

Ecopedagogics of Manggarai Belis Culture: Efforts to Preserve the Symbolic Relationship Between Humans and Nature to Prevent the Commodification of Local Culture

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ABSTRACT

Local culture shapes the ecological ethics of society, but globalization and commodification often erode its symbolic and ecological meaning. The Belis tradition in Manggarai Regency, East Nusa Tenggara, which is rich in spiritual and ecological values, is now undergoing changes due to modernization. The purpose of this study is to analyze the role of eco-pedagogy in preserving the symbolic relationship between humans and nature through the Belis tradition, identify ecological values, the impact of commodification, and formulate education strategies based on local wisdom. Using a qualitative approach with a case study method, data was collected through interviews, participatory observation, and documentation studies. Thematic analysis was conducted to examine human-nature relations, ecological values, and cultural commodification, with triangulation of sources and member checking for data validity. The results of this study show that the Belis tradition is not only a social and cultural practice, but also functions as a medium for ecological education that instills awareness of the sacred relationship between humans, livestock, and nature. However, the commodification of Belis culture, which has turned livestock into mere economic symbols, has threatened the ecological and spiritual values of this tradition. This research contributes to the development of a local wisdom-based education model for maintaining the relationship between humans and nature. Further research should explore the role of the younger generation in preserving the ecological values of the Belis tradition and formulate an applicable eco-pedagogical model in the context of Manggarai education.

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1. Introduction

Local culture is an expression of the collective identity of a community that is formed through historical, social, and ecological interactions within a specific living space (Mendez, 2024; Nursanty et al., 2023). The existence of local culture not only reflects aesthetic values and ancestral traditions; but also plays an important role in shaping the ecological ethics and knowledge systems of communities towards nature. The challenges of globalization, which bring with them a wave of homogenization of values, commercialization, and changes in modern lifestyles, are increasingly eroding the existence and meaning of local culture in various regions (Aminin, 2024; Anand, 2024). Amidst this process, minority languages such as Gochang in western Sichuan are threatened with extinction, bringing with them the loss of the traditional knowledge and cultural identity that has been established for centuries. The loss of language brings with it the loss of a worldview that has been shaped over centuries by local communities (Roche & Tsomu, 2018). This phenomenon has led to a shift from understanding culture as a system of meaning to interpreting it culture as an economic commodity. In this context, there is an urgent need to re-examine the role of local culture as a medium for preserving the relationship between humans and nature, while also positioning it as an important part of the educational process that can raise ecological awareness among communities.

The Belis tradition in the Manggarai Regency is one of a the local cultural heritages that is rich in symbolic and ecological meaning (Hairuddin et al., 2024; Imun et al., 2023). This practice involves the

giving of dowry in the form of livestock such as buffaloes or horses, traditional fabrics, and agricultural products from the male party to the female party as a form of respect for women and their families (Daar et al., 2023). More than just a marriage transaction, Belis represents a strong social relationship between two large families. and a symbol of appreciation for women's reproductive power (Andari et al., 2023). This tradition also shows the close connection between humans and nature, as the use of livestock reflects respect for natural resources and ancestors, who are believed to be one with nature.

Widespread social change and economic pressures have caused a shift in the meaning of the Belis practice (Hairuddin et al., 2024). Cultural commodification has become one of the main symptoms; as the symbolic value of Belis has begun to be replaced by materialistic values (Tanggur et al., 2024). The use of money, gold, or other valuable items as substitutes for livestock no longer reflects the ecological and spiritual meaning of this tradition. People tend to see Belis as an economic burden or a mere material obligation, so that the relationship that was once sacred and rooted in respect for nature has begun to be displaced by pragmatic interests. This process is in line with the theory of commodification, which states that the social and symbolic value of a tradition can be degraded to mere commodities in the economic market (Prodnik, 2012). This shift in values in the Belis tradition illustrates how local culture, which was once closely related to ecological and spiritual relationships, has become trapped in capitalist economic logic. Furthermore, the eco-pedagogical perspective warns that the commodification of culture can damage the relationship between humans and nature, which ultimately threatens the sustainability of local traditions (De Angelis, 2023).

The scarcity of livestock, changes in the values of the younger generation, and weak ecological awareness are the main causes of Belis the commodification of Belis (Molnár et al., 2015). This shift not only threatens the preservation of local culture, but also creates pressure on environmental sustainability. Livestock populations are declining, while the rate of symbolic consumption of nature in the context of Belis continues to increase without any conservation efforts (Leclère et al., 2020). Traditions that originally represented harmony between humans and nature now have the potential to become instruments of exploitation of local ecosystems if they are not accompanied by appropriate conservation approaches. If Belis traditions are maintained without planned conservation efforts based on ecological awareness, the once-deep symbolic relationship between humans and nature could be eroded, even risking irreversible ecological damage. Therefore, it is important to develop a holistic approach that not only involves nature conservation but also strengthens cultural awareness, so that Belis remains a symbol of harmony and nature conservation, not merely an economic ritual that exploits local resources.

Over the next decade or two, the loss of spiritual and ecological meaning in Belis, practices is highly likely if there is no value-based educational intervention capable of countering the pace of cultural commodification. An educational, contextual, and locally-based approach is urgently needed to preserve the sustainability of Belis culture. Ecopedagogy has emerged as an approach that bridges education and culturally based ecological awareness (Tierney, 2018). This approach encourages communities to critically and reflectively re-examine the symbolic relationship between humans and nature. Through ecopedagogy, Belis traditions are not only preserved formally, but also understood as an integral part of ecological ethics and cultural identity that must be preserved from generation to generation.

Previous studies have generally focused on anthropological, historical, or social values in the Belis tradition, without directly linking them to an environment-based educational approach. Research conducted by Imun et al., (2023) examined cultural values in Belis practices as symbols of respect for women and families, but did not discuss their ecological dimensions. Sila et al; (2024) explored the changing meaning of Belis in modern society; but focused on economic and cultural identity aspects without touching on its ecological education potential. Meanwhile, Purwaningsih and & Ridha; (2024) highlight the importance of preserving local culture through character education in schools; but do not specifically relate it to the concept of eco-pedagogy or the relationship between humans and nature.

