If one pillar becomes more dominant over the other, an area becomes unsustainable.

Several researchers have identified the relationship between sustainability and identity (Pol, 2002; Dehghanmongsabadi, 2020; Basile & Cavallo, 2020) (see Figure 1). The term identity usually refers to the uniqueness inherent in someone or something. It can be seen from different perspectives that several kinds of identities are known, such as social identity, cultural identity, and place identity (Kaymaz, 2013). Social identity is defined as a person's conception that originates from experience during his participation in a social group to lead to the internalization of values and emotions, concern, and pride in being a member of the group (Tajfel & Turner, 2004). Meanwhile, Hall (1990) introduced cultural identity as a conception formed due

to the similarity of historical and cultural experiences, nationalities, ethnicities, religions, and localities as a group with a stable and sustainable framework. Besides being associated with humans, identity is also associated with a place. The term place

identity was initially referred to by Relph (1976). It is a person's self-conception of a place formed from his intersubjective experience with a place, for example, the appearance of buildings or scenery. It refers not only to the peculiarities of individual places but also to similarities between different places.

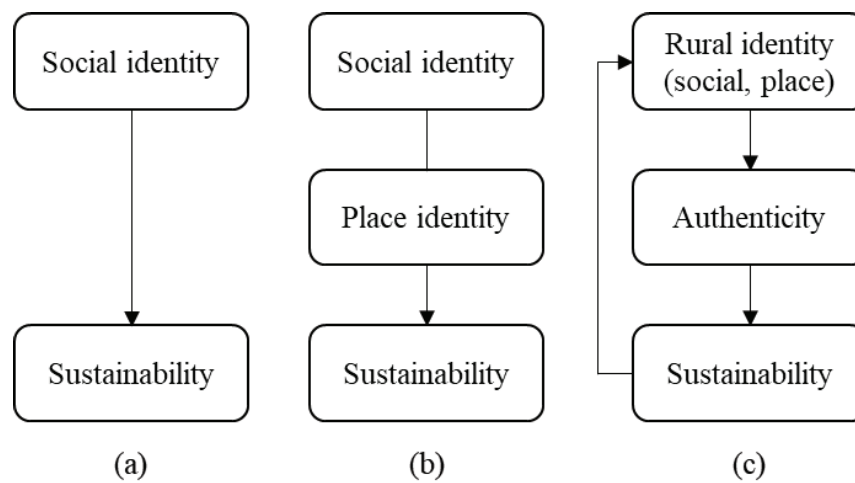


Figure 1. Relationship between Identity and Sustainability

Source: (a) Pol (2002), (b) Dehghanmongabadi (2020), (c) Basile & Cavallo (2020)

Pol (2002), Dehghanmongabadi (2020), and Basile & Cavallo (2020) agree that sustainability is highly dependent on the identity factor. Pol (2002) emphasizes the importance of social identity, while Dehghanmongabadi (2020) and Basile & Cavallo (2020) emphasize that not only social identity but also place identity can affect sustainability. According to them, identity has a fundamental role because it directly affects values, behavior, lifestyle, and communication among people. Sustainability cannot be achieved without an established social identity where communities with strong identities will have a unified social network and have the most potential to move towards sustainability. Therefore, places with a strong identity contribute to increasing

public awareness of sustainability due to the high sense of belonging and attachment to the place.

Previous studies on rural identity and local economy illuminate how rural identity is woven into specific strategy focuses on tourism development to bolster economic growth (Rigg et al., 2008; de San Eugenio-Vela & Barniol-Carcasona, 2015; Diamond, 2023). This approach posits that growth as the result of increased consumption can be produced and reproduced through the creation of specific identity of a territory (including rural areas). Central to this argument is that identity facilitates and construct values (Pol, 2002; Basile & Cavallo, 2020) including economic values. As such, local beliefs as the core of identity creation and construction is

directed towards exchange value generation of which this process conveniently neglects concern of balance among socio-economic and environmental principles. Studies on rural Asian development rarely touched upon the effect of constructing rural identity in achieving sustainability, as main concerns in rural area development were poverty reduction and strategy to enhance the capability of agriculture to compete and create added value and welfare to the local community (Kelly, 2011; Cobbinah et al., 2015).

