



**LOCAL COMMUNITY KNOWLEDGE, ATTITUDE AND PRACTICE
ON ECOTOURISM SERVICES AT LINGGI, NEGERI SEMBILAN,
MALAYSIA**

By

WAN MOHD ADIB BIN WAN MOHD YUSOH

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Master of Science**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Master of Science

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Chairman : Ts. Mohd Hafizal bin Ismail, PhD
Faculty : Forestry and Environment

Local communities are central to ecotourism, playing key roles in supporting economic activities that enhance their well-being. However, the current landscape of local community participation in ecotourism economic activities is challenged by the lack of knowledge and awareness about ecotourism. These challenges hinder ecotourism development, staying true to its principles and realising economic and social benefits for local communities. Thus, this study explores local communities' knowledge, attitude, and practice of ecotourism services in Linggi, Negeri Sembilan. The study uses a cross-sectional methodology and a standardised Knowledge, Attitude and Practice (KAP) questionnaire. The findings reveal significant correlations between demographic factors and the local community's engagement with ecotourism services in Linggi, Negeri Sembilan. Older individuals, especially those aged

between 31 and 39, exhibit higher participation rates in ecotourism activities. Local communities from Kampung Pengkalan Kempas, demonstrate a more positive attitude towards ecotourism. Moreover, males are slightly more involved in ecotourism practices than females, and individuals with higher education levels tend to possess a greater understanding of ecotourism principles. The community demonstrates a high degree of knowledge of ecotourism, but only moderate levels of attitude and practice are seen. The study also discovers that knowledge does not significantly correspond with either attitude or practice, although attitudes toward ecotourism have a weak but significant influence on practices. Finally, the KAP variables are affected to varied degrees by demographic factors such as age, education, village location, and gender. The findings addressed the disconnect between knowledge, attitude, and practice regarding ecotourism among the local community, indicating a need for bridging the gap between awareness and actual behaviour. In addition, there is also a need to encourage the participation of youth in ecotourism services. In conclusion, the implications of this study underscore the critical importance of addressing knowledge gaps, enhancing community engagement, and aligning attitudes and practices to foster ecotourism development. This includes strengthening community engagement, facilitating capacity-building initiatives, developing sustainable infrastructure, providing policy support, and fostering partnership development.

Keywords: Attitude, Ecotourism, Knowledge, Local Community, Practice

SDG: GOAL 15: Life on Land



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Master Sains

**PENGETAHUAN, SIKAP DAN AMALAN MASYARAKAT TEMPATAN
TERHADAP PERKHIDMATAN EKOPELANCONGAN DI LINGGI,
NEGERI SEMBILAN, MALAYSIA**

Oleh

WAN MOHD ADIB WAN MOHD YUSOH

Januari 2024

Pengerusi : Ts. Mohd Hafizal bin Ismail, PhD
Fakulti : Perhutanan dan Alam Sekitar

Masyarakat tempatan adalah pusat kepada prinsip ekopelancongan, yang memainkan peranan penting menyokong aktiviti ekonomi dalam meningkatkan kesejahteraan hidup. Walau bagaimanapun, landskap semasa penyertaan masyarakat tempatan dalam aktiviti berasaskan ekopelancongan dicabar oleh kurangnya pengetahuan dan kesedaran mengenai prinsip ekopelancongan. Cabaran-cabaran ini menghalang pembangunan ekopelancongan mampan, pengekal prinsip dalam merealisasikan manfaat ekonomi dan sosial bagi masyarakat setempat. Justeru itu, kajian ini bertujuan meneroka pengetahuan, sikap dan amalan (KAP) masyarakat setempat terhadap perkhidmatan ekopelancongan di Linggi, Negeri Sembilan. Kajian ini menggunakan metodologi keratan rentas dan soal selidik terhadap penilaian tahap pengetahuan, sikap dan amalan yang standard. Hasil kajian

