

Identification of Samin Community Culture in Bojonegoro Towards Environmental Sustainability in Rural Area

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Abstract. Globally, currently more than 50 percent of the world's population lives in urban areas. It is projected that 70 percent of the world's population will live in cities by 2050. Given the sheer scale of urbanization and its environmental implications, it is important to consider the interrelationships between urban and rural contexts in an integrated manner. Achieving sustainable development requires priorities and the implementation of tailored policies in both urban and rural areas. One way that can be done is to strengthen rural cultural values in communities and indigenous peoples. In this study, the case study raised is the cultural value of the Samin Bojonegoro community in maintaining cultural values and preventing the flow of urbanization of its population. The creation of a livable environment through the cultural values of the Samin community will be raised through this research through ethnographic approach with synchronic and diachronic presentation. As a result The Samin community, which is rooted in the culture of an agrarian society, has not changed much in terms of vegetation, land use, and cultural activities. This has an impact on environmental sustainability and cultural establishment so that it seems as if it has a border from outside influences while also protecting cities from urbanization flows and environmental burdens

Keywords: Cultural landscape, Sustainable development, rural development

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1. Introduction

Rapid population growth in developing countries raises concerns about the changing nature of the relationship between urban and rural areas [1, 2]. A growing number of recent publications, research reports and policy documents from international organizations emphasize decentralized development as a solution for building sustainable rural-urban linkages.

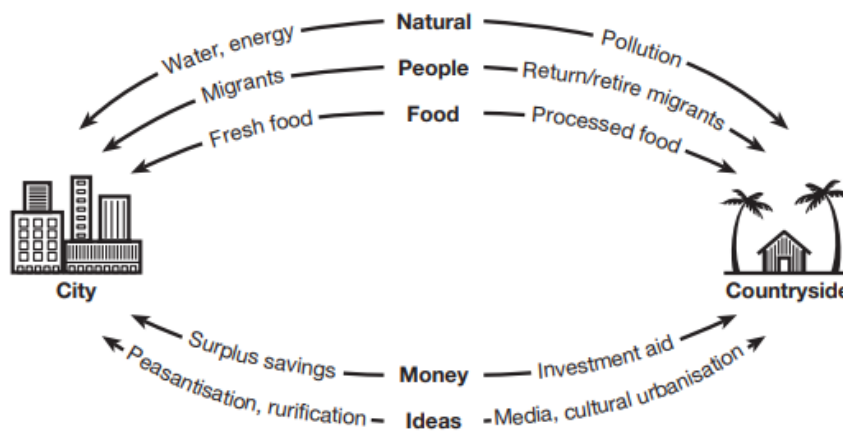


Fig 1. The concept of a two-way Rural-City relationship
Source: Somanje et al., 2020

One of the key ideas presented by the figure above is to emphasize the two-way relationship between the village and the city. One of the factors that influence the rural-urban relationship is the cultural linkage factor [1-3]. Cultural linkages differ from social linkages in the focus of each approach. Cultural linkages emphasize the structure of society as the initial concept of transformation, while social linkages identify the real interactions of society during the transformation process. However, cultural linkages can be found through social linkages and physical linkages. So, identifying cultural linkages should be a new approach to determine how cities interact with rural areas to obtain optimal benefits from rural transformation that supports sustainable urban development.

The initial effort to find cultural linkages is to identify the culture of the community, especially rural communities. Thus, some cultural characters are obtained that show the strength of rural communities that support urban sustainability. In this study, the people who became the research subjects were the Samin people in the Jepang Hamlet, Margomulyo Village, Bojonegoro Regency, East Java. Although it is not directly a transitional city or suburban area, the Samin Bojonegoro Community has a unique culture that can be adapted into a conception of the relationship between the Village and the City.

The cultural landscape of the Samin community marks the level of development of human life so that each landscape composition is required with intrinsic values of local wisdom [4-7]. The Samin community has a variety of cultural and artistic beauty that is integrated with the lives of its people. Cultural values and local wisdom in the composition of the Samin community landscape can be explored as an effort to document the nation's culture, so that it becomes a reference in the process of preserving the landscape and culture of the Samin community and the conception of sustainable Rural-City cultural linkages.

The research question that will be answered in this research is what aspects cause the cultural landscape of the Samin community to survive and be sustainable even though it has passed the times.