Research by Hairuddin et al.; (2024) discusses the damage to the symbolic value of Belis due to tourism and commodification; but does not offer an educational approach as a solution. No research has explored how ecopedagogy can be used as a strategy to preserve the symbolic and ecological meaning of Belis; traditions. The lack of integration between critical education perspectives and local cultural studies indicates a conceptual gap that must needs to be bridged through this research. It is important to develop a deep understanding of concrete ways to apply ecopedagogy in local cultural contexts, such as Belis.

Several countries have successfully implemented eco-pedagogy to preserve the local culture and human relationships with nature. New Zealand has implemented Māori-based education that integrates ecological and spiritual values, with the concept of kaitiakitanga as the basis for environmental education (McAllister et al., 2023). Brazil has also developed an ambiental educational movement that combines local knowledge

with nature conservation, particularly in the context of the Amazon rainforest, to maintain a balance between culture and the environment (Franzolin et al., 2020). These practices demonstrate show that a similar approach can be applied to in Belizean traditions to protect their symbolic and ecological significance.

The novelty of this study research lies in its attempt to combine two approaches that have traditionally been positioned separately: local culture and ecological education. The Belis tradition is positioned not only as a cultural heritage, but also as an instrument of community-based ecological education. This approach allows for the formation of a new understanding of how local culture can serve as a relevant, contextual, and experience-based ecological learning space for the community. This study research seeks to fill this gap in the literature by offering a model of an eco-pedagogical approach based on the Belis tradition that can be used as a reference in similar studies.

This study analysis the role of ecopedagogy in preserving the symbolic relationship between humans and nature through the Belis tradition in Manggarai, which is now threatened by commodification and social change. This study identifies the symbolic and ecological values in the Belis tradition and the forms of commodification that occur, and formulates ecopedagogical-based educational strategies to for preserving this tradition. The three main questions asked we are: 1) What are the symbolic and ecological values in the Belis tradition? (2) How does commodification affect the relationship between humans and nature in Belis? (3) How can ecopedagogical strategies be applied to preserve these values? This study aimed to integrate environment-based education into the preservation of local culture and increase the ecological awareness of the Manggarai community.

2. Method

2.1. Research design and data sources

This study uses a qualitative case study approach (Bennett & Elman, 2006; Gammelgaard, 2017) to understand the meaning, symbols, and human-nature relationships in the Belis tradition in Manggarai. A case study was chosen because it Belis is a local phenomenon that has been influenced by modernization and cultural commodification. This study began with preliminary data collection through a literature review and participatory observation of the Belis procession in the Manggarai Regency. Subsequently, in-depth interviews were conducted with various informants directly involved in the tradition to explore the symbolic meaning and ecological value changes that have occurred. The data were was also supplemented with documentary studies in the form of cultural archives and historical records related to Belis. This approach was carried out sequentially to obtain a comprehensive picture of the preservation and changes in the Belis tradition. The main data sources were came individuals selected based on their in-depth knowledge of the Belis tradition (Castleberry et al., 2018; Creswell & Poth, 2016). Data collection techniques included in-depth interviews, participatory observations, and documentary studies to obtain comprehensive and contextual data.

2.1 Selection of informants

This study used purposive sampling to select 20 informants who were considered capable of providing in-depth insights into the Belis tradition and its relationship with nature. Informants were selected from various groups to represent a diversity of perspectives, namely: 1) Traditional leaders who have symbolic knowledge of about the Belis tradition (Bennett & Elman, 2006). 2) Catholic and Islamic religious leaders who provide perspectives on spirituality and ecology (Hammarberg et al., 2016). 3) Belis tradition practitioners who are directly involved in the procession, consisting of men and women who have and will carry out the Belis tradition, men and women parents who have carried out and will carry out the Belis tradition. 3) Local economic actors are involved in Belis transactions, providing views on cultural commodification. 4) Geography and sociology teachers at St. Fransiskus Xaverius Ruteng High School who provided a theoretical perspective on environment-based education. 5) Students at St. Fransiskus Xaverius Ruteng High School, who represent the younger generation's views on ecological and symbolic value changes (Akhter S., 2022; Gammelgaard, 2017). These 20 informants were selected to ensure diversity of perspectives and to support the analysis of the preservation of ecological and symbolic values in the Belis tradition. To maintain confidentiality and facilitate analysis, the informants' names were replaced with codes (P1) to (P20), as which are detailed in Table 1.

Table 1. Informant identity and coding

Informant Code	Informant Category	Gender	Additional Information
P1	Traditional Leaders	Male	Traditional leader
P2	Traditional Spokesperson	Male	Local traditional elders

Informant Code	Informant Category	Gender	Additional Information
P3	Catholic religious leader	Male	Pastor of St. Mary Assumptha Parish
P4	Islamic religious leader	Male	Head of the Indonesian Ulema Council (MUI) of Manggarai Regency
P5	The man who will pay Belis	Male	Not yet married, will perform Belis
P6	The woman who will be bought	Female	Not yet married, will perform Belis
P7	Elderly Man (who is married)	Male	Already married off children and lived the Belis culture
P8	Elderly Women (who have been married)	Female	Already married off children and lived the Belis culture
P9	The man who has paid Belis	Male	Has undergone the Belis tradition
P10	Women who have Belis	Female	Has undergone the Belis tradition
P11	Father (who will pay the dowry)	Male	Will marry off a son
P12	Parents of the Woman (to be Married))	Female	Going to marry off a daughter
P13	Local Economic Actors	Male	Seller of buffalo and horses for the Belis tradition
P14	Local Economic Actors	Female	Belis ceremonial equipment and materials merchant
P15	Geography Teacher	Male	St. Francis Xavier High School Ruteng
P16	Sociology Teacher	Female	St. Francis Xavier High School Ruteng
P17	High school students	Male	Grade 11 students, active in OSIS activities.
P18	High school students	Female	Grade 12 students participate in cultural communities at school
P19	High school students	Male	Grade 11 students, with a family background of Belis perpetrators
P20	High school students	Female	Grade 12 students interested in environmental and cultural issues

