



DOI: <https://doi.org/10.38035/gijlss.v4i1>
<https://creativecommons.org/licenses/by/4.0/>

Policy Analysis of The CIPP Model in Eradication of Illiteracy Towards Food Security in the Baduy Community of Lebak Regency

Harits Hijrah Wicaksana^{1*}, Hendy Tannady²

¹Universitas Esa Unggul, Jakarta, Indonesia, harits@esaunggul.ac.id

²Universitas Esa Unggul, Jakarta, Indonesia, hendy.tannady@esaunggul.ac.id

*Corresponding Author: harits@esaunggul.ac.id¹

Abstract: Illiteracy eradication is positioned as a strategic instrument for human development, but its implementation in indigenous communities presents a policy dilemma between formal education interventions and protecting local socio-cultural systems. This study aims to analyze the CIPP model policy in alleviating illiteracy towards food security in the Baduy indigenous community. A qualitative approach was used using in-depth interviews, observations, and documentation studies of regional policies. The analysis was conducted thematically through four CIPP dimensions: Context, Input, Process, and Product. In the context dimension, illiteracy eradication remains a regional development agenda, but is not universally established due to the recognition of the uniqueness of the Inner Baduy custom. In the input dimension, regulations, budget support, and institutional structures are available, but have not been designed within an integrative framework that links literacy to strengthening the local food security system. In the process dimension, policy implementation shows an adaptive and restrictive pattern, where external intervention is limited to maintain social stability and customary sustainability. In the product dimension, the Baduy indigenous community's food security is relatively well maintained through a system of *huma agriculture* and *leuit management* based on *pikukuh karuhun*, although formal literacy is not internalized. This study concludes that there is a disconnect between administrative literacy indicators and the socio-ecological literacy practices of indigenous communities. Therefore, it is necessary to formulate contextual literacy policies that align with local food security systems and value structures to achieve inclusive and sustainable development.

Keywords: CIPP Model, Illiteracy Eradication, Food Security, Baduy Indigenous People, Public Policy.

INTRODUCTION

Illiteracy eradication has long been positioned as a strategic instrument for human development, but its implementation in indigenous communities has not always been without controversy. Formal literacy programs are often assumed to be a universal need that

automatically improves well-being, yet in certain communities, literacy has existed in social practices that differ from formal school standards. In the Baduy indigenous community, social, economic, and food security have been stable through customary mechanisms passed down through generations. When the state defines illiteracy as a public problem that must be addressed immediately, fundamental questions arise regarding the appropriateness of such interventions to the community's livelihood systems and food security.

The theory of literacy as a social practice explains that literacy is not simply the ability to read and write, but rather a set of practices deeply rooted in community life (Barton & Hamilton, 2012; Street, 1984). In the Baduy indigenous community, literacy practices are manifested in oral traditions, informal numeracy skills, multilingual communication, and mastery of ecological knowledge that underpins agricultural systems and food distribution. If formal standards are the sole measure, some community members are categorized as "illiterate," even though they possess functional literacy competencies that support daily food security. This difference in definition is at the root of the mismatch between state literacy policies and the social realities of indigenous communities.

Social practice theory also provides a foundation for understanding the correlation between disrupted education and illiteracy, the influence of community norms on reading and writing habits, and the impact of family responsibilities and informal structures on literacy development (Machimana et al., 2025). In the Baduy indigenous community, collective responsibility for agriculture, traditional gender roles, and a customary division of labor create social priorities distinct from the formal school system. Literacy is not integrated into daily practices because their food and economic systems do not require the use of written texts. This situation explains why illiteracy persists not solely due to a lack of educational facilities, but because formal literacy has not yet become a structural necessity in their social system.

The global issue of illiteracy has long been linked to complex socioeconomic factors and historical inequalities (Hanemann, 2023; OECD, 2024). This situation is not simply an individual deficiency, but rather a reflection of systemic inequalities, sociocultural norms, and institutional constraints (Bénabou & Tirole, 2016). In the Baduy indigenous community, the classification of illiteracy needs to be interpreted in relation to public policy and resource distribution. Without understanding these structures, literacy efforts risk ignoring the social roots that sustain the condition.

Poverty, unemployment, and financial insecurity are major barriers to accessing education (Koley, 2025). Seasonal workloads and family responsibilities limit time and energy available for learning (Fujihara, 2023). These socioeconomic pressures create a cycle of exclusion in which illiteracy reinforces poverty, and poverty further hinders access to literacy (World Bank, 2022). For the Baduy indigenous community, whose livelihoods depend on traditional agriculture, this cycle is directly related to the ability to maintain stable food production and consumption.

Cultural factors also determine educational participation, where individuals who attend formal education may experience stigma due to perceived deviations from community norms (Batan et al., 2025; Pratt, 1998). However, when education is perceived as supporting economic empowerment and social inclusion, support from families and local institutions increases (Addae, 2021). This means that the success of illiteracy eradication depends heavily on social acceptance and perceived benefits to livelihood systems, including community food security.

Literature shows that culturally responsive pedagogy increases relevance and participation (UNESCO, 2017). Literacy policies must consider historical injustices and provide flexible pathways for adult learners (Agustina & Khairunnisa, 2024; Grotlüschen et al., 2025). Programs that recognize local knowledge, connect learning to everyday life, and utilize a holistic approach have been shown to increase retention and motivation (Assefa, 2021; Éthier et al., 2025; Juhnke & Haley, 2024). Recognizing these interconnected barriers is a

prerequisite for designing accessible and relevant policies (Afonso et al., 2025; Belando-Montoro et al., 2022). In the Baduy indigenous community, this relevance means linking literacy to harvest management practices, distribution record keeping, and understanding food policy information.

Meanwhile, the concept of food security has evolved from a focus on availability to four main pillars: availability, access, utilization, and stability (Clapp et al., 2022). The initial definition from the 1974 World Food Conference emphasized adequate global food supplies to avoid crises due to crop failure (United Nations, 1975). However, subsequent revisions emphasized stable production, fair prices, incentives for smallholder farmers, and infrastructure support and fair trade (FAO, 1983). This evolution demonstrates that food security depends not only on production but also on policy structures and socioeconomic access.

Further understanding extends this concept to include household access and the ability to obtain food in conditions of global economic instability (Maxwell, 1996). Hunger is not simply a matter of supply, but also of the socioeconomic ability to access food (Burchi & De Muro, 2016). The ultimate goal is to ensure everyone has physical and economic access to sufficient food for a healthy life (FAO, 1983; World Bank, 2022). In the Baduy indigenous community, this access is linked to the ability to adapt to external dynamics without disrupting the customary balance.

The dimension of agency is crucial in contemporary food security discourse. Although not yet fully recognized in international policy (Clapp et al., 2022), agency refers to the capacity of individuals and groups to influence food systems and governance structures (Neufeld et al., 2021). The capability-building perspective emphasizes the right and ability to determine one's own well-being (Dreze & Sen, 2002; Fukuda-Parr, 2003; Hill, 2003; Sen, 1985, 1999). Agency refers to the freedom to act and achieve goals deemed important to both oneself and the community (Fukuda-Parr, 2003; IBRAHIM & ALKIRE, 2007; Sen, 1985). Formal literacy, if designed appropriately, can expand the agency of the Baduy indigenous community in interacting with the broader food system.

Sustainability is also a key element in modern food security. Food practices must ensure that the needs of the present generation are met without compromising those of future generations (HLPE, 2020). Food systems are understood as complex networks involving the environment, people, institutions, infrastructure, and socioeconomic processes (HLPE, 2014). The interaction of food systems with ecological, health, and social systems determines long-term sustainability (Béné, 2020; Berry et al., 2015; Ericksen, 2008; Ingram, 2011; Maxwell, 1990; Schipanski et al., 2016). In the Baduy indigenous community, customary agricultural systems have maintained ecological balance, so literacy policy interventions need to consider their impact on these interconnected systems.

Based on this explanation, literacy and food security are intertwined domains within a complex social system (Barton & Hamilton, 2012; Clapp et al., 2022; HLPE, 2020; Street, 1984). Literacy interventions are not neutral actions, but rather public policies that can strengthen or disrupt the structure of community sustainability. Public policy itself is a government decision that goes through a process of agenda setting and evaluation (Anderson, 2011; Dye, 2013). Its effectiveness is greatly influenced by the appropriateness of the design to the social environment in which it is implemented (Pressman & Wildavsky, 1984).

