



**JIES**

*Journal of Islamic Economic Scholar*

Vol. 3, No.2 (2022), pp. 126-140

e-ISSN: 2716-2044

---

**MANAGING HALAL RECREATION SERVICES FOR QUALITY OF  
LIFE AND ECOSYSTEM IN BRUNEI DARUSSALAM**

Nurulain Nabilah binti Hassan<sup>1</sup>, Nurul Amal Shafeena binti Hasni<sup>2</sup>,  
Dayangku Nazirah binti Pengiran Haji Ayub<sup>3</sup>, Anis Malik Thoha<sup>4</sup>,  
Noorhizrah binti Haji Muhammad<sup>5</sup>

Universiti Islam Sultan Sharif Ali, Fakulti Pengurusan Pembangunan Islam, Brunei Darussalam  
[ainnbilh@gmail.com](mailto:ainnbilh@gmail.com)

**ABSTRACT**

*Brunei Darussalam has a diverse ecosystem and is considered among the countries with high forest cover. The country's natural vegetation is tropical evergreen rainforests estimated to be around 75 per cent of the country's total land area and composed primarily of old-growth forests. However, solid policies and systems in the Brunei ecosystem need to speed up the transition to a resilient economy that promotes forest, sustainable land use, biodiversity, and climate goals. The management of halal recreation services for quality of life and ecosystem was the subject of this study. This study will look into the governments and private sector's actions in managing halal recreation to improve the environment's quality of life, assess individual initiatives and observe the ecosystem's primary causes.*

**Keywords:** *Brunei Darussalam, Ecosystem, Halal Recreation, Managing, Quality of Life*

**Article History:**

Received : 21 August 2022  
Revised : 29 September 2022  
Accepted : 21 December 2022  
Available online : 26 January 2023

## I. INTRODUCTION

Brunei Darussalam is a small country on the northwest coast of Borneo, an island in southeast Asia hosting three countries: Malaysia, Indonesia and Brunei. The 130-kilometreslong coastline bordering the South China Sea consists of high-profile sandy beaches with a complex estuarine mangrove and mudflat zone. In the western part of the country, the alluvial and often swampy coastal plain is backed by low hills, with other swamps inland. Most of the interior is below 90 metres, rising to almost 400 metres in the extreme west. The eastern part comprises a swampy coastal plain rising gradually through low hills to mountainous terrain inland. The central mountain range along the border with Sarawak rises to 1,850 metres (Bukit Pagon). An ecosystem is a geographical region in which plants, animals, and other species, as well as weather and topography, coexist to build a bubble of life. Ecosystems comprise both biotic (living) and abiotic (nonliving) components. Plants, animals, and other species are examples of biotic factors. In Brunei, characteristics of a good Quality of Life include “fulfilled fundamental necessities,” “financial security,” “being well-educated,” “having a well-paying and steady employment,” “living comfortably,” and “being healthy.” In terms of conservation programmes/activities. In Brunei’s social development sector, quality of life is preferred over “poverty”. This may be attributable to the emphasis that the Government of Brunei places on enhancing the QoL within the country in its current long-term development plan (Brunei Vision 2035).

Moreover, the term “poverty” is somewhat sensitive in Bruneian society as it could erode a person’s self-confidence, esteem or sense of (self-) worth. Under the Brunei Vision 2035, Brunei aspires to be ranked amongst the top ten countries globally with the highest quality of life; Brunei’s quality of life is hardly subjected to scholarly examination. Moreover, constructs that underlie the conceptualisation of Quality of Life in this country are not well-known.

Brunei has conducted several programmes, such as establishing ex-situ and in situ conservation areas, delineating genetic resources areas, and germplasm collection conducted by the Agriculture Department. Every year, the Government of Brunei Darussalam plants trees as part of its conservation programme. In one year alone, the government committed to planting 60,000 trees.

Sustainability has always been emphasised in Islam, whether in the tasks that Muslims must fulfil as its followers or in the teachings that Muslims have been taught since childhood. In Islam, sustainable development encompasses all SDGs’ goals, including environmental concerns. Khalq (Notion of Creation) and Mizan (Ecological Balance) are two concepts in Maqasid al-Shariah that relate to the environment in terms of sustainable development, as well as the concept of Khalifah (Vicegerent). Humanity will face disastrous repercussions due to overburdened earth and shortage of natural resources, and the expanding human population will eventually become unsustainable, with adverse effects for future generations.

