



Wolio Proverbs as a Local Knowledge System for Sustainable Coastal Development: A Cultural Linguistic Perspective on Community Resilience in Baubau, Indonesia

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Abstract. This research analyses Wolio proverbs as a local knowledge framework that articulates community resilience and sustainable development within the coastal context of Baubau Regency, Southeast Sulawesi, Indonesia. It aims to achieve two objectives: (1) to identify the cultural value framework embedded within Wolio proverbs concerning socio-ecological resilience, and (2) to analyse the manner in which ecological metaphors influence the community's perception of risk, calamity, and environmental processes. The study used a descriptive-interpretive qualitative methodology, incorporating thematic coding and conceptual metaphor analysis within a Cultural Linguistics framework. The analysis produces two primary findings aligned with these objectives. First, Wolio proverbs embody a structured framework of cultural values articulated through four interconnected components: a hierarchy that prioritises the individual, community (lipu), tradition (sara), and religion; a work ethic that underscores self-discipline and economic stability; prudence and social boundaries that inform risk management; and justice and social order that uphold community cohesion. Second, Wolio proverbs employ ecological metaphors—such as tides, flooding, drizzle, storms, and coral reefs—as cognitive frameworks for understanding environmental uncertainty, cyclical change, and socio-ecological impacts. These findings suggest that Wolio proverbs serve not only as moral expressions but also as culturally rooted frameworks for adaptation pertinent to sustainable coastal development, disaster risk reduction, and natural resource management. This research underscores the significance of Wolio indigenous knowledge in promoting the achievement of the Sustainable Development Goals, specifically SDG 11, SDG 13, and SDG 14, within small island and coastal communities.

Keywords: Wolio proverbs; indigenous knowledge; socio-ecological resilience

1 INTRODUCTION

Sustainable development is now recognised not merely as a technocratic endeavour to reconcile economic, social, and ecological objectives but also as a process that significantly depends on a community's shared values, knowledge, and creativity [1]. Numerous studies have demonstrated that the failure of development programs frequently stems from neglecting the cultural and epistemic dimensions of local communities, especially their perceptions of risk, disaster, and the futur [2], [3]. Within this context, community resilience theory has progressed from the original concept of physical resilience to a more comprehensive framework that underscores the ability of communities to adapt, learn, and transform through their social, cultural, and symbolic resources [4], [5]. Within the Indonesian context, research on indigenous knowledge highlights that cultural values, traditional ecological wisdom, and community moral principles are vital in disaster and climate change preparedness, especially in agricultural and coastal communities [2], [6].

Numerous studies on disaster preparedness have demonstrated that local cultural values serve as a fundamental basis for reinforcing social networks, directing collective responses, and structuring human-environment interactions during crisis situations [3], [7]. Research concerning the resilience of indigenous communities, communities affected by eruptions, and coastal populations indicates that their survival strategies are influenced by an integration of local

ecological knowledge, traditional authority frameworks, and shared narratives regarding disasters [4], [7], [8]. However, the majority of these studies concentrate on social practices, institutions, and policies, whereas the linguistic dimension—particularly proverbs—as a repository of ecological, moral, and social knowledge has seldom been subjected to systematic analysis. However, existing literature on Traditional Ecological Knowledge (TEK) indicates that communities preserve ecological principles, ethical frameworks for nature utilisation, and perceptions of space and time through oral narratives, rituals, and proverbs [5], [9].

In coastal and island regions of Indonesia, such as Southeast Sulawesi, local ecological knowledge manifests through community practices in naming natural phenomena, classifying seasons, and establishing moral responsibilities towards the sea and forests [6], [9]. Research on marine conservation and coral reef ecology further underscores the importance of incorporating cultural values into natural resource management policies to enhance their efficacy and sustainability [10], [11]. Nonetheless, the connection between local ecological knowledge and its depiction in proverbs has not been a central focus of investigation, despite the fact that proverbs constitute a form of "compressed knowledge" that encapsulates the community's core values and perspectives on life.

Theoretically, the advancement of ethnolinguistics, linguistic anthropology or anthropological linguistics, and/or cultural linguistics offers valuable instruments for interpreting language as a reflection of cultural conceptualisations [12], [13], [14]. Cultural linguistics, as articulated by Sharifian, conceptualises language as a repository of cultural schemas, categories, and metaphors that are shared within a community and conveyed through social transmission [15]. Linguistic anthropology and cognitive linguistics also demonstrate that proverbs serve as a form of "condensed culture" that unites moral schemas, value hierarchies, and representations of the social world across generations [16], [17], [18]. Conceptual Metaphor Theory elucidates how correspondences between the physical domain—nature, the body, space—and the moral and social domains generate frameworks through which communities interpret uncertainty, risk, and resilience [15].

