Realization of the Pentahelix Model in the Development of Paksebali Tourism Village Towards Sustainable Tourism

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ABSTRACT

This study examines the implementation of the pentahelix model in the development of Paksebali Tourism Village toward sustainable tourism in Klungkung Regency. Using a qualitative approach, data were collected through in-depth interviews with government officials, academics, business actors, tourism group (Pokdarwis) managers, and community members, supported by field observations and documentation studies. The data were analyzed using inductive thematic coding to identify collaboration patterns, actor roles, and key challenges. The findings show that the government functions as a regulator and facilitator through policy support, infrastructure development, and capacity-building programs, although coordination between agencies remains inconsistent. Academic involvement contributes to potential mapping and community mentoring but is generally short-term and lacks continuity. Business actors strengthen the tourism economy but tend to work independently, resulting in limited integration with village development plans. The community becomes the core driver of attractions and tourism activities, yet still faces obstacles in service standards, digital literacy, and human resource capacity. The media element shows the weakest performance, with limited digital promotion and minimal collaboration with external media partners. Overall, the realization of the pentahelix model in Paksebali has begun but is not yet optimal. Strengthening coordination mechanisms, sustaining programs, enhancing digital promotion, and improving stakeholder synergy are essential to support sustainable tourism development.

INTRODUCTION

Tourism has developed into a strategic sector with a significant impact on the social, economic, and cultural lives of communities (Ratna Susanti et al., 2022). Its development is characterized not only by increasing tourist visits but also by significant changes in local community dynamics, including social interaction patterns, community-based economic systems, and the transformation of cultural spaces and activities (Simanjuntak et al., 2024). The rapidly growing tourism sector encourages rural communities to become increasingly involved in creative economic activities, tourism services, and direct natural resource management. This transformation demonstrates that tourism serves not only as an economic driver but also as a catalyst for social restructuring at the village level (Ningtias et al., 2024). As more communities shift toward tourism-based livelihoods, the need for structured governance and inclusive decision-making becomes increasingly urgent (N et al., 2015). Without proper coordination, tourism development risks causing social disparities and environmental pressures. This highlights the importance of designing collaborative governance frameworks capable of managing rapid tourism growth.

As tourism activity increases, the concept of sustainable tourism development has become crucial. This concept emphasizes a balance between economic growth, environmental conservation, and socio-cultural sustainability ("Tour. Sustain. Dev. Goals – Journey to 2030," 2022). The implementation of sustainable tourism allows tourist destinations to continue to develop without sacrificing the quality of life of local communities or the preservation of the natural resources that support them (Herawaty et al., 2023). However, various literature indicates that the implementation of sustainable tourism faces complex challenges, such as capacity imbalances among actors, weak coordination, the dominance of certain actors, and a lack of regulations ensuring environmental preservation (Nuhung et al., 2022). In an ideal context, sustainable tourism is expected to be implemented through structured planning, coordinated action, and long-term commitment from all stakeholders (das sollen). Yet in reality (das sein), many tourism villages still struggle with fragmented programs, unequal distribution of resources, and inconsistencies between policy intentions and field implementation (Fariz et al., 2023).

This gap highlights the unresolved tension between the expectations of sustainable development and the operational limitations faced at the village level. These inconsistencies show that sustainable tourism remains more of a normative aspiration than a fully practiced framework in many rural settings. The persistent gap between vision and execution creates policy stagnation, hampering long-term development outcomes. This mismatch demonstrates the urgency of studying how collaborative mechanisms actually work in practice. Furthermore, the gap suggests that certain enabling conditions such as strong leadership, adequate funding, and institutional capacity have not been fully established in many tourism villages. Without addressing these structural challenges, efforts toward sustainable tourism are likely to remain symbolic

rather than transformative. Thus, a deeper empirical investigation becomes crucial to identify which systemic barriers most significantly impede implementation.

