



## Balinese Hindu Religious Rituals as Practices of Religious Ecology

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**ABSTRACT:** Balinese Hindu religious rituals function not only as expressions of spiritual devotion but also as socio-cultural practices that embody ecological values. This article aims to analyze Balinese Hindu rituals as forms of religious ecology practices that regulate the relationship between humans and nature within the context of contemporary Balinese society. This study employs a qualitative approach using a literature review method by examining Hindu religious texts, scholarly works, and previous studies related to religion and environmental discourse. The findings indicate that Balinese Hindu rituals, such as subak rituals, Bhūta Yadnya, and Dewa Yadnya, play a significant role in internalizing religious-ecological values through the sacralization of nature, collective resource management, and the formation of environmental ethics rooted in Hindu cosmology. Subak rituals represent ecological wisdom in water and agricultural management, Bhūta Yadnya serves to maintain balance between humans and natural forces, while Dewa Yadnya reinforces the sacralization of natural spaces as part of the cosmic order. However, modernization, tourism, and changing lifestyles pose challenges to the effectiveness of these rituals as religious ecological practices. This article argues that Balinese Hindu religious rituals hold significant potential as sources of spiritually grounded environmental ethics and local wisdom that remain relevant in responding to the global ecological crisis.

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### A. INTRODUCTION

Balinese Hinduism constitutes a belief system that functions not only as a form of spiritual practice but also as a normative framework governing human relations with nature and the social order. Within Balinese Hindu cosmology, nature is understood as an integral part of a sacred cosmos that is ontologically interconnected with human existence and divine manifestations. Consequently, human–nature relations are not conceived in purely utilitarian terms, but are framed by ethical and religious values that emphasize balance and harmony. The philosophical principle of Tri Hita Karana, which highlights the harmonious relationship between humans and God (parahyangan), among humans (pawongan), and between humans and the natural environment (palemahan), serves as a central foundation in shaping this worldview and is frequently referenced in studies of Balinese Hindu religious ecology (Windia & Dewi, 2019; Lansing, 2017).

These philosophical values are not confined to abstract concepts but are concretely enacted through religious rituals. In the context of Balinese Hinduism, rituals function as the primary medium through which doctrinal teachings and ecological values are internalized within social practice. Rituals such as Tumpek Wariga, Melasti, and Nyepi exemplify ceremonial practices that contain explicit ecological dimensions, as they symbolically and practically regulate human relationships with the natural world. Tumpek Wariga, for instance, is a ritual dedicated to honoring plants, affirming flora as living entities endowed with religious and ecological significance. Through this ritual, communities are encouraged to adopt attitudes of care, protection, and environmental stewardship, enabling ritual practices to function as belief-based instruments for strengthening ecological awareness (Sumitri, 2022; Narti, 2024).

Furthermore, the close relationship between Balinese Hindu rituals and environmental conservation is reflected in the extensive use of natural elements as ritual materials. Ethnobotanical studies indicate that many Balinese Hindu rituals involve the utilization of diverse plant species, each of which carries symbolic meanings rooted in Hindu cosmology. This ritual dependence on natural resources establishes a reciprocal relationship between the continuity of religious practice and the sustainability of local

ecosystems. In this context, rituals may be understood as socio-cultural mechanisms that indirectly promote the conservation of local biodiversity by embedding ecological responsibility within religious life (Ristanto et al., 2020).

Theoretically, Balinese Hindu ritual practices can be analyzed within the framework of ecotheology, an approach that positions nature as an integral component of religious interpretations of divine existence. Rituals such as *mecaru* and various forms of *Bhūta Yadnya* are not understood solely as efforts to restore balance within a metaphysical dimension, but can also be interpreted as symbolic mechanisms representing attempts to harmonize human relationships with the natural environment. This perspective demonstrates that within the Balinese Hindu tradition, responsibility toward nature is embedded within religious practice itself, such that environmental conservation is not framed merely as a technical or policy-driven concern, but as an inherent component of religious obligation (Suryani, 2024).

The implementation of these values can be observed in the everyday life of indigenous communities in Bali, such as Desa Adat Penglipuran, where the principles of *Tri Hita Karana* and ritual practices are integrated into spatial planning, natural resource management, and social behavior. Practices such as restrictions on motorized vehicles, the preservation of bamboo forest areas, and community-based environmental management regulated through customary law illustrate how religious teachings and rituals contribute to the formation of operational ecological ethics within society. These findings indicate that Balinese Hindu rituals are not merely symbolic in nature, but also have tangible implications for environmental governance and sustainability (Sukarma & Suryawan, 2023).