menunjukkan hubung kait yang signifikan antara faktor demografi dan penglibatan masyarakat setempat dengan perkhidmatan ekopelancongan di Linggi, Negeri Sembilan. Individu yang lebih tua, terutamanya mereka yang berumur antara 31 dan 39 tahun, mempamerkan kadar penyertaan yang lebih tinggi dalam aktiviti ekopelancongan. Masyarakat tempatan daripada Kampung Pengkalan Kempas, menunjukkan sikap yang lebih positif terhadap ekopelancongan. Selain itu, lelaki lebih terlibat dalam mengamalkan prinsip ekopelancongan berbanding wanita, dan individu yang mempunyai tahap pendidikan tinggi cenderung mempunyai pemahaman yang lebih besar tentang prinsip ekopelancongan. Masyarakat menunjukkan tahap pengetahuan ekopelancongan yang tinggi, namun tahap sikap dan amalan adalah sederhana. Kajian ini juga mendapati bahawa pengetahuan mempengaruhi sikap dan amalan dengan ketara, walaupun sikap terhadap ekopelancongan mempunyai pengaruh yang lemah tetapi ia signifikan terhadap amalan. Akhir sekali, pembolehubah KAP dipengaruhi kepada pelbagai peringkat mengikut faktor demografi seperti umur, pendidikan, lokasi kampung, dan jantina. Penemuan ini melihatkan hubungan antara pengetahuan, sikap, dan amalan mengenai ekopelancongan di kalangan masyarakat setempat serta menunjukkan keperluan untuk merapatkan jurang antara kesedaran awam dan tingkah laku. Di samping itu, terdapat juga keperluan untuk menggalakkan penyertaan belia dalam perkhidmatan ekopelancongan. Kesimpulannya, implikasi kajian ini menekankan kepentingan kritikal dalam menangani jurang pengetahuan, meningkatkan

penglibatan masyarakat, dan menyelaraskan sikap dan amalan untuk memupuk pembangunan ekopelancongan yang mampan. Ini termasuk mengukuhkan penglibatan komuniti, menggalakan inisiatif pembangunan kapasiti, membangunkan infrastruktur yang mampan, menyediakan sokongan polisi dan dasar, serta memupuk pembangunan kerjasama dan perkongsian.

Kata Kunci: Amalan, Ekopelancongan, Masyarakat setempat, Pengetahuan, Sikap

SDG: GOAL 15: Kehidupan di darat

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Mohd Hafizal bin Ismail, PhD

Senior Lecturer Ts
Faculty of Forestry and Environment
Universiti Putra Malaysia
(Chairman)

Zulkhairi Azizi bin Zainal Abidin, PhD

Senior Lecturer
Faculty of Forestry and Environment
Universiti Putra Malaysia
(Member)

ZALILAH MOHD SHARIFF, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 16 May 2024

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LIST OF ABBREVIATIONS

CBET	Community Base Ecotourism
CBT	Community Based Tourism
KAP	Knowledge, Attitude, Practice
MVV	Malaysia Vision Valley Development Plan
RTPD	Rancangan Tempatan Port Dickson
S-Cvi	Scale Content Validity
SDGs	Sustainable Development Goals
TIES	The International Ecotourism Society
UNWTO	United Nations World Tourism Organization
UPM	Universiti Putra Malaysia
WCED	World Commission on Environment and Development

CHAPTER 1

INTRODUCTION

1.1 Chapter Outlines

This chapter presents an overview of the study and a fundamental role in establishing the foundation for the entire research study. This chapter consists of six sections: background of the study, problem statement, research questions, research objectives, significance of the study and definition of the key terms. The background of the study presents some context or background information about the topic to help understand its relevance. Next, the elaboration of the problem statement follows the exploration of the study context. Subsequently, this chapter presented the research's objectives, questions, and significance of the study, and conceptual and operational definitions of terms were provided. Overall, the introductory section of this chapter serves as a basis for the subsequent chapters, offering a comprehensive overview of the content which will follow.

1.2 Background of the Study

Ecotourism is recognized as a responsible form of tourism that promotes sustainable development and the conservation of natural and cultural resources (Sharif et al., 2020; Vincent & Thompson, 2002). It encompasses a set of principles and practices aimed at minimizing negative impacts on the environment, enhancing socio-cultural well-being, and providing economic

benefits to local communities (Hosseini & Paydar, 2021; Beaumont, 2001). It encourages the positive interaction between tourism, the environment, and local communities, aiming to benefit each component (Kia, 2021; Nair et al., 2014).