2. Materials and Methods

The research location was chosen in the Jepang Hamlet, Margomulyo Village, Margomulyo District, Bojonegoro Regency, East Java, with the reason that the Samin people live in this village. The location of this Jepang hamlet is precisely on the southeast side of the city of Bojonegoro, which is about 70 kilometers from the district capital. The Jepang hamlet is in the 'inland', in the middle of a teak forest (Perhutani) and is 5 kilometers from the highway. The research was conducted from April – June 2021.

The approach model in this research is descriptive qualitative that leads to ethnography, namely in describing an empirical reality of research results, researchers are required to go directly to the research location in order to be able to appreciate the customs and symptoms of everyday life which is full of local socio-cultural phenomena. This approach strategy was chosen on the basis of the consideration that (1) the qualitative approach even though it only covers a small/limited scale of research locations, is able to develop on a broader conceptual framework, (2) this approach model is not only concerned with results, but aspects process is something more important, in fact (3) this ethnographic qualitative approach is very good if a study wants to explain a phenomenon in depth and comprehensively so that the research results are detailed descriptions that are not rigid but also in-depth [8-10].



Fig 2. Map of Reasearch Field
 Source: Google Earth, 2016

In collecting data sources, researchers collect data sources in the form of primary data and secondary data.

1) Primary Data

Primary Data is the type and source of research data obtained directly from the first source (not through intermediaries), both individuals and groups. So the data is obtained directly. Primary data is specifically carried out to answer research questions. The author collects primary data by survey method and also observation method. The survey method is a method of collecting primary data using oral and written questions. Then the author also collects data using the observation method. The observation method is a primary data collection method by observing certain activities and events that occur.

2) Secondary Data

Secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained or recorded by other parties). Secondary data is in the form of evidence, historical records or reports that have been arranged in archives or documentary data. More clearly, the types of data to be taken in this study are listed in Table 1 below.

Table 1.
Type of Data

No	Aspect	Data
1	Land Use dan Activity	Topographical variations Land use Activities on each land
2	Response to nature	Response to rivers, plains, mountains Response to climate (temperature, humidity)
3	Cultural traditions	Traditions that influence land use and form Interaction with nature that changes or modifies traditions
4	Vegetation	Main crops cultivated Native plants that have myths and are closely related to people's beliefs

This research is ethnographic research. According to Spradley (1997), ethnographic research is research that describes a culture, which aims to understand a view of life from the point of view or perspective of the actor or owner of that culture. To be able to answer these questions, data collection techniques are needed, namely:

1. Observation

This is done by observing the life of the Samin community in general every day, seeing their activities or activities, observing important objects (environment, residence, agricultural land, and places of worship) which are a vital part of their survival.

2. Interview

Interviews were conducted with Samin elders, hamlet, village, and sub-district government officials, who were considered to know the research problem. Interviews were conducted using interview guidelines that had been prepared and adapted to the research topic. The selection of Samin actors / characters/ communities to be interviewed is carried out using a snowballing system.

3. Literature Study

The literature study step is important to complete data that cannot be obtained from observations or interviews. The libraries used can be in the form of books, journals, local mass media, photos, and unprinted research results. In anticipation of the difficulties that may occur.


This research is qualitative research in the form of a description related to the meaning of life as a revealer of culture. The analytical method used in this study refers to the ethnographic method by Spradley (1997) by conducting interview analysis. The results of in-depth interviews using ethnographic interviews with informants were then analyzed and classified according to their domain. Or to analyze data using a qualitative approach which is presented in the form of a description (Spradley, 1997).

3. Result and Discussion

3.1 Land Use and Activities

In general, land use in the Jepang Hamlet, Margomulyo Village, Bojonegoro Regency is divided into two, namely settlements and agricultural land. If traced further, satellite images taken through three different periods, namely 2013, 2017, and 2021 (Table 2) show no significant changes in the land use. The activities in it have also remained unchanged, limited to socio-cultural and agricultural activities.

Table 2.
Result

Year	Satellite Image	Land use
2013		Settlements and agricultural areas
2017		Settlements and agricultural areas
2021		Settlements and agricultural areas

This is very interesting and a good thing, considering the shift of the function of agricultural land to non-agricultural development will affect the development of the area Agriculture [11]. If changes do occur, it is not only livelihoods that change, but all activities and cultural patterns [12-14]. Thus, the Samin community can be a good example in efforts to preserve agrarian culture that prioritizes environmental sustainability. By making the agricultural landscape part of the cultural landscape, community action promoting consensus on local values is an effective way to earn a living while preserving the environment [3].