Across various languages, an increasing corpus of research on proverbs has documented how proverbial expressions embody culturally shared values and metaphorical frameworks that influence everyday reasoning and social behaviour. Research on Indonesian and Acehnese proverbs illustrate how maritime and ecological analogies underpin the principles of patience, adaptation, and harmony with the environment [18]. Analyses of Setswana, Arabic, Chinese–Spanish, Italian, and English–Vietnamese proverbs underscore their role as nuanced tools of social regulation, custodians of cultural identity, and directives for behaviour [19], [20], [21], [22], [23], [24]. These findings illustrate that proverbs serve as a significant means of illustrating communities' connections with their environments, hazards, and historical backgrounds. Nevertheless, research on Wolio proverbs remains limited and has not been explicitly integrated within a dual analytical framework that associates cultural value systems and ecological analogies with community resilience and sustainable development [25], [26]. This is despite the Wolio community's extensive maritime heritage, robust customary institutions, and distinctive ecological connections with coastal and marine ecosystems. Simultaneously, the body of literature on community resilience in Eastern Indonesia has yet to employ the corpus of proverbs as primary data for examining how local value systems and environmental conceptualisations collectively contribute to socio-ecological resilience.

Based on these gaps, this study examines Wolio proverbs as a local knowledge system that concurrently articulates cultural value frameworks and ecological perspectives on environmental uncertainty. More specifically, this study seeks to: (1) examine the depiction of local values and knowledge within Wolio proverbs concerning resilience and sustainability, and (2) analyse ecological metaphors and cultural imagery in Wolio proverbs as cognitive instruments through which the community interprets risk, disaster, and environmental changes. The theoretical framework integrates concepts from Cultural Linguistics, ethnolinguistics or anthropological linguistics, and Conceptual Metaphor Theory to analyse Wolio proverbs as repositories of cultural conceptualisations that are directly pertinent to discussions of community resilience and sustainable development.

The novelty of this article resides in the integration of Cultural Linguistics, community resilience theory, and sustainable development discourse within the specific context of the Wolio coastal community. While research on community resilience typically emphasises social practices and policies, and studies of proverbs often concentrate on morality or metaphorical frameworks in isolation, this investigation presents an integrated interpretation that unites religious, customary, ecological, and economic values within a cohesive local knowledge system. Thus, this article not only advances the field of Cultural Linguistics but also offers a conceptual framework for developing adaptation and sustainability policies that are culturally rooted and attuned to the indigenous knowledge of Indonesian archipelagic communities.

2 METHOD

2.1 Research Design

This study employed a qualitative methodology utilizing a descriptive-interpretive framework to examine the corpus of Wolio proverbs [27] as cultural texts that encapsulate local knowledge systems, value structures, and ecological metaphors pertinent to community resilience and sustainable development. This methodology was selected due to the study's objective of elucidating the significance, conceptual frameworks, and societal roles of proverbs within the Wolio cultural milieu, consistent with ethnolinguistic and cultural linguistic paradigms that perceive language as a manifestation of the "cultural worldview" and the communal conceptual categories of a society.

2.2 Data Sources and Research Corpus

The principal research corpus comprised numerous Wolio proverbs sourced from two main origins: (1) written records in *Onina Manga Mancuana Mangenge: Traditional Expressions of the Wolio People* [28] and the Book *Wolio Proverbs: Expressions of the Wisdom of the Wolio People* [29], located in Baubau City, Southeast Sulawesi, Indonesia, and (2) informal interviews and focused discussions with Wolio traditional and cultural authorities. The criteria for data selection encompassed proverbs that: a) embody moral principles or codes of behavior; b) pertain to the aims of this study. This corpus serves as a local knowledge bank facilitating the restoration of the cultural significances and ecological values of the Wolio people.

2.3 Data Analysis Procedures

The analysis was performed using a set of interconnected processes. Initially, all transliterated proverbs underwent semantic analysis to ascertain their fundamental meanings and cultural implications. Thematic coding was performed to categorize the proverbs into cultural values, work ethic, caution and boundaries, justice, and ecological analogies. The use of Conceptual Metaphor Theory and Cultural Linguistics was employed to delineate cross-domain mappings from ecological elements, including water, rain, coral, and coastal space, to abstract concepts such as resilience, risk, and sustainability. A multilevel analysis—micro, meso, and macro—was performed, encompassing an investigation of lexical and syntactic structures, mapping proverbs within each category to identify consistent value patterns, and juxtaposing the findings with community resilience and Traditional Ecological Knowledge (TEK) literature from other indigenous communities [15], [30], [31]. All phases of the analysis were directed by the notion that proverbs serve as a succinct representation of the culture that unifies the values, ecological perspectives, and social frameworks of the Wolio community.

