

Socio-Cultural Support for the Sustainability of Food Production and Consumption in Highland Communities in Sinjai District, South Sulawesi Province

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ABSTRACT

The role that socioculture plays in promoting sustainable food production and consumption is becoming more widely acknowledged. The fact that socio-culture is now widely acknowledged as one of the primary forces behind sustainable food production and consumption is indicative of this progress. The primary focus of this study is on the sociocultural components of the food production and consumption subsystems in highland communities in the West Sinjai District, Sinjai Regency, South Sulawesi Province. Using a case study methodology, a qualitative approach, comprehensive observation, detailed interviews, documentation, and triangulation as data gathering strategies. so that the highland community's sociocultural reality may be thoroughly observed. The socio-cultural apparatus helps highland people adopt sustainable food production and consumption practices. The socio-cultural apparatus is one of the factors that aids upland people in realizing sustainable food production and consumption. The sociocultural aspect of highland communities' food production places a heavy emphasis on the importance of religious values, community, and collaboration. These ideas are used to food production techniques such as Appada Elo, Appatinro Bine, Passibaling, and Ganre Pare Beru, from clearing the land to harvesting. A strong emphasis is also placed on religious values (serving food to others as a sign of respect and appreciation for their creator and to become closer to their ancestors), the value of community (serving food to others as a symbol of gratitude and appreciation), and prestige values (such as local brown rice varieties) in the sociocultural aspect of food consumption in highland communities. These ideas are embedded in long-standing traditions that protect the sustainability of regional food production and consumption.

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1. Introduction

Human socio-subculture and food are closely related (Briones et al., 2018; Muhammad, 2019). An increasing amount of research suggests that in order to achieve sustainable network food production and consumption, we need to better understand the socio-

cultural dimensions of food safety (Keding et al., 2013; Busthanul et al., 2023; Summase et al., 2019). This shift has led to the inclusion of socio-culture as one of the "key drivers" of sustainable food production and consumption in conceptual frameworks (Cleveland et al., 2013; Mak et al., 2012; Ali & Abdullah, 2012; Nona et al., 2019). But despite growing acceptance, socio-subculture is often left out of policymakers' and academics' conversations on the battle against malnutrition (Arsyad et al., 2018; Alesina & Giuliano, 2015; Busthanul et al., 2023; Alesina and Giuliano, 2015).

Numerous purposeful strategies pertaining to the sustainability of network meal production and consumption (Arsyad et al., 2018; Ahmad et al., 2020) fall short of success because they overlook the socio-cultural aspects of neighboring communities (Quoquab & Mohammad, 2016; Ahmad et al., 2017). The framework's inability to recognize how important the socio-subcultural mix of communities is to many facets of food sustainability and how it influences food safety is one of its flaws. Stated differently, while the importance of subculture is widely recognized, there are still a lot of questions regarding what exactly and how much it matters. This gap may also be somewhat linked to the challenge of quantifying and operationalizing this kind of expansive idea (Alesina & Giuliano, 2015; Delis & Iosifidi, 2016; Guiso et al., 2006)

Food systems can adapt to changes in the environment, affecting households as well as communities (Teddu et al., 2018). Socio-cultural components are often used by communities to withstand economic, social, and ecological shocks (M. S. S. Ali, 2017; Dahliana et al., 2018). It involves assembling their dietary demands while taking into account local customs and available information (Ahmad et al., 2017). The upland region of the West Sinjai district of the Sinjai is highlighted in this observation. Based on data from the Food Security Office of Sinjai, South Sulawesi Province, which showed that land productivity for the rice commodity was 47.32 ton ha⁻¹ in 2021 and dropped to 43.92 ton ha⁻¹ in 2022, the study's motivation is the area's warning for food insecurity. A decrease in agricultural commodity output is known to cause food shortages, and the region is considered disaster (Ahmad et al., 2017). Numerous studies have been carried out on food in highland areas, such as community food self-sufficiency (Agho et al., 2011; Bacon et al., 2012; Chandra & Diehl, 2019) and community manufacturing and eating patterns (Ahmad et al., 2017). Nevertheless, no research has examined the socio-cultural elements of the food production subsystem in highland communities (Bonetti et al., 2022; Cherubin et al., 2018; Dalin & Rodríguez-Iturbe, 2016; Guoqing, n.d.; Kesse-Guyot et al., 2013; Lu & Tian, 2017; Mendonça et al., 2023) and food consumption subsystem (Ajibola et al., 2011; Archer et al., 2013; Bernués et al., 2014; Borch & Kjærnes, 2016; de Boer et al., 2007; Hubbard et al., 1992; Jiao, 2016; Machu et al., 2015; Osman et al., 2014; Quoquab & Mohammad, 2016; Teddu et al., 2018; Zaefarian et al., 2019). Therefore, the purpose of this research is to examine and investigate the social culture that, particularly in the research region, promotes the food security of highland community families.