3.2 Response to Nature

The living traditions that is still held by the Samin community today is to maintain a harmonious relationship between humans and nature. The Samin community is guided by the guidelines that everything must be done in moderation (*sakcekap*), the Samin community is strictly prohibited from cutting trees carelessly, especially around springs, if they cut down they must plant again as a substitute. So, this community is very careful and not carelessly exploiting natural resources [15, 16].

The Samin community still recognizes the nyadran or village clean tradition because it is based on the belief that whether or not natural resources are damaged on earth depends on the system of use. The Samin people have never exploited fields or rice fields, farming activities are adjusted to the seasons. Farmers Samin Bojonegoro will not sow seeds (planting) three times a year. The cropping pattern is carried out in the rainy season to plant rice, and in the dry season to plant secondary crops.

The community's obedience is due to the belief in the law of karma as a result of the actions they have done. Therefore, all aspects of life are carried out with extreme care as expressed by Ms. Hardjo Kardi as the following elder:

"Sopo kang nandur bakal ngundhuh, ora ana nandur pari tukul jagung, nandur pari mesti nguduh pari"

It means: "Whoever plants will surely harvest, no one who plants rice will harvest corn, whoever grows rice will definitely produce rice". In this regard, the life system of the Samin community has rules that must always be obeyed. So, in everyday

life people will always be careful in the process of processing natural resources in order to avoid things that are not desirable.

Respon terhadap alam di atas dapat dimaknai sebagai bentuk adaptasi terhadap kondisi geografi dan iklim adalah diyakini sebagai kearifan lokal yang diturunkan dari generasi ke generasi, bahkan ada yang memperlakukannya sebagai mitos yang harus diikuti untuk mendapatkan keselamatan [17, 18].

3.3 Cultural Tradition

Cultural traditions and customs that are still valid among the people of Samin Bojonegoro consist of life cycle events such as the traditions of birth, marriage, death, and salvation. The following are some of the cultural traditions or customs of the Samin Bojonegoro community [15, 19].

1. Birth traditions

When a baby is born, the community carries out the brokohan tradition (slametan when a new child is born), sepasar or sapeken (fifth day celebration), which is calculated according to the Javanese calendar. Then there are three eight, seven eight, and annual brokohan. For the procession of the birth life cycle, those who are present in this tradition are mothers or neighboring women and family. The goal is to ensure the safety of the baby and its mother [15, 16]

2. Marriage

The Samin community has long adhered to endogamous marriage, which requires marriage between fellow Samin communities. In ancient times the marriage process was carried out through arranged marriages. However, at this time marriages can be carried out beyond the boundaries of the group and even outside the village. According to Mujib's research (2019), around 75% of the Samin Bojonegoro community have gone through marriage without an arranged marriage and 25% are still in an arranged marriage [19].

3. Death

The Samin community gives the term for people who have died is to copy sandhang or change clothes. That is, according to the Samin people, people who have died are creatures who can no longer communicate, and do not give the impression of people who have lost in general, which occurs outside the Samin community. Thus, the salvation or brokohan of death is only carried out once at the time of death (dino geblak), namely after the burial of the body. So, there is no salvation according to Javanese calculations in general, such as seven days of death, forty days, up to one hundred days of death, and so on [15, 16].

3.4 Vegetation

The vegetation that characterizes the Samin community is agricultural crops such as rice and purple sweet potatoes. This is because farming in the Jepang Hamlet of Margomulyo Village and especially the Samin community is used as the main livelihood. However, with the advancement of information technology and the open access of the Samin community in the Jepang Hamlet to outsiders, there has been a change in agricultural conditions in Margomulyo Village. Nevertheless, rice as a rainy season crop and purple sweet potato as a secondary crop grown in the dry season still survive to this day [15].

Vegetation selection is highly dependent on climate [20, 21], and the Samin people understand it as local wisdom that is passed down from generation to generation. This deep-rooted culture has a positive impact on nature conservation in the rural areas of the Samin community. Non-forest vegetation in rural landscapes has been shown to increase water retention [20].