A comprehensive evaluative approach is needed to assess the alignment between community needs, resource readiness, implementation dynamics, and the program's impact on livelihood systems. The CIPP model emphasizes the importance of a thorough analysis of the context, planning, implementation, and policy outcomes (Stufflebeam, 2003; Stufflebeam & Shinkfield, 2007). Evaluation should not stop at administrative outputs but should assess substantive changes to the capability and sustainability of the social system. In the case of the

Baduy indigenous community, the measure of success in eradicating illiteracy should be linked to its contribution to food security.

Based on these overall arguments, this study identifies several key issues: first, the discrepancy between the administrative definition of illiteracy and the social literacy practices of the Baduy indigenous community; second, the unclear contribution of literacy programs to strengthening community food security; and third, the potential tension between policy interventions and the customary structures that underpin the traditional food system. Therefore, this study aims to analyze literacy policies in the Baduy indigenous community by assessing their suitability for needs, planning readiness, implementation dynamics, and their impact on the agency and sustainability of the community food security system. With this approach, this study is expected to produce policy recommendations that are culturally responsive while strengthening the socio-ecological sustainability of the indigenous community.

METHOD

This research was conducted among the Baduy indigenous community in Kanekes Village, Leuwidamar District, Lebak Regency, Banten Province, in October–December 2025. This study uses a qualitative approach to understand the socio-cultural realities shaping food security and illiteracy in the Baduy indigenous community. This approach was chosen because research on indigenous communities requires an interpretive understanding of values, norms, and daily life practices that cannot be reduced to mere numbers (Lewis, 2015; Takona, 2024; Tarnoki & Puentes, 2019). Within the CIPP framework, qualitative methods explore the Context, Input, and Process dimensions related to socio-cultural conditions, local resources, and informal knowledge systems (Jacob et al., 2011; Zhang et al., 2011).

Data were collected through in-depth interviews and participant observation. In-depth interviews were used to obtain information regarding community perceptions of food security, traditional food management practices, and views on education and literacy in daily life (Kallio et al., 2016). Participatory observation was conducted to directly observe patterns of food production, distribution, and consumption, as well as forms of non-written communication used by the community in transferring knowledge between generations (Tongco, 2007). Informants were selected purposively based on their roles, experiences, and involvement in traditional life (Palinkas et al., 2015). The informants in this study were the Head of the Lebak Regency Education Office, the Head of the Lebak Regency Food Security Office, the Social and Cultural Division of the Lebak Regency Regional Planning and Development Agency, the Jaro of the Baduy Traditional Government, and the Baduy Traditional Community Leaders.

Data were analyzed thematically through iterative stages of reduction, display, and conclusion drawing (Braun & Clarke, 2006). The analyzed data were then classified into Context, Input, Process, and Product components to maintain consistency with the CIPP evaluation framework (Stufflebeam, 2003; Zhang et al., 2011). Validity was ensured through triangulation of interviews, observations, and documents (Nowell et al., 2017). With this approach, qualitative methods are expected to provide a comprehensive and contextual understanding of the food security of the Baduy indigenous community in conditions of limited formal literacy.

RESULTS AND DISCUSSION

Context Evaluation

The results of the context evaluation research based on the results of interviews with informants, the eradication of illiteracy remains positioned as a regional development agenda in Lebak Regency, but its implementation is not universally carried out across the region. The Lebak Regency Regional Government emphasized that the literacy program is still running, but has different treatment when dealing with the Inner Baduy indigenous community due to

differences in social and cultural contexts. The Head of the Lebak Regency Education Office stated, "In general, the eradication of illiteracy remains an agenda of the regional government; the program exists and is running in many areas, but for the Baduy Tribe the policy is indeed different."

This distinction is based on the principle of protecting customary law as an educational policy, so that development is not directed at social interventions that could potentially change the structure of indigenous people's lives. He continued, stating that "it's not because the program doesn't exist, but because from the outset, the Baduy people have been positioned as an area that must be protected, not intervened in." This regional planning perspective means that development strategies are not solely focused on eradicating formal illiteracy, which refers to the formal education system as the sole indicator of progress, but rather are tailored to the needs and character of indigenous peoples, which refers to the protection of existing social systems and local knowledge. The Socio-Cultural Division of the Lebak Regency Regional Planning and Development Agency stated, "Planning does not only rely on formal literacy eradication; for the Baduy people, an alternative strategy is the protection of social systems and local knowledge."

In the context of food security, literacy is understood contextually and informally, because the Baduy people's ability to survive and thrive is inherited through direct practice in daily life. As the Head of the Lebak Regency Food Security Agency stated, "We do not rely on formal literacy approaches, but rather on strengthening existing systems," the formal literacy approach is not the primary instrument in maintaining the well-being of the Baduy indigenous people. The process of passing down Baduy knowledge takes place from generation to generation without written media related to knowledge about farming, food management, and living arrangements obtained through direct involvement in *huma activities* and adherence to *pikukuh*. This was emphasized by the Jaro of the Baduy Tribal Government, "Knowledge about farming and food management comes from *ancestors*, passed down from generation to generation and learned through daily practice."

He continued that "custom is the main rule in using nature and regulating which areas may and may not be cultivated," making the food security of the Baduy indigenous people built on a customary system that strictly regulates the use of natural resources and maintains ecological balance such as *leuweng larangan*, namely areas that may not be cultivated to ensure food sustainability. The existence of a customary system, the Baduy Tribe perceives formal education as a potential social change that can shift the established customary order. Outside assistance is only if it does not bring changes to the lifestyle and values they believe in. He emphasized the statement "changes in lifestyles such as teaching reading and writing or technology that violates customs are unacceptable."

Field observations show three groups: Inner Baduy (*tangtu*), Outer Baduy (*penamping*), and *Dangka*. In the Inner Baduy Tribe, researchers did not find any formal or non-formal educational activities covering three main villages, namely *Cibeo Village*, *Cikertawana Village*, and *Cikeusik Village*. For the Outer Baduy Tribe, formal education was found, namely *Bojongmenteng 2 Public Elementary School* located in *Ciboleger Village*. The Outer Baduy indigenous people occupy 28 villages and 8 sub-villages such as *Cikadu Village*, *Kaduketuk Village*, *Kadukolot Village*, *Gajeboh Village*, *Cisagu Village*, which surround the Inner Baduy area, which usually has mixed with other Sundanese communities and is familiar with outside culture such as schooling and economic transactions. Meanwhile, the Baduy *Dangka Tribe* lives outside the *Kanekes Village* area, living in *Padawaras Village (Cibengkung)* and *Sirahdayeuh Village (Cihandam)*, meaning they live outside the Baduy Tribe's traditional area.

Based on the results of the documentation study, legally, the policy to eradicate illiteracy in Lebak Regency is based on Law Number 20 of 2003 concerning the National Education System, which affirms that every citizen has the right to receive education without

discrimination. Article 26 emphasizes that non-formal education, including literacy education, is part of the national education system that functions as a substitute, supplement, and/or complement to formal education. As such, the Lebak Regency Government issued Regional Regulation Number 3 of 2019 concerning Amendments to Regional Regulation Number 2 of 2010 concerning the Implementation of Education in Lebak Regency. However, this regulation is general in nature and does not have specific articles or provisions governing the implementation mechanism of the illiteracy eradication program, especially those targeting indigenous communities, including the Baduy Tribe.

Indigenous communities are recognized through the legal basis of Article 18B paragraph (2) and Article 28I paragraph (3) of the 1945 Constitution which states "The State recognizes and respects the unity of indigenous legal communities along with their traditional rights... the cultural identity and rights of traditional communities are respected in accordance with the development of the times and civilization." This is then emphasized in Law Number 6 of 2014 concerning Villages which recognizes the existence of indigenous villages as government entities based on ancestral rights. Regional Regulation Number 32 of 2001 concerning the Customary Rights of the Baduy Community is the core regulation for the protection of indigenous communities in Lebak Regency, but many academic studies indicate the need for more comprehensive policy regulations regarding indigenous communities that do not only regulate customary rights but also cultural rights, customary territories, and procedures for managing customary territories contextually.