2. Materials and Methods

This research was designed using a qualitative approach and a case study methodology. The social realities of highland populations are closely examined using this methodology. The topic statistics series processes included comprehensive methodologies, including observation, documentation, triangulation, and in-depth interviews. (Chen et al., 2019; Creswell, 2015). Similar to that, area observations and focus group discussions (FGD) are used in this study to better identify the real-world

events that take place. According to Baker (2018), Statistics come from two sources: primary and secondary data. Ten informants provided primary data, including five at the sub-district level, six at the extension service level, and the village community and authorities. The research unit developed into a highland community with thirty informants. The target organization was chosen after preliminary data from key informants and understanding of local conditions were taken into consideration

2. Results and Discussion

2.1. Socio-Cultural Components of Food Production in Highland Communities

Cultural values influence an individual's conduct (Summase et al., 2019; Ali et al., 2017; Dahliana et al., 2018). Value-abiding people have an impact on production behavior. The subsystems of crop upkeep, planting, harvesting, and land preparation make up the production behavior. The account of the food production process in West Sinjai makes it abundantly evident that the upland communities' norms, family networks, and values are all significant components of the food production system.

Value

Following extensive interviews with several informants, it became clear that the values of collaboration, togetherness, and trust were present in the activities associated with the communal food production process. Table 1 displays these values.

Table 1. Meanings and Values A few food-related operations in the highland areas of West Sinjai, Sinjai.

Actions	Meaning/benefit in food production actions
<i>Tudang Sipulung/Appada Elo</i> (Value of Togetherness)	A representation of communal cohesion. In farming, decisions are reached by consensus after protracted discussion. One virtue that is maintained in community activities is togetherness.
<i>Passibaling/</i> assists in the cultivation process (Value of Mutual Cooperation)	Emblem of harmony and collaboration. If planting is not done in tandem, it will take a long period.
<i>Appatinro Bine dan Ganre Pare Beru</i> (Religion/Safety Value)	Safety requests and expressions of community appreciation for the accomplished achievement are made.

The values of safety and religion, as well as the values of unity and mutual collaboration, are some of the things that can be understood from the above table about the food production process in highland villages. The community coming together to debate significant issues related to the manufacturing process that will be carried out is a reflection of the value of unity. Additionally, as a sign of unity and obedience, the community must abide by the decision made at this gathering.

The community's participation in the planting sub-system, also known as "passiballing," exemplifies the need of mutual assistance. The realization has been

reached that collaborative activities enable quicker completion than isolated ones. Plant development uniformity in one stretch may be affected by a comparatively short planting period, reducing the likelihood of plant-disturbing organism assaults.

The highland community does a number of ritualistic activities that represent the values of religion and safety. Beginning with the "Mappatinro Bine" event, which takes place before to tillage, and ending with the "Ganre Pare Beru" event, which takes place after the harvest or once all of the produced items have been placed in the community's homes. throughout the Mappatinro Bine rite, the community prays for protection throughout the production process and asks for the highest harvest from the seeds they plant and sow. Conversely, Ganre Pare Beru is a tradition carried out by the people as a token of gratitude for their protection throughout the production process and the prosperity of the plants they cultivate.

Relationships

Table 2. Relevant stakeholders in a few community-based upland food production initiatives in West Sinjai.

Activities	Related Parties	The gatherings and activities that informants were aware of
<i>Appada Elo/Tudang Sipulung</i>	Village Head, P3A, Farmers Organizations, Community Leaders, Agricultural Extension Workers, and Fertilizer Retailers	Local agricultural extension staff aid the village authority in carrying out this job.
<i>Land Processing</i>	Family, Agricultural machinery services.	Farmers may employ land processing equipment (hand tractors) if they can afford to purchase or rent it; if not, traditional methods of land processing are used.
<i>Planting</i>	Farmer group/citizen, Family member	Planting rice will be finished quicker and with more uniform plant growth the more people plant it.
<i>Plant Maintenance</i>	Each family	Every landowner is responsible for doing weeding, fertilization, pest surveillance, and pest treatment.
<i>Harvest</i>	Each family	The harvesting procedure will be finished more quickly if more family members participate.

