

Wellness Tourism: Utilizing The Slopes Of Mount Welirang For Forest Healing Based On Community-Based Tourism

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Abstract.

This study is one of the studies that examines CBT as an approach to developing wellness tourism, the potential of the slopes of Mount Welirang that can be used for forest healing and marketing using the 5P concept (Product, Price, Place, Promotion, and People). The method used in this study is a qualitative method based on Community Based Tourism (CBT). Data collection was carried out using focus group discussion (FGD) techniques, interviews, observation, and documentation studies. Data analysis techniques used an interactive model on the application of Community Based Tourism (CBT) implemented in the development of forest healing on the slopes of Mount Welirang. The results of the study are as follows: 1) The development of forest healing with the application of Community-Based Tourism (CBT) is based on three pillars, namely community empowerment, ecological conservation, and sustainable community innovation. 2) The potential of the slopes of Mount Welirang lies in its geological and topographical foundations, biodiversity as natural medicine, and sensory stimulation. 3) Marketing using the 5P concept. The main products offered are the development of forest healing destinations that include forest-based healing activities, integrated tourism packages, and educational added value. Price refers to a value-based pricing approach. Place focuses on the slopes of Mount Welirang as the main object. Promotion is carried out using a digital approach based on transformational narratives. People focuses on the community, which is at the center of the overall forest healing development on the slopes of Mount Welirang.

Keywords: Wellness Tourism; Forest Healing and Community Based Tourism (CBT).

I. INTRODUCTION

Wellness tourism has grown into a deeply rooted global phenomenon, driven by modern humans' need to escape stressful urban routines and reconnect with nature. The United Nations World Tourism Organization (UNWTO) noted that by the first quarter of 2022, the number of tourist visits was equal to the total number of visits in 2021, indicating a threefold increase compared to 2021 [1]. This wave is particularly noticeable in Indonesia. The ministry of Tourism and Creative Economy, in its 2024/2025 Tourism and Creative Economy Outlook, notes an increase in demand for destinations that offer authentic and healthy experiences for the body and soul, raising awareness of the importance of holistic health and environmental sustainability. This proves that people need personal transformation through meaningful interaction with natural ecosystems. Based on these global and national trends, the Indonesian government, through the Ministry of Environment and Forestry (KLHK), has actively adopted and promoted the concept of forest healing as an integral part of its conservation and protected area management policies based on sustainable use. The government's concrete commitment is manifested in structured programs such as the "Jungle Run Series: National Parks/Nature Parks 2024," which is explicitly designed as a forest healing initiative by the KLHK. This national program aims to increase tourist visits to conservation areas and introduce and facilitate nature-based therapeutic experiences to the wider community.

This KLHK initiative serves as official recognition and institutional validation of the psychological and physiological benefits of interacting with forests. The support of the central government creates a crucial policy framework and strategic momentum for the development of new forest healing destinations in Indonesia. The KLHK policy emphasizes that naturally vegetated areas that are not included in official

national parks also have intrinsic value for biodiversity conservation and for maintaining the holistic health of communities. Institutional support from the Ministry of Environment and Forestry opens up opportunities and provides a basis of legitimacy for developing the potential of areas such as the slopes of Mount Welirang. The slopes of Mount Welirang in East Java have emerged as a potential destination that has not yet been fully explored. This area, with its volcanic topography, offers relatively well-preserved mountain forests, fresh air, diverse mountain flora, and natural panoramas that hold tremendous potential as a forest healing location. Its unique natural characteristics, combining geological, ecological, and atmospheric elements, create an ideal sensory environment for triggering psychological relaxation, reducing stress, boosting the immune system, and restoring mental fatigue, as revealed in various studies on the therapeutic effects of forests [2][3]. This potential positions Welirang as a high-value forest healing destination amidst the competition among natural destinations in East Java.