In terms of food security, the regulatory basis refers to Law Number 18 of 2012 concerning Food, which emphasizes that the state is responsible for providing sufficient, safe, quality, and nutritious food for the community. In addition, Law Number 41 of 2009 concerning the Protection of Sustainable Food Agricultural Land emphasizes the obligation of the central and regional governments to implement and protect sustainable food agricultural land to prevent land conversion that could threaten food security. In Lebak Regency, Regional Regulation Number 3 of 2016 concerning the Protection of Sustainable Food Agricultural Land is a regulation at the district level related to food security by establishing policies to maintain the area of food agricultural land, maintaining agricultural areas so that they do not change function, encouraging efforts to increase production, empower farmers, and community involvement that includes planning and determination, development and utilization of land, inter-institutional coordination, and control and guidance.

Overall, based on interviews, observations, and documentation studies, there is a policy inconsistency between the normative and implementation levels. On the one hand, the local government states that the literacy eradication program remains in place and is a development agenda, but on the other hand, the program is not applied to the Baduy indigenous community, citing respect for customary provisions. Meanwhile, various regulations governing literacy education, recognition of indigenous communities, and food security are found, indicating that a sectoral legal framework is already in place. This situation creates a policy gap, as the existence of general regulations is not accompanied by specific provisions explaining how the program is adapted or officially exempted for indigenous communities.

Thus, rationally, policies should be consistent between norms and implementation: if a literacy program is established as a regional policy, then it is necessary to formulate a contextual implementation mechanism for indigenous communities; conversely, if an exception is indeed made, then the exception must have an explicit and formulated policy basis. The fact that there is no specific regulation governing the adaptive model for the Baduy Tribe indicates a normative vacuum at the operational level, so that the decision not to implement the program is more administrative and discretionary than based on a structured policy design. Therefore, firm and contextual regulatory adjustments are needed to ensure legal certainty and consistency between policy statements and implementation practices.

Input Evaluation

It was emphasized that the policy of eradicating illiteracy in Lebak Regency shows that the Regional Government continues to maintain literacy programs as part of the development agenda, but does not apply them universally throughout the region. In the case of the Baduy indigenous community, the Head of the Lebak Regency Education Office emphasized that "the strategy is not to replace the program, but to shift its location and form, because they cannot enter, all formal and non-formal education services are provided in the Outer Baduy area." This adjustment shows that policy input is designed spatially by making Outer Baduy a buffer zone for education services, so that state intervention does not directly touch the protected core indigenous territory. If coercion has the potential to cause social tension because it conflicts with the principle of *pikukuh* which regulates the life order of indigenous communities, the policy design emphasizes the principle of spatial adaptation rather than service expansion.

In the context of food security, formal literacy is not presented as a primary instrument determining the well-being of the Baduy indigenous community, as the customary food system is considered stable and self-sufficient. The Head of the Food Security Agency stated that "for the Baduy, we do not rely on a formal literacy approach, but rather on strengthening the existing food system." This reinforces alternative development strategies for the Baduy indigenous community contextually, protecting the social systems and local knowledge that have functioned for generations. However, he also stated that resources in the form of budgets, mentoring, and sectoral programs remain available within the regional policy structure, but their use is consciously limited, taking into account potential socio-cultural impacts.

In this case, the input dimension concerns not only program availability but also normative decisions to restrain interventions from disrupting established customary systems by providing indirect support through buffer zones rather than policy penetration into core customary areas. This approach demonstrates that policies are designed with the principle of minimal intervention and respect for socio-cultural autonomy, not on technocratic aspects such as the readiness of teaching staff or budget size, but rather on customary boundaries that must not be violated. This is as stated by the Head of the Lebak Regency Education Office, namely, "the consideration is not about the budget or the readiness of teaching staff, but about customary boundaries," which is followed by the statement of the Head of the Lebak Regency Food Security Office, "if it has the potential to change lifestyles, we will withhold it."

From the perspective of the Baduy indigenous people, the knowledge system regarding food and life is not acquired through formal education, but rather through a process of inheritance that occurs from generation to generation in daily practice. Jaro customary governance explains that agricultural knowledge is inherited from *ancestors* and practiced through direct involvement in *farming activities*. The learning process takes place without written media because knowledge is acquired through direct experience and adherence to *customary pikukuh* that regulates life. This knowledge system forms the foundation of food security that does not depend on formal literacy or external educational interventions. Instead, the Baduy indigenous people have internal learning mechanisms that have been tested in maintaining food sustainability.

Field observations revealed that the teaching staff at SDN 2 Bojongmenteng, located in Ciboleger Village, consists of 8 active teachers with a total of 171 students. The teaching staff or teachers come from outside the Kanekes Village area, while the students come from the surrounding area, especially from Ciboleger Village. Educational facilities, both formal and non-formal, other than those mentioned, are not found in this area, such as educational facilities at the junior high or senior high/vocational school level. For food security, assistance in the form of plant seeds such as durian seedlings, jobless hanjeli seedlings, and fertilizer to the Baduy indigenous community includes empowerment and mentoring activities carried out by universities as a fulfillment of community service activities. Meanwhile, assistance provided

by the Lebak Regency Government often takes the form of direct assistance such as the provision of basic necessities.

Then, field observations found that the Inner Baduy Tribe is estimated to number around 800 people who live in the interior of the forest and are still isolated and have not yet entered outside culture, while the Outer Baduy Tribe is estimated to number around 7,000 people. It should be emphasized that the population of the Baduy indigenous community, both the Inner Baduy Tribe and the Outer Baduy Tribe, listed is an estimate based on the results of observations by researchers in each village in the Baduy Community area obtained from local residents. This is because the Baduy indigenous community almost entirely does not have a resident identity card and there is no official survey data conducted by the Lebak Regency Government.

Furthermore, based on the results of a documentation study, in 2010, the number of illiterate people in Lebak Regency was 1,813 people spread across 28 sub-districts, such as Bojongmanik District with 278 people, Maja District with 217 people, Cibadak District with 217 people, Banjarsari District with 215 people; however, interestingly, Leuwidamar District (as the settlement area of the Baduy indigenous people) stated that there were no more illiterate residents (Wicaksana, 2024). Furthermore, in 2018, the number of residents aged 15-59 years in Lebak Regency was 806,294 residents with 21,327 illiterate residents, so that in percentage terms it had a value of 2.65 percent of the population aged 15-59 years in Lebak Regency (Nurul Ainy et al., 2019). Meanwhile, for funding or budget, based on Regent Regulation Number 59 of 2023 concerning Amendments to the Lebak Regency Regional Government Work Plan for the 2023 Fiscal Year, the Lebak Regency Government allocates a general budget for government affairs in the education sector through the Education Office, where for non-formal education, the Lebak Regency Government in 2023 allocated a budget of Rp. 9,965,687,000 or Rp. 9.9 billion.

Overall, findings on the input dimension concluded that the main problem lies not in the lack of resources, but rather in the unclear policy design that explicitly regulates how the literacy eradication program is adapted for the Baduy indigenous community and directly linked to strengthening food security. This is reflected in basic issues such as inconsistent illiteracy data and the absence of an accurate population database, such as an update on the Baduy indigenous population, which demonstrates a weak foundation for input planning, so that policies are not fully based on the real needs of the community. Although the local government has allocated a budget for non-formal education in literacy programs and teaching staff, the provision of educational facilities is still inadequate, with formal education only at the elementary school level, and non-formal education activities are absent. Sectoral support in the food sector is also limited to direct, unsustainable assistance, and its role is replaced by universities through community service in training and community empowerment mentoring activities.

This is because all of these inputs are not formulated within an integrative framework that explains the functional relationship between literacy and food systems. In fact, by positioning illiteracy eradication in relation to food security, policy inputs should be able to design a contextual literacy model that strengthens the capacity for customary-based food production, distribution, and management, rather than simply withholding interventions. The absence of conceptual integration between literacy strengthening and local food knowledge systems indicates a gap in policy integration between education and food security, where resources are available but have not been constructed in a systematic, contextual, and accountable design to address the sustainability challenges of the Baduy indigenous community.

Process Evaluation

The implementation of the literacy eradication policy in Lebak Regency, within the context of the Baduy indigenous community, is not carried out through program expansion, but rather through limiting interventions to avoid disrupting existing livelihood systems. The local government, specifically the Lebak Regency Education Office, emphasizes that educational approaches must not enter social spaces that could potentially change the Baduy indigenous community's lifestyle and food system: "We don't monitor food security technically, but we follow its development as part of its indirect impact... so the evaluation is not based on numbers, but on social and customary stability." The restrictions are understood as a precautionary measure, stopping the agenda if inappropriate interventions are found to trigger undesirable social changes within the customary system, and each relevant agency has a role. As the Head of the Lebak Regency Education Office stated, "The coordination focuses on limiting roles... it's not about who gets to go further, but who should stop where."