2.2 Data Collection

Data were collected using through three main techniques: namely 1) Semi-structured interviews were conducted to explore the symbolic meaning, ecological views, and personal experiences related to the Belis tradition in depth but still flexibly (Mahat-Shamir et al., 2021). The interview process took place at the informants' homes or activity locations, lasted 45-90 minutes per session, and used Indonesian and/or Manggarai languages according to the context. Using probing techniques, the researchers deepened the informants' answers while maintaining ethics, building trust, and providing space for reflection. Informants were selected through purposive sampling and snowball sampling, starting with traditional leaders who then recommended other relevant individuals with in-depth knowledge of the symbolic and ecological values in Belis practices (Hammarberg et al., 2016). 2) Participatory observation, which involved researchers in the Belis traditional procession of Belis to directly observe the ecological relationship between humans and nature (Hammarberg et al., 2016). 3) Documentation studies in the form of collecting cultural archives, photographs, and historical records related to Belis to enrich field data (Etikan et al., 2016). These three techniques we are used continuously used to support a comprehensive analysis.

2.3 Thematic analysis and data validation

The data were analyzed using a thematic analysis approach, grouping the results of interviews, observations, and documentation into main themes, such as the symbolic relationship between humans and nature and ecological values in Belis (Castleberry et al., 2018). Interview data were analyzed by transcribing recordings, coding, and identifying narrative patterns based on the research questions. Observation data were analyzed by reviewing field notes, focusing on behavior, symbols, and human-nature interactions in the Belis procession. Documentations such as cultural archives, photographs, and historical records were examined to confirm or supplement information from interviews and observations. The three data sources were integrated through source triangulation to strengthen the validity of the findings, and the preliminary results were reconfirmed through member checking with several informants to ensure interpretation the interpretation accuracy of the interpretation (Etikan et al., 2016; Hammarberg et al., 2016). To ensure data validity, triangulation was conducted by comparing information from various sources (Etikan et al., 2016), as well as member checking by confirming the analysis results with several informants (Hammarberg et al., 2016). This process ensures an accurate and in-depth interpretations based on the themes found.

2. Results and discussion

3.1 The role of ecopedagogics in preserving the symbolic relationship between humans and nature in the belis tradition

3.1.1 Ecological meaning of belis tradition

The belis tradition in East Nusa Tenggara, particularly among the Manggarai people and other tribes in Flores, contains symbolic values that are rich in ecological meaning (Hairuddin et al., 2024; Niman, 2022). In this context, belis is not only understood as a means of transaction or a form of dowry in the marriage system, but also as a representation of the spiritual and ecological relationship between humans, animals, and the natural environment. Symbolically, livestock such as buffaloes and horses used in belis represent more than just material wealth (Imun et al., 2023). These animals are treated as living beings that have sacred values, not as inanimate objects that can be traded or exchanged for money. This view reflects the cosmological philosophy of indigenous peoples, who see humans not as the center of domination over nature, but as part of an interconnected web of life. Within the framework of eco-pedagogy, this understanding becomes an important gateway to instilling ecological awareness that is rooted in local traditions (Prasetyo, 2023).

To clarify the symbolic meaning in the ecologically rich practice of the belis, the following is a visual documentation that captures one of the main elements in the belis procession, namely the buffalo. This image is not merely a visual representation, but a reflection of the spiritual and ecological relationship between humans, animals, and nature, as understood in the traditions of indigenous communities in East Nusa Tenggara.



Figure I. Buffalo and horses as dowry in Belis culture

Figure 1, shows ing a decorated buffalo and a horse prepared for the Belis procession, providing es a concrete illustration of the ecological and symbolic meanings contained in this tradition. In the image, the buffalo and horse serve not only as dowry or symbols of status in marriage but also as a sign of respect for the bride's family and ancestral spirits. The animals are presented through rituals and prayers, which show that they are viewed as partners in the sustainability of the ecosystem and not merely as material objects.

The symbolic meaning of in the Belis procession is in line with the principles of eco-pedagogy, which teaches ecological awareness values to the community. Livestock in this tradition serves as a reminder of the harmonious relationship between humans and nature, in which her humans are valued as part of a larger web of life. Thus, understanding this spiritual and ecological relationship is an important for point in instilling ecological awareness in indigenous communities, especially through education based on local traditions (Efendi et al., 2025; Prasetyo, 2023).

Adding to the perspective of the local community, a traditional elder explained as follows that:

"The animals we offer in the Belis procession are not just for marriage, but as a reminder that we are part of nature. The buffalo is not only a symbol of wealth, but lives with us we care for and protect it. The prayers we offer in this procession are to honor the spirits of our ancestors and nature, because they are the ones who give us life." (Interview with P1, 2025)

This interview excerpt confirms that for the Manggarai people, the Belis tradition is not only a social aspect, but also a form of recognition of the interdependent relationship between humans, nature, and other

living things. This ritual has a deep ecological dimension, which enables the younger generation to understand the importance of caring for and maintaining ecosystem the sustainability of the ecosystem

In addition, in the *ba pangkang* tradition, animals, especially horses or buffaloes, are given not merely as a form of payment, but also as a sign of love and respect. The term “*ba pangkang*” itself implies a connection between two families that are united in social and spiritual bonds. The animals given are often from the giver's own livestock, not purchased at the market, which shows the emotional and ecological closeness between the giver and the animal.

The ecological significance of is increasingly apparent in the implementation of the *wagal* or *nempung* ceremony, which is a ritual for fertility and prosperity performed before or after the *belis* ceremony (Antonius & Wahyu, 2020; Gunawan, 2022). In this ceremony, buffaloes or pigs are sacrificed as offerings to the ancestors and guardian spirits of the land. However, animal sacrifice is not merely a consumptive act; rather, it is part of a ritual that expresses gratitude and a plea for nature to continue providing abundant life.