In the context of tourism villages, the success of destination development is determined not only by the magnitude of its potential but also by the strength of the collaborative network formed among stakeholders (Saifudin Yahya et al., 2023). This aligns with the principle of collaborative governance, which encourages multi-stakeholder involvement in every decision-making process (Ansell, C. and Gash, 2023). In community-based tourism development, the pentahelix model is one of the approaches widely used to map and strengthen collaboration between stakeholders, namely government, academics, business actors, communities, and the media (Aribowo et al., 2022).This model positions collaboration not merely as cooperation put as a structured governance architecture where each actor is expected to contribute resources, knowledge, and institutional legitimacy (Althunibat et al., 2024). When operating effectively, the pentahelix framework can mitigate development fragmentation, improve transparency, and foster shared responsibility in decision-making (Indrianti et al., 2024). However, achieving this level of collaboration requires alignment of goals and consistent communication across actors, which is often difficult in rural contexts with limited institutional capacity. The presence of informal power dynamics within villages may also influence how decisions are made, potentially weakening participatory processes. These limitations reveal that the pentahelix model, while conceptually strong, relies heavily on the practical ability of actors to work together under a shared governance structure(Alfandy, A., & Meganingratna, 2024).

This model is believed to be able to increase innovation, strengthen governance, expand promotion, and open new economic opportunities for the community. Multi-stakeholder participation enables the destination development process to be more inclusive and democratic, as each actor brings different perspectives, interests, and expertise to address tourism issues (Kumala et al., 2024). However, the implementation of pentahelix also faces challenges such as insufficient communication, differing priorities, and the lack of a formal collaborative forum that unifies the vision and mission of all parties (May et al., 2025). Therefore, the effectiveness of pentahelix depends heavily on the extent to which synergy and coordination are consistently established. Ideally, the pentahelix framework should function as a solid collaboration platform that integrates policies, programs, and roles (das sollen) (Herawaty et al., 2023). However, existing studies show that its field implementation tends to be partial, temporary, and not institutionalized (das sein).

This indicates that although the concept is normatively embraced, it has not fully translated into operational mechanisms such as joint planning, regular cross-sector dialogues, shared monitoring systems, or standardized performance indicators. As a result, collaboration often becomes project-based rather than systemic, making its outcomes inconsistent and difficult to scale. This discrepancy indicates a structural gap between the theoretical framework of pentahelix and its real application in tourism village governance. Such structural gaps highlight the importance of institutionalizing collaboration through formal policies or local regulations. Without clear governance instruments, collaborative efforts remain vulnerable to leadership changes, funding limitations, or external interventions (Palangda & Dame, 2023). These realities underline why empirical evaluation of pentahelix imple-mentation is urgently needed to generate strategies that can strengthen long-term inter-actor cooperation.

Klungkung Regency is one of the regions in Bali actively developing tourist villages as a regional development strategy. Supported by its unique culture, natural resources, and high community participation, Klungkung strives to optimize the tourism sector to improve community welfare. One of these developing tourist villages is Paksebali Tourism Village. This village offers cultural and nature-based tourism experiences, such as tubing on the Unda River, traditional arts performances, local crafts, trekking, and culinary specialties. These attractions make Paksebali a destination with great potential for development into a sustainable tourism village. Beyond its tourism potential, Paksebali possesses a strong traditional social structure, local leadership, and community institutions that can serve as a foundation for collaborative governance. These socio-cultural assets provide an enabling environment for partnership-building, although their effectiveness depends on how well they are integrated into formal development planning. However, these strengths can also present challenges, as traditional norms sometimes influence decision-making processes in ways that limit participation from younger generations or marginalized groups. Additionally, the coexistence of formal governance institutions and customary structures requires careful alignment to avoid role overlaps. Understanding how these sociocultural features interact with tourism governance is therefore essential to designing effective collaborative models.

The development of Paksebali Tourism Village is inextricably linked to the involvement of various actors. The local government encourages the growth of tourism villages through policymaking, infrastructure provision, and human resource training (Klungkung Tourism Office, 2023). Academics are also involved in providing mentoring and research into village potential. Businesses provide supporting services such as homestays, culinary delights, and tourism services. The community, as the primary actor, plays a role in managing attractions, organizing tourism activities, and preserving local traditions and culture. The media, both local and social, helps expand the promotional reach of tourism villages, making them more widely known to tourists (Herawaty et al., 2023). However, the roles of these actors are not equally strong. Some contribute intensively while others are still minimally involved, creating an imbalance that affects the overall governance dynamics of the tourism village. This imbalance reflects the need for more structured role distribution and institutional strengthening among all stakeholders. Such asymmetry also suggests that some actors may lack resources or authority to participate optimally, leading to dependency on a few dominant groups (Saifudin Yahya et al., 2023). If not addressed, this imbalance can reduce the inclusiveness and sustainability of tourism governance. Strengthening collaborative equity therefore becomes essential to prevent long-term governance vulnerabilities.