Furthermore, the policy monitoring process is not conducted through quantitative indicators or formal administrative reports as is customary for government programs. The Lebak Regency Food Security Office stated that monitoring is conducted more through direct observation of the stability of cropping patterns and the absence of symptoms of food insecurity, where "we do not monitor the Baduy with the approach of other regions... as long as these are absent, we assume their food security is still maintained." This is supported by the Social and Cultural Sector of the Lebak Regency Regional Planning and Development Agency, which assesses social stability and the absence of customary conflicts as indicators that the policy is running appropriately, where "as long as their food security is stable and no customary conflicts arise as a result of government programs, we consider that an indicator that the policy is still appropriate."

Based on this, inter-agency coordination in the process dimension shows a different character from conventional development approaches, which are usually accelerative. The government actually emphasizes coordination as a control mechanism to prevent overlapping education and food programs that clash with customs. Filtering is reinforced by the principle of regional differentiation that distinguishes Outer Baduy as an adaptive region and Inner Baduy as a protective region, as stated by the Social and Cultural Affairs Division of the Lebak Regency Regional Planning and Development Agency, that "programs that have the potential to change lifestyles... we usually do not approve for the Inner Baduy region." Finally, in its implementation, policies are not bound by rigid written technical procedures, but rather by normative agreements across agencies that place custom as the primary reference. The Head of the Lebak Regency Education Office stated that "there is an unwritten procedure that we adhere to together, namely the principle of 'not forcing and not standardizing'."

From the perspective of the Baduy indigenous people, the food management process occurs systematically following *the ancestral traditions*, starting from the clearing of fields, planting local rice, and storing it in *the leuit* as a long-term reserve. The Jaro of the customary government states that "management is carried out sequentially according to the ancestral traditions... after the harvest, the rice is stored in *the leuit*." *The leuit* serves as a buffer mechanism that allows rice to be stored for months, even beyond one planting season, and this system has operated without reliance on literacy or formal administrative skills. The Jaro of the customary government states that "children are taken to the huma from an early age... they learn not from writing, but from habit," a statement reinforced by the statement of a Baduy customary leader, "rice in *the leuit* can be stored for a long time, usually for more than one planting season." When faced with famine or crop failure, the community relies on the leuit reserves and social solidarity among members as risk management mechanisms. This situation is seen as a test that must be faced together, as the Jaro of the customary government states, "if there is a famine... the community relies on the rice reserves in *the leuit*."

The results of field observations by researchers indicate that the implementation of the policy of eradicating illiteracy towards food security in the Baduy indigenous community shows an implementation pattern that does not take place directly in the Inner Baduy Tribe area, but rather focused on the Outer Baduy Tribe area as a space for interaction with the public service system. The formal learning activity process in Ciboleger Village follows the national curriculum and takes place as in elementary schools in general, without finding a learning model specifically designed to integrate the Baduy cultural context or strengthen literacy based on the local food system. Meanwhile, the Inner Baduy Tribe, the learning process is internal through direct involvement in *huma activities*, spatial management and cropping patterns, as well as cultural and collective practices and examples without administrative intervention.

In terms of food security, field observations revealed that the Inner Baduy have a distinct rice paddy cultivation system. Typically, in other areas, rice paddies are cultivated with a stable water supply through irrigation systems such as canals, dams, and water pumps. However, once the Inner Baduy have cleared their land, they plant rice directly without a stable water supply, instead being watered regularly without the aid of an irrigation system. Furthermore, a *leuit (a storage area for harvested crops)* has been found around Inner Baduy settlements. Meanwhile, the Outer Baduy have adopted a modern transactional economic system to meet their food needs, where agriculture follows the national rice paddy system.

Furthermore, based on the results of a documentation study through the report of the Lebak Regency Food Security Service entitled "Food Security and Vulnerability Map of Lebak Regency in 2024", Kanekes Village has received assistance in the form of repairs and construction of *leuits* in an effort to strengthen food security in the Baduy indigenous community, especially for the Inner Baduy Tribe. However, Kanekes Village itself is included in the villages vulnerable to priority 2 (two) food insecurity which indicates that this area is a high priority area. It has been stated that the Baduy indigenous community lives in Kanekes Village, Leuwidamar District, Lebak Regency, where cereal production in this area from 2019 to 2023 is:

Table 1. Production of Staple Cereals and Tubers 2019-2023 (Tons) Leuwidamar District

Cereals	2019	2020	2021	2022	2023
Rice Production	15,767	20,181	16,768	19,004	16,066
Corn Production	1,266	599	39	-	3
Cassava Production	1,272	872	336	196	30
Sweet Potato Production	55	51	51	66	37
Aquaculture Fish Production	-	-	66.44	76.41	76.08

Source: (Lebak Regency Food Security Service, 2024)

The inclusion of Kanekes Village as a village vulnerable to food insecurity, despite the implementation of activities such as assistance for repairing and constructing a *leuit (household shelter)*, indicates that the process of strengthening food security has not been carried out in accordance with its contextual objectives. Training and mentoring in community empowerment are necessary to achieve the goal of strengthening food security. This can be done in conjunction with the fulfillment of educational learning, particularly through the eradication of illiteracy. Literacy does not need to be forced with the standards of the formal national education system, but can be achieved through non-formal education such as training and mentoring activities in food security to avoid conflict with the customary rules of the Baduy community. This can be done, for example, in 2023 the Lebak Regency Government allocated a budget of Rp. 1.1 trillion for the education sector, of which Rp. 9.9 billion was allocated for literacy activities.

Table 2: Lebak Regency Regional Government Work Plan for 2023 for Government Affairs in the Education Sector

GOVERNMENT AFFAIRS IN THE FIELD OF EDUCATION OF LEBAK REGENCY	1,110,015,484,351
Supporting Programs Affairs District Government	755,839,828,382
Planning , Budgeting , and Evaluation of Regional Device Performance	195,656,250
Administration Finance Regional Devices	753,985,218,395
Administration Personnel Regional Devices	75,191,500
General Administration of Regional Devices	376,206,725
Provision of Supporting Services Affairs Local government	1,115,355,512
Maintenance of Supporting Regional Assets Affairs Local government	92,200,000
Education Management Program	354,175,655,969
Elementary School Education Management	192.117.454.283
School Education Management Intermediate First	129,683,634,686
Childhood Education (PAUD) Management	22,408,880,000
Management of Non-Formal/ Equivalency Education	9,965,687,000

Source: (Regent Regulation Number 59 of 2023 concerning Amendments to the Lebak Regency Regional Government Work Plan for the 2023 Fiscal Year)

Based on Table 2, the education management program allocates a budget for non-formal/equivalency education, one of which is allocated for basic literacy education. The number of students receiving basic literacy education is 200; the remainder is allocated for equipment procurement, implementation, preparation, and coaching at several non-formal educational institutions. The funding or budget allocated for non-formal/equivalency education management is as follows:

Table 3. Funding for Non-Formal/Equivalency Education Management in Lebak Regency in 2023.

Management of Non-Formal/ Equivalency Education	9,965,687,000
Procurement of Practical Tools and Demonstrations Non-formal/ Equivalency Students	0
Implementation of Non-Formal Learning Process / Equivalency	130,000,000
Preparation and Action Carry on Evaluation Educational Units in Non-Formal/ Equivalency Education	50,000,000
Coaching Institutions and Management Non-formal/ Equivalency Schools	9,785,687,000

Source: (Regent Regulation Number 59 of 2023 concerning Amendments to the Lebak Regency Regional Government Work Plan for the 2023 Fiscal Year)

If the percentage between funding for non-formal education management and funding for education affairs in **Table 3** is 0.9%, and the allocation of funds is prioritized for institutional development activities and non-formal school management with a percentage of 98.2%, while 1.8% of funding is allocated to fulfill the three non-formal/equivalency education management activities.

Overall, the implementation process places greater emphasis on limiting roles, controlling interventions, and using social and customary stability indicators as benchmarks for policy success. This is reinforced by the finding that formal education only takes place in the Outer Baduy region, while the Inner Baduy maintains a practice-based cultural learning system without administrative intervention. However, there is a lack of synchronization between this normative approach and the objective conditions of the region, which places Kanekes Village as a priority 2 (two) vulnerable village. While the non-formal education budget allocation only covers 0.9% of the total education budget and is largely focused on institutional development, rather than on expanding the direct literacy learning process. This condition indicates that although the policy process is considered contextual and harmonious

with the customary system, the integration between literacy and food security has not been optimally implemented within an adaptive and sustainable empowerment framework.