To deepen our understanding of the ecological dimension in the *belis* tradition, it is also important to look at supporting ritual practices such as the *wagal* or *nempung* ceremonies (Gunawan, 2022). These rituals reflect the spiritual relationship between indigenous peoples and nature, in which animal sacrifice symbolizes gratitude and prayers for continued life. As a further illustration, an informant involved in the *nempung* ritual said.

"Every time we sacrifice an animal in this ceremony, we are not only thinking about ourselves but also giving thanks to nature and our ancestors. We also taught teach our children to take care of nature, as our ancestors took care of us. This is our way of maintaining a good relationship with nature". (Interview with P7, 2025)

This excerpt provides an insight into the profound meaning of animal sacrifice rituals in the *Belis* tradition. For indigenous peoples, animal sacrifice is not only related to prayers for fertility and prosperity but also as a form of respect for nature and ancestors. This reinforces the ecological dimension of the *Belis* tradition which that has survived for generations. The following image visually documents this sacred procession, which is rich in ecological meaning and collective value in natural resource management.



Figure 2. Nempung Ceremony: Fertility rituals with sacrificial animals

Figure 2, shows the procession of buffalo slaughter in the *nempung* ceremony performed by traditional elders. Prayers are offered in the traditional language, hoping that the balance between nature and humans will be maintained (Bedir, 2021). The meat from the sacrificial animals is then distributed fairly to the entire community, reflecting the values of mutual cooperation and sustainability in the use of natural resources. From these practices, it can be seen that the *belis* tradition has a strong eco-pedagogical dimension, namely as a means of ecological education based on local wisdom. Through live stock the symbolism of live stock, the community is taught to respect life, maintain the balance of the ecosystem, and build harmonious relationships between humans, nature, and ancestors (Prasetyo, 2023). These values are not instilled not through the formal education system, but through cultural practices that are passed down orally and symbolically from generation to generation.

An informant directly involved in the *Nempung* ceremony explained as follows that:

“Every time we perform this ritual, I feel closer to the land and nature. This it reminds us that our lives are in balance with nature and our ancestors. This ritual teaches us to always maintain that balance, especially in terms of caring for nature and the resources we obtain from it”. (Interview with P9, 2025).

This quote describes how the nempung ritual, which involves animal sacrifice, serves as a means for communities to remember and celebrate their relationships with nature. This ritual emphasizes teaches the importance of sustainability and balance as well as respecting living creatures as part of a larger ecosystem.

The belis tradition in East Nusa Tenggara, particularly among the Manggarai people and various ethnic groups in Flores, reflects a complex and sacred relationship between humans, animals, and the natural environment (Niman, 2022; Rodliyah et al., 2017). In this cultural system, belis not only functions as a medium of exchange or dowry in marriage, but more than that, it serves as a symbol of spiritual and ecological relationships that have been passed down from generation to generation. This tradition contains local wisdom values that are in line with the principles of eco-pedagogy, which is an educational approach that instills ecological awareness through culture-based experiences and practices (Sitorus et al., 2024).

The ecological meaning in the belis tradition is clearly seen in the way the community treats livestock, especially buffaloes and horses, which are used in this procession (Zahrawati, 2023). These animals are not viewed as material objects or economic commodities but as living beings that have sacred and spiritual value. This respectful attitude towards animals reflects the cosmological view of indigenous communities, which do not place humans as superior entities above nature, but rather as part of an interconnected and interdependent system of life (Narayanan, 2016). This perspective is very much in line with contemporary eco-pedagogical ideas that emphasize the importance of teaching ethical values and responsibility for the environment through cultural channels (Pandis, 2025).

This is visualized in Figure I, which shows a buffalo that has been specially decorated and offered in a belis procession. The buffalo symbolizes respect for the bride's family as well as respect for the ancestors. The ritual of giving a buffalo is accompanied by traditional prayers that signify the recognition of the connection between humans and nature. In practices such as this, belis not only indicates social status or wealth, but also becomes a spiritual medium that strengthens the relationship between humans and other elements of life (Rodliyah et al., 2017).

The ba pangkang tradition further reinforces this symbolic value even more deeply. In ba pangkang, the animals used as belis are not obtained from markets or trade, but are usually raised by the male family members themselves. The animal is given as a token of love and respect, not as a means of payment (Hairuddin et al., 2024; Imun et al., 2023). This emphasizes the emotional and ecological dimensions of the relationship between humans and animals as well as between the two families that are about to be united. The gift of animals in this context is a symbol of a spiritual connection that reflects a high level of ecological awareness.

The ecological meaning is further emphasized in the wagal or nempung ritual, which is a ceremony to pray for the fertility and prosperity that accompanies the belis. Figure 2 shows the process of slaughtering buffaloes by traditional elders in the nempung ceremony, accompanied by the recitation of prayers in the traditional language. This procession is carried out as a form of gratitude to nature and ancestors, with the hope that life will continue to be blessed by a fertile nature. It is important to note that the sacrifice of animals here is not consumptive or exploitative in nature but rather part of a sacred rite that embodies the principle of sustainability. After the ritual, the meat is distributed fairly to the entire community, reflecting the values of mutual cooperation and the ethics of equitable distribution of natural resources.

All of These practices illustrate how the belis tradition functions as a living eco-pedagogical vehicle within the community. Through the symbolism of livestock and the accompanying ritual processions, the community collectively learns and internalizes ecological values, such as respect for living creatures, the importance of natural balance, and the need to maintain ecosystem sustainability (Prasetyo, 2023). This knowledge is transmitted orally and symbolically from generation to generation, making culture an irreplaceable ecological learning space for formal educational systems. Local ecological knowledge systems, when preserved and passed on, can shape a collective awareness of a more sustainable environment (Lam et al., 2020).