The local community is integral to ecotourism as it involves residents' active participation and engagement in tourism activities such as accommodation, guiding, handicraft production, and cultural performances (Nair et al., 2014; Hosseini & Paydar, 2021). By actively involving the local community, ecotourism generates economic benefits, strengthens social cohesion, and preserves cultural heritage and traditions (Sharif et al., 2020; Vincent & Thompson, 2002).

Regarding economic benefits, ecotourism can create new job opportunities for locals, employing people in areas with limited economic options that can help alleviate poverty and improve community members' standard of living (Liu et al., 2023; Zeng et al., 2022). Moreover, ecotourism often promotes the development of local businesses and infrastructure, leading to increased income and economic growth in the area (Buckley, 2009; Das & Chatterjee, 2015; Honey, 2008). For instance, in 2010, local communities within Taman Negara National Park (Kuala Tahan) saw a notable upsurge in their business compared to 1993 (Aziz et al., 2012). Additionally, they experienced a boost in financial support for a startup, encouraging numerous young adults to engage in ecotourism-related activities in the region. Many residents of Kuala Tahan

believed that ecotourism activities significantly improved their livelihood, primarily through enhanced accessibility to the area, development of facilities and infrastructure, and improved connectivity linking their region with the global community.

Regarding social cohesion, ecotourism was observed to strengthen bonds among local communities in lower Kinabatangan, Sabah, boosting self-confidence and pride in their traditions and culture (Uma et al., 2015). A similar trend was noted in Tioman Island, where locals believed that ecotourism had bolstered their pride in local culture and spurred various cultural activities among the populace (Hanafiah et al., 2013). Thus, it becomes evident that tourism plays a pivotal role in economic growth and contributes significantly to social development and cultural capital, benefiting communities associated with the ecotourism industry.

However, to ensure that the ecotourism development can achieve its intended goal, it is imperative to engage the local community from the beginning of the project (Kia, 2021; Muhammad Fakruhayat Ab Rashid et al., 2021; Shieh et al., 2014). In addition, according to Kunjuran (2020) and Sen & Walter (2020), gathering insight from the local population is crucial to comprehend their requirements, concerns, and targets regarding ecotourism. One way to gain insights into the local community is to understand their knowledge, attitudes, and practices regarding the ecotourism activities they are currently engaged in (Kunjuran, 2020). This knowledge can help inform the development to

ensure that the locals' ecotourism activities are aligned with the ecotourism aspiration and promote sustainability (Gumede & Nzama, 2022; Zeng et al., 2022). Besides that, it can also ensure that the ecotourism project considers the community's vision and aspirations, as mentioned in previous sources (Kunjuraman, 2020).

One way to understand the local community's knowledge, attitude, and practice is through the Knowledge, Attitude, and Practice (KAP) surveys. Researchers developed KAP as a method to measure individuals' or communities' understanding, perspectives, and behaviours regarding a specific topic (Salas-Zapata et al., 2018). Using KAP surveys, valuable information about the local community's level of knowledge and awareness about ecotourism, their attitudes towards it, and their current practices or involvement in ecotourism activities can be gathered where it can then be used to tailor ecotourism projects and initiatives to better align with the community's needs, aspirations, and cultural values.

This study explores the knowledge, attitude, and practice (KAP) of the local community in Linggi, Negeri Sembilan, regarding ecotourism activities to highlight the crucial role that local communities play in the sustainable development of ecotourism in the area. The study is designed to help ecotourism development in the Linggi area, taking into consideration the local community's perspectives on sustainable development. Furthermore, the study aims to identify gaps in knowledge, negative attitudes, or inadequate

practices that may hinder the successful implementation of ecotourism projects in the area. By understanding the local community's KAP towards ecotourism, stakeholders can tailor their initiatives accordingly to ensure that ecotourism is developed based on the perspectives of all the stakeholders.