Product Evaluation

The food security of the Baduy indigenous community, from the perspective of the local government, is considered to remain stable even though the literacy eradication program has not been implemented in the Inner Baduy region. The Head of the Food Security Agency stated, "Our indicators—availability, access, and stability—are relatively secure for the Baduy indigenous community; they are not classified as a food-insecure area... their food production is sufficient for their own needs, and their consumption patterns are stable." The assessment confirms that the community's food production is sufficient for their own needs and their consumption patterns are consistent, and this stability is not accidental, but rather the result of an effective social system within the indigenous community.

This condition is directly felt as a consequence of adherence to *pikukuh* and consistent management of *huma* and *leuit* that does not depend on formal educational intervention. Jaro of Customary Government stated that "with the system of farming in *huma* and reserves in *leuit*, we feel no shortage of staple food." This indicates that the relationship between formal literacy and food security in the Baduy indigenous food system is not built through literacy skills, but through the customary knowledge system, as stated by the Head of the Lebak Regency Education Office, "We cannot intervene in the food system adopted by the Baduy indigenous people; it has become their characteristic with its customary knowledge system."

This view explains that without formal literacy education, the Baduy indigenous people are still able to regulate food production, distribution, and consumption consistently, meaning that formal literacy is not positioned as a primary determining factor in maintaining food stability in the customary area. The customary system functions as the primary mechanism in ensuring food production and stability, regulating the entire process from planting times, managing *the fields* and *leuweng*, to the obligation to store a portion of the harvest in *the leuit* as reserves. This is emphasized by the statement of the Jaro of Customary Government, "Customs guarantee food availability by regulating planting times, maintaining *the fields* and *leuweng*, and ensuring that each family stores a portion of its harvest in *the leuit*."

In addition to serving as a family reserve, *the leuit* serves as a safety mechanism in the event of a poor harvest, allowing distribution to be carried out in rotation and under control. Social solidarity is also part of the system, ensuring that no family is left without food. The Jaro of the Customary Government stated that "these rice reserves are taken in turns according to customary rules so that all families can continue to eat until the next harvest." From a food security system perspective, there is a differentiation in the food security model between the Inner Baduy and Outer Baduy, but both are still seen as development achievements, not as a development gap, but as a form of contextual success according to the character of each region. As stated by the Head of the Lebak Regency Education Office, the Head of the Food Security Office, and the Social and Cultural Division of the Lebak Regency Regional Planning and Development Agency, together, "both have food security, but their paths are different. The Outer Baduy are already familiar with modern economic transactions connected to the market, while the Inner Baduy still use traditional transactions with a system of exchanging agricultural products and customary systems, but we view this as an achievement, not a gap."

The lack of a literacy program in the Baduy indigenous community, particularly the Inner Baduy, is positioned as a policy strategy to maintain the social balance that has historically underpinned food security. According to the Head of the Lebak Regency Education Office, "If a literacy program is forced upon them, it could disrupt the social fabric that has traditionally underpinned their food security." The impact on the food sector is also considered insignificant, so the program is not considered a factor hindering food security.

The aspect of sustainability is an important dimension in assessing the results of this policy because it views food security as a system passed down from generation to generation. *Leuit* is not only understood as a storage place, but also as a symbol of future food security as long as customs are maintained. Jaro of the Customary Government stated that " *leuit* is not only a place to store rice, but a symbol that food will be available for future generations, tens, even hundreds of years into the future." This belief is reinforced by the view that "as long as *the pikukuh karuhun* is maintained, the next generation will not experience food shortages," as stated by Baduy Customary Leaders, which is understood as a consequence of consistently implementing the customary system in managing *land* and natural resources.

The results of field observations by researchers indicate that the products of the implementation of policies to eradicate illiteracy towards food security in the Baduy indigenous community are differentiated. The Outer Baduy tribe, which is known to be able to be intervened by the education system, did not find integration between learning materials with the context of local food security or traditional agricultural systems that are the basis of community life, both formal and non-formal. Meanwhile, the Inner Baduy tribe, no literacy related to food security was found, where knowledge is still carried out with children and adolescents actively involved in *huma activities*, starting from land clearing, rice planting, to storing harvests in *leuit*, which indicates that the process of knowledge transmission takes place culturally and collectively.

The rice storage system in *the leuit (rice storage)* still functions effectively as a long-term food reserve, demonstrating that traditional food security mechanisms continue to operate without relying on external distribution systems. Meanwhile, the Outer Baduy tribe is beginning to become increasingly dependent on transactional economic systems and markets to meet their food needs. Therefore, this indicates that there have been no changes in lifestyles, social structures, or traditional agricultural systems as a direct impact of the literacy eradication policy. Social stability and adherence to *the ancestral customs* remain, which are normatively viewed as indicators of the success of the process of limiting government intervention. However, from the perspective of educational policy outcomes, there is no apparent increase in literacy capacity that directly strengthens food productivity or economic diversification in the customary region.

Furthermore, based on the documentation study discussed in the context, input, and process dimensions, various regulations governing literacy education, recognition of indigenous communities, and food security were found contextually, indicating that a sectoral legal framework is in place. However, there is a policy inconsistency between the normative and implementation levels. The local government states that the literacy eradication program is a development agenda, but on the other hand, the program is not applied to the Baduy indigenous community, citing respect for customary provisions. This creates a policy gap, so that the decision not to implement the program is more administrative and discretionary than based on a structured policy design. Therefore, contextually, firm regulatory adjustments are needed to ensure legal certainty and consistency between policy statements and the implementation practices of literacy eradication towards food security in the Baduy indigenous community.

In terms of input, the lack of clarity in policy design that explicitly regulates how literacy programs are adapted for the Baduy indigenous community and directly linked to strengthening food security has led to a lack of facilities, workforce, and documentation for formal and non-formal education in this region. In percentage terms, the number of illiterate people in Lebak Regency is 2.65% of the population aged 15-59 years. Interestingly, Leuwidamar District (as the settlement area of the Baduy indigenous community) is declared free of illiteracy. Meanwhile, the area that can be intervened, namely the Outer Baduy Tribe, only has one educational facility at the elementary level with 9 teachers and no non-formal education. This

is despite the local government allocating a budget for non-formal education, including literacy education, such as in 2023, a budget allocation of IDR 9.9 billion. This is because – despite having a contextual policy basis that regulates the eradication of illiteracy, strengthening food security, and customary rights of indigenous communities – the Lebak Regency Government does not have integrative provisions that explain the functional relationship between literacy and local food systems, indicating that the availability of resources has not been constructed in a systematic, contextual, and accountable design to address the sustainability challenges of the Baduy indigenous community.

This can be seen from the implementation process, where the production of staple cereals and tubers from 2019 to 2023 in Leuwidamar District has not been able to meet food needs, placing this area, especially Kanekes Village, as a village vulnerable to priority 2 (two) or high priority food insecurity. The need for literacy that connects strengthening food security with local knowledge has not been a policy strategy, seen by how government agencies have not maximized resources. That of the budget allocation in the education sector of Rp. 1.1 trillion, only Rp. 9.9 billion is allocated for literacy activities or 0.9%, of which the percentage for institutional development and management of non-formal schools is 98.2%, while 1.8% is used to fulfill non-formal/equivalency education management activities. This condition shows that although the policy process is considered contextual and harmonious with the customary system, the integration between literacy and food security has not been optimally implemented within the framework of adaptive and sustainable empowerment.

Thus, overall, the product dimension shows that the results of the illiteracy eradication policy on the food security of the Baduy indigenous community are differentiated and have not been systemically integrated, where the local government through the Education Office, Food Security Office, and Regional Planning and Development Agency assess that food security remains stable even though the literacy program is not implemented in the Inner Baduy Tribe because the customary system based on *pikukuh karuhun*, *huma* management, and rice storage in *leuit* is able to guarantee availability, rotating distribution during famine, and intergenerational sustainability without dependence on formal literacy. However, sectoral regulations regarding literacy education, recognition of indigenous communities, and food security have not been formulated in an integrative design, so the decision not to implement the program is more administrative-discretionary than based on structured policies that link literacy to the local food system. The limited educational facilities in the Outer Baduy Tribe – which only has one elementary school without non-formal education support – as well as the very small proportion of the literacy budget, indicate that resources have not been constructed to strengthen literacy capacity based on food empowerment, which in the process contributed to the designation of Kanekes Village as a high priority food security vulnerable village, while the Inner Baduy Tribe relatively does not show similar vulnerabilities because it continues to rely on its traditional system, so that policy products ultimately reflect customary stability on the one hand and structural vulnerability of development on the other.