Thus, the belis tradition is not only part of the social ritual of marriage, but also a profound expression of the relationship between humans and nature. Through an eco-pedagogical approach, this practice can be an important instrument in cultural-based environmental education; as well as a pillar of spiritual and ecological values in indigenous communities. In a modern context marked by commodification and environmental

crises, reinterpreting beliefs through an ecopedagogical lens is highly relevant and strategic for strengthening cultural identity while building authentic ecological awareness (Shutaleva, 2023).

3.1.2 Ecopedagogic function in revitalizing the meaning of tradition

The Belis tradition, which previously contained symbolic values about the harmonious relationship between humans and nature, now faces a major challenge owing due to the increasingly intensive process of commodification. This shift in meaning is clearly seen when belis, which was originally manifested in the form of livestock such as buffalo or horses, symbols of life and respect for ancestors and nature, is slowly being replaced by cash, which is considered more practical and efficient. This shift not only changes the form of the belis, but also reduces the spiritual, ecological, and cultural values contained within it. Commodification in the context of belis reflects a transformation from ecological meaning to economic logic (Hairuddin et al., 2024). As expressed by one informant who said:

“I still believe that buffalo are important, but I know that now many people prefer money. They don’t want to bother with maintenance. But for me, buffalo are more than just objects; they are a symbol of respect for ancestors and nature.”(Interview with P7, 2025)

This quote illustrates the cultural dilemmas faced by indigenous communities. Despite the difficulties in raising livestock, traditional leaders feel that they are losing the spiritual and symbolic meaning contained in the gift of livestock, as part of the Belis tradition. In this context, cash is considered more practical, but for some older people, buffaloes and other livestock still carry a deeper meaning as symbols of their connection to their ancestors and nature.

Modernization and changing lifestyles have accelerated this process. Urbanization, increasing household economic demands, and social mobility have caused communities, especially the younger generation, to move away from the livestock rearing practices that were once an integral part of their culture (Hornby & Hull, 2023). A consumptive lifestyle has also contributed to changing perceptions, where the belis procession, which was once based on the values of togetherness and spirituality, has now become an arena for displaying social status and economic prestige (Brown & Vergragt, 2016). In some cases, the value of belis can reach hundreds of millions of rupiah depending on the social status of the woman's family, as indicated by sources in the field data.

The practice of handing over belis in the form of cash has now become a common phenomenon in traditional ceremonies. The transaction is carried out openly and handed over in an envelope or another symbolic container. Although it is still accompanied by traditional ceremonies, the symbolic meaning of the gift has been reduced; money no longer represents life as buffalo or horses do, but has become a neutral medium of exchange from a spiritual and ecological perspective. The loss of this element implies means losing an important dimension of the belis as a vehicle for ecological learning and respect for nature.

This phenomenon reflects the cultural dilemmas faced by local communities. On the one hand, modernization and efficiency promise convenience and flexibility in meeting traditional demands. However on the other hand, the noble values in traditions that unite humans with nature and their ancestors are increasingly being displaced by market mechanisms and economic rationality. When culture and nature are commodified, the relationship between humans and both changes from a bond of mutual care to an exploitative relationship (Fairhead et al., 2012).

The shift in the meaning of the belis from an ecological symbol to an economic commodity poses a serious challenge to efforts to preserve local and ecological values. In this context, an ecopedagogical approach is highly relevant for examining and revitalizing the meaning of belis, so that it does not become merely an economic practice. Eco-pedagogy requires critical reflection on the values lost in this commodification process and encourages culture-based education to revive the ecological awareness that has long been embedded in local traditions (Hornby & Hull, 2023).

The shift in the meaning of belis as a result of commodification is not only a matter of change in form or technical delivery, but also touches on the philosophical and ecological aspects of a culture. Traditions that were once rich in symbols of life now face the threat of a reduction in meaning that could disrupt the continuity between humans and nature (Janif et al., 2016). Therefore, an ecopedagogical approach is the key to restoring the function of the belis as a space for ecological and spiritual learning in indigenous communities.

The shift in meaning in the belis tradition shows signs of cultural transformation that are not only symbolic, but also has significant ecological consequences (Rodliyah et al., 2017). The belis tradition, which in the context of indigenous communities in East Nusa Tenggara, has long been interpreted as a form

of respect for ancestors and nature through the symbolism of livestock, is now facing intense pressure from modern economic logic. The process of commodification that has infiltrated this customary realm has shifted the position of buffaloes and horses from sacred creatures to units of value that can be replaced with money. The spiritual and ecological values that once surrounded the giving of belis are increasingly being reduced and replaced by nominal and transactional exchange values (Janif et al., 2016).

These changes can be traced through the social dynamics of occurring in indigenous communities, as reflected in the field data. Communities acknowledge that difficulties in raising livestock we are the main reason for their shift to cash. Shrinking grazing lands due to settlement expansion and land use changes, as well as high animal maintenance costs, have prompted them to seek alternatives that are considered more practical and efficient. This process is gradual but systematic, reflecting how external pressures from modernization seep into the heart of local culture (Fairhead et al., 2012). This phenomenon is not only a change in practice, but also a paradigm shift; from raising livestock as part of an ecological relationship to buying and paying for it as part of market economic logic.

In addition, modernization and changes in lifestyle changes have accelerated this process. High mobility, increased living standards, and the emergence of a consumerist mindset have distanced the younger generation from the traditional values that once lived in the rhythm of custom (Rodliyah et al., 2017). The giving of belis is no longer seen as a symbol of the bond between two families and between humans and nature, but is often considered an economic burden that must be borne in the marriage procession. The rapidly increasing value of the belis has even become an indicator of social status, rather than a reflection of balance with nature.

The practice of exchanging dowry in the form of cash concretely illustrates how the symbolic form of dowry has been reduced (Hairuddin et al., 2024). Envelopes or packages of money have replaced the physical presence of livestock that was once given with full ritual processions and traditional prayers. This transformation erases an important symbolic event: the loss of the spiritual procession that connects humans with nature and their ancestors (Misiaszek, 2016). Money does not carry the impression of life or sacrifice, but only becomes a neutral instrument of exchange instrument. This weakens the educational and ecological dimensions that have been contained in the belis tradition.