However, the dynamics of the pentahelix model implementation in Paksebali reveal several challenges that require attention. The Paksebali Tourism Awareness Group (Pokdarwis) report (2024) revealed that coordination between actors has not been optimal, particularly in terms of joint program development, regular meetings, and clear role allocation. Academic involvement remains temporary, resulting in unsustainable development recommendations. Business actors largely operate independently without integration into tourism village plans. Community human resource capacity is une-

venly distributed, particularly in service delivery, attraction management, and digital marketing. The media's role in promotion is also limited, both in terms of consistency and quality of digital content (Joshi & Islam, 2023). These findings illustrate that the collaborative ecosystem in Paksebali has not yet reached a functional level of interdependence, where actors operate based on shared agendas and clear governance structures. Instead, collaboration tends to be ad hoc, dependent on short-term projects, and lacking continuity. Such structural limitations hinder the creation of a unified development direction and weaken Paksebali's ability to compete with more established tourism villages. These conditions illustrate a clear gap between the ideal pentahelix collaboration expected to support sustainable tourism (das sollen) and the fragmented, inconsistent implementation observed in Paksebali (das sein). This gap reinforces the need to conduct a comprehensive analysis to understand why synergy among actors has not yet been fully achieved. Moreover, these issues highlight that improvements require not only increased participation but also stronger regulatory and institutional support. The absence of long-term planning frameworks further contributes to the difficulty of maintaining consistency in collaborative activities. Therefore, deeper examination is necessary to identify how these structural weaknesses can be transformed into opportunities for institutional reform.

Various previous studies have examined the development of tourism villages, including the role of pentahelix actors (Pugra et al., 2021), digital promotion strategies (Vani et al., 2021), and community engagement (May et al., 2025). However, specific studies on how the pentahelix model is implemented in Paksebali Tourism Village within the context of sustainable tourism development are still very limited. This research gap becomes academically urgent because the success of sustainable tourism in tourism villages relies heavily on collaborative governance mechanisms, yet empirical evidence regarding how these collaborations actually unfold in Paksebali remains insufficient. Furthermore, the limited availability of localized studies prevents a deeper understanding of village-specific constraints that might differ from other tourism villages in Bali. Without this understanding, policy interventions risk being generic and ineffective in addressing Paksebali's unique development characteristics. Consequently, there is a need for context-sensitive research that captures the unique cultural, institutional, and economic features of Paksebali. Such research can generate tailored recommendations that better align with local realities. Additionally, filling this gap can contribute to comparative studies on tourism village governance across Bali, strengthening the academic discourse on collaborative tourism development.

Based on these gaps, this study aims to analyze in-depth how the pentahelix model is implemented in the development of Paksebali Tourism Village towards sustainable tourism. Understanding the collaboration patterns between actors is expected to contribute to the development of more effective, inclusive, and sustainable tourism village development strategies and support tourism development policies that prioritize a balance between environmental, economic, and sociocultural aspects. Ultimately, this research seeks to provide actionable insights that bridge theory and practice, enabling stakeholders to strengthen collaborative structures, reduce governance fragmentation, and optimize Paksebali's potential as a model for sustainable tourism village development in Bali. Through this analysis, the study also aspires to offer practical recommendations that can be adopted by local governments,

tourism organizations, and community groups. Additionally, the findings are expected to enrich academic discussions on the operationalization of collaborative governance models in rural tourism. In doing so, this research not only addresses a local development issue but also contributes to broader theoretical advancements in sustainable tourism governance.

METHODS

In addition to field-based data collection techniques, this study also adhered to ethical principles. All interviewed informants were provided with an explanation of the research objectives, the expected form of participation, and their right to terminate the interview at any time without any consequences. Informants were also given the option to remain anonymous if they felt uncomfortable. The researchers ensured that all information obtained would be used solely for academic purposes and would be kept confidential. Implementing these ethical principles is crucial given the research's involvement of local communities, village officials, and stakeholders who are structurally sensitive to local government policies. Additional ethical steps included seeking verbal informed consent, clarifying how data would be stored securely, and explaining potential risks and benefits of participation. The researcher also emphasized that no personal identifiers would appear in the final report. These procedures were crucial to prevent discomfort or fear among participants, especially when discussing institutional weaknesses or sensitive coordination issues. Ethical reminders were reiterated at the beginning of each interview to ensure participants' ongoing comfort throughout the process.