3.5 Aspects of supporting rural sustainability

Several aspects of the cultural identity of the Samin community that have been identified can be traced as cultural linkages that form the foundation of a healthy Rural-City bond. Thus, the existence of a healthy Rural-City bond has implications for the sustainability of urban development. The concept of urban-rural linkage has been initiated by Kevin Lynch with several important mental maps that become the main components forming a place, one of which is the border [22]. Ecological boundaries such as the green belt or green belt are important, this is implemented well by the Samin Bojonegoro community as stated in Kevin Lynch's theory regarding the components of the city and its supporters

Some of the things that underlie the formation of a green belt as a regional border in the Samin community are cultural values that are still firmly held including a response to nature that is not anthropocentric, so that in its use it does not exploit natural resources. The Samin people have never exploited paddy fields, they cultivate crops according to the season. Samin farmers in the Jepang hamlet do not want to sow seeds (cultivate crops) three times a year. They have a cropping pattern, namely in the rainy season they plant rice, and in the dry season they plant crops. In addition, the existence of marriages that are dominated by fellow Samin people resulted in a stable population and a relatively well-maintained carrying capacity of the area, so that the flow of urbanization to urban areas can also be minimized. The implication is that land use is also relatively fixed from time to time. The implications that can be drawn from some of the local cultural wisdom of the Samin community can be explained through this Urban-rural linkage chart (Figure 3).

The Samin community, which is rooted in the culture of an agrarian society, has not changed much in terms of vegetation, land use, and cultural activities. This has an impact on environmental sustainability and cultural establishment so that it seems as if it has a border from outside influences while also protecting cities from urbanization flows and environmental burdens.

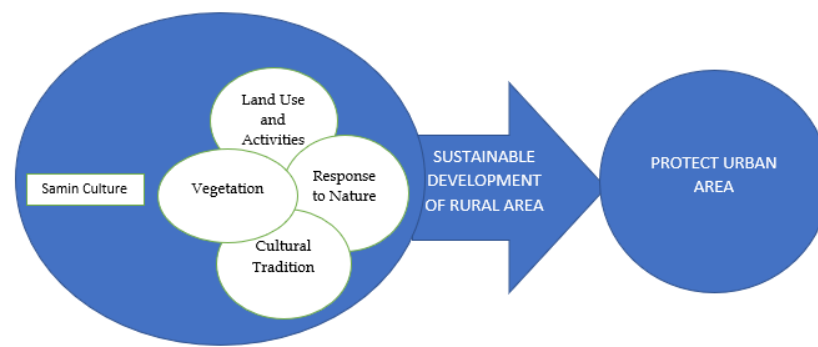


Fig 3. Concept towards sustainable rural development

Migration, cultural values, natural resources, government policies must be managed properly in a decentralized manner first so that local scale sustainability is formed as the main condition for regional sustainability. Therefore, the Samin community has become a good example in strengthening cultural values and preserving natural resources in a decentralized manner so that migration flows and energy flows that can have an impact on urban areas can be minimized properly.

6. Conclusion

The land use and activities of the Samin community not significantly changed when viewed through satellite imagery and direct observation. The Samin community has cultural values that are still firmly held including a response to nature that is not anthropocentric, so that in its use it does not exploit natural resources. In addition, cultural tradition with the existence of marriages that are dominated by fellow Samin people, in a stable population and a relatively well-maintained carrying capacity of the area, so that the flow of urbanization to urban areas can also be minimized. The implication is that land use is also relatively fixed from time to time has an impact on environmental sustainability and cultural establishment. Indigenous vegetation and food crops have not changed much and ecologically become the green belt of the surrounding area. So that it seems as if it has a border from outside influences while also protecting cities from urbanization flows and environmental burdens.