This phenomenon reveals the cultural dilemmas that experienced by indigenous communities experience. On the one hand, they are caught up in the demands of efficiency and modernity, while on the other hand, they are aware that by giving up livestock as a medium of exchange, they are also giving up their spiritual connection with the environment and the wisdom of their ancestors. When culture and nature are commodified, the relationship between humans and both changes from one of mutual care to one of exploitation (Aldeia & Alves, 2019). In this context, belis is no longer a space for learning to live with nature, but rather becomes part of an economic system that is detached from its ecological roots.

There for this reason, the eco-pedagogical approach is highly relevant in addressing this shift. Eco-pedagogy encourages the restoration of traditional values through critical awareness and education based on local wisdom. The tradition of belis needs to be reinterpreted not as an economic obligation, but as a means of informal education that teaches the interconnectedness between humans, animals, and nature (Sakti et al., 2024). The giving of Livestock in the belis should be kept alive as a medium that conveys the ecological message that humans live from and with other creatures, and not as the sole rulers of nature. The shift in the meaning of belis due to commodification touches on a very fundamental aspect of indigenous people's lives: the way they see and interpret nature. Within the framework of ecopedagogy, belis is not only preserved as a traditional ritual, but its function as a vehicle for ecological learning and local spirituality is restored. Only in this way can the symbolic relationship between humans and nature, which has been disrupted by market logic be restored.

3.2 Preservation strategies to prevent commodification of belis culture

3.2.1 Implementation of ecopedagogic education for environmental awareness

The implementation of eco-pedagogical education as a strategy for preserving Belis traditions is realized through a community- and family based approach, which directly involves the younger generation in daily traditional activities (Sutrisna et al., 2025). This education is not centered on formal schools, but is carried out through cultural interactions at the local level, where ecological values are passed down by parents, traditional leaders, and the community as part of cultural practices. The implementation of eco-pedagogical education as a strategy for preserving the Belis tradition is reflected in a community- and family based approach that directly involves the younger generation in their daily traditional activities. This learning process occur stakes place through local cultural interactions, where ecological values are passed down by parents, traditional leaders, and the community as part of cultural practices (Amri & Putri, 2023).

The following image shows one form of traditional value inheritance that takes place in the context of daily community life, particularly through cultural processes that directly involve children:



Figure 3. Pongo Activity: Traditional Value Education by Parents to Children

Figure 3 shows the pongo ceremony, which is held by the families of the bride and groom. The Pongo ceremony in the Manggarai tradition is a ceremony formalizes the bond of love between a man and a woman, which marks the beginning of the marriage process. The groom's family will bring songke cloth (traditional Manggarai cloth) and a sum of money (seng kembung) to the bride's family as part of this ceremony. The main event in of the pongo is the offering of belis (paca) and money accompanying the belis, which is an agreement between the two families (Antonius & Wahyu, 2020). Children are seen in the middle of the traditional meetings, listening to advice from their parents and traditional leaders. In this activity, they are given a direct explanation of the symbolic meaning of horses or buffaloes as animals that not only represent social status, but are also part of an ecosystem that must be preserved. The inheritance of this symbolism directly introduces the concept of ecology from an early age, showing that livestock are living creatures that continue the life of the family and community, not just attributes of that adorn ceremonies (Riany et al., 2017).

Livestock, in the context of this activity, is increasingly being restored to its position as a living ecological element with real ecological value. The interaction between children and animals, which in some cases is included in pongo ceremonies, strengthens emotional bonds and the understanding that animals are partners in maintaining land fertility and the sustainability of community life (Tolo et al., 2025). The implementation of eco-pedagogical education to preserve the belis tradition is evident through the direct involvement of the younger generation in daily cultural practices within the community and family environment. This educational process takes place organically through intergenerational interactions, in which here ecological values and local wisdom are passed down in the context of traditional life. One concrete form of this approach can be seen in the following pongo activities:



Figure 4. Young People Observing the Belis Process with a Horse as a Symbol of Honor

In the **Figure 4**, a group of teenagers is seen observing the belis procession, in which a buffalo is prepared to be handed over. The presence of the younger generation in this direct observation provides an effective eco-pedagogical opportunity. They witness how animals are involved not as static objects, but as symbols of respect, ecological responsibility, and community integrity. Maintaining animal health and

habitat through feeding, cage maintenance, and respect in rituals is a tangible form of social commitment to nature conservation (Janif et al., 2016). Thus, the concept of an ecosystem is no longer abstract but concrete through the presence of animals in their traditional lives.

These observations show that the community collectively strives to incorporate the elements of ecological education into traditional practices. The tradition in question is a cultural heritage and as well as a means of sustainable ecological education because it is passed down orally and through interactive experiences with the environment. Children who witness and participate in the belis procession undergo a natural learning process regarding about the relationship between humans and nature, which is expected to shape their ecological awareness from an early age (Tolo et al., 2025). As explained by a traditional leader, this understanding is gained not only through verbal explanations, but also through direct involvement in traditional processions that are rich in ecological meaning:

"In the belis procession, we not only teach about social symbols and status, but also about how we protect nature through our relationship with livestock. Children who see and are directly involved in this ceremony will understand that buffaloes or horses are not only for sacrifice, but also part of an ecosystem that must be preserved so that it remains alive and healthy. They learn that this is part of our responsibility to the environment, not just a customary obligation." (Interview with P15, 2025).

In other words, eco-pedagogical education is implemented through community and family activities, where livestock are no longer positioned merely as cultural symbols, but as part of the local ecology that must be preserved. This means that the belis tradition is not only preserved in the form of rituals, but also functions as an educational vehicle that reinforces ecological values in everyday community life (Amri & Putri, 2023).

The implementation of community- and family based eco-pedagogical education in the Belis tradition demonstrates a highly relevant strategic effort to preserve the symbolic relationship between humans and nature. This approach emphasizes informal education that grows and develops organically in traditional social interactions, where ecological values are not taught theoretically, but through direct experience and active participation in everyday cultural practices (Biesta & Tedder, 2007). This type of education differs from formal education models, which are often detached from the local contexts and cultural wisdom.

