Environment, Resource and Ecology Journal (2024)
Clausius Scientific Press, Canada

DOI: 10.23977/erej.2024.080214
ISSN 2616-3756 Vol. 8 Num. 2

Development Model of Japanese National Parks: A Stakeholder Approach with Shiretoko and Fuji Hakone Izu Examples

Enqing Zhu, Ping Wei*

School of Foreign Languages, Beijing Forestry University, Beijing, China
**Corresponding author*

Keywords: Japanese National Parks; Stakeholder Theory; National Park Development Model; Fuji Hakone Izu National Park; Shiretoko National Park

Abstract: This research explores the development models of Japan's national parks and constructs a governance framework using stakeholder theory. By analyzing Fuji Hakone Izu and Shiretoko National Parks, it proposes effective methods for identifying and classifying stakeholders, and examines their diverse needs and influence on park development. The governance framework includes three key elements: (1) clearly defining the roles and relationships of power, economic, regulatory, and social stakeholders; (2) ensuring sustainable park development through stakeholder participation; and (3) promoting a balance between economic and environmental goals to achieve multifunctionality. This framework provides theoretical support for managing Japan's national parks and serves as a reference for governance in protected areas globally.

1. Introduction

From the perspective of Japan as an individual country, the governance of national parks can be broadly classified into two types. The first type originated from the 'National Park Establishment Movement' in the late Meiji era, emphasizing the economic effects brought by national parks. The second type emerged after the enactment of the National Park Law in 1931 and the Natural Park Law in 1957, which, while supporting economic objectives, placed greater emphasis on heritage protection and environmental conservation. Regarding the former, Ito (1993) emphasized a development model for national parks focused on the tourism economy[9], while Sen (1997) studied the promotion of tourism and regional cooperation in boundary areas, mentioning the cooperation in the tourism industry between Tokyo and the Tama-Chichibu National Park during the mid-to-late 20th century.

As for the latter, Yamamoto (2007) pointed out that, along with the rise in living standards during the period of rapid economic growth, the number of national park users continued to increase, leading to the development of the tourism industry in national parks, but also highlighting the need to address various environmental issues that accompanied this growth. Hiwasaki (2005) emphasized the importance of stakeholder participation from local communities in the sustainable management of national parks. Furthermore, Tanaka et al. (2011) analyzed the sharp conflict between the large-scale tourism economy and the environment faced by the Shiretoko region, designated as a World Natural

Heritage site, and explored potential solutions.

Globally, research on the development and governance of national parks has gradually evolved from focusing on single aspects such as 'economy' or 'species diversity'to expanding into governance models[2][19] , property rights, and cooperative studies in the 21st century, with recent research placing greater emphasis on 'relationships'[3]. For example, Zhang (2023) argued that studies on national park management and governance should not only include conservation effectiveness and development but also consider social responses and public attitudes. Thus, social responses are considered an important component in constructing good governance for national parks. Moreover, as existing research mainly focuses on case studies and empirical research concerning the sustainable development and effective management of individual national parks [24][29], there is still a need to strengthen comparative studies targeting multiple national parks.

Therefore, this study uses stakeholder theory, which includes social analysis, to investigate and compare the governance models of Fuji Hakone Izu National Park and Shiretoko National Park, each representing one of the two types of national parks in Japan. Based on the governance models of each park, the study aims to clarify differences in development priorities and provide constructive proposals for building and improving national park governance models

2. Theoretical Framework

2.1. Definition of National Park

In 1994, the IUCN defined national parks as "large natural or near-natural areas to protect large-scale ecological processes, species, and ecosystem characteristics, while offering opportunities for spiritual, scientific, educational, recreational, and leisure activities compatible with the environment and culture.[11]" As of March 2022, there are 6,004 national parks globally in the IUCN protected area system[7]. Definitions of national parks vary by country due to regional and cultural differences.

In Japan, the natural park system includes National Parks, Quasi-National Parks, and Prefectural Natural Parks, with National Parks representing Japan's best natural landscapes. The Ministry of the Environment defines National Parks as areas designated under the Natural Parks Act, directly managed by the national government, where human activities are restricted to protect natural landscapes while providing necessary facilities for public appreciation and enjoyment of nature.

2.2. Stakeholder Theory

The theory of stakeholders emerged in 1959 and was explicitly defined by the Stanford Research Institute in 1963 as groups essential for an organization’s survival. Freeman (1984) provided a broad definition, describing stakeholders as "any group or individual who can affect or be affected by the achievement of organizational objectives" [6]. This definition elevated stakeholders from practice to theory. Since the mid-1990s, stakeholder theory has rapidly expanded across various social governance fields. This research will use interviews with local residents and professors to identify stakeholders and establish the managerial structures of Fuji Hakone Izu and Shiretoko National Parks, as summarized in Table 1[6].