As sustainability becomes the credo of development thus impacting planning and decision-making processes at regional and local level including rural areas, nevertheless it is still difficult to gauge whether or not this theme is incorporated in rural identity building process. Drawing from Cobbinah et.al.'s main argument (2015) and incorporating Pol(2002), Dehghanmongabadi (2020), and Basile & Cavallo (2020) similar argument on identity and sustainability, we argue that strengthening rural identity leads to exchange value creation which enhances rural economy. This in turn enables rural community to pursue and incorporate sustainability principles in their development agenda. Moreover, we posit rural Asia, in particular rural Indonesia, still focus on economic development rather than balancing all three pillars of sustainability due to inability to generate sufficient added value from agriculture related sector. This paper seeks to clarify whether a strengthening rural identity would lead to enhanced local economy and in turn facilitates achieving rural sustainability. We draw from the case of current development in a rural area in the

Special Region of Yogyakarta to amplify our position as stated above.

We focus on research in rural areas because rurals have the highest poverty rates (Alkire et al., 2014; Rosyadi, 2017). In addition, rurals also get a negative impact from the high rate of urbanization (Woods, 2005). Rural areas almost all over the world are depopulating as their inhabitants increasingly leave them (Woods, 2011). In Indonesia, Central Bureau of Statistics (BPS) data states that in 2015 the proportion of the rural population was 46.7%, and it is estimated that in 2035 it will shrink to 33.4% (Badan Pusat Statistik, 2020). The main factor causing the decrease in the rural population is the high rate of out-migration because the availability of employment opportunities is not proportional to the growth of the labour force (Prayitno & Subagiyo, 2018). This problem threatens the sustainability of life in rural areas because humans, as the main actors in processing resources in rural areas, are becoming increasingly scarce. Moreover, most out-migration actors are residents of the young age group because young people tend to move more quickly to other areas with higher attractiveness than older people who prefer to stay and are unwilling to move (Itriyati, 2015; Basile & Cavallo, 2020).

This study took the location of Nglanggeran Village, which is located in Patuk District, Gunung Kidul Regency, Yogyakarta (see Figure 1). This village has various natural, economic, and socio-cultural potentials that can be used as a basis for the formation of rural identity. In addition, Nglanggeran Village has also received many titles, such as ASEAN Community Based Tourism in 2017, ASEAN Sustainable Tourism

Award in 2018, and The Best Tourism Village in 2021 from United Nations World Tourism Organization (UNWTO). It has succeeded

in managing sustainability in the economic, socio-cultural, and environmental fields (Sekretariat Kabinet Republik Indonesia, 2021).

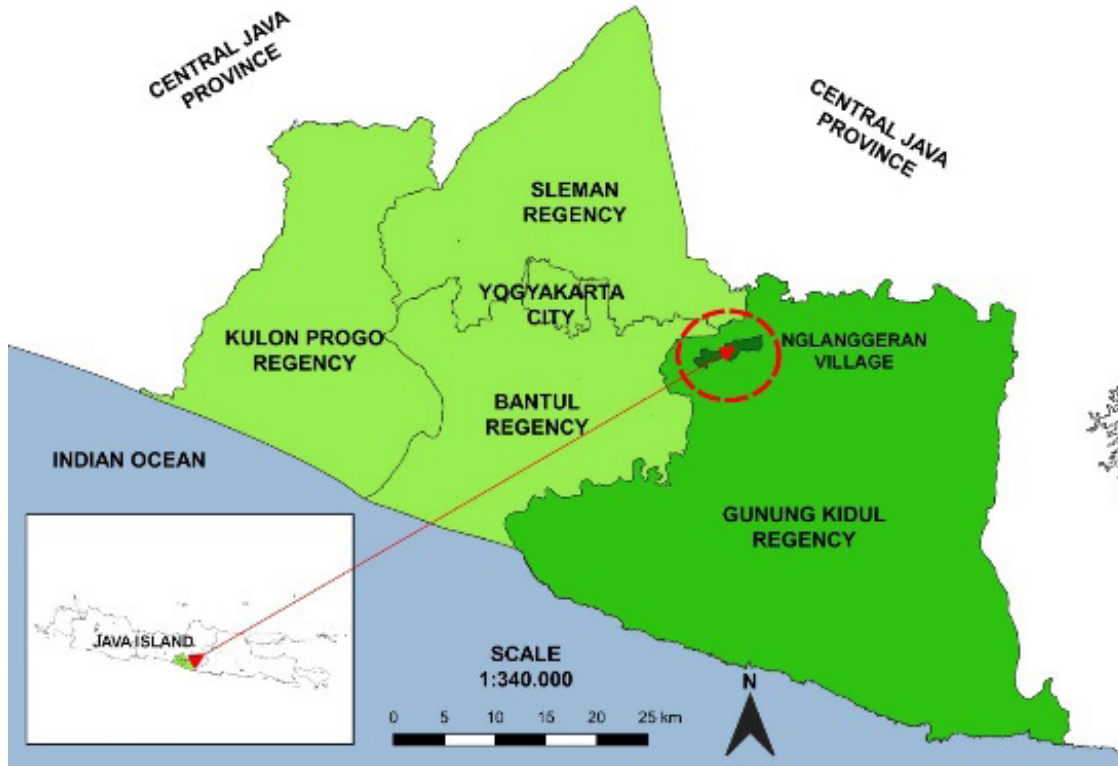


Figure 2. Location of Nglanggeran Village

Source: Developed from geoportal.jogjaprov.go.id (2022)