Discussion

The discussion of the findings of this study will answer 3 (three) problem questions which indicate that the first problem lies in the discrepancy between the administrative definition of illiteracy as formulated by Law No. 20/2003 concerning the National Education System and the practice of social literacy that exists in the Baduy indigenous community. Administratively, illiteracy is defined as the inability to read, write, and count in the formal education system so that indicators of success are measured through individual technical achievements and quantitative reporting, whereas in the social reality of the Baduy indigenous community, the ability to understand the planting cycle, read natural signs, manage *land*, and obey *the pikukuh karuhun* is a form of contextual literacy that supports the sustainability of

collective life (Riyadi et al., 2025). Oral traditions and family-based knowledge transmission mechanisms function as an effective and adaptive educational system, so that the reduction of the meaning of literacy to merely symbolic text-based abilities ignores the structure of local knowledge that has been proven functional (Winursiti et al., 2025). Thus, although administratively some residents can be categorized as illiterate, socio-ecologically they have literacy capacity rooted in local expertise passed down across generations and relevant to their life needs (Sumarlina et al., 2023).

This discrepancy is further evident when Leuwidamar District is administratively declared literacy-free, while the Inner Baduy indigenous community does not attend formal education and does not use a reading and writing system in their daily lives. Therefore, statistical indicators do not fully capture the reality of literacy based on collective practices. The differing views between the Inner Baduy and Outer Baduy regarding formal education indicate that policy design requires social sensitivity and a diverse mapping of needs, as each group has a different relationship with the state education system (Yamanda, 2024). The availability of tutors, modules, and funding becomes ineffective if the implementation process does not go through the legitimacy of traditional leadership, which holds the authority to determine the limits of external intervention (Khomsan & Wigna, 2009). As a result, policy outcomes tend to be administrative and symbolic, not fully reflecting contextual transformations and being accepted as part of the community's knowledge system.

The second issue relates to the unclear contribution of literacy programs to strengthening community food security, despite the government's normative support from cross-sectoral regulations that emphasize the importance of food sustainability. The Baduy indigenous community's food system is built through *huma management*, traditional planting patterns, and the *leuit mechanism* as a collective reserve that has been proven to maintain social stability and long-term food distribution between families (Khomsan & Wigna, 2009). Studies on the risk management of the Baduy food system indicate that this community has adaptive strategies to production uncertainty, so literacy should be directed toward strengthening the capacity for recording, distribution, and post-harvest innovation that remains aligned with tradition (Taryana et al., 2020). However, because literacy programs are not designed in an integrated manner with the local food system, their implementation is sectoral and the results are not measurable in directly improving community food security.

Fluctuating cereal production data and the designation of Kanekes Village as a high-priority vulnerable area indicate that food security continues to face structural risks, necessitating a literacy approach that is not solely administratively oriented but also strengthens the community's adaptive capacity. Information literacy and an understanding of modern knowledge flows can be instrumental in addressing external challenges, including climate change and market dynamics, as long as the integration process is carried out selectively and respects customary values (Triko et al., 2022). If educational resources are directed toward supporting local economic practices and community-based food management, policy outcomes have the potential to create synergies between increasing individual capacity and the sustainability of collective systems. Without a conceptual design that explicitly links literacy and food, the program's contribution to strengthening local food systems remains implicit and undocumented systematically (Taryana et al., 2020).

The third issue concerns the potential tension between policy interventions and the customary structures that underpin the Inner Baduy's traditional social and food systems. The pikukuh-based social system and customary leadership create a relatively homogeneous and collective way of life, so any form of external intervention requires careful social negotiation to avoid differentiation of values and work orientations (Khomsan & Wigna, 2009). Research on perceptions of literacy among the Baduy indicates that educational modernization is acceptable to a limited extent as long as it does not shift the foundations of cultural identity

and the mechanisms for the transmission of traditional knowledge (Yamanda, 2024). Therefore, limiting the government's role in program implementation is not merely a form of policy passivity, but rather a strategy to maintain social harmony while avoiding policy products that have the potential to disrupt the established system (Riyadi et al., 2025).

However, this restrictive approach also creates a dilemma because the absence of an explicitly formulated adaptive literacy model results in implementation decisions being more administrative-discretionary than based on a systematic regulatory framework. Baduy local wisdom can actually serve as the foundation for formulating contextual literacy that combines strengthening individual capacity with preserving collective systems, so that literacy functions as an instrument of empowerment, not a tool for change that forces homogenization (Sumarlina et al., 2023). If the policy formulation process is carried out through structural dialogue with traditional authorities and utilizes local resources as a learning basis, the resulting policy has the potential to produce an inclusive and sustainable education model. Thus, the main problem is not the conceptual construction, which needs to be reformed so that literacy is positioned as strengthening the capacity of indigenous communities in an adaptive and contextual manner, rather than simply achieving administrative indicators (Winursiti et al., 2025).

CONCLUSION

Based on the research results and discussion, several conclusions can be formulated as follows:

1. In the context and product dimensions, the administrative definition of illiteracy is not fully aligned with the social-ecological literacy practices of the Baduy indigenous community which are based on customary knowledge and collective life systems, so that formal policy outputs do not fully represent the contextual literacy capacity that exists within the community.
2. In the input and process dimensions, the illiteracy eradication program has not been designed in an integrated manner with strengthening food security, because resource support, implementation design, and cross-sectoral coordination are still carried out sectorally so that the impact on adaptive capacity and local food stability is not yet substantive.
3. In the process and product dimensions, the approach of limiting government intervention shows sensitivity to customary structures, but has not been followed by the formulation of a systematic contextual literacy model so that the policy results are not optimal in strengthening communities in an adaptive and sustainable manner.

Based on these conclusions, a more appropriate policy direction is not simply to adjust literacy programs, but rather to formulate integrative policies that explicitly link the education system, food security, and the protection of customary land within a single regional regulatory framework. Literacy needs to be redefined as an instrument for strengthening the capacity of *huma management*, *leuit* systems, customary-based resource governance, and the reproduction of customary knowledge, so that education does not stand apart from the production system and social structure of the community. The policy must be designed across sectors through collaboration between the Education Office, the Food Security Office, and the Regional Planning and Development Agency, involving customary leadership as actors in formulating, not just policy recipients. Thus, the integration of education, food, and customary land will produce a development model that is contextual, adaptive, and aligned with the socio-ecological sustainability of the Baduy indigenous community.