Highland societies' food production system also heavily relies on the elements of family and social order. The family networks involved in the food production process are shown in Table 2.

The community under study in the research area is organized into kinship groups based on marriage or blood links. The more productive family members there are, the more likely it is that the region will be farmed. Whether it is their own cultivated land or

property belonging to others in the same position, the cultivated area tends to be bigger in families with higher productivity levels. The number of family members also affects how many working days are required to provide food. People at the research site often leave to develop other commodities or enterprises in other sectors, including animal husbandry or vegetable cultivation on dry ground and yards, after finishing one of the production sub-systems.

Norms

Every area has standards for social life (Ahmad et al., 2020; Teddu et al., 2018). Among the people living in the study site, norms are unwritten guidelines that are revered and held in high regard. The regulations governing what the community may and cannot do throughout the manufacturing process are intimately tied to the norms that exist in the highland community inside the production system. Table 3 displays the norms or guidelines.

Table 3 The meanings and norms of Highland Community Food Production in West Sinjai District as reported by informants Sinjai Regency.

Norms/Rules	Informants' understanding of Norms
No eating while planting	in order to prevent illnesses and pests from attacking the community's vegetation
Hot water should not be spilled on the ground	in order to prevent pests from attacking newly planted plants and to ensure their rapid growth
Menstruating women are not allowed in the agricultural area when plants are undergoing generative development	in order to avoid stopping the plant's development and lowering its output

In collective efforts to produce food, three sorts of rules remain significant. The three norms are limitations that, in the eyes of the highland community, lead to an inability to produce activities when they are violated. The three standards have a lot in common when it comes to illnesses and pests that harm crops. The outcomes of informant interviews, which:

"... In the production process, pest-caused crop failure is what we are most scared about. Due to insect attacks on their crops, many farmers are unable to harvest. Sometimes pests attack crops without warning, and we have no idea what to do about it. Although we've tried spraying them, certain bugs are resistant to the medication we give them.

Due to this worry, all farmers in the hamlets of Puncak, Batu Leppa, and Bonto Mania, as well as some farmers in Lembanna, exclusively grow local rice or red rice..."

The residents of Gunung Perak have been cultivating the indigenous, or red rice, type for many years. This type has a high level of disease and insect resistance. This cultivar is almost never attacked by pests. It does, however, have a very extended life span—

roughly 8 to 9 months during a single production cycle – due to both its lengthy lifespan and the cold temperature. Regional food security may be maintained by areas that protect their native resources (Rahmadanih, 2010)

2.2. Socio-cultural Components of Food Consumption in Highland Communities

People often base their views on their values in order to make pertinent judgments. Food has an expressive function in culture, reinforcing ties with the diverse influences of social life, punishments, religion, economics, science, and technology. Put another way, dietary patterns and eating habits may have a significant and fundamental impact on the makeup and features of society in addition to the human body (Cleveland et al., 2013; Singh et al., 2016). Highland communities in the study site constantly take values, knowledge, and other associated components into account as a foundation for food satisfaction.

Value

Certain food kinds or culinary components have particular meanings for certain groups. Thus, even when they often do not meet nutritional requirements, individuals will still eat certain meals or foods that are valued. The values and significance of several food-related activities that highland communities engage in listed below.

Table 4. Values and Interpretations of Informants Regarding Food Consumption in Highland Communities in West Sinjai, Sinjai.

Food Consumption Activity/Value	Informants' understanding/interpretation of the value of food consumption
Every time you complete a task that is regarded as significant (marriage, harvesting, etc.), express gratitude (Religious value)	The purpose of the event is to express thanks to God for allowing the celebration/activity to be carried out in a safe and effective manner. Another reason why people celebrate Thanksgiving is to honor their ancestors.
Bringing Food to Visiting Visitors (Value of Community)	a representation of unity and humanity. When visitors arrive, people are really ashamed if they don't serve them.
Presenting chicken, brown rice, and songkolo (prestige value)	This kind of cuisine is a must-have on the menu for special occasions like Thanksgiving.