The forest healing activities developed include forest walking, forest therapy and forest bathing. The interaction between humans and nature has been proven to have a significant psychological impact on mental health. Specifically, this interaction can reduce stress levels, improve mood, and strengthen overall mental health [4]. Forest healing is a structured approach that utilizes natural areas to improve focus, reduce fatigue, and relax the body. The resulting relaxation contributes directly to a more peaceful and restorative night's sleep [5][6]. Exposure to natural environments plays a crucial role in mitigating mood disorders that often arise as a result of accumulated stress and the pressures of modern urban life [7]. These findings collectively affirm the essential value of the human-nature relationship as a vital means of maintaining and restoring mental health amid the challenges of contemporary life. The development of the potential of the slopes of Mount Welirang as a forest healing destination must prioritize sustainability and social justice. The Community-Based Tourism (CBT) approach is a critical and integral foundation. CBT places local communities as the owners, managers, and primary beneficiaries of tourism activities [8]. The application of CBT principles in forest healing on the slopes of Welirang is very important for several fundamental reasons: (1) Ecological Sustainability: local communities, as guardians of forest traditions, have the knowledge and motivation to preserve the natural resources that form the basis of their ecotourism [9].

(2) Economic Empowerment: forest healing activities can be a source of alternative income for the community, improve local welfare and reduce dependence on activities that have the potential to damage the environment [10]. (3) Authenticity of Experience: community involvement allows tourists to have a more authentic forest healing experience, rich in local wisdom and traditional forest-related practices that cannot be offered by large commercial tourism operators [11]. The development of forest healing carries significant risks if not community-based and can lead to problems such as unequal distribution of benefits, environmental degradation, and the loss of local cultural values, as well as undermining the essence of sustainability that is at the heart of wellness tourism itself [12]. This study aims to comprehensively explore the potential of utilizing the Welirang Mountain Slopes area as a forest healing destination by promoting the principles of Community Based Tourism. This study will formulate a development model that responds to the demand for wellness tourism and ensures ecological sustainability, local community empowerment and an authentic and meaningful healing experience for tourists.

II. METHODS

This research method uses a qualitative approach based on Community Based Tourism in Padusan Village, Mojokerto. Data collection techniques include focus group discussions (FGD), in-depth interviews, observation, and documentation studies. Informants were selected using purposive sampling. Informants for the in-depth interviews included the head of Padusan Village, village officials, local tourism business operators, and practitioners who understand the concept of forest healing. Participants in the focus group discussions included community groups, village youth, tourism managers, and homestay managers. Data validity and reliability were ensured through source triangulation techniques. The data analysis technique used was in interactive model so that the application of Community-Based Tourism (CBT) in the development of forest healing on the slopes of Mount Welirang could be analyzed.

III. RESULT AND DISCUSSION

CBT as an Approach to Developing Wellness Tourism on the Slopes of Mount Welirang

Community-Based Tourism (CBT) is a participatory approach in which local communities play an active role in managing tourist destinations, from planning to benefit distribution. On the slopes of Mount Welirang, in Padusan Village, this approach has been adopted to develop forest-based wellness tourism (forest healing) with three main pillars: community empowerment, ecological conservation, and sustainable tourism innovation. The model is in line with a four-phase framework (Community Assessment, Planning & Preparation, Delivery, Monitoring & Evaluation) that emphasizes a sustainable cycle based on stakeholder participation.