In recent years, with the spread of environmental crises and the concept of sustainable growth, many scholars have focused on governance issues related to the ecological environment through the lens of stakeholder theory, garnering significant attention. For example, Zhou (2022)[31] analyzed the social networks of stakeholders in nature reserves, Takara et al. (2023)[25] conducted a study on franchise operations in China's Sanjiangyuan National Park, and Fan et al. (2023) [5]carried out a comparative study on the social value of ecosystem services in Central America based on the SolVES model and stakeholder theory. However, there is still limited research applying stakeholder theory to

governance issues.

Table 1: The development of stakeholder theory

Development	Time period	Theoretical basis and background	Characteristic
Influence	1960~1980	①External changes that bring uncertainty" ②Existing theories can no longer provide reasonable answers" ③Emergence of internal changes in times of turmoil	A new concept of 'stakeholder' is used to scan external changes, respond to environmental challenges, and collect relevant information to improve organizational performance
Involvement	1980 ~1990	①The emergence of the theory and practice of participatory democracy ②The rise of employee governance based on the "labor-managed firm theory"	Stakeholders are absorbed into the organization's decision-making and management processes, but the scope and extent of their involvement depend on the discretion and limitations set by the management, generally remaining in a controlled and subordinate position
Collaborative governance	1990~	①The 1997 Asian financial crisis ②The emergence of a "pluralistic society" characterized by large-scale decentralization	The rights and interests of stakeholders are treated on an equal footing with those of shareholders, and stakeholders, in an equal position, share power and control in the governance of the company, following the logic of a cooperative relationship on par with shareholders

Recent studies have further advanced the application of stakeholder theory in environmental governance. Valentinov (2023)[27]explored the significance of stakeholder participation for corporate sustainability, emphasizing the application of stakeholder theory in corporate sustainability management. Osei et al.(2024)[20]examined the impact of stakeholder pressure on circular economy practices and sustainability performance, highlighting the critical roles of eco-innovation and stakeholder engagement. Siangulube (2023)[23]analyzed stakeholder perceptions of landscape governance through a multi-stakeholder platform, demonstrating the platform's potential in addressing complex environmental problems. Johannsdottir and Davidsdottir (2024) proposed a paradigm shift from the shareholder and stakeholder perspective to a future successor perspective, discussing corporate long-term responsibility in sustainable development[12].

Despite these advancements, the application of stakeholder theory in environmental governance remains limited. Future research should focus on how to effectively integrate this theory with practical governance measures and examine its applicability in different cultural and institutional contexts.

Therefore, this study aims to investigate and analyze the governance practices and characteristics of Japan's national parks using stakeholder theory. Specifically, based on a literature review, and through interviews with park community workers and scholars, I plan to clarify the stakeholders of Fuji Hakone Izu National Park and Shiretoko National Park and further analyze their governance models.

2.3. Identification and Appeal Classification of Stakeholders in Japanese National Parks (Real Data)

2.3.1. Identification of Stakeholders in Japanese National Parks

Preparations: Interview outline, mobile phone, laptop, meeting recording paper, black signature pen

Interview duration: 20 minutes per person

Interview dates: Online: September 11-13, 2024; Offline: September 16-19, 2024

Number of participants: 60 individuals

Composition:

Online interviews: 20 professors participated: ten Chinese professors specializing in national park planning and management, each of whom has conducted field research in Fuji Hakone Izu and Shiretoko National Parks; nine Japanese professors with independent field research experience; and one research group member involved in national park development planning, who has visited both parks.

Offline interviews: 40 staff members from Fuji Hakone Izu National Park and ten from Shiretoko National Park, each closely connected to park development (e.g., community entrance, park center facilities).

Mode: Open, non-interference interviews

Structure: Begin by introducing oneself and explaining the interview purpose: to identify stakeholders in Fuji Hakone Izu and Shiretoko National Parks. Interviewees are asked to elaborate on their understanding of stakeholders' interests.

Use the following open-ended questions:

(a) Based on your experience, who are the stakeholders involved in national park development?

(b) Specifically, who are the stakeholders involved in Fuji Hakone Izu and Shiretoko National Parks?

(c) What are the specific interests of these stakeholders?

Organize the interview records and draw conclusions.

Interview results:

(1) Sixteen stakeholder groups were identified for each of the two parks (see Tables 2 and 3).