1.3 Problem Statement

Sungai Linggi is located in Port Dickson District of Negeri Sembilan, Malaysia. In the Malaysia Vision Valley Development Plan 2045, Sungai Linggi is positioned as an eco-adventure destination with wildlife-watching activities. According to the plan, Sungai Linggi will be developed as a new ecotourism-adventure destination in the state by integrating its resources into a crocodile sanctuary, fireflies and mangrove tour and other recreation activities in the coastline of Sungai Linggi. The government has gazetted the Sungai Linggi as the Saltwater Crocodile Sanctuary as part of the development. The gazettelement of the area is expected to have the potential to receive impacts from ecotourism activities reducing the availability of existing ecotourism facilities and products in the region, namely, Sungai Timun Jetty, Pengkalan Kempas Historical Complex, Pengkalan Kempas Jetty, Sungai Linggi Cruises, and fishing activities.

As mentioned previously, one of the critical components of ecotourism is the participation of the local community in the development and planning process. This process will allow the co-creation of tourism experiences that are

culturally sensitive, socially inclusive, and economically beneficial (Mendoza-Ramos & Prideaux, 2018; Phelan et al., 2020). By actively involving the community in decision-making processes, fostering their ownership of ecotourism initiatives, and promoting their active participation, sustainable practices can be developed and implemented in a manner that aligns with the community's values and aspirations (Vincent & Thompson, 2002; Nault & Stapleton, 2011).

The local community's participation can be viewed from various angles, including readiness, management, and conservation. The level of readiness indicated by local communities in the context of their ability to participate in ecotourism includes an assessment of the infrastructure, skills, and resources they provide (Sobhani et al., 2022; Thomas, 2013). On the other hand, the understanding of local community management facilitates the determination of the degree of independence and empowerment that individuals living in a particular locality demonstrate to influence and structure their tourism activities (Ballantyne et al., 2009; Mahmood et al., 2021; Messmer, 2000).

However, the current landscape of local community participation in the country is challenged by several multifaceted challenges. These challenges include centralized public administration, insufficient financial resources, domination of elites, high costs of community participation, inefficient community leadership, financial constraints, and ineffective networking (Hui et al., 2020; Kunjuran et al., 2016; Pusiran & Xiao, 2013; Samdin et al., 2022).

In addition, the notable challenges that are often discussed by vast arrays of literature are the lack of awareness and knowledge about ecotourism, operator commitment, inexperience, and lack of industry understanding (Kunjuraman, 2020; Kunjuraman, 2017; Pusiran & Xiao, 2013). These challenges hinder effective ecotourism development and the realization of economic and social benefits for local communities.

Thus, studying the local community's knowledge, attitude, and practice towards sustainable ecotourism holds significant importance for developing and managing ecotourism initiatives (Zhang & Lei, 2012; Adom, 2019; Kim et al., 2019). It provides valuable information on the community's existing knowledge about ecotourism, their attitudes or beliefs towards sustainable practices, and their actual behaviors and practices related to tourism activities (Cobbinah, 2015; Sangpikul, 2020). This knowledge can guide the formulation of targeted interventions and effective engagement strategies that address the specific needs and concerns of the local community (Kc et al., 2018; Ross & Wall, 1999).

In ecotourism research, the Knowledge, Attitude, and Practice (KAP) model has emerged as a crucial framework for comprehending stakeholders' behaviors and responses, shedding light on their knowledge, attitudes, and practices concerning sustainable tourism. This model aids researchers and practitioners in delving deeper into how individuals or groups acquire knowledge, form attitudes, and translate these into observable behaviors

(Wong Abdullah et al., 2019; Zhang & Lei, 2012). By assessing stakeholders' knowledge, attitudes, and practices, particularly the local community, researchers can glean insights into their awareness levels, perceptions, and engagement with sustainable ecotourism practices (Cheung & Fok, 2014; Adeleke, 2015).