2.4 Data Validity and Validity

Validity was upheld through the triangulation of sources, incorporating literature on local cultural values, community resilience, Traditional Ecological Knowledge (TEK), and cross-linguistic metaphorical studies, alongside peer discussions with cultural linguistics researchers and the provision of thick descriptions, ensuring that the interpretative process is transparently traceable in accordance with anthropological linguistic research standards [32], [33].

3 RESULTS

This section delineates the findings from the study of the Wolio proverb corpus, organized specifically in alignment with the two research topics. The findings related to the initial research question indicate that Wolio proverbs encapsulate a cohesive local knowledge system across four interconnected domains of cultural values: (1) the hierarchy of cultural values, (2) work ethic and livelihood sustainability, (3) prudence and social boundaries, and (4) justice and social order. The findings related to the second research question reveal a specific cluster of ecological metaphors that serve as cognitive frameworks for understanding environmental change, risk, and wider socio-ecological dynamics. These results demonstrate that Wolio proverbs function as moral advice and social regulation,

while also serving as culturally embedded frameworks that promote resilience and sustainability in coastal communities.

3.1 Representation of Cultural Values and Local Knowledge Systems in Wolio Proverbs

The examination of the Wolio proverb corpus reveals that the local knowledge system of the Wolio community is organized into multiple interconnected realms of meaning. Proverbs govern the interplay among self, community, tradition, and religion within a coherent ethical hierarchy. Proverbs underscore the need of work ethic, economic stability, and the repudiation of ephemeral lifestyles as essential components of sustainable existence. Simultaneously, ideas of caution and societal limits are conveyed through statements that caution against moral and social violations. Ultimately, principles of justice and social order are upheld by proverbs that govern leadership, consensus, and accountability. The subsequent subsections address these domains. Collectively, these cultural value patterns indicate that Wolio proverbs serve not just as symbolic representations but also as operational frameworks for structuring collective behavior and decision-making pertinent to sustainable community development.

3.2 The Hierarchy of Cultural Values in Wolio Proverbs

Wolio proverbs illustrate a value hierarchy that prioritizes karo (self), lipu (community), sara (custom), and agama (religion) in a distinct ethical framework, as outlined in Table 1. This hierarchy conceptualizes resilience as a multifaceted social and moral framework, wherein personal safety, communal togetherness, adherence to customary law, and religious validity are interdependent and mutually reinforcing, rather than an isolated individual capacity.

TABLE 1. Cultural Value Hierarchy in Wolio Proverbs.

Wolio Proverb	Literal Meaning	Cultural Meaning	Conceptual Value
<i>Ayinda-yindamo arataa, somanamo karo</i>	Not-not be wealth, as-long-as be self	Self must not be sacrificed for material possession	Primacy of life and personal safety
<i>Ayinda-yindamo karo, somanamo lipu</i>	Not-not be self, as-long-as be community/land	Community's wellbeing is above personal interest	Collective solidarity
<i>Ayinda-yindamo lipu, somanamo sara</i>	Not-not be community, as-long-as be customary-law	Social order is sustained through obedience to <i>sara</i>	Customary law as moral regulator
<i>Ayinda-yindamo sara, somanamo agama</i>	Not-not be customary-law, as-long-as be religion	Religion is the highest source of legitimacy	Religion as supreme moral authority

This structure conceptually links the social dimension (community and tradition) to the transcendent dimension (religion), positioning sustainability as an equilibrium between individual welfare and overarching ethical responsibilities. This value hierarchy serves as a normative framework for conflict resolution and collective decision-making during crises or social transformation within a cultural-linguistic context. This hierarchy aligns closely with the principles of SDG 11 (Sustainable Cities and Communities), highlighting social cohesion, ethical governance, and community-based resilience as fundamental components of sustainable urban and coastal development.

3.3 Work Ethic and Livelihood Sustainability in Wolio Proverbs

The second domain underscores the importance of employment, present sacrifice, and economic stability as fundamental components of sustained resilience. Wolio proverbs highlight the primacy of persistent and continuous effort over sporadic and unpredictable gains, as illustrated in Table 2. Metaphors of exhaustion, precipitation, palm fluid, and inundations are utilized to illustrate economic values through ecological imagery, emphasizing that sustainability is defined not by the scale of gains but by their rhythm and resilience.