The central role of families and communities as educational agents provides a great opportunity to for preserving traditions, while instilling a deep ecological awareness (Riany et al., 2017). In pongo activities, for example, parents and traditional leaders directly educate children about the importance of livestock, such as horses and buffalo as an integral part of the ecosystem and a symbol of respect for ancestors and nature. The learning approach inherent in these cultural activities allows children to experience firsthand the harmonious relationship between humans and the environment, so that their ecological awareness is not just an abstract concept, but a value that they feel and live by (Hedegaard, 2012).

The presence of livestock that are physically involved in traditional ceremonies also reinforces their eco-pedagogical functions. These animals are not merely objects of rituals but also teachers of nature who teach the importance of maintaining ecosystem balance. Through direct interaction, observing, caring for, and respecting animals in the context of tradition, the younger generation learns to understand the role of animals as living beings that have a sacred and ecological position, not merely as social symbols or commodities (Amri & Putri, 2023). Thus, the belis tradition effectively becomes a medium for learning the ecological values that are integrated into cultural practices.

This type of eco-pedagogical learning also facilitates the formation of a strong ecological identity based on real experiences and respect for the environment. The Ecological awareness fostered through the belis tradition has the potential to produce sustainable behavior, where the community not only cares for livestock but also the surrounding environment as part of an interdependent life system. This is very important given the challenges of modernization and commodification that threaten to erode the ecological meaning of these traditions.

Thus, the strategy of preserving the belis tradition through community- and family based eco-pedagogical education is not only relevant for preserving cultural heritage, but also crucial in building strong ecological awareness. Education that emphasizes ecological values in this traditional context provides a concrete answer to the need for environmental preservation and cultural sustainability simultaneously at the same time. This confirms that the preservation of indigenous traditions and the environment are not two separate things, but rather complement and reinforce each other through a local and contextual educational process (Cajete, 2020).

3.2.2 Raising ecological awareness to reduce commodification

The results of this study show that efforts to increase ecological awareness among indigenous peoples are an important strategy for preventing the widespread commodification of Belis culture. This awareness focuses on understanding the intrinsic relationship between indigenous practices and ecological sustainability, which has long been deeply embedded in Belis traditions. Through dialogue and active community involvement, especially among indigenous leaders and families, an informal educational process has taken place that emphasizes the importance of maintaining an ecosystem balance as part of indigenous responsibilities (Fenetiruma & Kamakaula, 2023).

Interviews with traditional leaders confirmed that money, which now often replaces livestock in Belis ceremonies, has eroded the spiritual and symbolic value of the tradition. Traditional leaders expressed concern that this shift not only eliminated the spiritual meaning attached to animals as symbols of life and respect for ancestors, but also weakened the harmonious relationship between humans and nature, which has long been maintained by Belis rituals. This is a critical point in research that shows the need for ecological awareness as the main barrier to against market mechanisms that reduce customs to mere economic transactions.

Field data obtained from local livestock documentation also shows a downward trend in the population of livestock, such as buffaloes and horses, which are key elements of in the Belis tradition. This decline in population is directly linked to the practice of commodification, in which here the economic value of money is considered more profitable and practical than raising livestock, which requires resources and large areas of land. This condition indicates serious ecological pressure, not only for cultural continuity, but also for the sustainability of local ecosystems that have long depended on the balance between humans and livestock.

This finding underscores the importance of integrating eco-pedagogical education that links customs with environmental sustainability principles in to cultural preservation efforts (Fenetiruma & Kamakaula, 2023). Community involvement in this educational process not only increases their understanding of the ecological significance of Belis, but also strengthens their collective commitment to preserving livestock as part of an interdependent ecosystem. Thus, ecological awareness has become an effective strategic tool to reduce the negative impacts of commodification while strengthening the local values that animate the Belis tradition (Rodliyah et al., 2017).

Increased ecological awareness among indigenous communities has proven to be an effective strategic tokey in overcomeing the commodification of Belis culture, which erodes traditional and symbolic values. As expressed by a traditional leader, the shift from using livestock to money in Belis ceremonies has led to the loss of many important dimensions of the tradition:

"In the past, in every Belis procession, buffaloes and horses were more than just gifts. They were symbols of life, honor, and our connection to our ancestors and nature. Now, money has replaced them, but we must remember that it money can not replace our relationship with animals and nature. We must preserve this ecosystem, not only for our culture, but also for our survival alongside nature" (Interview with P2, 2025).

This marks a fundamental shift in the community's perception, where Belis is no longer seen as a symbolic bond connecting humans with nature and ancestors, but rather as a mere economic transaction. This shift has the potential to weaken the cultural foundations that have long held teachings about balance and interdependence among living things (Cajete, 2020).

Indicated by local livestock documentation, this is not only an impact of socioeconomic changes, but also a direct consequence of the decline in ecological value inherent in Belis practices. Animals such as buffaloes and horses, which are were once symbols of life, strength, and respect for nature, are now increasingly difficult to maintain due to land pressure and high costs (Imun et al., 2023). This situation shows that commodification not only changes the physical form of Belis giving, but also threatens the ecological balance that has been harmoniously established between the community and the environment.

In the context of eco-pedagogy, raising ecological awareness serves as an educational medium that integrates cultural values with the principles of environmental sustainability (Hnatyuk et al., 2024). The direct involvement of the community, especially traditional leaders and families, in the process of traditional education that emphasizes the relationship between customs and ecosystems, forms a stronger collective understanding of the importance of caring for livestock not only as an economic asset, but also as an integral part of the web of life. This type of education serves as a counterbalance to the tide of modernization and commodification, which that tends to obscure the original meaning of tradition.

3.3 Ecopedagogics as a solution to preserve nature and farm animals in the belis tradition

The Belis tradition in East Nusa Tenggara not only functions as a customary ritual in a social and cultural context, but also as a highly contextual ecological learning space. This tradition presents a system of local knowledge that integrates spiritual and ecological relationships between humans, livestock, and the surrounding environment. Within the framework of ecopedagogy, the Belis tradition can be viewed as a medium of education that teaches the community to respect, care for, and preserve the environment holistically through cultural practices that have been passed down from generation to generation.