Nevertheless, a growing body of scholarship has noted that amid the dynamics of modernization, tourism development, and changing social lifestyles, the religious ecological values embedded in Balinese Hindu rituals face significant challenges. In certain contexts, rituals risk undergoing a shift in meaning, becoming ceremonial activities detached from their ecological ethical dimensions. This condition reveals a gap between the normative values of religious teachings and contemporary social practices, while simultaneously opening space for critical inquiry into the extent to which Balinese Hindu rituals continue to function effectively as forms of religious ecological practice in the present era.

Based on this discussion, the study of Balinese Hindu religious rituals as practices of religious ecology is both academically relevant and significant. This research is expected to contribute to the development of religion–environment studies by examining the role of ritual as a medium for internalizing ecological values within local cultural contexts. Furthermore, it seeks to enrich scholarly discourse on the contribution of local religious wisdom to environmental conservation and sustainable development in the midst of the global ecological crisis (Lansing, 2017; Narti, 2024).

## DISCUSSION

### A. Religious Ecology in the Perspective of Religious Studies

Religious ecology constitutes an analytical approach that situates the relationship between humans, nature, and religious values as an inseparable unity. Within Hinduism, this relationship is not merely ethical or symbolic, but also cosmological and spiritual in nature. The natural world is understood as a manifestation of divine power (*Brahman*) that permeates all elements of the universe. Consequently, environmental degradation is not viewed solely as a technical or economic issue, but as a disruption of cosmic harmony with profound religious and moral implications (Radhakrishnan, 1951). Ecotheology in the Hindu context is therefore not limited to philosophical reflection, but functions as a lived framework grounded in Vedic teachings and local philosophical traditions that continue to shape social practices within Balinese society (Geertz, 1973; Sudharta, 2010).

In Hindu teachings, a fundamental concept underpinning religious ecology is *Rta*, the cosmic order that governs the structure and balance of the universe. *Rta* represents the universal principle that sustains harmonious relationships among humans, nature, and the divine. When human actions align with *Rta*, life unfolds in balance; conversely, violations of this cosmic law generate disorder in both social life and the natural environment (Klostermaier, 2014). This conceptual framework positions excessive exploitation of nature as an act of *adharma*, namely behavior that contradicts moral and cosmic order.

Hindu sacred texts such as the Vedas, Upaniṣads, and the *Bhagavadgītā* frequently portray nature as a life-giving mother. The *Atharvaveda*, in particular, explicitly venerates the earth as *Bhūmi Devī*, the sustaining force of all living beings. The *Bhūmi Sūkta*, one of the most significant hymns in the *Atharvaveda*, articulates the cosmological and ethical worldview of ancient Hindu society toward the earth. In this hymn, the earth is personified as a mother (*Mātā Bhūmīḥ*) who provides life, protection, and continuity for all beings. Humans are not positioned as rulers of nature, but as integral participants within a cosmic order who bear moral responsibility to protect and refrain from harming the earth. The human–nature relationship is thus depicted as sacred, grounded in respect, reciprocity, and spiritual responsibility. Humans are reminded not to injure the earth, as it is the very ground upon which they stand and the source of life itself. This message reflects a profound ecological consciousness embedded in early Hindu tradition, where human–nature relations are framed within a sacred cosmological relationship (Jamison & Brereton, 2014). The concept of *Pañca Mahābhūta* the five fundamental elements constituting the universe, namely earth (*pr̥thivī*), water (*āpah*), fire (*tejas*), air (*vāyu*), and space (*ākāśa*) further reinforces the ontological unity between humans and the natural world. Both the human body and the cosmos are composed of the same elemental substances, giving rise to the understanding that harming nature ultimately

means harming oneself. Environmental ethics in Hinduism thus emerge from an ontological awareness of the unity between the microcosm (human beings) and the macrocosm (the universe) (Easwaran, 2007).

Religious ecology in Hinduism is also closely intertwined with the doctrines of karma and samsara. Every human action toward the environment is believed to generate consequences, whether in the present life or in future existences. Environmental destruction is understood as negative karma that results in suffering not only for the immediate perpetrators, but also for future generations. This worldview cultivates a strong sense of ecological responsibility, as humans are held accountable not only in social terms, but also in spiritual and karmic dimensions (Chapple, 2001).