(2) Detailed insights were gathered from each expert on the stakeholder interest relationships.

Fuji Hakone Izu National Park:

Table 2: Interviews with Stakeholders in Fuji Hakone Izu National Park

Stakeholder	Frequency of expert interviews	Frequency of interviews with entrance community workers	Comprehensive mention frequency
the Ministry of the Environment	100%	100%	100%
Local Administrative Offices	100%	100%	100%
Local Governments	100%	100%	100%
Specific Management Organizations within the Park	100%	100%	100%

Tourism Enterprises	90%	100%	95%
Tourists	90%	100%	95%
Park Practitioners	80%	100%	90%
News Media	60%	40%	50%
International Organizations	70%	20%	45%
Hot Springs	50%	80%	65%
Regional Residents	40%	30%	35%
Volunteers	70%	80%	75%
Experts and Related Research Institute	30%	0%	15%
Social Organizations	70%	50%	60%
Citizens	80%	0%	40%
Education Base	50%	0%	25%

Shiretoko National Park:

Table 3: Interviews with stakeholders in Shiretoko National Park

Stakeholder	Frequency of expert interviews	Frequency of interviews with entrance community workers	Comprehensive mention frequency
the Ministry of the Environment	100%	100%	100%
Local Administrative Offices	100%	100%	100%
Local Governments	100%	100%	100%
Specific Management Organizations within the Park	100%	100%	100%
The general public	90%	100%	95%
The Shiretoko Foundation	90%	100%	95%
Park Practitioners	80%	100%	90%
Local Residents	60%	40%	50%
Volunteers	70%	20%	45%
International Organizations	50%	80%	65%
Tourists	40%	30%	35%
Experts and Related Research Institute	100%	80%	90%
Hot Spring	30%	10%	20%
Social organizations (excluding the Shiretoko Foundation)	60%	50%	55%
Tourism Enterprises	10%	80%	45%
Education Base	80%	0%	40%

Based on the compilation of interview content, the main stakeholders with a comprehensive mention rate exceeding 50% in Fuji Hakone Izu National Park are totally 11 entities, including the Ministry of the Environment, local administrative offices, local governments, specific management organizations within the park, tourism enterprises, hot springs, visitors, park practitioners, volunteers, news media, and social organizations. Similarly, in Shiretoko National Park, the main stakeholders also comprise 11 entities. These are the Ministry of the Environment, local administrative offices, local governments, specific management organizations within the park, the general public, the Shiretoko Foundation, park practitioners, local residents, experts and relevant research institutions, international organizations, and social organizations (excluding the Shiretoko Foundation).

2.3.2. Analysis and Classification of Stakeholders' Demands in Japanese National Parks

Employing the expert survey method and referring to the classification methods of Lauren (2021)

and Balane (2020), the identified stakeholders are categorized based on the following four characteristics [1][4]:

1) Power Stakeholders: Individuals or groups that exert significant influence over the decision-making of specific policies or plans.

2) Economic Stakeholders: Individuals or groups primarily involved in economic activities.

3) Regulatory Stakeholders: Agencies or organizations that ensure regulatory compliance within the park and are mainly engaged in macro-level regulations.

4) Social Stakeholders: Individuals or groups that influence the park's image building, reputation maintenance, and promotional activities.

The specific categorization results are as follows (see Table 4, Table 5):

Fuji Hakone Izu National Park:

Table 4: Stakeholders' Demands of Fuji Hakone Izu National Park

Classification	Stakeholder	Interest appeal
Power stakeholders	Ministry of Environment, local offices, local governments, and specific management institutions in the park	Formulate relevant policies, coordinate the interests of all parties, and promote the rational use of parks.
Economic stakeholders	Tourism enterprises, hot springs, tourists and park practitioners	Make full use of local cultural landscape resources and natural landscape resources to develop tourism, leisure and entertainment industry and related industries, and make profits.
Regulatory stakeholders	Ministry of Environment, local offices, local governments, park practitioners, and specific management institutions in the park.	Strictly protect the environment in the park and supervise the rational use of resources so that the rational use of the park can be guaranteed.
Social stakeholders	Volunteers, News media, social relations groups, park practitioners	Create and publicize the good image of the park, and promote the export of related culture with Mount Fuji as the center.