Knowledge within the KAP model encompasses understanding various stakeholders, including tourists, local communities, and tourism operators, regarding sustainable tourism practices and concepts. This facet evaluates individuals' awareness and knowledge concerning environmental conservation, cultural preservation, and ethical tourism (Abdullah et al., 2020; Ip-Soo-Ching et al., 2019; Yoon & Lee, 2023). Regarding attitudes, analyzing stakeholders' perspectives provides valuable insights into their willingness to support and actively engage in sustainable tourism activities (Mahat et al., 2019; Nor et al., 2018). Understanding stakeholders' practices allows for an evaluation of the practical effects of their knowledge and attitudes, facilitating an assessment of the correlation between individuals' beliefs and their behaviors while pinpointing areas necessitating behavioral changes (Launiala, 1970; Lindstrom & Larson, 2016; Weaver & Buckley, 2007).

In conclusion, with the lack of knowledge and understanding faced by the local community in the country, this study seeks to assess the knowledge, attitude, and practice of the local community in Sungai Linggi regarding ecotourism development and activities. This understanding could inform the

design and implementation of effective strategies to promote sustainable tourism practices that contribute to achieving the aspirations and goals of the Malaysia Vision Valley Development Plan 2045. Furthermore, this study helps identify areas where educational interventions and community engagement initiatives are needed to enhance the locals' participation in and support sustainable tourism activities and serve as a foundation for future research and policy-making efforts to promote sustainable tourism in the region.

1.4 Research Questions

The research questions guiding this study are as follows:

1. What is the relationship between local community demographic profile and involvement in ecotourism services in Linggi, Negeri Sembilan?
2. What is the level of knowledge, attitude, practice of the local community on ecotourism services in Linggi, Negeri Sembilan?
3. What are the relationships between the knowledge, attitude, and practices attributes among the local community in Linggi, Negeri Sembilan?
4. What are the differences between the demographic profiles and ecotourism services on the knowledge, attitude, practice attributes of the local community in Linggi, Negeri Sembilan?

By addressing these research questions, this study provides insights into the level of knowledge, attitudes, and practices of the local community in Linggi regarding ecotourism services. Additionally, it will also examine the

community's involvement in ecotourism services and the influence of socio-demographic factors on their attitudes towards ecotourism.

1.5 Research Objectives

This study aimed to assess the local community involvement and the level of knowledge, attitude, and practice towards ecotourism services. The following specific objectives were established to accomplish the study's goal:

1. To identify the relationship between local community demographic profile and involvement in ecotourism services.
2. To assess the level of knowledge, attitude, and practice among the local community on ecotourism services in Linggi, Negeri Sembilan.
3. To determine the relationships between knowledge, attitude, and practices variables among the local community in Linggi, Negeri Sembilan?
4. To evaluate the differences between demographic profiles and ecotourism services on knowledge, attitude, and practice of the local community in Linggi, Negeri Sembilan.

1.6 Significance of the Study

Ecotourism services involve a diverse range of factors, activities, and provisions that collectively constitute the ecotourism experience (Kia, 2021; Polat, 2021; Raji, Karim, Arshad, et al., 2018). The study of ecotourism services is immense significance and encompasses a range of areas including environmental conservation, economic development, community

empowerment, and sustainable tourism practices (Tai, 2017). In addition, the study of ecotourism services that involve the local community is essential in order to ensure that ecotourism generates benefits for both the natural environment and the general well-being of the local people. This will offer significant contributions towards understanding the strategies and approaches that can be employed to promote sustainability, preserve cultural heritage, and stimulate economic growth within ecotourism locations.

By assessing the knowledge, attitudes, and practices (KAP) of the local community in Linggi, Negeri Sembilan, this research provides valuable insights into their perspectives on sustainable ecotourism. The perceptions of ecotourism among local communities are influenced by their personal experiences and tangible benefits that obtain from the tourism activities (Laverack & Thangphet, 2009; Scheyvens, 1999). In order to support the development of sustainable ecotourism, it is essential to actively engage local populations as stakeholders. Moreover, according to Hasana et al., (2022), the level and type of community participation varies from one ecotourism venture due to the myriad of social, cultural, and political considerations involved. Thus, the contribution to the understanding of local community perceptions and involvement in sustainable ecotourism and understanding these perceptions is crucial for effective ecotourism planning, development, and management in the future (Chan et al., 2021; Hasana et al., 2022a; Nur Syamsi & Lee, 2021).