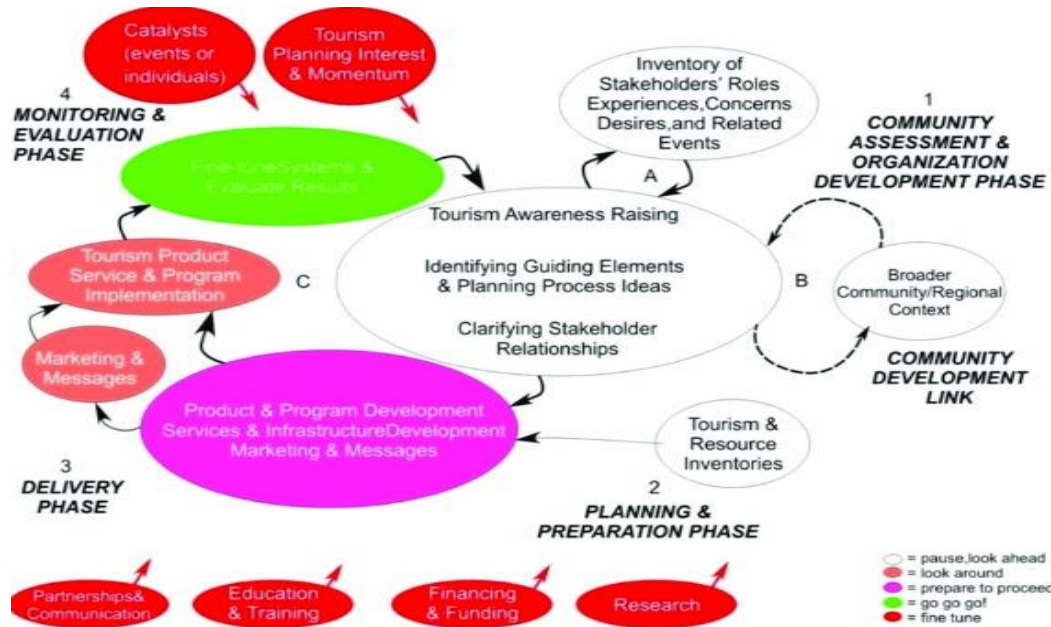


Fig 1. Identifying Guiding Elements & Planning Process Ideas

The Potential of Mount Welirang Slopes for Forest Healing Development

The slopes of Mount Welirang in Mojokerto Regency, East Java, are potential and strategic for the development of forest healing destinations in Indonesia. Its potential lies in the unique convergence of biophysical, ecological, atmospheric, and socio-cultural factors that synergistically create an ideal environment for nature-based therapy. This potential needs to be comprehensively understood as a scientific and practical basis for sustainable and community-based tourism development planning. First, geological and topographical foundations: a volcanic landscape that forms a healing space. The slopes of Mount Welirang are part of the still-active Welirang volcanic complex. Past and present volcanic activity has shaped a dynamic topography consisting of hills, valleys, and mineral-rich volcanic soil layers. This topography creates significant elevation variations, ranging from the mountain foothills (around 700 meters above sea level) to near summit (>3,000 meters above sea level). Variations in elevation offer a range of sensory experiences and physical challenges that can be tailored to different healing needs. Hiking trails with varying inclines provide measured physical activity (walking/hiking), which is a core component of forest healing. These activities improve cardiovascular fitness, muscle strength, and endurance. Gentler valleys provide space for static meditation, yoga, or breathing therapy in a calmer and more sheltered atmosphere. The volcanic landscape offers dramatic and ever-changing views. The expansive views and awe-inspiring natural elements trigger positive emotions, reduce self-focus associated with anxiety and depression, and increase feelings of connection to something greater. This visual stimulation is a crucial component in creating a restorative experience. Second, biodiversity as natural pharmacy and sensory stimulus.

The slopes of Mount Welirang hold a wealth of biodiversity that forms a multifunctional natural laboratory that serves as both a therapeutic resource and a holistic sensory stimulus. The unique vegetation composition, combining endemic mountain flora with economically valuable species, creates an ecological mosaic that is highly relevant for the development of forest healing. Vertically, the vegetation shows clear stratification: the submontane zone (700-1500 meters above sea level) is dominated by broad-canopied trees

such as the banyan (*Ficus Benjamina*) with towering aerial roots, Durian (*Durio Zibethinus*), Mangosteen (*Garcinia Mangostana*), Petai (*Parkia Speciosa*), and Breadfruit (*Artocarpus Altilis*) that form dense and shady forest cover. At medium altitudes (montane zone at 1,500-2,500 meters above sea level), there is a transition to mountain casuarina (*Casuarina Junghuniana*) and pine (*Pinus Merkusii*) stands, which are the main contributors of therapeutic volatile compounds (phytoncides). Meanwhile, in the sulbapine zone (>2,500 meters above sea level), Cantigi (*Vaccinium varingifolium*) and herbaceous vegetation dominate the landscape. This biodiversity is also a living pharmacy based on the local wisdom of the Padusan Village community. Cantigi leaves and fruits are traditionally used as antidiabetic and anti-inflammatory agents, containing the active compounds arbutin and ericolin. The roots of certain types of palm trees are used as diuretics and detoxifiers, rich in saponins and polyphenols. Petai, in addition to its fruit, seeds and pods are used to treat hypertension and infections due to their thiozolidinedione content.