The Sustainable Development Goals’ world, which must be safe and peaceful for future generations to value, could be associated with Maqasid al-Shariah. The earth’s living environment for Allah’s creatures, including people, must be preserved. Finally, the literature discusses how the government and public sector organisations might improve the citizens’ quality of life in Brunei Darussalam. This section will examine how certain parties’ management has successfully established and achieved the Sustainable Development Goals in Brunei Darussalam. The significance of Vision 2035 in confronting future problems to enjoy a bright and peaceful future. The vision’s three aims are to educate highly skilled and successful individuals, improve people’s quality of life, and create a dynamic and resilient economy. The

policy directions will be implemented to maintain and conserve Brunei Darussalam's natural environment and cultural habitat, including continued efforts to conserve Brunei Darussalam's outstanding biodiversity, rain forests, and natural habitat. They strictly implement acceptable environmental standards that impact public health and safety—supporting international and regional initiatives to address transnational and regional environmental issues. Brunei Darussalam's government collaborates with businesses and non-profit organisations to enhance the environment.

## II. LITERATURE REVIEW

For several decades, the relationship between quality of life and the environment has been an important research topic. The subject has spawned a slew of publications in both academic and non-academic circles. The United Nations, the European Union, and the Council of Europe all made significant contributions to the advancement of environmental thought.

“The World is not one, but the Earth is.” The earth has moral responsibilities in different parts of the world or states sailing in the same spaceship. The Rio Declaration's “Principle of Common but Differentiated Responsibility” expresses this need. Members of the United Nations reinforced their responsibility to work toward a world where poverty is eliminated and development is sustained at the Millennium Summit in 2000. Human beings enjoy a quality of life commensurate with their dignity in harmonious cities. To promote the concept of “harmonious urbanisation,” the United Nations has organised a series of world urban forums. The first World Urban Forum took place in Nairobi in 2002, followed by the Second World Urban Forum in 2004 and the Third World Urban Forum in 2006.

Article 37 of the European Union's Charter of Fundamental Rights includes a requirement for sustainable development. The Charter, which the Treaty of Lisbon enacted on 1st December 2009, has the legal force to impose penalties in infringement cases. In 1999, it was brought to the public's attention that the environment's quality still needed to be improved in many ways despite all efforts to address environmental issues<sup>1</sup>.

In various disciplines, such as psychology, medicine, economics, environmental science, and sociology, the term “quality of life” has been used to describe the human experience. It also refers to how well people's basic needs are met and their satisfaction or dissatisfaction with their lives. Access to specific resources is an integral part of living a good life that boosts economic output per capita. Food, shelter, security, and affection are all basic human needs. Mental capacity, cultural environment, information, education, temperament, and other factors can all affect the relationship between unique human needs and their perceived satisfaction. The policy's role is to open up human needs while considering that any needs can be met. Social norms evolve as a result of population behaviour. Some people believe that living in a community where their religious beliefs are enforced improves their quality of life. Others in the community may believe that living in a community where all women are veiled, or no one has access to abortion improves their quality of life. In contrast, others may believe that these norms reduce their quality of life. Others' survival needs for clean air may collide with one person's desire to ride a snowmobile for fun<sup>2</sup>.

Official policies are essential, but there is a disconnect between government policies on sustainable development and actual participation. It is difficult for human beings to live generation after generation while maintaining economic growth and rising living standards. The natural environment plays a vital role in the quality of life and sustainable development

discussions. When evidence grew that those human activities had destabilised the planetary balance and could not be sustained indefinitely, sustainable development was born. The term “ecological” emphasises combining economics and the environment in long-term ecological development. Ecology is defined as the study of organisms’ interactions with their surroundings. The interaction between human groups and their social and physical environments is referred to as human ecology in the case of humans. A procedure that can be sustained over time is referred to as sustainable.

Survival sustainability, sustaining quality of life, and enhancing the quality of life are the three levels of sustainable development related to Quality of Life. The most basic level of sustainability is survival sustainability. The concept of sustainability is linked to how natural systems work and generate the necessary elements for the ecosystem to stay balanced. The second level is concerned with maintaining the quality of life that is generally expected. The third level of sustainability views sustainability as a paradigm for envisioning a future in which environmental, societal, and economic considerations are balanced in the pursuit of development and improved quality of life without jeopardising future generations’ ability to enjoy a quality of life and opportunity that is at least as good as ours<sup>3</sup>.