Similar to other rural areas, Nglanggeran village also experienced depopulation as working age group chose to out-migrate seeking jobs and economic opportunities. However, in the last several years, this trend is reversed and the area currently experiencing population growth due to in-migration rate exceeded out-migration. Most of the in-migrants are working age groups and they committed to collaborate in developing the area through utilization of its natural potential, economic and socio-cultural activities. As such, we consider Nglanggeran village as suitable location to investigate how rural identity enhances and

facilitates local economic growth which in turn shapes and reshapes local community's idea and perception on sustainability.

Before carrying out field survey, we tried to understand the relationship between identity and sustainability through an extensive literature review. Then we try to analyze the reality in the selected study location. We observed the phenomena experienced by research subjects holistically in a natural context. We employed qualitative approach by relying on the primary information through in-depth interviews with several key informants and direct observations in the field, while secondary data collection

(including reports and text materials) is added to breathe more nuanced elements in our analysis (Creswell & Poth, 2016). At first, we searched for secondary data and literature online and visited the Nglanggeran Village government office. Then we met several key informants using the purposive method. We interviewed eight key informants: one representative from government offices, one from community leaders, and six from community groups, including youth or tourism groups, women groups, and farmer groups. We used an unstructured interview method to gather information from the key informants with an interview duration of about one to two hours per person.

After collecting the data and information, we analyzed them using manual qualitative coding. We reviewed all information from interview transcripts and organized it into codes to find themes and patterns corresponding to the research objective. It involved a reading process through data, putting codes to excerpt, grouping codes according to themes, and making interpretations that lead to research findings. There are two stages of coding that we have done. We created initial codes representing the actual field conditions in the first stage. We assigned codes to words, phrases, or sentences from the interview transcripts that can represent the code. We began generalizing field conditions in the second stage by identifying the first codes. The relationship that is formed between rural identity, local economy, and sustainability can be identified from the second stage of coding after we have conducted an iterative and in-depth review of the codes that were formed at the beginning. Moreover, we

grouped information into categories based on stages of events in chronological order (longitudinal coding) to ensure the flow of the formed relationship. Longitudinal coding is an attribution of change processes collected and compared over time regarding their similarities and differences from one period to another.

The utilization of our method in this research allows us to evaluate whether the relationship model as outlined in Figure 1 can also be explicated in rural Indonesia and sustainability as development outcomes can be achieved through the deployment of rural identity. Furthermore, this allows us to test whether rural community rather than implementing sustainability principles as promoted by government and international agency, they instead could develop their framework of sustainability based on rural identity, something akin with Ostrom's argument on collective action (Ostrom, 1990; Ostrom, 2000).

DISCUSSION

Initial Conditions in Nglanggeran Village

Nglanggeran village can be reached about an hour's driving (± 25 km) from the provincial capital, Yogyakarta. This village consists of five hamlets, namely Karang Sari Hamlet, Doga, Nglanggeran Kulon, Nglanggeran Wetan, and Gunungbutak with a total area of 762.80 hectares. More than 50% of the land in Nglanggeran is used for agricultural activities, both wet and dry land agriculture. The rest area is used as a plantation, forest, and settlement. Although agricultural activities dominate land use, jobs in this sector are less attractive to some people, especially young people, due to the

low income generated from this sector. Meanwhile, job opportunities in the non-agricultural sector are not widely available then resulting in much unemployment in Nglanggeran.

Due to economic pressures, many farmers have switched professions to become forest wood sellers and stone miners around the Nglanggeran Mountain Area, now better known as the Ancient Volcano. It is called the Ancient Volcano because it used to be an active volcano but now is inactive due to a geological process. This mountain was formerly on the seabed, then raised to form solid rock with cliffs as high as 200-700 meters above sea level. The stones are thought to have been formed from the Oligo-Miocene epoch about 60-70 million years ago (Setiawan, 2022).

In addition, many people prefer to migrate to find work outside the village. Not only the city of Yogyakarta and the surrounding cities, but there are also many residents of Nglanggeran who work as migrant workers abroad in Malaysia, Arabia, Korea, Taiwan, and Hong Kong. When there was an earthquake in Yogyakarta in 2006, most migrant workers returned to Nglanggeran because their houses were damaged. Therefore, most of them returned to unemployment.