Aren (from nira and its roots) functions as a cardiovascular tonic and expectorant, containing inositol and galacturonic acid. Various types of shrubs are also used for their leaves as antipyretics and analgesics, containing luteolin and apigenin. Integrating this ethnobotanical knowledge into forest healing packages adds a unique and authentic dimension to medical tourism. Welirang's biodiversity offers a structured multisensory experience that is at the heart of forest healing. Visual stimulation is derived from textural dynamics (the contrast between the rough bark of the banyan tree and the smooth trunk of the pine tree), color gradations (the deep green of the mangosteen vs. the silvery green of the cantigi), and natural geometric patterns (the symmetry of palm leaves vs. the asymmetry of banyan tree aerial roots). Auditory stimulation is produced by an acoustic symphony such as the soothing rustle of the wind in the pine canopy (500-2000 Hz) and the more dynamic rustling of durian leaves (2000-8000 Hz), creating a natural binaural effect when moving between vegetation zones. Olfactory stimulation arises from complex layers of aroma: fresh citrus top notes from pine, earthy and distinctive middle notes from petai, and deep musk base notes from banyan trees, forming natural aromachology for mood therapy. Tactile stimulation is provided by the variation in leaf surfaces, ranging from the smooth wax-like surface of cantigi to the hairy leaves of some shrubs, as well as the different textures of tree bark that can be used in grounding therapy techniques. Thus, the biodiversity potential of Welirang offers a unique and sustainable forest healing model, where ecological conversation harmoniously blends with therapeutic utilization based on local wisdom, making it a living laboratory for the development of ecosystem-specific wellness tourism.

5P of Marketing (Product, Price, Place, Promotion and People)

The development of forest healing destinations on the slopes of Mount Welirang requires a marketing strategy that considers the values of sustainability, community empowerment, and the authenticity of the experience offered. The marketing mix in the context of the Community-Based Tourism (CBT) approach is an important tool to ensure that all elements of the tourism product are in line with market needs while supporting the local community as the primary managers. The marketing mix used in this study adapts the 5P framework (Product, Price, Place, Promotion and People) which is interpreted contextually to support the development of community-based wellness tourism. First, the product. The main products offered in the development of forest healing destinations on the slopes of Mount Welirang include three core components: forest-based healing activities, integrated tour packages, and educational and health added value. Activities such as forest walking, forest bathing, and forest therapy are designed contextually in accordance with the landscape and ecological richness of the Padusan area. These activities are well suited to the needs of a market experiencing mental fatigue and seeking natural recovery alternatives. This product incorporates elements of local ecological education and traditional health practices based on community knowledge, such as the use of forest herbs, giving the Welirang forest healing package a strong differentiation from other similar destinations. Quasi-experimental studies show that regular forest walking (e.g., 30 minutes per week for 8 weeks) can improve mental health, attention span, self-reflection, and a sense of connection with nature [13].

These findings confirm that forest healing tourism products offer educational and therapeutic value for tourists. Second, Price. The pricing strategy developed refers to a value-based pricing approach that considers affordability for the main market segment (middle-class domestic tourists) without neglecting the

exclusive value of the healing experience itself. Value-based pricing can increase tourists' perception of value, satisfaction, and loyalty, as well as support the economic sustainability of tourism destinations [14]. The pricing system is modular, allowing tourists to choose healing packages based on duration, intensity, and additional facilities. A profit-sharing model is applied in the CBT principle so that the profits from each activity are shared fairly between local facilitators (guides, homestay owners) and village tourism group managers. This system increases community involvement and strengthens the social legitimacy of sustainable tourism practices [15]. The prices set reflect the value of a deep, community-based personal healing experience. Third, Place. The slopes of Mount Welirang, located in the village of Padusan, Mojokerto, are relatively easy to access from major cities in Indonesia, such as Surabaya and Malang. The road infrastructure leading to the location is adequate, although improvements are needed on the route to the healing site. The World Tourism Organization (2021) states that accessibility has become an intrinsic factor in responsible, sustainable, and quality tourism [1]. Therefore, investment in transportation infrastructure and supporting facilities is needed to make the slopes of Welirang more accessible to tourists [16].