TABLE 2. Work Ethic and Sustainable Livelihood

Wolio Proverb	Literal Meaning	Cultural Meaning	Conceptual Value
<i>Mangule yindaaka mangule, bolimo mangule manguleaka</i>	Be-tired so not tired; do-not be-tired so tired	Work hard now so you don't suffer in the future	Future-oriented hard work as protection against poverty
<i>Boli mboo maina mawa amae sampearo, boliakamo mboo titina konau</i>	Do-not be like flood coming once; be like dripping of palm-tree	A small but stable income is better than a large but temporary one	Preference for steady flow over one-time gain; income stability
<i>Boliakamo mboo maina waro-warosomanamo alele, amaranca maka nesabantara aburomo</i>	Better like drizzle coming continuous; than big rain stopping quickly	A gradual and consistent process is more valuable than a short big effort	Incremental resilience through small, constant steps

The expression “tired now to avoid being tired later” conveys a future-oriented resilience model where immediate difficulties are perceived as an investment in long-term stability. The inclination for consistent drizzle rather than abrupt rainstorms signifies a moral economy that denounces consumerist and speculative habits in favor of stability and continuity. These values establish a culturally rooted basis for sustainable livelihood strategies and community-oriented economic development, closely aligning with the aims of SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production), especially in small-scale coastal and island economies.

3.4 Prudence and Social Boundaries in Wolio Proverbs

The third domain concerns the principles of limits, caution, and cautious judgment. Wolio proverbs project these values through spatial boundary metaphors, measuring tools, and bodily control, as summarized in Table 3. Exceeding limits is not solely regarded as a technical error but is also perceived as a moral and social hazard that has the potential to compromise societal cohesion.

TABLE 3. Prudence and Social Boundaries in Wolio Proverbs

Wolio Proverb	Literal Meaning	Cultural Meaning	Conceptual Value
<i>Wa irone boli lempagi tida, ntomi kapera boli lalo kabori, lempagi tida maropu masoka</i>	Sparrow do-not cross boundary; small-bird do-not pass limit; crossing boundary destroys	Do not exceed moral or social boundaries	Boundaries protect social harmony
<i>Boli kamata saweta, tatimbangia mpuu</i>	Do-not see one side; weigh carefully	Consider all sides before acting	Careful judgment; risk mitigation
<i>Boli ubeaka panata</i>	Do-not bend the measuring-stick	Maintain fairness and truthfulness	Integrity of rules/justice
<i>Tungku ufikiri, bangutaaka ubutuki</i>	Think first; step after	Self-control in decision-making	Avoid harmful or rushed decisions

Expressions such as “do not bend measuring-stick or the ruler” underscore the significance of integrity and fairness in the application of rules, whereas the appeal to “weigh all sides” affirms that multi-perspective reasoning is a fundamental cultural competency. In this sense, prudence becomes a form of social capital that prevents conflict escalation and sustains trust within the community. Within the framework of sustainable development, these principles resonate with governance-related SDGs, particularly SDG 16 (Peace, Justice, and Strong Institutions), as they underscore transparency, accountability, and ethical rule enforcement as prerequisites for long-term resilience.

3.5 Justice and Social Order in Wolio Proverbs

The fourth domain emphasizes justice, integrity, and the mutually beneficial relationship between leaders and their communities. Wolio proverbs highlight the importance of the consistency of agreements, the inviolability of one's word, and the safeguarding of the vulnerable as fundamental pillars of social stability, as illustrated in Table 4.

TABLE 4. Justice and Social Order in Wolio Proverbs

Wolio Proverb	Literal Meaning	Cultural Meaning	Conceptual Value
<i>Boli bali-bali kamondo</i>	Do-not change the agreement repeatedly	Agreements must be honored	Rule consistency; social stability
<i>Boli delapi wilumu</i>	Do-not deny your own word	Keep one's promises and commitments	Personal integrity
<i>Tea tapatawei samia mokohakuna, salabinamo tapetotoi sapulu mia yindamo hakuna</i>	Better give ten wrong than wrong one rightful	Do not take others' rights, even slightly	Justice prioritizing protection of the weak
<i>Tontomaka saanguna to mobarina, tontomaka mobarina to mosaanguna</i>	See one for many; see many for one	Leaders and people are inseparable; fairness in leadership	Ethical leadership; community cohesion

The principle that it is preferable to distribute resources erroneously to many rather than to cause damage to even a single legitimate individual exemplifies a moral awareness of injustice that underpins social trust and the legitimacy of authority. Meanwhile, proverbs linking leaders and people as inseparable entities conceptualize governance as a moral relationship rather than a purely administrative one. These values inherently underpin sustainable governance frameworks by fostering ethical leadership, social inclusion, and safeguarding vulnerable populations, which are fundamental components of SDG 16 and SDG 10 (Reduced Inequalities).

4 ECOLOGICAL METAPHORS IN WOLIO PROVERBS AND THE COMMUNITY'S CONCEPTUALISATION

Ecological metaphors within Wolio proverbs serve a vital function in shaping community perceptions of risk, environmental transformation, and the processes of life. Natural phenomena such as tides, cyclones, floods, coral reefs, and drizzle function as source domains for understanding uncertainty, concealed risks, life cycles, and the significance of continuity, as illustrated in Table 5.