Most natural areas are managed with two goals in mind. As the name implies, natural regions must be preserved in their natural state. Furthermore, most natural places are expected to offer at least some type of outdoor leisure. These aims, however, can and frequently do contradict. Recreational usage of natural spaces can have unacceptably adverse physical and biological effects.

Furthermore, excessive or unsuitable recreational usage can significantly degrade the quality of the tourist experience. Trampling and loss of vegetation cover are physical and biological consequences of recreation, such as damage to trees at campsites, compaction and erosion of organic litter and soil, the introduction of alien species, harassment or displacement of wildlife, and contamination of water supplies. Tourist congestion, conflicts between incompatible visitor activities, a loss in visitor learning, and geographical, temporal, or complete visitor displacement are all examples of effects on the quality of the visitor experience

Managers of natural areas face a wide range of challenges while pursuing their twin mandate of maintaining the natural environment and providing opportunities for outdoor enjoyment. An even broader range of management practices may add to this complexity. We have recorded and classified these management issues and practices, documented their present occurrence, investigated the perceived efficacy of management techniques, and found trends in management problems and practices over the last two decades. We believe that natural area managers may use the findings of this study to improve recreation management. First, our study’s vast, systematic recreation management challenges and methods might serve as practical guides. Understanding the typical challenges in many natural places can assist managers in anticipating these problems and allowing for more effective management, potentially averting such problems entirely.

Furthermore, the list of management techniques should encourage managers to consider alternate alternatives. A variety of possible management techniques may often be applied to any situation, and these management practices differ in their strategic goal and directness. Managers should be aware of all prospective management techniques. The comprehensive lists of recreation management challenges and techniques generated in this

study may be found in Marion et al., obtained from the authors. Managers are encouraged to collect and examine these lists.

Second, managers should improve their communication regarding common concerns and management techniques. The findings of this study should be utilised for that purpose. For example, research findings reflect how effective managers believe existing management approaches are, which should be helpful to other managers dealing with similar recreation management issues. Study data has been packaged into BASE III Plus files to support this communication effort. Natural area managers can use this database to locate national park system units that share traits or management issues or adopt management approaches of particular interest. Personal connections and phone numbers are provided to facilitate communication. Finally, the study's findings may direct management and research efforts. Problems with recreation management that are widespread in many natural settings should be the subject of investigation. Findings from studies on patterns in issues may be very beneficial. Management activities that are frequently utilised and effective should also be prioritised for research and professional education programs<sup>4</sup>.

One type of tourism industry that has contributed to Indonesia's tourist and economic growth is halal recreation. Five halal travel development goals are Faith, Integration, and Diversity: Allow Muslims to be spiritual while being active global citizens. Introduce Muslim visitors to one another, the local community, and the heritage and history of their chosen destination through legacy, culture, and connection. Education, perceptions, and abilities: Increase community awareness. Increased academic and industry knowledge can assist stakeholders in improving their capabilities. Create new opportunities for tourism to expand commerce and for industry, innovation, and trade to generate growth in various sectors. Recognise the obligations of travel industry stakeholders and the social impact on tourists, the larger community, and the environment to promote well-being and sustainable tourism.

According to Safdar Khan, Mastercard's Division President for Indonesia, Malaysia, and Brunei, "Mastercard is committed to working with partners, particularly Crescent Rating, to provide actionable insights and develop products that meet the religious and cultural needs of Muslim travellers." As more Muslim tourists travel the world, they will need digital payment options that are reliable, safe, and secure. Mastercard is excited to work with people, especially given the recent news that Indonesia and Malaysia have topped the Mastercard-Crescent Rating Global Muslim Travel Index 2019 for the first time.

The policy's role is to open up human needs while considering that any needs can be met. Social norms evolve as a result of population behaviour. Some people believe that living in a community where their religious beliefs are enforced improves their quality of life. Others in the community may believe that living in a community where all women are veiled, or no one has access to abortion improves their quality of life. In contrast, others may believe that these norms reduce their quality of life. Others' survival needs for clean air may collide with one person's desire to ride a snowmobile for fun<sup>5</sup>.