In the marketing mix, place refers to the ecological setting and narrative of the place as a space for spiritual healing. Healing points such as forest walking, forest bathing and forest therapy trails have been mapped. This mapping strengthens Welirang's position on the East Jawa wellness tourism map as a destination that offers natural panoramas and nature therapy integrated with local culture and ecology. Fourth, Promotion. Promotion is carried out through a digital approach based on transformational narratives. Social media such as Instagram, TikTok, and YouTube are utilized by communities and tourism activists to showcase testimonials, short videos, and visualizations of the healing atmosphere in Welirang. Testimonials play an important role because many tourists use video platforms to watch reviews and other travel experiences before visiting [17]. This content will be informative and intentionally frame the travel experience as a journey of self-transformation and spiritual healing. The trend of promoting nature tourism that emphasizes authenticity and recovery is in line with the preferences of millennials and Gen Z [18]. Thus, transformational narrative-based promotion through social media will directly respond to and capitalize on trends in tourism preferences that prioritize meaning and self recovery in nature. Fifth, People. The community is at the heart of the entire forest healing development in Welirang. The people of Padusan Village act as healing guides, homestay managers, herbal medicine providers, and spiritual activity facilitators. The community has in-depth knowledge of the forest and sensitivity to the rhythms of nature, which are key prerequisites for the success of the forest healing program. Active community involvement will strengthen the local identity as forest guardians and preservers of ecological values. Regular training programs are conducted to improve the community's capacity to provide a safe, empathetic, and sustainability-based healing experience. Studies on CBT emphasize that strengthening the role of local communities is necessary for natural and cultural resources to develop into tourist attractions [19]. Therefore, the community is the main subject in the destination development scheme.

IV. CONCLUSION

This study shows that Community Based Tourism (CBT) can be used as an approach to developing wellness tourism on the slopes of Mount Welirang. This approach emphasizes the participatory aspect of the local community in managing tourist destinations, from planning to the distribution of benefits. The potential of the slopes of Mount Welirang for forest healing lies in its geological and topographical foundations, which reveal a volcanic landscape that creates a healing or refreshing space for visitors. Furthermore, biodiversity is used as natural medicine and sensory stimulation, as the slopes of Mount Welirang are home to a wealth of biodiversity that forms a multifunctional natural laboratory that serves as a source of therapeutic resources and holistic sensory stimulation. Marketing for the forest healing concept is carried out using the 5P concept, which consists of product, price, place, promotion, and place. The product focuses on forest healing, which consists of forest walking, forest bathing, and forest therapy. Then the price prefers to the pricing strategy developed using a value based pricing approach, taking into account affordability for the main market segment, namely middle-class domestic tourists.

Pada aspek place menekankan pada fungsi dan objek utama Lereng Gunung Welirang sebagai upaya untuk mengembangkan forest healing. Aspek promotion dilakukan dengan menggunakan pendekatan digital berbasis narasi transformasional. Media yang digunakan yaitu instagram, tiktok dan youtube yang dimanfaatkan oleh komunitas untuk menampilkan testimoni dan video pendek tentang forest healing di Lereng Gunung Welirang. Dan yang terakhir yaitu people memiliki fokus pada komunitas yang ada untuk mengembangkan forest healing. Masyarakat memiliki peran sebagai pemandu, pengelola, penyedia dan fasilitator dalam kegiatan spiritual. The place aspect emphasizes the main functions and objects of the slopes of Mount Welirang as an effort to develop forest healing. The promotion aspect is carried out using a digital approach based on transformational narratives. The media used are Instagram, TikTok, and YouTube, which are utilized by the community to display testimonials and short videos about forest healing on the slopes of Mount Welirang. Finally, the people aspect focuses on existing communities to develop forest healing. The community plays a role a guides, managers, providers and facilitators in spiritual activities.

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