After the earthquake, several youths who were the Karang Taruna group members saw that the Ancient Volcano's natural potential could be used as an attractive tourist attraction. The youth witnessed many

people from outside Nglanggeran who came to this mountain to do climbing activities. Therefore, in 2007 the youth groups, with the approval of other community groups, such as women and farmer groups, began to develop the Ancient Volcano area as a tourist spot. In the previous period, since 1999, this 48-hectare mountain area has been managed by the youth group to plant banana trees and elephant grass. The harvest was sold to fund annual community activities, such as commemorating Indonesia's Independence Day on 17 August.

Rural Identity, Local Economy, and Sustainability

We found that the sustainability status that has been achieved by Nglanggeran today is not directly influenced by the existence of a robust rural identity but is bridged by the vital role of the local economic condition variable. A robust rural identity is an asset for the community to develop its local economy. After obtaining economic benefits, the community only began to realize the importance of sustainability and began to act towards it. Therefore, awareness of sustainability improves forms of local economic development that align with sustainability and tries to abandon all activities that threaten sustainability. Then, local economic activities growing fast affected the transformation of rural identity. We tried to simplify the findings that form between rural identity, local economy, and sustainability in the following diagram (see Figure 3).

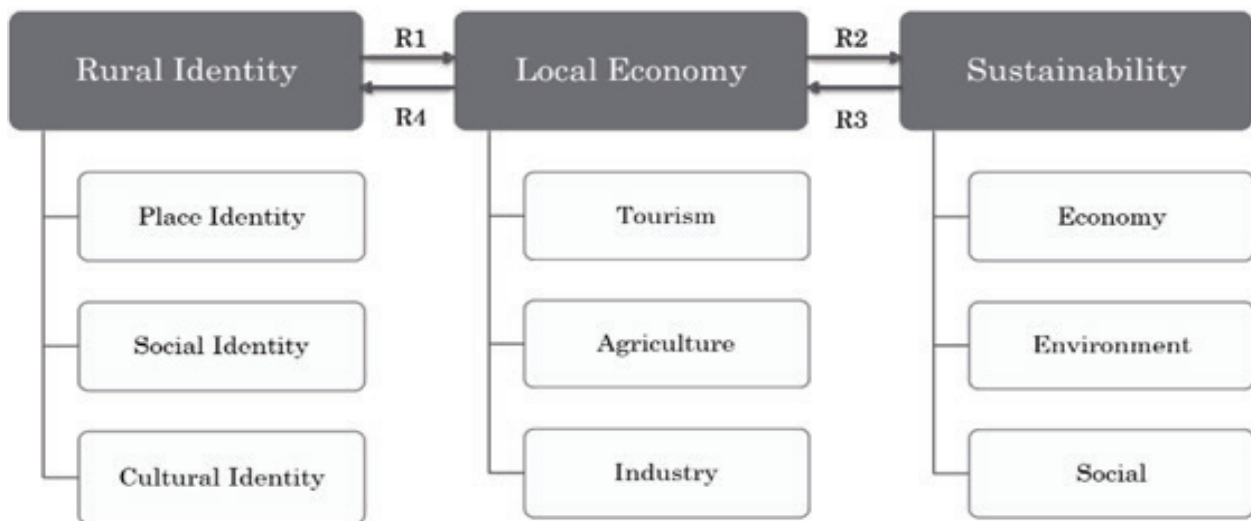


Figure 3. The Relationship Between Rural Identity, Local Economy, and Sustainability

Source: Developed by authors (2022)

Our finding revealed a different trajectory regarding how rural identity is constructed and later reshapes the local economy as informed from previous research (Pol, 2002; Dehghanmongabadi, 2020; Basile & Cavallo, 2020). These studies were conducted in developed countries and as such the result of these inform a different cause-and-effect compared to ours. Our Nglanggeran case study illuminates poverty and urbanization commonly found in developing countries that formed the economic pressure which then lead to the development of rural identity, similar to findings of study conducted by Cobbinah et al. (2015).

R1: Rural Identity as An Engine of Local Economic Development

Our findings reinforce the statement that rural identity is not only formed from place identity and social identity

(Dehghanmongabadi, 2020) but is also influenced by cultural identity (Basile & Cavallo, 2020). Based on the identity of the place, all respondents agreed to view Nglanggeran as a rural condition in general, blessed with fertile soil that supports agricultural activities for food crops and secondary crops. In addition, there is also agroforestry plant cultivation, a land-use system that combines several types of plants with cropping patterns and an ecosystem that resembles a forest (Saputro et al., 2021). The primary plants in Nglanggeran are cocoa plants planted together with durian, rambutan, guava, mahogany, and sengan (*Albizia Chinensis*) trees. The existence of the Ancient Volcano, with its contours with large humps and beautiful natural landscapes, is the most robust identity of the place because it is not found in other areas (see Figure 4).