Everyday Hindu religious practices further reflect these ecological values. Various forms of *yadnya* rituals, particularly *Bhūta Yadnya*, are performed as expressions of reverence toward natural elements and other living beings. *Bhūta Yadnya* rituals teach humans to maintain balance with natural forces that, while often invisible, play a crucial role in sustaining life. Such rituals function as cultural and religious mechanisms for internalizing ecological ethics within communal life (Lansing, 2006).

The religious ecological approach within Hindu studies also opens space for dialogue with contemporary global environmental issues, including climate change, water scarcity, and biodiversity loss. The principle of *ahimsa*, commonly understood as non-violence in social and spiritual contexts, can be expanded to encompass a commitment to non-harm toward the natural environment. In this sense, Hindu teachings offer valuable contributions to the development of a global environmental ethic grounded in spirituality and cosmic awareness (Narayanan, 2016). From the perspective of Hindu religious ecology, environmental crises are not merely technical challenges, but crises of values and spirituality.

At the same time, Balinese ritual practices such as the subak system currently face serious challenges due to agricultural modernization, land-use conversion, and pressures from tourism development. In several regions, rituals continue to be performed formally but have lost their regulatory influence over ecological behavior. As agricultural land diminishes and irrigation systems are disrupted, subak rituals risk being reduced to cultural symbols devoid of substantive ecological function. This condition underscores the urgency of revitalizing the meaning of subak rituals as forms of ecological wisdom, rather than preserving them merely as symbolic cultural heritage (Hauser-Schäublin & Harnish, 2014).

#### A. Subak Rituals as a Form of Ecological Local Wisdom

The subak system represents one of the most prominent forms of local ecological wisdom among Balinese Hindu communities, integrating religious, social, and ecological dimensions in agricultural management, particularly rice cultivation. Subak functions not merely as a technical irrigation system, but also as a religious institution that regulates human–nature relations through structured agricultural rituals. From the perspective of religious ecology, agricultural rituals within the subak system can be understood as cultural religious mechanisms that maintain balance between human interests and the sustainability of natural ecosystems (Lansing, 2006; Hauser-Schäublin, 2011).

Agricultural rituals within the subak system are deeply rooted in Balinese Hindu cosmology, which positions water as a sacred element and the source of life. Water is personified as a manifestation of divine power associated with Dewi Danu, the goddess of fertility and guardian of lakes. Consequently, the distribution and utilization of water are not perceived merely as technical matters, but as religious acts that must be carried out in a fair and harmonious manner. Rituals conducted at subak temples serve to reinforce collective awareness that water is a sacred gift that must not be controlled or exploited in an individualistic manner (Geria, 2019).

Subak rituals constitute the core of Bali's traditional agricultural system by integrating water management, social solidarity, and Hindu cosmology into a unified ecological praxis. Subak is not simply a farmers' organization, but a religious institution that regulates human relationships with nature through a continuous and structured cycle of rituals. In this context, subak rituals can be understood as practices of religious ecology that bridge material agricultural needs with the spiritual obligation to maintain cosmic balance (Lansing, 2006; Sutawan, 2018).

One of the most fundamental rituals within the subak system is *mapag toya*, a ritual of welcoming water performed prior to the planting season. This ritual is typically conducted at subak temples or at the upstream points of irrigation channels, with the purpose of invoking the smooth flow of water and seeking blessings from Dewi Danu as the ruler of water sources. From a religious ecological perspective, *mapag toya* reflects the understanding that water is not merely a natural resource, but a sacred entity endowed with moral and spiritual dimensions. By sacralizing water through ritual, subak communities cultivate a collective ethic that emphasizes equitable, prudent, and sustainable water use (Geria, 2019).

Following *mapag toya*, the ritual sequence continues with *nuwasen* or *nandur*, rituals that mark the beginning of rice planting. These rituals are not conducted individually, but are based on collective agreement among all members of the subak. Religiously sanctioned synchronization of planting schedules has significant ecological implications. Simultaneous planting has been shown to effectively control pest populations naturally and to maintain the ecological balance of rice fields without excessive reliance on chemical inputs. In this way, the *nandur* ritual functions as an ecological mechanism embedded within religious belief systems and ritual practice (Lansing & Kremer, 2012).