Shiretoko National Park:

Table 5: Stakeholders' Demands of Shiretoko National Park

Classification	Stakeholder	Interest appeal
Power stakeholders	Ministry of Environment, local offices, local governments, local residents, and specific management institutions in the park	Coordinate the unity of environmental, social and economic interests and participate in or be responsible for the formulation of macro policies of the park.
Economic stakeholders	Shiretoko consortium, park practitioners	Get as much economic income as possible on the premise of protecting the park environment.
Regulatory stakeholders	International organizations, the Ministry of the Environment, local	Strictly protect the world natural heritage in the park, so that the

	offices, local governments, specific management institutions in the park, Shiretoko consortium, experts and relevant research institutions, other social organizations and park practitioners except the Shiretoko Consortium.	ecological environment of the park is not damaged.

3. Development and Operation Mode of National Parks in Japan

The development of Japan's national parks can be divided into the following five stages:

1) Exploration Period (1912-1939): A period of exploration influenced by the national parks of the United States and Italy.

2) Stagnation Period (1939-1945): A period during which development was halted due to World War II.

3) Recovery Period (1945-1957): Characterized by the emergence of strengthened regional conservation models and the growth of tourism within the parks.

4) High Growth Period (1957-1971): A period of increased economic development following the replacement of the National Parks Act with the Natural Parks Act.

5) Sustainable Development Period (1971-): Since the establishment of the Environmental Agency, the predecessor of the Ministry of the Environment, this stage has been marked by an ongoing process of revisions addressing both economic and environmental aspects.

3.1. Development and Operation Mode of Fuji Hakone Izu National Park

Fuji Hakone Izu National Park, established on February 1, 1936, is a prominent example of a national park with a strong emphasis on economic development. It comprises four distinct regions: the Mount Fuji area, the Hakone area, the Izu Peninsula area, and the Izu Islands area. Given the presence of Mount Fuji, a symbol of both natural and cultural significance, substantial efforts have been directed toward ecosystem and environmental conservation alongside economic activities[28].

In the early phase of the park's development, Japan's rapid economic growth and significant improvement in living standards led to a dramatic increase in private car ownership. This period saw a nationwide trend of developing tourist infrastructure, such as roads and vacation homes, and Fuji Hakone Izu National Park was part of this trend. Notably, in 1957, the Hakone and Izu Peninsula areas collaborated on the construction of the park's first cable car (Fujita & Nakano, 2010). In the Mount Fuji region, which is the centerpiece of the park, several toll roads were constructed in 1964 and 1970 to accommodate increasing tourist demand. While these developments generated substantial economic benefits for the local economy, they also exerted considerable pressure on the region's environment[22].

In recent years, the park has adopted an "Interactive Management and Operation System" to balance sustainable development with rational resource utilization. This system emphasizes collaborative governance involving various stakeholders, including governmental agencies, organizations, and individuals[14]. To ensure the park's long-term sustainability, it is mandated that the management plan be revised and refined every five years. This governance framework is based on three key modules, which aim to foster a comprehensive and adaptable approach to park management[18]. (see Figure 1).

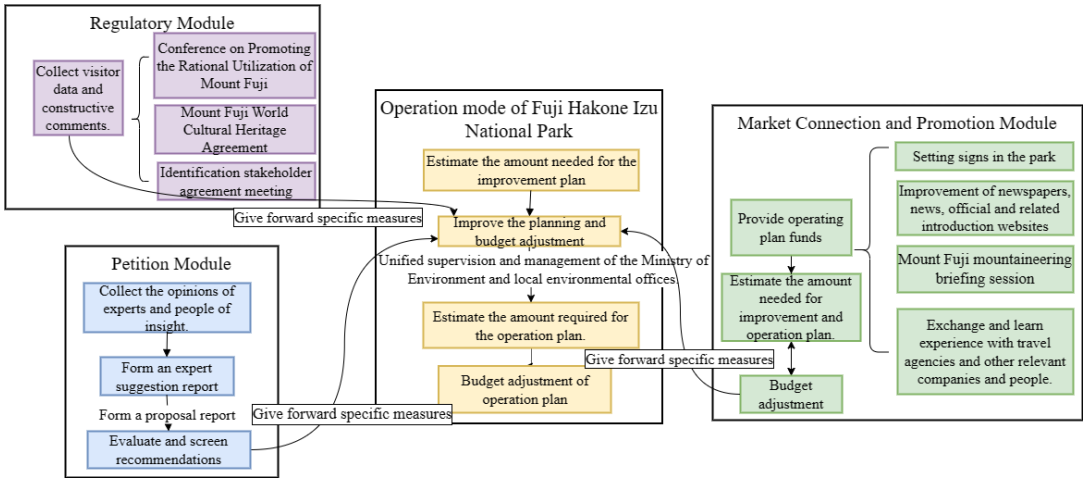

Figure 1: Operation mode of Fuji Hakone Izu National Park

The sustainable development of Fuji Hakone Izu National Park is based on the following three modules:

Regulatory Module: After conferences such as the "Promotion Committee for Rational Utilization of Mount Fuji", "Mount Fuji World Heritage Committee", and "Stakeholder Committee", shortcomings were identified and addressed. Prefectures, cities, towns, mountain huts, and designated personnel appointed by the Ministry of the Environment contribute insightful opinions, using visitor data to propose measures that ensure World Cultural Heritage protection and rational park use. Implementation is overseen and funded by the Ministry of the Environment and the Kantō Regional Environment Office.