RESULTS AND DISCUSSION
The Role of Government in Implementing the Pentahelix Model

The government is a central actor in the development of Paksebali Tourism Village because it has the authority to regulate, facilitate programs, and establish institutional structures. Based on interviews, the Klungkung Regency government has provided a number of supports, such as establishing tourism village regulations, developing basic infrastructure, and mentoring in human resource development programs. This support aligns with the government's role as an enabler and facilitator in collaborative governance (Ansell & Gash, 2007). However, in the field, coordination between government agencies has not been optimal. Some development activities are sporadic and not well integrated between the district and village. This limited synchronization is evident in overlapping programs, a lack of continuity in mentoring, and the absence of a formal collaborative forum that brings together all actors. This situation indicates that despite the government's presence, its effectiveness in encouraging multistakeholder collaboration in Paksebali's development is not optimal. In addition to providing regulations and basic infrastructure, the government also plays a role in establishing the direction of tourism village development policies through planning documents, such as the Regional Development Planning Agency (RIPPDA), Regent's Regulations, and Decrees for the Establishment of Tourism Villages. However, field findings indicate that these policies have not been fully translated into consistent actions at the technical level. The district government, for example, has provided tourism training, but has not targeted all community groups, so capacity building has been partial.

Cross-sector coordination also remains a challenge. Tourism village planning is often separated from other regional government agencies (OPD) programs, such as the Department of Industry, the Department of Cooperatives, and the Department of Public Works and Housing, which have the potential to support destination development. The lack of integrated planning makes tourism village development appear to be operating in isolation, without synergistic support from all government units. This results in program imbalances, such as discontinued infrastructure, training that is not followed by evaluation, and promotion that is not integrated with district tourism policies. Furthermore, the government has not yet fully developed formal mechanisms such as pentahelix collaboration forums that bring together government, academics, business actors, the community, and the media. Without a coordination forum, communication between actors only occurs during specific projects or events. This makes the collaboration that is established situational, rather than permanent. In fact, the existence of such a forum has the potential to strengthen decision-making; align visions; minimize program overlap; and ensure that tourism village development is sustainable. Thus, the government's role as a leading actor is already underway, but its effectiveness still needs to be improved through strengthened coordination, consistent mentoring, and the establishment of formal multi-stakeholder dialogue spaces.

The Role of Academics in Mentoring and Knowledge Transfer

Academic involvement has thus far provided added value in terms of innovation, research into village potential, and strengthening community capacity. Academics participate through various schemes such as Community Service Programs (KKN), the MBKM program, lecturer research, and community service. However, this involvement is largely temporary and follows the academic calendar, so its sustainability depends on specific projects. The sustainability of this mentoring is a major issue. Many recommendations from academics, such as those regarding attraction development, digital promotion strategies, or improving the management capacity of tourism-focused tourism groups (Pokdarwis), cannot be consistently implemented due to the lack of long-term monitoring. Villages also report difficulties in continuing some innovations without further technical support, such as training in digital marketing or tourism business management.

There are no formal collaboration agreements with universities that would ensure regular academic involvement. Collaboration still relies on individual or group student initiatives, rather than institutional partnerships. Yet, numerous studies emphasize the importance of structured partnerships between tourism villages and universities to maintain the continuity of innovation and knowledge transfer (Ratna Susanti et al., 2022). This situation demonstrates that the role of academics in Paksebali holds significant potential, but it remains unstructured and unaffiliated with a more strategic, long-term collaborative framework. If this synergy is strengthened, academics could play a crucial role in ensuring Paksebali's development is data-driven and evidence-based.