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References

- [1] A. Pudianti, J. A. Syahbana, and A. Suprpti, "Role of Culture in Rural Transformation in Manding Village, Bantul Yogyakarta, Indonesia," *Procedia - Social and Behavioral Sciences*, vol. 227, pp. 458-464, 2016.
- [2] A. N. Somanje, G. Mohan, J. Lopes, A. Mensah, C. Gordon, X. Zhou, *et al.*, "Challenges and Potential Solutions for Sustainable Urban-Rural Linkages in a Ghanaian Context," *Sustainability*, vol. 12, p. 507, 2020.
- [3] J. Shen and R.-J. Chou, "Cultural Landscape Development Integrated with Rural Revitalization: A Case Study of Songkou Ancient Town," *Land*, vol. 10, p. 406, 2021.
- [4] R. N. Awalia, N. H. Arifin, and Kaswanto, "Kajian Karakter Pembentuk Lanskap Budaya Masyarakat Adat Kajang di Sulawesi Selatan," *Jurnal Lanskap Indonesia*, vol. 9, 2017.
- [5] Djono, T. P. Utomo, and S. Subiyantoro, "Nilai Kearifan Lokal Rumah Tradisional Jawa," *HUMANIORA*, vol. 24, 2012.
- [6] M. L. Tondi and S. Y. Iryani, "Nilai dan Makna Kearifan Lokal Rumah Tradisional Limas Palembang Sebagai Kriteria Masyarakat Melayu," *Langkau Betang*, vol. 5, 2018.
- [7] A. Vindya, A. Saladin, and J. Siswanto, "Penerapan Nilai - Nilai Budaya pada Rancangan Gedung Pusat Seni dan Budaya Jawa Barat," presented at the Seminar Nasional Cendekiawan ke 4 Tahun 2018, 2018.
- [8] W. R. Borg and J. P. Gall, *Educational research introduction* 6ed. White Plains, NY: Longman Publishers USA, 1996.
- [9] L. N. Groat and D. Wang, *Architectural research methods*, Second Edition ed. Canada: John Wiley & Sons, Inc, 2013.
- [10] J. P. Spradley, *Metode Etnografi*. Yogyakarta: PT Tiara Wacana Yogya, 1997.
- [11] M. Mulyadi, "Perubahan Sosial Masyarakat Agraris Ke Masyarakat Industri dalam Pembangunan Masyarakat di Kecamatan Tamalate Kota Makassar.," *Bina Praja*, vol. 07 Nomor 04, pp. 311-322, Desember 2015 2015.

- [12] C. Zagaria, C. J. E. Schulp, T. Kizos, Dimitris Gounaridis, and P. H. Verburga, "Cultural landscapes and behavioral transformations: An agent-based model for the simulation and discussion of alternative landscape futures in East Lesvos, Greece," *Land Use Policy*, vol. 65 pp. 26-44, 2017.
- [13] W. Pradoto, B. Setiyono, and H. Wahyono, "Peri-urbanization and the dynamics of urban-rural linkage: the case of Sukoharjo Regency, Central Java," *IOP Conference Series: Earth and Environmental Science*, vol. 202, p. 012039, 2018.
- [14] N. T. Lang, "Cultural and Social Elements in the Development of Green Architecture in Vietnam," *Procedia - Social and Behavioral Sciences*, vol. 85, pp. 16-26, 2013.
- [15] S. Munawaroh, C. Ariani, and Suwarno, *Etnografi Masyarakat Samin di Bojonegoro (Potret Masyarakat Samin dalam Memaknai Hidup)*. Yogyakarta: Balai Pelestarian Nilai Budaya (BPNB) Yogyakarta, 2015.
- [16] V. I. Sri and P. Lestari, "Masyarakat Samin Ditinjau dari Sejarah dan Nilai-Nilai Pendidikan Karakter," *Istoria*, vol. 13, 2017.
- [17] U. F. Andi, "Local Wisdom, Myth and Pragmatical Interests in Architecture Case Study: Malay Sultanate Palaces in West Kalimantan, Indonesia," presented at the International Joint Conference SENVAR-iNTA-AVAN 2015, 2015.
- [18] W. Bambang, S. Ari, K. Susilo, and A. Widya Fransiska Febriati, "Cultural Approach of Sustainability in Dwellings Culture Riparian Community Musi River Palembang," *DIMENSI (Journal of Architecture and Built Environment)*, vol. 43, 2016.
- [19] U. Hanifah, "Transformasi Sosial Masyarakat Samin Di Bojonegoro (Analisis Perubahan Sosial dalam Pembagian Kerja dan Solidaritas Sosial Emile Durkheim)," *Jurnal Sosiologi Agama: Jurnal Ilmiah Sosiologi Agama dan Perubahan Sosial*, vol. 13, 2019.
- [20] K. Demková, M. Hais, and M. Edwards-Jonášová, "Cross-Border Comparison of Non-Forest Woody Vegetation in the White Carpathians (Central Europe) Over Last 65 Years," *Journal of Landscape Ecology*, vol. 12, pp. 64-78, 2019.
- [21] T. Van Renterghem, "Towards explaining the positive effect of vegetation on the perception of environmental noise," *Urban Forestry & Urban Greening*, 2018.
- [22] K. Lynch, *The Image of The City* Cambridge The MIT Press, 1960.