Petition Module: Opinions are gathered from experts and knowledgeable individuals.

Market Connection and Promotion Module: Measures include installing signage, improving newspapers, news media, introduction websites, and Mount Fuji climbing briefings, which provide suitable climbing dates and equipment guidance. Opinions from travel agencies and knowledgeable individuals, as well as learning from similar foreign websites, help improve website content. Budgets are used to determine operational plans and adjust details accordingly.

The park's development model reveals three key characteristics. First, it adopts the "implementation-feedback-adjustment-reimplementation" paradigm. Second, travel agencies lead capital investment, ensuring market alignment and timely response to demand. Third, conferences address deficiencies and vulnerabilities during the adjustment and implementation phases, demonstrating notable responsiveness.

Incorporating these modules enhances regulatory effectiveness, gathers insights, improves market visibility, and optimizes resource allocation to sustainably manage Mount Fuji and its surrounding areas.

3.2. Development and Operation Mode of Shiretoko National Park

Shiretoko National Park, located in Hokkaido, is a prime example of a national park that prioritizes environmental conservation. It was designated as a national park on June 1, 1964[16]. Over the past few decades, the establishment and management of Japan's national parks have undergone multiple adjustments in response to policy shifts and environmental changes (Yamashita, 2012). The final designated area of Shiretoko National Park spans the Shirane area of Shari Town, the Menashi area of Rausu Town, and the coastal area within 3,000 meters of the park's terrestrial zone.

Shiretoko National Park places a strong emphasis on the conservation of natural environments and the protection of ecosystems. With the establishment of the park, the initial settlers of the Shiretoko

region abandoned their agricultural activities and left, resulting in extensive traces of abandoned farmland and construction remnants[13]. In response, the "Shiretoko 100 Square Meter Movement" was launched in June 1977 (Shiretoko National Park, 2015). This movement focused on two key elements: land acquisition through donations and the restoration of forests and species that had been degraded by economic development. By 2010, the land conservation rate of the "Shiretoko 100 Square Meter Movement" reached 100%, and restoration efforts have been gradually advancing [10].

Since Shiretoko was designated a UNESCO World Natural Heritage Site in 2005, the role of the national park as a key conservation mechanism in the region has been strengthened, particularly in efforts toward environmental restoration and protection. For example, the "Ecosystem Restoration Project" included in the 2010 park plan has continued to play a significant role in this area[26]. Shiretoko National Park is divided into two main areas: marine and terrestrial zones, and its governance model can be further divided into the following modules (see Figure 2).

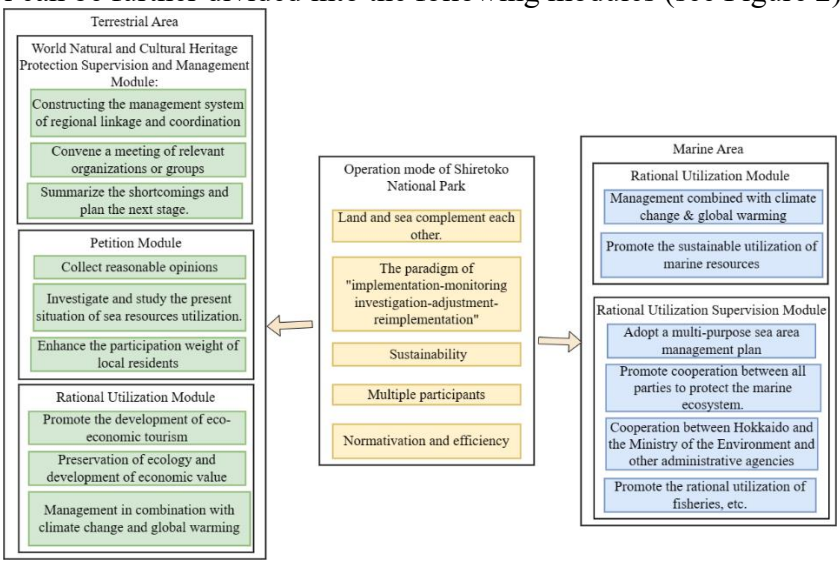

Figure 2: Operation mode of Shiretoko National Park

Shiretoko National Park, unlike the economically-driven Fuji Hakone Izu National Park, focuses on minimizing the negative impacts of park use through its environmentally-oriented approach. The development model is divided into two main areas—terrestrial and marine—each with specific modules:

Terrestrial Area:

World Natural and Cultural Heritage Protection Module: Protects the integrity of World Natural and Cultural Heritage through a regional cooperation system involving administrative agencies, local associations, governments, experts, research institutions, and residents. Meetings are held to identify current shortcomings and plan next steps.

Petition Module: Collects scientific opinions based on research related to the park's ecosystem from experts, institutions, administrative agencies, and local groups, while also considering local residents' needs and enhancing their participation.

Rational Utilization Module: Promotes ecological economy tourism through the Shiretoko Ecological Economy Tourism Strategy to provide visitors with quality experiences while preserving the park's ecological and economic value[21]. Management considers macro-level issues, including climate change.

Marine Area:

Rational Utilization Module: Focuses on sustainable utilization of marine resources, with management considering broader issues such as climate change.

Rational Utilization Supervision Module: Implements a multi-purpose marine area management plan where administrative agencies, such as Hokkaido and the Ministry of the Environment, collaborate with fisheries associations and research institutions to protect the marine ecosystem while promoting sustainable fisheries use. Research and assessments are conducted on fisheries and ecosystem conditions by the same entities as in the terrestrial area.

Based on the above two parts and the five modules, the development characteristics of Shiretoko National Park can be summarized as follows. First, the park is governed in two parts: the marine and terrestrial areas, with complementary development and management. Second, a paradigm of "implementation-monitoring investigation - adjustment - reimplementation" has been formed, focusing on the protection of the World Natural Heritage Site within the park. Third, the development model of the park is adjusted based on a macro perspective, ensuring sustainability. Fourth, the interactivity of the Ministry of the Environment and local governments reaches a high level, while there are also numerous other participating entities, ensuring both standardization and efficiency.

3.3. Results and discussion from the perspective of stakeholders

3.3.1. Comparison of development models

The two parks share three common characteristics in their development. First, both parks adopt a cooperative and collaborative operational structure, which involves multiple entities working together. This structure broadens the scope of capturing real-time demands and issues within the park. Second, both parks enhance the efficiency of addressing park-related issues by organizing various conferences and meetings centered around the park. Third, the participation of the public and social organizations is essential to the development of both parks. This increases the voice of public opinions in park development.

The two parks have differences in their development models in terms of four aspects.

Economic aspect: The Fuji Hakone Izu National Park involves various stakeholders such as tourism enterprises, hot springs, and visitors. It promptly aligns with the market and can meet market demands, focusing on profit generation centered around the market and visitors. On the other hand, the Shiretoko National Park primarily involves the Shiretoko Foundation and a few park practitioners in economic activities within the park. It does not directly align with the market and, instead, focuses on developing peripheral industries centered around itself to generate profits. These include publishing related publications and hosting fee-based peripheral activities.

Social aspect: In the development process, the Fuji Hakone Izu region emphasizes image building and media promotion to enhance its reputation and attractiveness. In contrast, the Shiretoko region focuses more on establishing and maintaining a reputation both domestically and internationally. Furthermore, the Shiretoko region places greater emphasis on protecting the external environment, particularly natural heritage, while the Fuji Hakone region, centered around Mount Fuji, tends to spread its cultural influence from the inside out.

Regulatory aspect: The Shiretoko region has stricter environmental controls compared to the Fuji Hakone Izu region. It involves more participating entities and can promptly address issues raised by local residents, with more frequent policy enactments.

Power aspect: When making decisions or formulating policies, the Fuji Hakone Izu region manages different areas within the park separately, with Mount Fuji as the central focus. In contrast, the Shiretoko region considers both marine and land areas, coordinating decisions between them.

3.3.2. Deficiencies in the development model

Fuji Hakone Izu National Park actively integrates market forces to develop tourism and related

industries, but its efficiency is lower compared to the internal feedback mechanisms focused on the park itself. Centered around Mount Fuji, the park drives the development of surrounding industries by attracting and meeting external demands[17]. However, the "execute-feedback-regulate-re-execute" process primarily involves the Ministry of the Environment, related agencies, and experts, leading to inadequate resolution of the park's internal issues.