TABLE 5. Ecological Metaphors in Wolio Proverbs and the Community's Conceptualization

Wolio Proverb	Literal Meaning	Cultural Meaning	Conceptual Value
<i>Maina bhala humai yinda mboomo maina laena kaluku</i>	Disaster does not come like a coconut trunk	Dangers appear suddenly, not with visible signs	Unpredictable risk; continuous vigilance
<i>Dangia kanguraana apene o ure razakina, satanga o dadina asapomo razakina</i>	When young fortune rises like high tide; when older it falls like ebb tide	Life and fortune follow rising-falling cycles	Long-term planning; ecological-temporal awareness
<i>Mboomo jorompoki pasi</i>	Like crashing against coral rock	Wrong steps cause severe, sometimes permanent damage	Moral navigation; consequences of misjudgment

<i>Boliakamo maina somanamo amaranca nesabantara</i>	<i>mboo waro-waro alele, maka abuwomo</i>	Better like drizzle that continues than heavy rain that stops	Small but steady effort is better than intense, brief effort	Incremental resilience; steady strengthening
<i>Boli so udani penena ure, udania tee saponu ure</i>		Do not remember only the rising water; remember also the falling water	Prosperity must be balanced with awareness of scarcity	Resource moderation; managing abundance and decline

Wolio proverbs employ natural imagery as a cognitive instrument to elucidate concepts of risk and change. Expressions such as "Maina bhala humai yinda mboomo maina laena kaluku" highlight that peril often arrives unexpectedly, unlike a coconut tree which can be identified from a distance. This metaphor conceptualises risk as concealed and imperceptible, thereby integrating vigilance into the fabric of daily ethical conduct. Disaster is regarded not as an aberration but as a constant potential; consequently, vigilance—through conservation, nurturing social connections, and avoiding environmental overexploitation—becomes an ingrained resilience strategy within the culture.

The metaphors of high and low tide in "Dangia kanguraana apene o ure razakina, satanga o dadina asapomo razakina" and "Boli so udani penena ure, udania tee saponu ure" illustrate how the rhythm of the sea serves as an allegory for comprehending the trajectory of life. The high and low phases are regarded as inherent, thus periods of abundance are interpreted as opportunities to prepare for the subsequent lows. This perspective promotes integrated planning across phases and meticulous resource allocation. Meanwhile, the metaphor of the reef in "Mboomo jorompoki pasi" underscores that incorrect decisions can lead to serious and challenging-to-reverse consequences, akin to a vessel colliding with a reef. This emphasises the importance of thoroughly considering the context and refraining from impulsive actions within the moral, economic, and social domains.

The precipitation metaphor in "Boliakamo mboo maina waro-waro somanamo alele" underscores the significance of perseverance: incremental yet persistent efforts are more meaningful than brief, intense bursts. Alongside other metaphors, this pattern constructs a cognitive framework of risk, uncertainty, and sustainability: peril remains unseen, life unfolds in cycles, errors can have catastrophic effects, and gradual change proves more resilient than instantaneous outcomes. This image illustrates the ecological experiences of the Wolio coastal community and demonstrates that Traditional Ecological Knowledge (TEK) is not only embedded in fishing practices but also articulated through language. Therefore, this collection of ecological metaphors provides a significant local framework for developing environmental and catastrophe policies that genuinely correspond with how communities interpret their world.

Together, these ecological analogies establish a cognitive framework through which the Wolio community interprets environmental uncertainty and sustainability. This metaphorical system embodies Traditional Ecological Knowledge (TEK), which is linguistically articulated and culturally transmitted, offering a locally rooted framework for environmental education, disaster risk communication, and climate adaptation initiatives in support of SDG 13 (Climate Action) and SDG 14 (Life Below Water).

5 DISCUSSION

The findings of this study demonstrate that Wolio proverbs establish a cohesive value framework and a socio-ecological navigation system that assist the community in confronting life's uncertainties and environmental transformations. The hierarchical arrangement of values, which elevates life above wealth, community above the individual, custom (sara) above collective interests, and religion as the ultimate source of legitimacy, embodies a complex moral framework that governs collective priorities and responsibilities. This framework reinforces the assertion that local knowledge systems function not solely as moral principles but also as culturally ingrained structures for the sustainable management of hazards, resources, and social cohesion over the long term [2], [6], [7].