Figure 4. Ancient Volcano Among the Rice Fields

Source: Field observation (2022)

Based on their social identity, the population of Nglanggeran, which amounts to around 837 families, is divided into several community groups: the youth group, women group, farmer group, and breeder group. In the beginning, the community did not share the same view on the sustainability of their village. Most were still indifferent to doing stone mining and logging, while some youth groups planted fruit trees and grass in empty areas to make money. Despite different views, when the 2006 earthquake occurred, the values of cooperation (*gotong royong*) were still closely attached, and the residents worked together to rebuild their damaged houses. The exciting thing that happened at that time was that they were required to build houses using steel frames because they used aid funds from the government. Even so far, the houses in Nglanggeran are in the form of *Limasan Houses*, which are traditional Javanese houses.

Based on cultural identity, the community generally holds common values and norms based on Javanese culture and traditions. It can be said that cultural identity is more robust than social identity. Various Javanese cultural traditions are still closely attached, such as “*Rasulan*”, “*Jathilan*”, “*Bersih Desa*”, “*Karawitan*”, and “*Kenduri*”. In addition, the Nglanggeran community also has unique

local traditions and beliefs. *Nglanggeran* comes from the word “*ngelanggar*”, which means to violate. The myth is that hundreds of years ago, the people around the mountain invited puppeteers (*Dalang*) to celebrate the harvest party (Ayu et al., 2021). However, the residents destroyed the puppets for some reason, so the puppeteers became angry and cursed them to become puppets thrown into the mountain. This belief persists today, where the *Nglanggeran* community has never held a puppet show with their back-to-the-mountain area.

This village also has a neighborhood area located at the top of the Ancient Volcano with its unique belief. They maintain the number of family heads of only seven, no less or more. This neighborhood area is known as “*Kampung Pitu*”, where in Javanese, “*pitu*” means seven (see Figure 5). According to its history, this village has been inhabited since 600 years ago, when the Sultan of Yogyakarta awarded *Eyang Iro Kiromo* and his descendants a piece of land for protecting the sacred heirlooms around the *Kinah Gadung Wulung tree* (Supriadi et al., 2021). The seven heads of families in *Kampung Pitu* live side by side by sticking to the belief passed down by their ancestors that the land they occupy will choose their appropriate inhabitants to live there in an inexplicable way. They believe that if the prohibition is violated, disaster will occur.

“Actually, there is no rule or agreement... If there are more than 7 families, suddenly, there must be someone who comes out on their own because they do not feel at home.... If there are less than 7 families, suddenly someone will build a house and make their own family” (SR, community, 2022).



Figure 5. View from Peak of Ancient Volcano Where Kampung Pitu is Located

Source: Field observation (2022)

The place identity, social identity, and cultural identity that formed the rural identity later became the engine of the local economy. Through the tourism group (Pokdarwis), the youth group tried to develop tourism activities in 2007 centred on the Ancient Volcano Area with the approval of other community groups.

R2: Local Economic Development Raises Community Awareness of Sustainability

Tourism activities in Nglanggeran have developed very rapidly. The number of tourist trips continues to increase yearly, so the tourism sector's revenue also increases dramatically, as shown in Table 1. Pokdarwis, the village tourism group, developed several tourist activities around the Ancient Volcano Area, such as photo spots, trekking, camping, rock climbing, and flying fox. Many tourists go camping or come in the early morning to see the sunrise at Gedhe Peak, one of the famous ancient volcanic peaks.

Table 1. The Number of Tourists and Revenue From 2007 - 2014

Year	Number of Visitors		Total	Revenue (Rp)
	Domestic	Foreign		
2007	1437	13	1,450	n/a
2008	1521	15	1,536	n/a
2009	2335	65	2,400	n/a

lanjutan tabel 1

Year	Number of Visitors		Total	Revenue (Rp)
	Domestic	Foreign		
2010	7314	132	7,446	n/a
2011	16,448	134	16,582	n/a
2012	27,675	200	27,875	81,225,000
2013	85,424	234	85,658	424,690,000
2014	324,827	476	325,303	1,422,915,000

Source: www.gunungapipurba.com (downloaded on June 24, 2022)