In contrast, Shiretoko National Park, a renowned World Natural Heritage site, leverages multi-stakeholder collaboration that includes the Ministry of the Environment, relevant agencies, the Shiretoko Foundation, local residents, and international organizations. However, it lacks direct market participation, with stakeholders focusing on internal monitoring, investigation, and implementation. This approach may delay market integration, hindering effective public awareness and appreciation of the park.

In recent years, global warming has become a significant challenge faced by the entire world. However, in the development process of the Fuji Hakone Izu National Park, centered around Mount Fuji, insufficient consideration has been given to the impacts of global warming. Existing research has indicated that there is great potential economic benefit in preserving the aesthetic value of alpine landscapes in national parks through climate change adaptation[15]. Therefore, if the region encompassing Mount Fuji, which possesses alpine landscapes, fails to timely adapt to the impacts of climate change, there will be a certain degree of decline in both tourism and environmental benefits.

4. Conclusion

The national park system in Japan has the potential to ensure local community participation and establish sustainable park management by achieving stakeholder consensus. To achieve this, several steps are necessary: identifying stakeholders and defining "local communities," clarifying stakeholder roles and responsibilities, and fostering consensus on park goals and long-term vision. By taking these steps, a park management system that transcends government boundaries and involves local communities can be established[8].This paper proposes a development model for national parks, focusing on Fuji Hakone Izu National Park and Shiretoko National Park.

In terms of power stakeholders, Japan's national parks adopt a comprehensive management model that combines centralized and local management. The central government, through the Natural Parks Division under the Ministry of the Environment, manages parks alongside local governments via local environmental affairs offices. Private and civil institutions also play a role in park management (Zhang, Song & Zhang, 2023). For example, the Kanto Regional Environment Office oversees Fuji Hakone Izu National Park, while the Kushiro Natural Environment Affairs Office manages Shiretoko, involving local residents. This model broadens the perspective for decision-making, enhancing decision universality and policy efficiency. Parks with imperfect mechanisms can refer to the following suggestions: (1) link government and local communities, combining macroscopic and microscopic views; (2) stimulate local residents' enthusiasm, enhance participation, and consider actual conditions in park management.

Regarding interest stakeholders, Japan prohibits park management departments from making revenue plans, with park management expenses funded by the Ministry of the Environment and local governments. Specific facilities within parks operate under a franchise leasing system, allowing private enterprises to manage hospitality facilities after obtaining licenses, thereby maintaining diverse park functions[30]. For example, hot springs and hotels in Fuji Hakone Izu National Park provide income while enriching park functions. This model balances economic interests and promotes steady development. Parks aiming to enhance their functions can consider the following: (1) increase government appropriations; (2) designate plans based on park characteristics; (3) promote cooperation and communication with operators, adjusting plans as needed.

Regarding regulatory stakeholders, Shiretoko National Park, a World Natural Heritage site, emphasizes maintaining its natural state. Regulatory stakeholders include park entities, governmental bodies, the Shiretoko Foundation, experts, research institutions, and international organizations. These stakeholders form a regulatory paradigm ("③ + ①—② + ①—②—①") involving constraint, feedback, investigation, and implementation. This collaborative model maximizes regulatory objectivity and effectiveness. Parks with inadequate regulatory measures can consider the following: (1) identify regulatory entities and their roles; (2) establish rigorous mechanisms based on regional park utilization; (3) ensure the depth and breadth of regulation, considering potential inappropriate behavior by regulated entities.

In terms of social stakeholders, Fuji Hakone Izu National Park emphasizes cultural dissemination and continuation, collaborating with tourism companies and media, and recruiting volunteers to enhance public awareness and recognition. This model promotes cultural aspects and aids park protection and inheritance. Parks with World Cultural Heritage sites can adopt the following: (1) regard cultural dissemination and protection as equally important; (2) establish partnerships with tourism companies and media; (3) recruit volunteers and conduct public education to raise awareness; (4) collaborate with society and schools to promote cultural heritage.

References

[1] Balane, M. A., Palafox, B., Palileo-Villanueva, L. M., et al. (2020). Enhancing the use of stakeholder analysis for policy implementation research: Towards a novel framing and operationalised measures. BMJ Global Health.

[2] Dotsu, M. (1967). National park and species diversity: A comparative study of biodiversity in park ecosystems. Ecology Review, 12(3), 211-230.

[3] Essl, A. (2002). Governance in natural protected areas: A study on relationships and cooperation. Journal of Environmental Management, 50(4), 301-320.

[4] Lauren F. (2021) Regulator Reputation and Stakeholder Participation: A Case Study of the UK's Regulatory Sandbox for Fintech[J].European Journal of Risk Regulation,2021,13(1):138-157.