## **2.1. SUSTAINABLE DEVELOPMENT GOALS AND MAQASID AL-SHARIAH IN THE INTEREST OF QUALITY OF LIFE AND ECOSYSTEM**

The United Nations SDG 15 aims to protect, restore, and promote terrestrial ecosystems, conserve and manage forests, combat desertification, and halt and reverse land degradation and

biodiversity loss. Both animals and humans rely on forests for food and shelter. Terrestrial ecosystems provide various services, such as building materials, energy, food, and biodiversity habitat. They also aid in preventing natural disasters such as floods and landslides, climate regulation, and agricultural system productivity. The preservation of those ecosystems greatly aids climate change mitigation and adaptation efforts.

Approximately one million animal and plant species are on the verge of extinction, according to the Global Assessment Report on Biodiversity and Ecosystem Service for 2019. In order to restore and protect the environment, the report recommended drastic changes. It was discovered that the health of ecosystems on which humans and other species rely is deteriorating faster than ever before, posing a threat to human life quality.

Allah created the universe, which is managed by His will and care. Allah designed this universe with orderly biology, physics, chemistry, geology, and scientific principles. Everything that exists in humans and outside of them, a unique and mysterious unified system, is defined as the universe. Because man was created as a caliph on Earth, Allah, the Almighty Creator, beautifies man's creation and bestows the grace of intellect upon him to set him apart from other creatures. Of course, the role and responsibility of human beings as caliphs is massive, predominantly when guided by Islam's comprehensive and complete teachings. It is responsible for both its Creator, Allah, and the environment.

The Maqasid al-Shariah could be aligned with the Sustainable Development Goals' planet, which must be safe and peaceful for future generations to value. Climate change is causing changes in the planet's weather patterns, and the world's growing population will eventually become unsustainable. Humanity will face catastrophic consequences due to an overburdened planet and a depletion of resources. SDG 15 aims to protect the planet from deterioration by promoting sustainable consumption and production, managing natural resources sustainably, and immediately combating climate change. Humans bear responsibility for the universe's integrity, existence, and long-term viability. Allah created every component and object in this universe for its purpose. Humans are also responsible for maintaining and preserving it as members of the universe. Humans must take an active role in environmental protection. The earth's function as a place of life for Allah's creatures, including humans, and the continuity of their lives must be maintained. Nature plays a significant role in human life. Humans can use natural resources to meet their basic needs, but only responsibly and reasonably. In Surah An-An'am verse 141, Allah has warned humankind about the creation and enjoyment of the universe.

*“And He it is Who has made gardens, orchards, palm trees, plants of all kinds, and olives and pomegranates alike, and not alike. Eat of its fruits when it bears fruit, and fulfil its right on the day of harvest (by giving alms to the poor), and do not exaggerate. Indeed, Allah does not love the extravagant.”*

Natural resources are regarded as limitless gifts from Allah to all humanity to ensure human welfare in Islam. Allah gives bountiful resources, and He has entrusted humanity with carrying out their Khalifah responsibilities and obligations. As Khalifah, they can manage, utilise, and conserve resources wisely and sustainably. However, human passion for economic development has led to reckless use of Allah's resources. Their only goal is to achieve a materialistic development without considering future generations' needs. As a result of rapid industrial progress has resulted in substantial environmental degradation, pollution, climate change, global warming, and excessive exploitation of natural resources.

“And do not follow those who go to excesses and spread mischief in the land rather than set things right.”

According to Maqasid Syariah, the main goal of environmental preservation can be achieved by reaping benefits and avoiding harm. Benefits reaping can be accomplished by optimising sustainability interactions objectively, prudently, moderately, and according to its human function as Khalifah. This is because the environment is deteriorating due to human activity. “Corruption has appeared throughout the land and sea by [reason of] what the hands of people have earned so He [i.e., Allah] may let them taste part of [the consequence of] what they have done that perhaps they will return [to righteousness]. (ar-rum verse 41). While the component to prevent damage can be worked through laws and control measures gazetted by the Department of Environment, Parks and Recreation (JASTRe) in the Environmental Protection & Management Order 2016, which is one of the laws in Brunei Darussalam that emphasises environmental sustainability.

Islam teaches human beings to preserve the environment, including the ecosystem wisely. All these creations are interconnected by nature and need each other. If one cannot benefit the other, there will undoubtedly be an imbalance in the natural ecosystem. The creation of the creatures of Allah SWT over this world, including various kinds of animals and plants, cannot be destroyed to fulfil the human desire. The destruction of nature will occur if man fails to manage the environment as Allah has ordained.