When these findings are considered alongside the collection of ecological metaphors, it becomes apparent that Wolio conceptions of resilience are profoundly grounded in embodied and environmental experience. Metaphors of tides, cyclones, continual drizzle, fleeting downpours, and coral reefs function as cognitive frameworks for understanding the dynamics of risk, change, and moral implications, in accordance with the principles of Cultural Linguistics and Conceptual Metaphor Theory [15]. In this context, Wolio proverbs serve not only to impart ethical

guidance but also to offer interpretive frameworks for understanding environmental cues, evaluating the outcomes of actions, and forecasting cyclical transformations.

The four clusters of cultural values identified in this study (1) value hierarchy, (2) work ethic and livelihood sustainability, (3) prudence and social boundaries, and (4) justice and social order—form the normative basis through which Wolio society structures collective life and addresses socio-ecological risks. The sequence "self – lipu – sara – religion" functions not merely as a moral framework but as a culturally specific mechanism for governing sacrifice, safeguarding, and establishing legitimacy during periods of crisis. This pattern corresponds with research on Indonesian local values that highlight collectivity, customary authority, and religious legitimacy as fundamental pillars of social resilience [8], [11].

The function of custom (*sara*) as a regulator surpassing communal interests emphasises its role as an ethical authority and a sustainable mechanism for conflict resolution. In Eastern Indonesia, traditional authority structures have proven to be essential in supporting post-disaster recovery efforts and ensuring social stability [9]. Supporting this, research on the resilience of indigenous populations and communities affected by eruptions in Eastern Indonesia indicates that customary authority institutions, collective rituals, and communal consensus are instrumental in facilitating post-crisis recovery [4], [26], [34]. In the Wolio context, the proverb that elevates *sara* above *lipu* signifies that collective consensus is necessary to uphold a higher moral standard, thereby discouraging short-term pragmatism, the tyranny of the majority, or "practical" decisions that compromise long-term stability [26], [35]. The incorporation of religion as the apex of the hierarchy further illustrates that moral legitimacy is rooted in transcendent values, which can serve as ethical stabilisers during periods of rapid social, economic, and ecological change [5], [36].

Proverbs highlighting the importance of diligent effort, the willingness to endure hardship—"tired now so as not to be tired later"—and the preference for modest but consistent income exemplify a moral economic framework that assesses livelihoods not solely based on material wealth but also in terms of stability and their influence on social networks [25], [37]. The maxim "a gentle, persistent drizzle surpasses a sudden downpour" underscores an incremental approach: gradual, consistent modifications hold greater significance than abrupt, unsustainable surges. This correlates with the concept of livelihood resilience, which considers long-term economic stability to be the outcome of diversification, robustness, and the capacity to withstand shocks, rather than merely the accumulation of short-term gains [2], [38].

The examination of Traditional Ecological Knowledge (TEK) in agricultural proverbs reveals a comparable pattern: incremental ecological processes such as plant development, the water cycle, and the growing season serve as models to elucidate concepts of labour, time, and sustainability [39], [40]. In the Wolio context, this gradual yet steady process is exemplified by metaphors of palm sap droplets and continuous rainfall. The proverb subtly critiques speculative economic behaviours or consumerist lifestyles that prioritise substantial, immediate gains at the expense of long-term stability. This dialogue aligns with cross-cultural research on Italian, Sino-Spanish, and Arabic proverbs, demonstrating how agrarian and ecological analogies are integrated into work ethics and livelihood practices [23], [26], [41], [42].

The proverbial emphasis on boundaries, prudent judgement, and the significance of a "clear rule" indicates that the Wolio community perceives risk as controllable through self-regulation, compliance with established norms, and meticulous decision-making. The prohibition against exceeding limits (*lempagi tida*) underscores that every action is bounded by social and ecological thresholds, and that transgressing these thresholds will lead to both symbolic and tangible forms of devastation. Within the TEK framework, this corresponds to the concept of social and ecological carrying capacity, specifically that traditional communities establish implicit norms to prevent overexploitation and internal discord [11], [43].

The exhortation to look beyond a single perspective and to consider attentively emphasises the importance of multi-faceted thinking within a meticulous approach. Research on community resilience indicates that the capacity to analyse issues from various perspectives, including those of vulnerable populations, influences a community's ability to foresee the effects of policies, disasters, or environmental changes [38], [44]. The adage regarding 'bending the bar' underscores the significance of maintaining rule integrity: when standards and laws are compromised, social trust diminishes, and long-term resilience frameworks are undermined. This aligns with research on proverbs concerning justice across various cultural contexts, which indicate that metaphors involving measuring instruments, straight pathways, or scales are frequently employed to represent fairness and injustice [45].

The proverb "Tungku ufikiri, bangutaaka ubutuki," which underscores the importance of pausing to reflect prior to action, can be interpreted as a culturally rooted cognitive framework designed to prevent impulsive decisions. From an anthropological linguistics perspective, such prohibitions and sequences of actions constitute aspects of speech behaviour that internalise societal norms of self-regulation [13], [16], [46]. This practice is essential in the contexts

of social conflict, resource management, and disaster response, as it helps prevent escalation and facilitates opportunities for dialogue and deliberation.