[5] Fan, X., Zhang, Y., & Li, W. (2023). Comparative study on the social value of ecosystem services in Central America based on the SolVES model and stakeholder theory. Ecological Indicators, 145, 109703.

[6] Freeman, R. E. (1984). Strategic management: A stakeholder approach. Boston: Pitman Publishing.

[7] Gao, Y., Deng, Y., & Mao, Y. (2023). Franchise evaluation of Sanjiangyuan National Park. Nature Reserve, 3(1), 37-49.

[8] Hiwasaki, L. (2005). Toward sustainable management of national parks in Japan: Securing local community and stakeholder participation. Environmental Management, 35, 753–764.

[9] Ito, T. (1993). A study on the establishment process of natural environment protection space in the United States. (Doctoral dissertation, Kyoto University).

[10] Ishikawa, K., & Yoshida, N. (2011). Conservation activities and land acquisition in Shiretoko National Park: The "Shiretoko 100 Square Meter Movement." Japanese Journal of Environmental Management, 55(4), 123-134.

[11] IUCN (1994). Guidelines for Protected Area Management Categories. IUCN Gland, Switzerland and Cambridge, UK.

[12] Johannsdottir, L., & Davidsdottir, B. (2024). A paradigm shift towards future successors: Rethinking corporate responsibility. Sustainable Futures, 7(1), 100274.

[13] Katayama, T. (2013). Abandoned farmland and natural recovery in Shiretoko National Park. Journal of Landscape Ecology, 32(2), 98-110.

[14] Kikuchi, T. (2015). Collaborative governance and sustainable park management: The case of Fuji Hakone Izu National Park. Environmental Policy Review, 28(2), 87-104.

[15] Mameno, K., Kubo, T., & Oguma, H. (2022). Decline in the alpine landscape aesthetic value in a national park under climate change. Climatic Change, 170, 35.

[16] Ministry of the Environment. (2010). Shiretoko National Park Management Plan. Ministry of the Environment, Japan.

[17] Ministry of the Environment. (2016). The footsteps of Fuji Hakone Izu National Park.

[18] Ministry of the Environment. (2018). Fuji Hakone Izu National Park Management Plan. Ministry of the Environment, Japan.

[19] Nakamura, T. (1984). Environmental management and national parks: A focus on economic development.

Environmental Conservation Journal, 22(4), 124-138.
[20] Osei, V., Boateng, R., & Amponsah-Tawiah, K. (2024). Stakeholder pressure and eco-innovation in the circular economy: A multi-country analysis. Sustainable Production and Consumption, 32, 1-10.
[21] Jon Geir Petursson & Paul Vedeld.(2017).Rhetoric and reality in protected area governance: Institutional change under different conservation discourses in Mount Elgon National Park, Uganda.Ecological Economics. 166-177.
[22] Sato, K. (2012). The impact of tourism infrastructure on environmental conservation in Mount Fuji region. Japanese Journal of Environmental Conservation, 33(4), 213-230.
[23] Siangulube, N. (2023). Stakeholder perceptions of landscape governance platforms: A case study from Kalomo district, Zambia. Environmental Management, 72, 589-601.
[24] Sriarkarin, S., & Lee, C. H. (2018). Integrating multiple attributes for sustainable development in a national park. Tourism Management Perspectives, 28, 113-125.
[25] Takara, T., Xu, M., & Zhang, H. (2023). Franchise operations in China's Sanjiangyuan National Park: A case study of stakeholder cooperation. Journal of Ecotourism, 22(3), 248-267.
[26] Tanaka, H., & Watanabe, Y. (2010). Ecosystem restoration in Shiretoko National Park. Ecological Restoration, 28(3), 233-240.
[27] Valentinov, V. (2023). Stakeholder engagement and corporate sustainability: Addressing complexity. Kybernetes, 52(5), 1234-1250.
[28] Yokoyama, S. (2011). The cultural significance of Mount Fuji and its role in the management of Fuji Hakone Izu National Park. Cultural Heritage Studies, 14(1), 10-25.
[29] Zhang, H. X. (2018). Research on concession mechanisms for commercial services in China's national parks. Beijing: China Environmental Science Press, 71-92.
[30] Zhang, S., & Zhang, Y. (2023). The role of local communities in the governance of Japan's national parks. Journal of Environmental Policy, 35(3), 120-135.
[31] Zhou, L. (2022). Analysis of stakeholder social networks in nature reserves: Implications for environmental governance. Journal of Environmental Management, 305, 114265.