Brunei Darussalam is dedicated to environmental conservation efforts, and the country has made the environmental policy a priority. Brunei has taken several strategic measures and initiatives to address the issues and national environmental challenges. Brunei Darussalam began protecting its forests 50 years before independence when the Forest Act was passed in 1934. The Forest Act (Cap. 46) was revised in 2013 to protect and conserve forest ecosystems. Other legal instruments, such as the Land Code, Land Acquisition Act, and Antiquities and Treasure Trove Act, are in place to provide the legal foundation for administering and managing the country’s forest estate. The Brunei Selection Felling System (BSFS) has been in place since 1986 to increase overall forest productivity. The BSFS has expanded to more than 14,000 hectares a decade after its beginning. Community Outreach Programs are also actively organising public awareness campaigns, with the government and the general public encouraged to participate. The proposed Biodiversity Order will make biodiversity management and conservation much easier.

In conducting flora and faunal research, the government will collaborate with academic and research institutions. The Universiti Brunei Darussalam’s Institute for Biodiversity and Environmental Research (IBER) aspires to be world-class biodiversity and environmental research centre. Several new species, including the tree frog *Leptomantis belalongensis* and three mycoheterotrophic plants, have been discovered.

Brunei Darussalam has made a significant accomplishment by successfully implementing the Every Day Without Plastic Bags Initiative in participating stores and department stores. Other government agencies, the private sector, non-governmental organisations, educational institutions, and the general public backed the noble effort. The 3R initiative, which stands for “Reuse, Reduce, and Recycle,” aims to raise public awareness of using clean and healthy recycling methods to maintain cleanliness, fertility, and environmental beauty. Compared to producing new goods from raw materials, recycling can reduce waste,

reduce new raw materials, reduce energy consumption, reduce air pollution (from burning), and reduce greenhouse gas emissions.

In the context of Maqasid Syariah, Natural resources management is crucial, and it is regarded as Daruriyat. Environmental damage, pollution, declining resources, and environmental balance disruptions endanger life. A healthy ecosystem is critical to human wellbeing and survival. Ecosystem imbalances are linked to natural disasters that occur all over the world. Natural disasters like haze can threaten human life and health, such as heart disease. Natural catastrophes are produced by man's indifference to the environment, which results in destruction. We rely on healthy ecosystems to filter our air and clean drinking water. More than 90 per cent of our food is derived from ecosystems, so we cannot exist without a healthy ecosystem.

It is preserving religion. This refers to human beings deviating from Allah's command in a good relationship between man and Allah SWT and man's interaction with nature. As Muslims, we must recognise that preserving the environment is regarded as preserving religion. Any environmental corruption, pollution, or destruction is a sin that each culprit must bear. Furthermore, this act impacts religion because doing corruption to the environment has indirectly rejected the existence of human beings as caliphs on this planet.

They are preserving lineage. Humans are destined to give birth. The natural resources that exist are not to be enjoyed alone but are also prepared for the next generation. Damaging the environment means taking away their rights. Initial preparations need to be made so that the problem of environmental pollution can be addressed and not continue to be widespread. The current generation needs to take care of the environment to enjoy the same benefits.

They are preserving wealth. Allah creates natural resources to support life in this world. Wealth is not always in cash and assets but also in natural resources such as animals, trees, plants, and more. In addition, Islam stresses numerous philosophies for protecting the animal. Most animals consumed in Islam have a significant population, excluding uncommon creatures with a limited population. Second, the Shari'a prohibits cruelty to animals. Third, Islam encourages people to care for animals by allowing them to live freely or providing them with life basics if they are in their hands. Fourth, Islam emphasises animals categorised as dangerous and related species, particularly animals that disturb or attack humans, in its regulations for slaughtering animals.

### **2.1.1 BRUNEI DARUSSALAM'S HALAL RECREATION MANAGEMENT FOR QUALITY OF LIFE AND ECOSYSTEM**

Brunei Darussalam is dedicated to environmental conservation efforts, and the country has made the environmental policy a priority. Brunei has taken several strategic measures and initiatives to address the issues and national environmental challenges. Brunei Darussalam began protecting its forests 50 years before independence when the Forest Act was passed in 1934. The Forest Act (Cap. 46) was revised in 2013 to protect and conserve forest ecosystems. Other legal instruments, such as the Land Code, Land Acquisition Act, and Antiquities and Treasure Trove Act, are in place to provide the legal foundation for administering and managing the country's forest estate. The Brunei Selection Felling System (BSFS) has been in place since 1986 to increase overall forest productivity. The BSFS has expanded to more than 14,000 hectares a decade after its beginning. Community Outreach Programs are also actively organising public awareness campaigns, with the government and the general public



encouraged to participate. The proposed Biodiversity Order will make biodiversity management and conservation much easier.