Subak rituals are also performed at each stage of rice growth, including rituals such as *metekap* and *ngeroras*, which are intended to seek protection from pests and diseases. Within Balinese Hindu cosmology, disturbances to crops are not understood

solely as biological phenomena, but also as indicators of disrupted relationships between humans and nature. Consequently, responses to such disturbances are not exclusively technical, but also ritualistic. This approach reflects a holistic ecological worldview in which nature, humans, and unseen spiritual forces interact within a living system (Hauser-Schäublin, 2011).

Harvest rituals, including communal harvest ceremonies and offerings of agricultural produce at subak temples, mark the culmination of the sacred agricultural cycle. Rice is not treated merely as a commodity, but as a divine gift that must be respected and honored. A portion of the harvest is ritually returned to nature and to the divine as an expression of gratitude and acknowledgment of human dependence on ecological systems. This practice reinforces ecological ethics that resist excessive exploitation and promote moderation and self-restraint in consumption (Ardhana, 2020).

### **B. Bhūta Yadnya in Efforts to Maintain Environmental Balance**

Bhūta Yadnya constitutes one of the five forms of Panca Yadnya in Hindu teachings and is aimed at maintaining harmonious relationships among humans, nature, and cosmic forces. In the context of Balinese Hinduism, Bhūta Yadnya is not understood merely as a ritual with magical connotations, but rather as a religious practice that reflects collective ecological awareness. Bhūta kala, as the recipients of offerings, represent dynamic and ambivalent natural energies that have the potential to generate imbalance if not engaged with in a harmonious manner.

Bhūta Yadnya functions as a religious means of regulating human relationships with natural forces so that balance may be sustained (Geria, 2020). In the daily lives of Balinese Hindu communities, Bhūta Yadnya is manifested in various ritual forms, ranging from daily segehan offerings to large-scale ceremonies such as caru and tawur agung. These rituals are performed in ecologically strategic spaces, including household compounds, road intersections, rice fields, coastal areas, and forest zones. The spatial placement of these rituals underscores the close relationship between Bhūta Yadnya and the management of living environments, while also reflecting an attitude of respect toward the energies inherent in each ecological space rather than a dominative relationship with nature (Ardhana, 2021).

From an ecological perspective, Bhūta Yadnya serves as a cultural mechanism that constrains exploitative human behavior toward the environment. The ritual offerings typically consist of locally sourced natural materials such as rice, leaves, flowers, water, and fire, reflecting principles of sustainability and human–environment interconnectedness. Moreover, Bhūta Yadnya instills values of balance and sufficiency, emphasizing that humans should not extract natural resources excessively and are morally and spiritually obligated to return a portion to nature as an expression of responsibility (Sutawan, 2019).

Balinese Hindu communities interpret Bhūta Yadnya as an effort to restore environmental balance in response to ecological disturbances, such as disease outbreaks, crop failures, or natural disasters. These disturbances are not perceived solely as natural phenomena, but as indicators of disrupted cosmic harmony resulting from human behavior that neglects ecological ethics. Through the performance of Bhūta Yadnya, Balinese Hindus engage in collective reflection and spiritual correction of their relationship with nature. In this sense, the ritual can be understood as a religiously grounded early-warning system for potential environmental crises (Astiti, 2022).

In addition to its ecological dimension, Bhūta Yadnya also possesses a strong socio-ecological dimension, as its performance involves collective participation within customary communities. This communal engagement strengthens social cohesion while fostering shared awareness of the importance of environmental preservation. In the context of Balinese customary villages, Bhūta Yadnya practices are often institutionalized through awig-awig (customary regulations) that govern prohibitions against environmental degradation, waste management practices, and village spatial planning. Consequently, Bhūta Yadnya does not stand merely as a symbolic ritual practice, but is integrated into customary legal systems and community-based environmental governance (Putra & Sudarma, 2020).

In the modern era, however, Bhūta Yadnya practices face various challenges arising from urbanization, mass tourism, and changing lifestyles. In some cases, Bhūta Yadnya rituals have been reduced to symbolic formalities without being accompanied by substantive changes in ecological behavior. This condition reveals a gap between ritual symbolism and ecological praxis. Therefore, there is a need to reinterpret Bhūta Yadnya as a contextual environmental ethic, so that the ritual is understood not only as a traditional obligation, but also as a means of ecological education and consciousness transformation among Balinese Hindu communities (Hauser-Schäublin, 2021).