In 2012, the Sultan of Yogyakarta visited Nglanggeran and saw the enormous potential of fruit crops, such as durian and longan. Therefore, Sultan offered to build a reservoir to irrigate the community's fruit plantations during the dry season. In addition, the construction of this reservoir also encouraged local people to cultivate critical lands around the reservoir (Suyanto et al., 2020). They started planting fruit trees and became a pioneer of agrotourism at Nglanggeran. The 0.34-hectare reservoir was built on land belonging to Sultan, which is located at an altitude of 495 meters above sea level (see Figure 6). Since its opening in 2013, this reservoir has also attracted the attention of many tourists because it presents a beautiful view, especially at sunset time. The song "Banyu Langit", sung by Didi Kempot, one of the famous Indonesian singers, tells about the beautiful atmosphere in Nglanggeran's reservoir (Ayu et al., 2021).

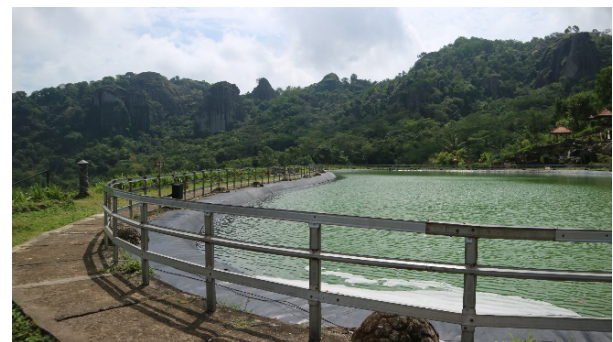


Figure 6. Reservoir of Nglanggeran

Source: Field observation (2022)

Pokdarwis do not work alone. They also empower the surrounding community to become tourism managers, counter guards, tour guides, and business actors to provide for the needs of tourists, such as opening stalls and places to eat. People who usually only receive income from farming are starting to get a significant additional income from tourism activities. In addition, the unemployment rate has also decreased a lot because there are enough jobs available to support tourism activities. Being a migrant worker is now starting to be forgotten. The population out-migration rate has been reduced to only 0.006%.

Behind the increasing economic welfare of the community from tourism activities, many problems began to emerge from various aspects. From the environmental aspect, the increasing number of tourists visits leaves much waste, especially at tourist spots. Moreover, the other problems were the occurrence of vandalism with graffiti on ancient volcanic rocks and the destruction of various rare plants that only grow on ancient volcanoes due to being stepped on or accidentally uprooted by tourists. Meanwhile, from the socio-cultural aspect, the attitude of tourists who did not respect local wisdom and lacked respect for local communities made them angry and reluctant to meet many people.

“Every week, we drop 15 bags of garbage just for the Ancient Volcano spot, not yet in the reservoir.... Many rare plants were damaged or cut down by visitors.... There was no etiquette for passing in front of the local community....” (TR, Pokdarwis, 2022)

The sustainability of the village, which has been achieved on the economic pillar, has turned into a threat to the environmental and social pillars, thus making Pokdarwis and the community aware of improving tourism management in Nglanggeran immediately. The initial goal of reducing the rate of urbanization and reducing poverty through increased local economic growth was slowly replaced with the achievement of quality local people's lives by prioritizing sustainable environmental conservation.

R3: Sustainability Awareness Improves Configuration of Local Economic Development

Awareness of sustainability's importance in their village is the driving force for the Nglanggeran community, especially Pokdarwis, to change their tourism activity strategy. At first, they pursued free individual tourists (FIT), then turned into a group of tourists who have a particular interest in studying with the community (Suyanto et al., 2020). Starting in 2015, they no longer focused on increasing the number of tourists but rather on increasing the length of stay, then overnight tour packages were developed. The accommodation provided is residents' houses developed as homestays for tourists. The main target of this tour package is students from big cities who are offered to experience life as a village community, enjoy the beauty of the scenery, and introduce to local cultural traditions. Various training and briefings were provided to the community to provide homestays of good quality and comfort. In addition, the quality of local food and drinks is also considered by using natural ingredients to meet nutritional value standards. The local

guides were also trained to provide standard services and procedures for serving tourists. Likewise, tourists are invited to get to know the local community's cultural traditions and wisdom and carry out campaigns and environmental conservation together.



Figure 7. Kedung Kandang Waterfall

Source: Soviana et al. (2020:7)

In addition, Pokdarwis has also developed a new tourist spot to break the concentration of visitors and increase the duration of the visit, namely the Kedung Kandang Waterfall (see Figure 7). It is a natural arrangement of volcanic rock from the lithological type of Nglanggeran formation that has steps and is in the middle of rice terraces (Soviana et al., 2020). However, this waterfall can only be visited during the rainy season because the water tends to be dry in the dry season. Around this waterfall, there is also a glamping area that was just developed during the Covid-19 pandemic. After making a configuration in economic development through tourism, although the number of tourists is not as much as in previous years, income is increasing sharply, as shown in Table 2.