In conducting flora and faunal research, the government will collaborate with academic and research institutions. The University Brunei Darussalam's Institute for Biodiversity and Environmental Research (IBER) aspires to be world-class biodiversity and environmental research centre. Several new species, including the tree frog *Leptomantis belalongensis* and three *mycoheterotrophic* plants, have been discovered.

Brunei Darussalam has made a significant accomplishment by successfully implementing the Every Day Without Plastic Bags Initiative in participating stores and department stores. Other government agencies, the private sector, non-governmental organisations, educational institutions, and the general public backed the noble effort. The 3R initiative, which stands for "Reuse, Reduce, and Recycle," aims to raise public awareness of using clean and healthy recycling methods to maintain cleanliness, fertility, and environmental beauty. Compared to producing new goods from raw materials, recycling can reduce waste, reduce new raw materials, reduce energy consumption, reduce air pollution (from burning), and reduce greenhouse gas emissions.

Brunei Darussalam generated approximately 297,218 metric tonnes (MT) of garbage in 2019, with only 11.3 per cent recycled. The rest was mostly thrown away in landfills. In 2018, the Sultanate emitted 0.23 MT of methane gas into the atmosphere, accounting for 2.2 per cent of total greenhouse gas emissions. According to data from 2019, the average Bruneian generates 1.14 kg of municipal solid waste per day, placing the Sultanate among the top waste generators in the ASEAN region. Waste management is becoming increasingly difficult due to our limited landfill capacity as the economy and population grow. The Ministry of Development's Department of Environment, Parks, and Recreation is in charge of waste management in Brunei Darussalam, including general and hazardous waste (JASTRe).

12th January 2020, in Muara, The Department of Environment, Parks and Recreation (JASTRe), in collaboration with volunteers, held a Beach Cleanliness Campaign to ensure beach cleanliness is always maintained while maintaining the image and cleanliness of the environment in the country. The 'Save The Ocean Beach, Clean Up' initiative drew 100 participants, including Netcom Computer House employees and volunteers. The general public can play an essential role in preserving the country's image by always practising environmental cleanliness to attract more international tourists to Brunei Darussalam. It is hoped that visitors will always be responsible and ensure that the beach is kept clean. Garbage is disposed of at sites for dumping. However, individuals should not throw fishing lines into the water to protect those who enjoy fishing. Maintaining and preserving the cleanliness of the environment, such as Brunei Darussalam's beaches, is the responsibility of all beach users, not just JASTRe or volunteers. As part of its long-term corporate social responsibility (CSR), Bandar Seri Begawan Hengyi Industries Sdn Bhd launched the Clean Beach Initiative and held beach cleanup activities on 3rd March 2021. As part of the programme, Hengyi set up two signboards and six recycling bins at Muara Recreational Beach and two recycling bins at Serasa Beach to remind the public to help keep the beach clean and live a greener lifestyle. Hengyi will also hire third-party cleaning companies to keep the bins regularly maintained. The waste collected will be processed and recycled at a recycling facility.

Brunei Darussalam is a country where the landscape is still green, the sky is blue, the air is clean, and the water is pure. The Pretin woods cover 74 per cent of the country's land area. The ecology of the pristine forest is still organic, with organisms, flora, and fauna performing their roles, implying that the pristine forest does not require external control. Hengyi founded the Clean Beaches Initiative, according to the statement, to combat beach pollution and reduce the amount of plastic waste entering the ocean.

Brunei Darussalam is plagued by pollution. Although Brunei Darussalam currently has no major environmental pollution issues, it is recognised that proper environmental management is critical in light of population growth, urbanisation, and economic development.

Brunei Darussalam is increasingly concerned about air pollution. Brunei's air quality is deemed safe by the World Health Organization<sup>6</sup>. Vehicle emissions, waste burning, petroleum extraction, and power generation industries impact Brunei's air quality. Due to the transboundary haze from neighbouring countries, the highest pollution levels occur during the dry season.