The Role of Business Actors in Supporting the Tourism Economy

Local businesses in Paksebali have demonstrated notable creativity in offering tour packages, developing supporting services, and responding to emerging visitor demands. Their presence plays an important role in diversifying tourism products and enriching the overall visitor experience. However, research findings reveal a series of structural and operational barriers that continue to limit the full realization of their potential within the tourism ecosystem (Simanjuntak et al., 2024). First, many business operators still lack a comprehensive understanding of tourism service standards. This includes inconsistent application of safety protocols, varied hospitality skills, limited understanding of visitor expectations, and unequal quality across different service providers. As a result, the overall tourism experience becomes uneven, and the reputation of the destination may be affected by the weakest service point. In destinations that rely heavily on community-based tourism, the absence of standardized service quality can become a major obstacle to strengthening competitiveness. Second, low digital literacy among business owners prevents them from leveraging online platforms optimally. Social media which is now the main gateway for discovering destinations, making reservations, reading reviews, and sharing travel experiences remains underutilized. Many business actors do not yet understand content creation, pricing visibility, or online customer engagement strategies.

This digital gap limits the visibility of Paksebali tourism products and reduces their ability to attract tech-savvy travelers who rely heavily on digital information. Third, business actors within the tourism value chain have not yet been integrated. Key services such as homestays, tubing activities, trekking guides, craft producers, and local culinary providers operate independently rather than through a coordinated system. This fragmentation forces visitors to search for multiple services separately, reducing convenience and weakening the potential for creating bundled tourism packages. Integrated packages could significantly increase both visitor satisfaction and sales value, yet the absence of coordination prevents this value from being captured. Fourth, business operators remain largely excluded from long-term tourism planning in the village. Their ideas, challenges, and needs are often not reflected in policy decisions because they are not involved in formal decision-making structures. This lack of participation results in misalignment between business realities on the ground and the strategic direction of village tourism development. In turn, this creates inefficiencies, reduces the relevance of village programs, and limits opportunities for innovation driven by local entrepreneurs.

Limited space for structured dialogue such as business forums, industry consultations, or village–business coordination meetings means that communication remains informal and sporadic. Business actors often operate independently, without a clear understanding of the village's tourism vision, planned infrastructure improvements, or upcoming events that could support business growth. This isolation limits collaboration and prevents the formation of a cohesive tourism ecosystem. If managed effectively, local businesses have the potential to generate significant economic impact, stimulate job creation, and create a strong multiplier effect for surrounding communities. They can also act as innovation drivers by introducing new products, adopting creative market strategies, and responding quickly to visitor preferences. Therefore, integrating businesses more deeply into the institutional structure of the tourism village through collaborative forums, joint marketing initiatives, standard-setting committees, and participatory planning processes is a strategic step toward strengthening the implementation of the pentahelix model in Paksebali.

The Role of the Community in Tourism Management and Attractions

The Paksebali community demonstrates a high level of participation in tourism activities, both as service providers and as attraction managers. They are involved in various activities, including trekking, tubing, performing arts, craft production, and culinary specialties. This involvement demonstrates that the community has become a key actor in implementing the community-based tourism (CBT) concept. However, in-depth interviews revealed that this high level of participation has not been fully matched by adequate capacity. Many people lack an understanding of basic hospitality principles, such as service excellence, complaint handling, and the concept of tourist behavior. At some water-based tourist attractions, safety standards are not strictly enforced due to a lack of formal training on risk management, the use of safety equipment, and emergency response procedures. This poses a potential risk to tourists and can impact the destination's reputation. Beyond technical capacity issues, there are also issues related to the community's perspective on tourism. Some residents still view tourism village activities as extra work done in their spare time, rather than as a primary source of income that can provide long-term economic benefits. This mindset leads to fluctuating commitment to attraction management, especially when residents are more focused on traditional activities, agricultural work, or other work outside the village. This situation presents challenges in the form of unstable tourism village operations, particularly during the peak tourist season.

The issue of regeneration is also a significant challenge. Not all young people in Paksebali are interested in continuing tourism management, preferring to work in the formal urban sector or in the larger tourism industry elsewhere in Bali. This lack of interest stems from the perception that rural tourism jobs are less economically promising or lack a clear career path. If this trend continues, the sustainability of tourism villages could be threatened by the lack of young cadres prepared to become future tourism actors. The lack of regular training exacerbates this situation. Training provided by the government or supporting institutions is usually only held once or twice a year, with a limited number of participants. Some tourism operators have never even received formal training related to service delivery, tourism management, or digital marketing. The lack of ongoing training modules hinders the development of community knowledge and makes it difficult to adapt to current tourism trends, such as experience-based tourism or content-based digital marketing. On the other hand, there is no structured capacity-building mechanism from the government, supporting institutions, or the Pokdarwis itself. Training programs remain sporadic, unscheduled, and not tailored to the specific needs of each tourism business unit.