An examination of ecological analogies reveals that the Wolio people's experiences as a coastal-maritime community influence their conceptualisation of risk, change, and life dynamics. The metaphor of the ebb and flow of fortune renders the rhythm of the sea a conceptual framework for comprehending the course of life: fluctuations are regarded as inherently natural. This viewpoint promotes cross-phase planning, such as conserving resources during high tide to prepare for low tide, in accordance with research on ecological timing and cycles found in agricultural and maritime proverbs [13], [25], [47], [48].

The metaphor of cyclones and disasters being unlike the coconut trunk that appears illustrates that not all risks are accompanied by visible indicators. This local knowledge promotes continuous vigilance: preserving reserves, fostering social networks, and preventing overexploitation even when circumstances seem secure. Research on proverbs and conservation indicates that numerous communities employ metaphors related to storms, flooding, or droughts to promote awareness of concealed hazards and the importance of ecological vigilance [2], [5]. The metaphor of the reef as a significant hazard capable of "crashing the boat" elevates maritime navigation to the domain of social and moral judgement. Errors are portrayed not as trivial mistakes, but as collisions with something firm and irreversible, emphasising the significance of moral literacy, consultation with elders, and contextual understanding. These findings are consistent with research on Mediterranean and East Asian proverbs, which indicate that prominent geographical features (such as reefs, mountains, rivers, and deserts) frequently function as metaphorical markers to denote peril or establish order [20], [49].

The metaphors of persistent precipitation and the ebb and flow within the work ethic and livelihood management clusters highlight that many optimal processes are inherently gradual and cyclical. From an ecolinguistic and TEK perspective, this demonstrates that the Wolio community develops adaptive strategies through the emulation of ecological cycles encountered in daily life [11], [50]. In other words, ecological wisdom is demonstrated not only through fishing or agricultural practices but also in how the community discusses work, nourishment, risk, and the future.

This research engages directly with the scholarly literature on Traditional Ecological Knowledge (TEK) and proverbs as mediums for conveying ecological understanding. Research on TEK in proverbs indicates that traditional expressions encompass knowledge of natural cycles, seasonal variations, and ecological boundaries pertinent to conservation and adaptation strategies [51], [40], [47]. The findings in Wolio proverbs support this perspective, further emphasising that maritime metaphors (such as tides, reefs, and cyclones) are integral to the cultural conceptualisations of coastal communities.

In Indonesia, research on indigenous cultural values and resilience affirms that collective norms, customary authority, and public rituals serve as vital resources for disaster preparedness [2], [5]. This research enhances these studies by demonstrating that the ecological value frameworks and ethical principles underlying resilience are also explicitly embedded in proverbs. Therefore, language is not merely a means of expression but also a repository of knowledge and adaptive strategies that can be utilised for educational initiatives, policy development, and empowerment efforts.

Cross-cultural analyses of proverbs—including literal-metaphorical movement metaphors in Italian proverbs, metaphorical structures in Indonesian and Acehnese proverbs, and networks of meaning in Chinese-Spanish and Arabic proverbs—illustrate that proverbs represent a form of "condensed culture" that governs the body, spatial relations, temporal concepts, and power dynamics [18], [52]. Within this context, Wolio proverbs hold a distinctive role as they extensively interpret littoral and maritime experiences as metaphors for resilience, boundaries, and justice. This supports Sharifian's Cultural Linguistics framework, which asserts that language encompasses cultural schemas, categories, and metaphors that influence social practices and perceptions of reality [14], [15].

The primary theoretical contribution of this study is to illustrate how Traditional Ecological Knowledge (TEK), Conceptual Metaphor Theory, and Cultural Linguistics can be synthesised within an integrated analysis of a singular corpus of proverbs. Wolio proverbs are demonstrated to concurrently encompass: (1) a framework of moral values, (2) an implicit ecological ethic, (3) a model of risk management, and (4) principles of community resilience. This reinforces the assertion that language, particularly proverbs, functions not only as a reflection of culture but also as a form of "software" that embodies the principles of resilience in daily life [13], [53].