Table 2. The Number of Tourists and Revenue From 2015 - 2020

Year	Number of Visitors		Total	Revenue (Rp)
	Domestic	Foreign		
2015	255,388	529	255,917	1,541,990,000
2016	171,306	1,557	172,863	1,801,710,500
2017	149,241	1,794	151,035	1,963,455,000

lanjutan tabel 2

Year	Number of Visitors		Total	Revenue (Rp)
	Domestic	Foreign		
2018	134,255	1,421	135,676	2,527,725,400
2019	101,866	1,241	103,107	3,273,593,400
2020	61,498	152	61,650	1,119,133,000

Source: www.gunungapipurba.com (downloaded on June 24, 2022)

As written, Nglanggeran has natural potential and is rich in agricultural and plantation products, especially cocoa. Previously, cocoa products were sold raw, so the selling value was not high enough. To support tourism activities, in 2010, a group of women named Purbarasa began to develop chocolate products, dodol, as a Nglanggeran souvenir using simple equipment after receiving assistance from university students and Gunung Kidul Industry and Trade Agency. In 2014, they received more significant support from the Indonesian Institute of Science (LIPI), the Bank of Indonesia, and the Gunung Kidul Forestry and Plantation Agency. Chocolate production became more optimal, starting from cultivation, post-harvest processing, and processing cocoa into products using technology and product distribution. At the end of 2016, Griya Cokelat Nglanggeran began operating by empowering local communities and using cocoa harvested from the surrounding community plantations. The products produced are not only in the form of cocoa powder but also chocolate bars, which are then developed into various processed foods and beverages such as bakpia, dodol, and banana chips (see Figure 8). Apart from chocolate, this group of women also develops batik products through Griya Batik and spa services through Griya Spa.



Figure 8. Chocolate Products from Griya Cokelat Nglanggeran

Source: <https://www.instagram.com/griya.cokelat.nglanggeran/> (downloaded on June 20, 2022)

Besides Griya Cokelat, in Nglanggeran, another production house also processes cocoa and produces chocolate products, namely the Agricultural Technology Park (TTP). The difference is that the group of women named Putri Kencana, who are members of the TTP, is assisted by the Research and Development of the Ministry of Agriculture and Yogyakarta Agricultural Technology Study Center (BPTP). TTP was initiated at the end of 2015 and began production in early 2022. In addition to producing chocolate, TTP also introduces integration technology between Etawa goats and cocoa in feed and fertilizer, as well as processing goat's milk and cocoa. However, Griya Cokelat and TTP do not cooperate and operate independently in processing and marketing their products.

“Griya Cokelat Nglanggeran existed before the construction of TTP. The working system of TTP and Griya Cokelat is different because Griya Cokelat is a community MSME. With the presence of TTP in the vicinity of Nglanggeran Village, Griya Cokelat is not disturbed and has no problem with this because Griya Cokelat has its products” (SY, women group, 2022).

These Nglanggeran chocolate products are not only marketed in villages but also outside the Province of Yogyakarta. Marketing abroad is still hampered because of the high cost of shipping. This chocolate industry also helps the economic development of local communities, especially women who were originally housewives, who now can earn additional income. In one month, Griya Cokelat's revenue reached 60 million rupiahs, while TTP's revenue reached 30 million rupiahs.

Cocoa farmers also benefit from the existence of this industry because of the increased selling value of cocoa in the form of fermentation to be further processed into cocoa powder. The system of agroforestry activities with cocoa as the main crop is also beneficial. In their research, Saputro et al. (2021) explained that a hectare of a farm household in Nglanggeran is planted on average around 190 cacao plants that are about 12 years old, 85 mahogany and sengon trees, and 50 other fruit trees. They also explained that the highest annual income earned by farming households was 18 million rupiahs. The lowest income was 9 million rupiahs, with a minimum contribution value of 42% of total household income.

R4: Local Economic Development Transforms the Rural Identity

The development of the local economy in a more sustainable form has influenced the change in the identity of the Nglanggeran, which has previously been discussed in three forms: place identity, social identity, and cultural identity.