The Pentang Pitak ceremony symbolizes the sacred relationship between humans and nature. This ceremony has a profound meaning in which humans are positioned not as rulers of nature, but as an integral part of the cycle of life that is interdependent with nature and other living creatures (Gunawan, 2022). This ritual emphasizes the community's awareness of the importance of maintaining the balance of the ecosystem as a condition for the sustainability of life sustainability together. A local farmer who is actively involved in the Belis tradition stated the following:

“For us, the buffalo and horses offered in Belis are not just a means of paying or honoring other families, but they are part of the nature that we care for and protect together. This ritual reminds us to always maintain the balance of nature and not just think about personal gain” (Interview with P13, 2025).

Furthermore, buffaloes sacrificed in the Belis procession represent hopes for fertility and sustainability of nature. These sacrificial animals are not only offered as a form of respect to ancestors and guardian spirits of nature, but also as a symbol of the symbiotic relationship between humans and nature that must be maintained (Rodliyah et al., 2017). Through this act of sacrifice, the community is invited to reflect on the cycle of life, gratitude, and the responsibility to protect natural resources so that they can continue to benefit future generations.

The Eco-pedagogy in the Belis tradition emphasizes the integration of cultural rituals and the principles of environmental sustainability, which indirectly teaches the values of conservation and environmental ethics to all members of the community. This tradition builds sustainable ecological awareness by connecting spiritual, social, and ecological aspects into a single whole. This shows that nature conservation cannot be separated from cultural preservation and conversely, sustainable culture must be built on a harmonious relationship with nature.

From the results of this study, it is clear that the role of eco-pedagogy play play is a very strategic role in preserving nature and livestock through the Belis tradition. This tradition is an effective learning tool for instilling ecological values in society, which have long been the a legacy of the ancestors (Cajete, 2020). Thus, ecopedagogy serves as a bridge connecting local wisdom and the principles of environmental sustainability, ensuring that the Belis tradition is not only a ceremonial ritual, but also a practice that supports the balance of nature in a tangible way.

The Belis tradition functions far beyond its social and customary roles, serving as a contextual ecological learning space that is integral to the lives of the local community. Through rituals such as the Pentang Pitak Ceremony and the buffalo sacrifice procession, this tradition conveys an important message about the interconnectedness of humans, livestock, and nature as a whole. In the context of ecopedagogy, this tradition provides an informal educational framework that is deeply rooted in local wisdom, where knowledge about nature conservation and the cycle of life cycle is conveyed naturally and continuously through cultural practices.

The Pentang Pitak ceremony, which affirms the sacred relationship between humans and nature, is a concrete manifestation of how communities position themselves as part of an interdependent web of life, rather than as rulers who impose their will on nature (Gunawan, 2022). This attitude is important because it shapes a collective awareness of the responsibility to maintain the balance of the ecosystem in order to avoid damage that could threaten survival. This reflects an ecocentric philosophy that distinguishes the Belis tradition from modern approaches that tend to be anthropocentric and exploitative approaches.

The sacrifice of buffaloes in the Belis procession is not only interpreted as a ritual offering, but also as a symbol of hope for fertility and sustainability of nature. Through this ritual, the community is invited to reflect on the cycle of life cycle and the close relationship between humans and their environment. This practice of sacrifice also strengthens social bonds and gratitude, which forms the foundation of the community's environmental ethics (Hairuddin et al., 2024). The distribution of sacrificial meat to the community reflects the values of mutual cooperation and sustainable use of resources, marking the harmony between human needs and nature conservation.

The eco-pedagogical role that emerges from this tradition is very strategic in the context of culture-based environmental education. The Belis tradition not only teaches ecological values theoretically, but also practices them through rituals and symbolism that are deeply rooted in the daily lives of the community (Sakti et al., 2024). Thus, ecopedagogy is becomes an effective means of transmitting the values of conservation and respect for nature to the next generation without separating them from their cultural identity.

The integration of cultural rituals and environmental sustainability principles in the Belis tradition shows that nature and cultural preservation go hand in hand. This is an important example off conservation efforts that not only focus on ecological aspects, but also involve social and spiritual dimensions as a foundation that strengthens the success of preservation. Traditions such as Belis reminds us that efforts to preserve nature must involve local wisdom and cultural traditions as relevant and sustainable sources of knowledge (Leclère et al., 2020).

3. Conclusion

This study examines the role of the Belis tradition in maintaining a balance between culture and the local ecosystem in Manggarai, East Nusa Tenggara. The Belis tradition, which was originally a social practice in marriage, holds ecological and spiritual values, reflected in rituals such as pongo and pentang pitak, as well as the use of livestock, such as buffalo and horses, as part of the local sustainability system. However, the process of commodification, which shifts the role of livestock to a monetary value, has threatened the ecological meaning of Belis, causing a decline in livestock populations and weakening the relationship between humans and nature. To address this challenge, a community- and family based eco-pedagogical approach has the potential to strengthen the ecological awareness of the younger generation so that they view livestock as ecological partners, not merely commodities. This approach can serve as a bridge between cultural preservation and environmental conservation and requires policy support from the government, educational institutions, and indigenous communities. The limitations of this study lie in its restricted geographical scope, which only covers indigenous communities in the Manggarai Regency, thus failing to reflect variations in Belis practices in other regions. In addition, the long-term impact of eco-pedagogical education on changes in the ecological behavior of the younger generation has not been thoroughly analyzed. Further research could expand the study area to East or West Manggarai to observe variations in Belis practices and as well as conduct longitudinal studies to assess the effectiveness of the eco-pedagogical approach in shaping the ecological awareness of the younger generation in greater depth. Thus, the Belis tradition not only needs to be preserved as cultural heritage but also revitalized as a relevant and contextual ecological education space for today's society.

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