The activities people engage in and the kinds of food they eat are reflections of the values around communal food consumption. Religious values, community values, and prestige values are the values that are prevalent in the community and often serve as the foundation for these activities.

The community interprets the religious significance of the occasion as an expression of thanks to the creator for all the gifts and favors that exist, enabling them to fulfill all of their desires. The highland community uses this religious value as a way to thank their ancestors for all of the information that has been handed down to them. The people in

the highlands believe that if they burn incense produced from candlenuts during a Thanksgiving celebration, their ancestors would appear to observe the occasion.

Serving meals to visiting visitors is one way that the concept of community is achieved. The visitors are either from the neighborhood, relatives, or elsewhere in the country. The goal of this presentation is to enable us to recognize our visiting guests. Because failing to provide food or drink to a visitor causes great embarrassment to the community. Informants who were contacted said that:

"...Serving meals to visitors is something we always do here; our grandma taught us this long ago. Since it used to be an extremely arduous and drawn-out journey, food was always offered whenever a friend or family came to visit. We have grown up with this culture for many years. When someone arrives, we feel guilty if we don't provide something..."

Foods that are regarded as prestige in the highland population include brown rice, sticky rice known as "songkolo," and chicken prepared with specific dishes called "Nasu Likku" (Galangal chicken). For the people living in the highlands, brown rice is revered as a basic diet. thus the local population has a hereditary legacy in it. As it happens, this disease is not unique to the study site. That there are views among people/groups in many Indonesian communities that regard basic foods as hallowed (holy), and that rice is a sign of Dewi Sri's gift (motto: like rice, the fuller the more downward). Sticky rice, or "songkolo," is presented at every occasion as a sign of closeness and togetherness. The "nasu likku" chicken, or Galangal chicken, represents the community's economic standing. The community's economic standing rises with the number of hens chopped. Other foods, like maize, potatoes, and bananas, are just considered common foods that foster community among the locals rather than having any particular significance.

Customs, Norms and Beliefs

Table 5 illustrates how the values of a society are linked to the customs, norms, and beliefs around food consumption in highland societies.

Spending on food and consumption, land rent, tools, and traditional activities like "sukuran/selamatan" are the four categories into which the community's spending culture on the agricultural items they purchase may be divided (Redfield, 1985)). The above-mentioned highland communities' traditions, customs, norms, and beliefs generate unwritten laws that are regulated by the local community. For instance, think of placing rice in a clay or tin container called a "Pa'berasseng" (rice container). The person bringing the rice to cook has to take a seat. Rice is regarded as a holy dietary element and is treated with care as a result (Karim et al., 2021; Rahmadanih, 2010; Yusran et al., 2019). One of the taboos that makes sense is the custom of not discarding food after eating it all as it not only honors the food but also prevents waste.

Table 5. The food consumption customs, conventions, and beliefs of highland populations in West Sinjai, Sinjai.

Customs, Norms and Beliefs	Understanding and interpretation of conventions, norms, and beliefs within the community
removing rice from the grain container while sitting	as an expression of reverence for rice, one of the holy meals.
It is not recommended for pregnant women to eat in front of the door or use big utensils.	It's anticipated that giving delivery will be challenging.
When eating, finish your meal.	In order to prevent food waste, as when food is wasted, you worry that one day you won't have any for eating.
Never eat straight from a pot or pan.	Eating in a saucepan or skillet is associated with the idea that the child will be mischievous and hard to discipline.

3. Conclusion

Sociocultural factors contribute to the realization of the sustainability of food production and consumption in highland communities. The socio-cultural viewpoint holds that food serves as more than just a source of sustenance. It has to do with trust, status, prestige, and community tranquility. The social side of food production in highland communities strongly emphasizes the value of community, cooperation, and religious ideals. These ideals are used in food production activities such as "Appada Elo," "Appatinro Bine," "Passibaling," and "Ganre Pare Beru," from the preparation of the soil to the harvest. A strong emphasis is also placed on religious values (serving food to others as a sign of respect and appreciation for their creator and to become closer to their ancestors), the value of community (serving food to others as a symbol of gratitude and appreciation), and prestige values (such as local brown rice varieties) in the sociocultural aspect of food consumption in highland communities. Long-standing community traditions that support the sustainability of regional food production and consumption serve as a physical embodiment of these principles.

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