From a practical standpoint, these findings are pertinent to the formulation of sustainable development policies and culturally appropriate disaster response initiatives. Research on the failings of development programs indicates that interventions that disregard local values are more likely to encounter opposition and diminish their legitimacy [2], [54]. By employing Wolio proverbs as an entry point, calamity mitigation initiatives, coastal economic development, and marine conservation efforts can be effectively conveyed through a language of values that resonates with the

community. Concretely, the principle of "continufous drizzle" can facilitate gradual, community-driven enhancement of livelihoods, such as cooperative-based processing of marine products and incremental ecotourism development, whereas the "straight ruler" metaphor can be employed to emphasise transparency and the integrity of rules in coastal zoning and resource management. Similarly, "do not exceed the limit" can be conveyed through culturally appropriate messages regarding ecological carrying capacity and limitations on harmful fisheries or coastal extraction activities. In this manner, Wolio proverbs serve as cultural gateways that enhance the social legitimacy, communicability, and sustainability of development policies within small-island and coastal settings.

In the context of Baubau and the Buton archipelago, where coastal vulnerability, urban growth, and pressure on marine resources converge, Wolio proverbs provide a culturally rooted epistemic foundation for the attainment of the Sustainable Development Goals, specifically SDG 11 (Sustainable Cities and Communities), SDG 13, and SDG 14. By incorporating these local conceptual frameworks into policy development, initiatives can attain not only technical validity but also social acceptance and cultural sustainability (2), (5), (66). Concretely, metaphors such as "continuous drizzle" can facilitate the gradual, community-driven enhancement of livelihoods; the principle of the "straight ruler" can serve to emphasise transparency and fairness in coastal zoning and marine governance; and "do not go beyond the limit" can be interpreted as culturally meaningful messages concerning ecological carrying capacity and restrictions on environmentally harmful resource utilisation. This aligns with resilience scholarship emphasising that sustainable adaptation over the long term relies not only on technical efficiency but also on value-based legitimacy and collective acceptability [6], [7].

This study remains limited in scope, chiefly because it has not analysed the utilisation of proverbs within current speech practices, including among younger demographics. Further research should integrate ethnographic speech data and participant observation to assess the degree to which proverbs continue to influence daily decision-making, rituals, customary deliberations, and formal educational contexts. It is also essential to investigate how language changes and digital media impact the dissemination of indigenous knowledge embedded in proverbs, as well as how these forms are incorporated into local curricula or cultural revitalisation initiatives within island communities. Overall, this discussion affirms that Wolio proverbs represent a localised knowledge system that integrates cultural values, ecological principles, and adaptive strategies into a unified conceptual framework. Language, in this context, is not solely a tool for communication but also serves as a cognitive framework that underpins community resilience and promotes a sustainable development orientation within the Wolio community.

6 CONCLUSION

This research indicates that Wolio proverbs represent a cohesive indigenous knowledge system, which synthesises cultural values, ecological ethics, and adaptive strategies within a unified conceptual framework. This research demonstrates, through an examination of value hierarchies, work ethic and livelihood sustainability, prudence and social boundaries, justice and social order, and ecological metaphors, that Wolio proverbs serve not only as moral expressions, but also as culturally embedded cognitive infrastructures that shape how communities interpret risk, structure collective life, and adapt to environmental and social change. This study's integration of Traditional Ecological Knowledge (TEK), Conceptual Metaphor Theory, and Cultural Linguistics offers a theoretical contribution by illustrating how language, specifically proverbs, functions as both a preserver and an active interpreter of resilience-focused knowledge. Wolio proverbs encapsulate not only ethical principles and social conventions, but also tacit frameworks for risk mitigation, ecological equilibrium, and enduring sustainability, conveyed through culturally significant metaphors and value systems. From a practical standpoint, these results underscore the pertinence of Wolio proverbs to culturally informed sustainable development initiatives. Within the framework of Baubau and the Buton archipelago, characterised by the confluence of coastal vulnerability, urban development, and pressures on marine resources, Wolio proverbs serve as an epistemological basis for promoting Sustainable Development Goals, specifically SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDG 14 (Life Below Water). By integrating locally-derived metaphors and core values—including incremental resilience, respect for boundaries, and procedural integrity—into development policies, environmental governance strategies, and disaster risk communication, development initiatives can attain not only technical efficacy but also social acceptance and cultural endurance. However, this investigation is constrained by its principal dependence on textual and conceptual analysis. Future research endeavours should integrate ethnographic observation of current speech practices, specifically within younger cohorts, to evaluate the degree to which Wolio proverbs continue to be utilised in daily decision-making processes, rituals, and educational settings. Additional research is warranted to investigate the effects of digital media and language change on the dissemination of this indigenous knowledge system and its incorporation

into formal development planning initiatives and locally relevant educational curricula within island communities. In summary, this research underscores that language functions not only as a communicative tool but also as a strategic cultural asset for fostering resilience and promoting sustainable development. Acknowledging Wolio proverbs as a manifestation of indigenous epistemology, this research advances the ongoing endeavour to formulate development models that are not only environmentally and economically sustainable, but also culturally relevant and socially acceptable.

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