For place identity, residents' views and meanings in seeing the nature of their

village are changed. In the beginning, due to economic pressures, they used and exploited natural resources arbitrarily through tree cutting and rock mining activities scattered among their agricultural lands (see Figure 9). Some people even ridiculed the reforestation activities carried out by several parties in barren areas, especially ancient volcanic areas. Now, people are becoming more concerned about the natural condition of their village and are trying to conserve the environment. Because the community is more independent in the economy, logging is the last option to earn income. Not only care about reforestation, but the community is also more concerned with the cleanliness of the village environment. Even locals try to educate tourists coming to Nglanggeran about environmental cleanliness's importance. Waste management is currently handled by Pokdarwis and local communities by relying on cooperation with informal waste traders because legal waste services do not reach this village (Nayono & Nayono, 2021).

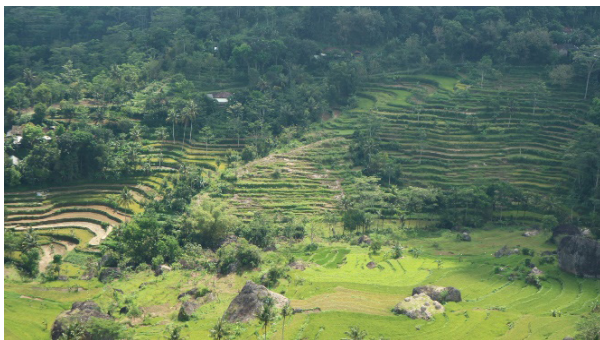


Figure 9. The Rest of Volcanic Rocks Among the Rice Fields

Source: Field observation (2022)

For social identity, there is a change in values and emotions in the community. In the past, village communities tended to be closed to the arrival of groups from outside Nglanggeran. In addition, rejection often

occurs if the groups of people who come are different in terms of ethnicity or religion, for example. However, with the passage of time and various understandings given by Pokdarwis, the community has become more open to tourist arrivals and can even mingle with tourists. The community plays an active role in providing homestays and various needs for tourists. In addition, in the past, people tended to be shy and inferior when asked about their origins because the villages in Gunung Kidul were known to be poor, dry, and barren. However, at this time, Nglanggeran residents feel proud because their village has succeeded in improving the living standards of its people, even though Nglanggeran is famous worldwide. Moreover, the community's identity as farmers is not simply abandoned, even though jobs in the tourism and industrial sectors currently provide higher income.

“Until now, our community is still active as farmers and ranchers. It could be said that tourism does not change the main job of the community. That is what we are trying to keep. When it comes to sustainability issues, it can be enjoyed by the next generation. We do not want people to depend too much on tourism. The community only has activities in the tourism sector a maximum of 4 days a week” (SH, pokdarwis, 2022).

Cultural identity tends to be more static because it is a belief and tradition passed down from generation to generation. However, the local community is sharpening and aware of being more concerned with local culture because it is one of the unique things that attract local economic development in Nglanggeran. Even now, people's houses

have returned to the traditional form of the Limasan house as it was before the 2006 earthquake. In addition, at this time, the community is also more aggressive in preserving the original arts and culture of Nglanggeran by forming art and culture groups that are actively practising in terms of traditional dances and music.

CONCLUSION

Rural identity, local economic development, and sustainability are of increasing interest to policymakers and development agencies wishing to accelerate economic growth in their region and seeking to achieve sustainability. Through field observations and unstructured interviews, this paper seek to clarify whether a strengthening rural identity would lead to enhanced local economy and in turn facilitates achieving rural sustainability. Our findings illuminate the gradual reciprocal relationship between identity, local economy, and sustainability. Furthermore, the interaction between identity and rural economy can facilitate rural areas to become the local and regional engine of economic growth.

Our analysis can contribute to the debates of placing rural in regional development, illuminating the capacity of the rural economy infused with rural identity to reverse the development trajectory and achieve sustainability. The rural area is no longer associated with depopulation and lack of competitiveness; instead, it is a place of innovation and economic vitality, attracting the young generation to participate in its diverse activities. While generating insights on this reciprocal relationship between rural identity, local economy, and sustainability, this

paper is not without its limitations which can guide future research. Our study relies only on one case. Although a single case could provide the relationship between identity, local economy, and sustainability, it calls for more cases encompassing different geographical characteristics and economic realities as rural Indonesia is not one geographical unit.

Related to this, further research is required to understand the spillover effect of this reciprocal relationship at the macro-level (regional level). Our findings illustrate how the relationship between rural identity, local economy, and sustainability in community (meso-) levels, yet it requires cross-cases analysis to test our findings before generating generalizability of the capacity of rural identity. As such, this entails increasing the number of rural areas observed and broadening the unit of analysis to include socio-economic-cultural aspects of rural areas and the local economy. Altogether, this would facilitate a better understanding of how rural areas work, engage in local and regional economies, and stimulate better rural and regional development policy-making processes.

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