As for Linggi, Negeri Sembilan, this site of study location maintains to provide as a habitat for estuarine crocodiles, albeit with a decreased population (Zakaria, 2014). Previous studies demonstrated the demands for the conservation and management of this species, particularly within the region of Peninsular Malaysia of this species in Linggi area. Thus, the findings of the research have the potential to aid in the development of sustainable ecotourism and to conservation efforts in Linggi.

The findings of this study can have several potential benefits for academia, practitioners, policymakers, and local communities as it can serve as a reference for future studies and facilitate a comparative analysis with similar research conducted in other regions (Baloch et al., 2023; Kia, 2021). Previous studies indicated that the exploration of the KAP among local communities with regards to ecotourism might contribute to enhancing regional identity and encouraging expansion in other industries (Raji, Karim, Ishak, et al., 2018), directly gain economically through a number of different activities, including job recruiting and profit sharing (Kia, 2021) and supporting government policy initiatives to promote successful protection of environmental and natural resources without affecting the economic viability or social well-being of local people and communities (Baloch et al., 2023).

Additionally, the research can help identify research gaps and opportunities for further investigation in the field of sustainable ecotourism. The findings also can inform decision-making processes related to sustainable ecotourism

development in Linggi and similar contexts. By understanding the local community's perceptions, needs, and preferences, practitioners can design and implement ecotourism initiatives that align with community values and aspirations. This can lead to the development of sustainable tourism products and services that cater to both environmental conservation and community empowerment (Amat Ramsa Yaman & Abdullah Mohd, 2004; Fiorello & Bo, 2012). The research findings can also guide the formulation of policies, guidelines, and regulations that promote responsible and sustainable tourism practices in the region (Kia, 2021).

This study also can empower stakeholders to actively participate in and benefit from sustainable ecotourism. By identifying the level of knowledge and attitudes among the local community, the research can help design targeted educational and awareness programs to enhance their understanding of sustainable practices (Ding et al., 2022). This can enable the community to actively contribute to conservation efforts, adopt sustainable behaviours, and engage in ecotourism-related activities. Increased community involvement can lead to socio-economic benefits, such as income generation, employment opportunities, and cultural preservation (Baloch et al., 2023; Stylos et al., 2022).

Through the encouragement of community participation, the research has the potential to instil within the local community a sense of ownership and concern in regard to their natural and cultural heritage. In consequence of this, ecologically vulnerable places, biodiversity, and traditional knowledge may

be preserved and conserved as a result. The findings of the research can also assist limit the possibility of potential conflicts between the growth of tourism and the interests of the community by ensuring that the requirements and goals of the community in the area are taken into consideration (Baloch et al., 2023).

In conclusion, by providing insights into local community perceptions and involvement in sustainable ecotourism, the research can contribute to sustainable ecotourism development, conservation efforts, and community empowerment. It can inform decision-making, enhance community participation, and foster the long-term success of ecotourism initiatives in Linggi, Negeri Sembilan.

1.7 Definitions of the Terms

Ecotourism: Ecotourism is defined as responsible travel to natural areas that conserves the environment, sustains the well-being of local people, and involves interpretation and education (Poudel & Joshi, 2020; Zeng et al., 2022). In addition, ecotourism is a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (Fennell, 2014).

Knowledge: Knowledge pertains to the subjective beliefs held by the community on the provision of ecotourism services in the context of environmental, socio-cultural, and economic aspects (Alejandro Quezada-Sarmiento et al., 2021; Beaumont, 2001).

Attitude: Attitude in this study pertains to the community's positive or negative assessment of behavioural performance on the environmental, cultural, and economic aspects in ecotourism services (Castellanos-Verdugo et al., 2016).

Practice: The practical implementation or utilization of a concept, belief, or approach, on the environmental, cultural, and economic aspects in ecotourism services (Liao et al., 2022; Mtapuri et al., 2021).

Ecotourism services: Ecotourism services encompass a distinct array of tourism-related products and services, activities, and experiences that are both sustainable and responsible in nature. These services are supplied to visitors within natural and cultural contexts (Wondirad, 2019).

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