Besides capacity issues, the community also faces challenges adapting to technology. Low digital literacy makes it difficult for them to manage social media, conduct online marketing, or communicate professionally with potential tourists. This is despite the fact that the current tourism era relies heavily on digital platforms for reservations, promotions, and online reviews. This digital lag has prevented some of Paksebali's tourism potential from being fully exposed.

These limitations demonstrate that the community is indeed highly willing and actively participates, but still requires structured and long-term support in terms of capacity building, business mentoring, and strengthening digital literacy. If these needs are met, the community can play a greater role as professional managers, enabling Paksebali Tourism Village to develop sustainably and competitively amidst competition from other tourist destinations in Bali.

The Role of Media in Promotion and Dissemination of Information

The media is the weakest element in the implementation of pentahelix in Paksebali Tourism Village. The minimal involvement of media actors is evident in how the village's social media is still managed independently by village administrators or Pokdarwis (tourism group), without adequate technical support. Administrators often operate based on intuition, rather than a planned communication strategy. Limited capabilities in visual design, product and attraction photography, copywriting, and content calendar management mean that the quality of digital promotions cannot compete with other tourism villages that have professional public relations teams. The resulting content is generally simple and informative and lacks compelling visuals, making it less effective at generating engagement or building a strong destination image.

Furthermore, social media managers don't yet understand the evolving algorithms of platforms like Instagram or TikTok, which are now spearheading tourism marketing. As a result, posts are inconsistent, posting times are inappropriate, hashtags are less strategic, and engagement with audiences is very limited. This makes it difficult for content to reach a wider audience, thus suboptimal promotional impact. Yet, in the digital tourism ecosystem, content consistency and creativity are crucial for a destination's visibility.

Interviews with business owners revealed that media promotion significantly impacts visitation rates. Several times, tourist visits have increased after viral posts by netizens or travel bloggers. However, because this was unplanned and sporadic, the increase was not sustainable. Paksebali currently lacks a mechanism to engage local influencers, travel content creators, or the media for regular promotions. The lack of formal partnerships with local or national media outlets severely limits Paksebali's coverage. Yet, many tourist destinations have thrived through active collaborations with media outlets and digital content communities. Media should not only function as a channel for disseminating information, but also as a strategic actor capable of building a destination's narrative and image. In the context of modern tourism, media has the power to shape public perception through storytelling, visual framing, and massive message dissemination.

Beyond visual aspects, villages have also yet to capitalize on the potential of media for public education and reputation building. Many of Paksebali's best practices such as river management, cultural attractions, or empowerment activities would actually have high news value if packaged well. However, without basic journalistic skills, these positive activities are rarely professionally documented and not publicized by the mass media. As a result, development efforts undertaken by the community or village government are not widely communicated to potential tourists.

Another limitation lies in the lack of ongoing digital marketing training for village media managers. Current management knowledge is still basic and not regularly updated. This is despite the rapid pace of the digital ecosystem algorithms, content trends, and audience preferences change within months. Without updated knowledge, village content will become outdated and struggle to compete with more adaptable and professional content from other destinations.

CONCLUSION

This study concludes that the development of Paksebali Tourism Village has involved all five elements of the pentahelix model, although the level of effectiveness across actors varies considerably. The government functions as the main policy director and facilitator, yet coordination between agencies and the consistency of development programs remain limited. Academic actors contribute through research, potential mapping, and community mentoring, but their involvement is still short-term and has not developed into long-term collaborative frameworks.

Business actors support the village economy through tourism services and local products, but their role has not been fully integrated into collective planning. Collaboration with Pokdarwis remains fragmented, and digital literacy constraints reduce their competitiveness. The community demonstrates strong enthusiasm and participation in tourism management, yet gaps in technical skills, hospitality, risk management, and digital capacity hinder consistent service quality and long-term sustainability. Meanwhile, the media element shows the weakest performance, as promotional activities are still modest and lack professional management and wider collaboration. Overall, the presence of all five pentahelix actors indicates that the collaborative foundation for sustainable tourism development already exists in Paksebali.

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