### **C. Dewa Yadnya and the Sacralization of Natural Spaces**

Dewa Yadnya constitutes one of the principal forms of Panca Yadnya in Hindu teachings and is performed as an act of offering and devotion to Ida Sang Hyang Widhi Wasa and His divine manifestations. In the context of Balinese Hinduism, Dewa Yadnya functions not only as a theological ritual of worship but also possesses a strong ecological dimension through the sacralization of natural spaces. Mountains, lakes, seas, forests, and springs are not regarded merely as physical landscapes, but as sacred spaces where divine forces reside. The sacralization of natural spaces through Dewa Yadnya plays a crucial role in shaping the collective ethical orientation of Balinese society toward the natural environment (Geria, 2020; Ardhana, 2021).

Within Balinese Hindu cosmology, the universe is understood as a layered structure interconnected both vertically and horizontally through the concepts of Tri Loka and Tri Mandala. Mountains are positioned as the most sacred realm (utama mandala),



while the sea is commonly understood as a space of purification and the release of negative elements. The performance of Dewa Yadnya at temples located in ecologically strategic areas such as Pura Besakih on the slopes of Mount Agung, Pura Ulun Danu Batur in the lake region, and Pura Tanah Lot along the coast demonstrates how religious rituals function as mechanisms for the sacralization of natural spaces. Through these rituals, nature is positioned as a sacred entity whose sanctity must be preserved rather than freely exploited (Lansing, 2006; Hauser-Schäublin, 2021).

One of the most routine and sustained forms of Dewa Yadnya is *odalan* or *piodalan*, the commemoration of a temple's anniversary, which is held every 210 days according to the *pawukon* calendar. *Odalán* is not only a ritual of devotion to the divine manifestations residing in the temple, but also serves as a socio-religious mechanism for maintaining the sanctity of temple spaces and their surrounding environments. Prior to and during *odalan*, community members engage in both physical and symbolic purification of temple areas, including courtyards, vegetation, and nearby water sources. This practice illustrates how *odalan* functions as a form of ritual-based ecological maintenance, in which cleanliness and spatial order are understood as integral components of spiritual obligation (Putra & Sudarma, 2020).

However, the expansion of mass tourism, urbanization, and land-use conversion has exerted significant pressure on sacred areas. In several cases, temples and their surrounding natural environments have undergone processes of commodification, whereby economic value increasingly outweighs sacred and ecological values. This condition generates tension between the demands of religious ritual and the economic interests of local communities. In such contexts, Dewa Yadnya rituals often continue to be performed formally, yet lose their regulatory capacity to shape broader ecological behavior within society (Hauser-Schäublin & Harnish, 2014; Astiti, 2022).

Nevertheless, Dewa Yadnya in the contemporary era has also undergone processes of adaptation and reinterpretation that demonstrate its continued relevance in modern ecological contexts. Several customary villages and Balinese Hindu communities have begun to link the performance of Dewa Yadnya with contemporary environmental concerns, such as ritual-based waste management, the use of environmentally friendly ritual materials, and the sustainable management of sacred areas. These practices indicate that the sacralization of natural spaces is not static, but can evolve in response to changing ecological challenges. In this regard, Dewa Yadnya functions as a medium of ecological education that instills awareness of environmental protection as an integral part of religious obligation (Sutawan, 2019; Ardhana, 2021).

Moreover, the sacralization of natural spaces through Dewa Yadnya plays an important role in sustaining Balinese cultural identity amid the pressures of globalization. Sacred spaces serve as symbols of the continuity of local values that distinguish Bali from other regions. In this context, Dewa Yadnya not only maintains cosmic balance but also functions as a cultural safeguard that protects community living spaces from global homogenization. The ritual sacralization of nature reinforces the moral claims of customary communities over their living environments, thereby carrying significant implications for environmental conservation efforts and the protection of local community rights (Geria, 2020).

## CONCLUSION

Balinese Hindu religious rituals function not only as expressions of spiritual devotion but also as practices of religious ecology that internalize environmental ethical values within social life. Grounded in the Balinese Hindu cosmological framework of *Tri Hita Karana*, rituals such as *subak* rituals, *Bhūta Yadnya*, and Dewa Yadnya play a significant role in regulating human–nature relations through collective resource management, the maintenance of cosmic balance, and the sacralization of ecologically strategic natural spaces. This study demonstrates that these rituals have tangible implications for the formation of ecological awareness and environmental conservation, despite facing challenges arising from modernization, tourism, and changing social lifestyles. Therefore, Balinese Hindu religious rituals hold considerable potential as sources of spiritually grounded environmental ethics and local wisdom that are relevant for responding to contemporary ecological crises and for enriching interdisciplinary studies on religion and the environment.

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