REFERENCES

- Addae, D. (2021). Adults who learn: Evaluating the social impact of an adult literacy project in rural South Africa. *Social Sciences & Humanities Open*, 3(1), 100115. <https://doi.org/10.1016/j.ssaho.2021.100115>
- Afonso, A., Morgado, L., Carvalho, I. C., & Spilker, M. J. (2025). Facing Challenges in Higher Education: Enhancing Accessibility and Inclusion Through Flexible Learning Design. *Education Sciences*, 15(8), 1013. <https://doi.org/10.3390/educsci15081013>
- Agustina, A. A., & Khairunnisa, A. (2024). PEMBERDAYAAN MASYARAKAT MELALUI PROGRAM PEMBERANTASAN BUTA AKSARA. *SENTRI: Jurnal Riset Ilmiah*, 3(7), 3319–3326. <https://doi.org/10.55681/sentri.v3i7.3118>
- Anderson, J. E. (2011). *Public Policymaking: An Introduction* (Seventh Edition). Cengage Learning. https://archive.org/details/publicpolicymaki0000ande_i8c2/page/n3/mode/1up
- Assefa, Y. (2021). Integration of Indigenous Knowledge into Adult Learning Material Development and the Facilitation Methodology. *Education Research International*, 2021, 1–10. <https://doi.org/10.1155/2021/2231759>
- Barton, D., & Hamilton, M. (2012). *Local Literacies: Reading and Writing in One Community* (1st Edition). Routledge. <https://doi.org/10.4324/9780203125106>
- Batan, D. M., Baguio, G., & Galigao, R. (2025). The influence of cultural norms on adult education and lifelong learning: A comprehensive study. *Pantao (International Journal of the Humanities and Social Sciences)*, 4(3), 3306–3315. <https://doi.org/10.69651/PIJHSS0403286>
- Belando-Montoro, M. R., Naranjo-Crespo, M., & Carrasco-Temiño, M. A. (2022). Barriers and facilitators to the retention and participation of socially, economically, and culturally disadvantaged university students. An international systematic review. *International Journal of Educational Research*, 113, 101968. <https://doi.org/10.1016/j.ijer.2022.101968>
- Bénabou, R., & Tirole, J. (2016). Bonus Culture: Competitive Pay, Screening, and Multitasking. *Journal of Political Economy*, 124(2), 305–370. <https://doi.org/10.1086/684853>
- Béné, C. (2020). Resilience of local food systems and links to food security – A review of some important concepts in the context of COVID-19 and other shocks. *Food Security*, 12(4), 805–822. <https://doi.org/10.1007/s12571-020-01076-1>
- Berry, E. M., Dernini, S., Burlingame, B., Meybeck, A., & Conforti, P. (2015). Food security and sustainability: can one exist without the other? *Public Health Nutrition*, 18(13), 2293–2302. <https://doi.org/10.1017/S136898001500021X>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Burchi, F., & De Muro, P. (2016). From food availability to nutritional capabilities: Advancing food security analysis. *Food Policy*, 60, 10–19. <https://doi.org/10.1016/j.foodpol.2015.03.008>
- Clapp, J., Moseley, W. G., Burlingame, B., & Termine, P. (2022). Viewpoint: The case for a six-dimensional food security framework. *Food Policy*, 106, 102164. <https://doi.org/10.1016/j.foodpol.2021.102164>
- Dinas Ketahanan Pangan Kabupaten Lebak. (2024). *Peta Ketahanan Pangan dan Kerentanan Pangan Kabupaten Lebak Tahun 2024*. https://disketapang.lebakkab.go.id/public/unduh/bankdata/1737434404_247980889011181af7df.pdf
- Dreze, J., & Sen, A. (2002). *Hunger and Public Action*. Clarendon Press. <https://books.google.co.id/books?hl=id&lr=&id=AiaQDwAAQBAJ&oi=fnd&pg=PP1>

- [&ots=s097dv4Pat&sig=N0xf092WrmE8cFDE25q2DXBMRqU&redir_esc=y#v=onepage&q&f=false](#)
- Dye, T. R. (2013). *Understanding Public Policy* (Fourteenth Edition). Pearson. https://books.google.co.id/books/about/Understanding_Public_Policy.html?id=oi-mygAACAAJ&redir_esc=y
- Ericksen, P. J. (2008). Conceptualizing food systems for global environmental change research. *Global Environmental Change*, 18(1), 234–245. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>
- Éthier, B., Magaña Canul, R. I., Torres Cuevas, H., & Pellerin, G. (2025). Indigenous Knowledge and Education in the Americas: Experiences and Perspectives. *IdeAs*, 25. <https://doi.org/10.4000/13g19>
- FAO. (1983). Progress in implementation of the plan of action to strengthen world food security - re-appraisal of concepts and approaches. In *Report of the Conference of FAO: Twenty-second Session in Rome, 5-23 November 1983* (V). Food and Agriculture Organization. <https://www.fao.org/4/x5563E/X5563e06.htm#progress%20in%20implementation%20of%20the%20plan%20of%20action%20to%20strengthen%20world%20food%20security>
- Fujihara, S. (2023). Explaining class differences in educational attainment in Japan: An empirical test of the Breen and Goldthorpe model. *Research in Social Stratification and Mobility*, 83, 100770. <https://doi.org/10.1016/j.rssm.2023.100770>
- Fukuda-Parr, S. (2003). THE HUMAN DEVELOPMENT PARADIGM: OPERATIONALIZING SEN'S IDEAS ON CAPABILITIES. *Feminist Economics*, 9(2–3), 301–317. <https://doi.org/10.1080/1354570022000077980>
- Grotlüschen, A., Belzer, A., & Yasukawa, K. (2025). Adult literacy education and the sustainable development goals in four case countries: can't get there from here. *International Journal of Lifelong Education*, 44(5), 479–496. <https://doi.org/10.1080/02601370.2024.2439961>
- Hanemann, U. (2023). *UNESCO International Literacy Prizes 2023, Promoting literacy for a world in transition: building the foundation for sustainable and peaceful societies: analytical study*. <https://unesdoc.unesco.org/ark:/48223/pf0000388129>
- Hill, M. (2003). DEVELOPMENT AS EMPOWERMENT. *Feminist Economics*, 9(2–3), 117–135. <https://doi.org/10.1080/1354570022000077962>
- HLPE. (2014). *Food losses and waste in the context of sustainable food systems*. https://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-8_EN.pdf
- HLPE. (2020). *Food security and nutrition: building a global narrative towards 2030*. <https://openknowledge.fao.org/server/api/core/bitstreams/8357b6eb-8010-4254-814a-1493faaf4a93/content>
- IBRAHIM, S., & ALKIRE, S. (2007). Agency and Empowerment: A Proposal for Internationally Comparable Indicators. *Oxford Development Studies*, 35(4), 379–403. <https://doi.org/10.1080/13600810701701897>
- Ingram, J. (2011). A food systems approach to researching food security and its interactions with global environmental change. *Food Security*, 3(4), 417–431. <https://doi.org/10.1007/s12571-011-0149-9>
- Jacob, S., Ouvrard, L., & Bélanger, J.-F. (2011). Participatory evaluation and process use within a social aid organization for at-risk families and youth. *Evaluation and Program Planning*, 34(2), 113–123. <https://doi.org/10.1016/j.evalprogplan.2010.08.002>
- Juhnke, P., & Haley, T. L. (2024). Indigenizing Prior Learning Assessment and Recognition: A Review of the Literature. *The Canadian Journal for the Scholarship of Teaching and Learning*, 15(3). <https://doi.org/10.5206/cjsotlrcacea.2024.3.16682>

- Kallio, H., Pietilä, A., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- Khomsan, A., & Wigna, W. (2009). SOSIO-BUDAYA PANGAN SUKU BADUY. *Jurnal Gizi Dan Pangan*, 4(2). <https://doi.org/10.25182/jgp.2009.4.2.63-71>
- Koley, J. (2025). A study on women's empowerment and sustainable development in India. *International Journal of Research in Human Resource Management*, 7(2), 113–121. <https://doi.org/10.33545/26633213.2025.v7.i2b.332>
- Lewis, S. (2015). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. *Health Promotion Practice*, 16(4), 473–475. <https://doi.org/10.1177/1524839915580941>
- Machimana, E. V., Mathebula, Nkarhi. E., Ntshangase, M. X., & Nkadimene, K. L. T.-. (2025). Causes of Adult Illiteracy at an Adult Community Learning Centre in the Nkowankowa Circuit, Mopani West District, Limpopo Province, South Africa. *Social Science and Human Research Bulletin*, 02(12). <https://doi.org/10.55677/SSHRB/2025-3050-1203>
- Maxwell, S. (1990). Food Security in Developing Countries: Issues and Options for the 1990s. *IDS Bulletin*, 21(3), 2–13. <https://doi.org/10.1111/j.1759-5436.1990.mp21003002.x>
- Maxwell, S. (1996). Food security: a post-modern perspective. *Food Policy*, 21(2), 155–170. [https://doi.org/10.1016/0306-9192\(95\)00074-7](https://doi.org/10.1016/0306-9192(95)00074-7)
- Neufeld, L. M., Huang, J., Badiane, O., Caron, P., & Forse, L. S. (2021, March). Advance equitable livelihoods: a paper on action track 4. *A Paper from the Scientific Group of the UN Food Systems Summit*, 1–28. https://sc-fss2021.org/wp-content/uploads/2021/04/Action_Track_4_paper_Advance_Equitable_Livelihoods.pdf
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis. *International Journal of Qualitative Methods*, 16(1). <https://doi.org/10.1177/1609406917733847>
- Nurul Ainy, K., Putri, M. R., & Triasmanto, M. (2019). *PENDUDUK BUTA AKSARA TAHUN 2018* (B. Purwaka, Ed.; First Edition). Pusat Data dan Statistik Pendidikan dan Kebudayaan. <https://data.kemendikdasmen.go.id/publikasi/p/vokasi-buku-statistik/penduduk-buta-aksara-tahun-2018>
- OECD. (2024). *PISA 2022 Results (Volume IV): How Financially Smart Are Students?* <https://doi.org/10.1787/5a849c2a-en>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Peraturan Bupati Nomor 59 Tahun 2023 tentang Perubahan Rencana Kerja Pemerintahan Daerah Kabupaten Lebak Tahun Anggaran 2023 (2023). <https://lebakkab.go.id/download/1-informasi-ringkasan-dokumen-rkpd/>
- Peraturan Daerah Kabupaten Lebak Nomor 3 Tahun 2016 tentang Perlindungan Lahan Pertanian Pangan Berkelanjutan, Pub. L. Perda No. 3/2016, Pemerintah Daerah Kabupaten Lebak (2016). <https://peraturan.bpk.go.id/Details/46458>
- Peraturan Daerah Kabupaten Lebak Nomor 3 Tahun 2019 tentang Perubahan Atas Peraturan Daerah Nomor 2 Tahun 2010 tentang Penyelenggaraan Pendidikan di Kabupaten Lebak, Pub. L. Perda No. 3/2019, Jaringan Dokumentasi dan Informasi Hukum (2019). <https://peraturan.bpk.go.id/Details/119898/perda-kab-lebak-no-3-tahun-2019>
- Peraturan Daerah Kabupaten Lebak Nomor 32 Tahun 2001 tentang Perlindungan Atas Hak Ulayat Masyarakat Baduy, Pub. L. Perda No. 32/2001, Kabupaten Lebak (2001).

- <https://aman.or.id/wp-content/uploads/2016/02/Perda-Kab.-Lebak-No.-32-Tahun-2001.pdf>
- Pratt, D. D. (1998). *Five Perspectives On Teaching in Adult and Higher Education*. Krieger Publishing Company.
<https://archive.org/details/fiveperspectives0000prat/page/n6/mode/1up>
- Pressman, J. L., & Wildavsky, A. (1984). *Implementation* (Third Edition). University of California Press. <https://archive.org/details/implementationho00pres/page/n6/mode/1up>
- Riyadi, D., Sapriya, & Supriatna, E. (2025). Warisan Pengetahuan Leluhur: Sistem Pembelajaran Masyarakat Baduy Luar Tanpa Sekolah Formal Melalui Keluarga dan Tradisi. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(1).
- Schipanski, M. E., MacDonald, G. K., Rosenzweig, S., Chappell, M. J., Bennett, E. M., Kerr, R. B., Blesh, J., Crews, T., Drinkwater, L., Lundgren, J. G., & Schnarr, C. (2016). Realizing Resilient Food Systems. *BioScience*, 66(7), 600–610.
<https://doi.org/10.1093/biosci/biw052>
- Sen, A. (1985). Well-Being, Agency and Freedom: The Dewey Lectures 1984. *The Journal of Philosophy*, 82(4), 169. <https://doi.org/10.2307/2026184>
- Sen, A. (1999). *Development as Freedom*. Oxford University Press.
<https://books.google.co.id/books?id=NQs75PEa618C&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Street, B. V. (1984). *Literacy in Theory and Practice*. Cambridge University Press.
<https://books.google.co.id/books?id=R0UdWQ5thf8C&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Stufflebeam, D. L. (2003). The CIPP Model for Evaluation. In *International Handbook of Educational Evaluation* (pp. 31–62). Springer Netherlands. https://doi.org/10.1007/978-94-010-0309-4_4
- Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation Theory, Model, and Applications* (First Edition). Jossey-Bass.
<https://books.google.co.id/books?id=xx6UgC6UdFMC&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Sumarlina, E. S. N., Permana, R. S. M., Darsa, U. A., Kurnia, G., & Rasyad, A. (2023). Local Expertise the Baduy Indigenous Community as a Literacy Reference in The Millennium Era. *Jurnal Humanitas: Katalisator Perubahan Dan Inovator Pendidikan*, 10(1).
<https://doi.org/10.29408/jhm.v10i1.25131>
- Takona, J. P. (2024). Research design: qualitative, quantitative, and mixed methods approaches / sixth edition. *Quality & Quantity*, 58(1), 1011–1013. <https://doi.org/10.1007/s11135-023-01798-2>
- Tarnoki, C., & Puentes, K. (2019). Something for Everyone: A Review of Qualitative Inquiry and Research Design: Choosing among Five Approaches. *The Qualitative Report*, 24(12). <https://doi.org/10.46743/2160-3715/2019.4294>
- Taryana, A., Khotimah, F. K. H., Achسانی, N. A., & Arifin, B. (2020). Innovative Food System Risk Management of The Baduy Tribe. *Business Review and Case Studies*, 1(1).
<https://doi.org/10.17358/brcs.1.1.1>
- Tongco, Ma. D. C. (2007). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, 5, 147. <https://doi.org/10.17348/era.5.0.147-158>
- Triko, G., Hapsari, D. R., & Matindas, K. (2022). Digital Media information Literacy on Custom Community in The Internet of Things (IoT) era: Case Study of Outer Baduy Custom in Kanekes Village, Leuwidamar, Lebak Regency, Banten Province. *Jurnal Komunikasi Pembangunan*, 20(02). <https://doi.org/10.46937/20202241086>

- Undang-Undang Dasar Negara Republik Indonesia Tahun 1945, Pub. L. UUD 1945, Jaringan Dokumentasi dan Informasi Hukum (1945). https://www.mpr.go.id/uploads/jdih/UUD_1945_DALAM_SATU_NASKAH.pdf
- Undang-Undang Nomor 18 Tahun 2012 tentang Pangan, Pub. L. UU No. 18/2012, Pemerintah Republik Indonesia (2012). <https://peraturan.bpk.go.id/Details/39100>
- Undang-Undang Nomor 41 Tahun 2009 tentang Perlindungan Lahan Pertanian Pangan Berkelanjutan, Pub. L. UU No. 41/2009, Pemerintah Republik Indonesia (2009). <https://peraturan.bpk.go.id/Details/38786/uu-no-41-tahun-2009>
- Undang-Undang Nomor 6 Tahun 2014 tentang Desa, Pub. L. UU No. 6/2014, Jaringan Dokumentasi dan Informasi Hukum (2014). <https://peraturan.bpk.go.id/Details/38582/uu-no-6-tahun-2014>
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional, Pub. L. UU No. 20/2003, Jaringan Dokumentasi dan Informasi Hukum (2003). <https://peraturan.bpk.go.id/Details/43920/uuno-20-tahun-2003>
- UNESCO. (2017). *Education for Sustainable Development Goals: learning objectives*. UNESCO. <https://doi.org/10.54675/CGBA9153>
- United Nations. (1975). *Report of the World Food Conference*. <https://digitallibrary.un.org/record/701143?ln=en&v=pdf>
- Wicaksana, H. H. (2024). *EVALUASI KEBIJAKAN PUBLIK: Sebuah Diskursus Program Pengentasan Buta Aksara Masyarakat Adat Baduy* (F. Hadiansyah & D. Y. Saputra, Eds.). UNTIRTA PRESS. <https://upress>.
- Winursiti, N. M., Sapriya, S., & Supriatna, E. (2025). Eksistensi Tradisi dan Sastra Lisan Sebagai Media Pendidikan Masyarakat Baduy Luar di Era Globalisasi. *Jurnal Adat Dan Budaya Indonesia*, 7(2). <https://doi.org/10.23887/jabi.v7i2.89540>
- World Bank. (2022). *The State of Global Learning Poverty: 2022 Update*. <https://thedocs.worldbank.org/en/doc/e52f55322528903b27f1b7e61238e416-0200022022/original/Learning-poverty-report-2022-06-21-final-V7-0-conferenceEdition.pdf>
- Yamanda, N. (2024). LITERACY EDUCATION IN THE VIEW OF THE INNER AND OUTER BADUY COMMUNITIES. *International Conference on Learning Community*.
- Zhang, G., Zeller, N., Griffith, R., Metcalf, D., Williams, J., Shea, C., & Misulis, K. (2011). Using the Context, Input, Process, and Product Evaluation Model (CIPP) as a Comprehensive Framework to Guide the Planning, Implementation, and Assessment of Service-learning Programs. *Journal of Higher Education Outreach and Engagement*, 15(4), 57–84. <https://files.eric.ed.gov/fulltext/EJ957107.pdf>