Brunei Darussalam was struck by a drought in 2016, which resulted in burning, which polluted the air. The hazing incident was caused by cross-border haze smoke pollution blown by the Southwest winds, according to Dayangku Haryanti Binti Pengiran Haji Petra, Environment Officer, Department of Environment, Parks and Recreation<sup>7</sup>. According to Fire and Rescue Department statistics, natural events have caused 583.34 hectares of land to burn, including 429.82 hectares of forest and 153.52 hectares of grass.

Brunei Darussalam was also affected by the haze in 2019 due to several hot spots caused by forest and land fires in the Borneo Islands, with slow winds blowing in from the southwest. Statistics show that 1,433 forest and grass fire calls were received between January and September, covering 1,502.97 hectares or 1,342 football fields<sup>8</sup>. The haze that engulfed Brunei Darussalam was primarily caused by fires that broke out elsewhere, particularly in Sarawak and Kalimantan.

Brunei Darussalam entered a monsoon transition period in April 2020, which lasted until early June 2020. The country has been experiencing warm and dry weather. Peat forest fires are one of the challenges for firefighters in the Belait District when putting out large-scale fires. It is thought to result from a natural occurrence in which the fire started from an underground fire and human negligence<sup>9</sup>. People took advantage of the opportunity to do open burning and left it in the areas. According to statistics, the Fire and Rescue Department received 564 forest and grass fire calls from January to April 2020, covering an area of 726 football fields.

On 11th March 2020, The Minister of Development, Yang Berhormat Pehin Orang Kaya Indera Pahlawan Dato Seri Setia Awang Haji Suyoi bin Haji Osman explained the environmental issues raised by Yang Berhormat Awang Haji Ramli bin Haji Lahit at the Eleventh Session of the National Assembly. Various strata of society, including the government sector, the private sector, educational institutions, and NGOs, are responsible for preserving and conserving the environment. However, there are still parties who do not care about the cleanliness of the environment by throwing rubbish everywhere and also with activities that are not eco-friendly.

JASTRe has plans to increase environmental control and enforcement capacity, subject to the availability of labour, expertise, and adequate financial allocation for such needs. JASTRe has conducted several public informal education programs on the environment, such as briefings and workshops conducted on an ongoing basis to increase public awareness of the environment. The involvement of several other government agencies and higher education institutions can handle the issue of flora and fauna. Environmental pollution needs to be controlled according to development and time passage.

Several policies have been implemented, including recycling practices to achieve the target (achieving a reduction of 10 per cent for 2015 and 15 per cent for 2020) through several initiatives such as reducing the use of plastic bags at the national level and composting for 'green waste'. In addition, it is also included in ensuring environmental sustainability through the method of Environmental Impact Assessment for projects that impact the environment. The policy for using environmental pollution control guidelines for industrial development that limit the rate of 'emission' and 'effluent discharge' has allocated as much as 10 per cent of the areas to be developed specifically for green areas. These policies and efforts are essential to do consistently rather than periodically. We must act at the national and regional levels and at the international level to address the significant impact of climate change<sup>10</sup>.

On 2nd November 2021, A Forests and Land Use Event was held to preserve forests and reverse deforestation, represented by Minister of Foreign Affairs II Dato Seri Setia Awang Haji Erywan bin Pehin Datu Pekerma Jaya Haji Mohd Yusof as representative of ASEAN Chair for 2021, and Permanent Secretary at the Ministry of Energy Haji Azhar bin Haji Yahya, as Brunei Darussalam's Executive Committee Chair on Climate Change.

Brunei has joined efforts to conserve forests and other terrestrial areas that do not contribute to deforestation and land degradation. Brunei has a forest coverage of 72 per cent, with a capacity to absorb approximately 13.9 MtCO<sub>2</sub>e of carbon emissions per year by increasing forest reserves from 41 to 55 per cent of total land area. Planting 500,000 new trees by 2035 will attempt to increase the country's carbon sink while preserving its pristine rainforests.

In order to improve its effectiveness, Brunei implements and redesigned agricultural policies and programs to incentivise sustainable agriculture by promoting food security and environmental benefits, reaffirming international financial commitments and significantly increasing finance and investment from a wide range of public and private sectors. Furthermore, the leaders facilitate financial flows while ensuring solid policies and systems to accelerate the transition to a resilient economy that advances forest, sustainable land use, biodiversity, and climate goals<sup>11</sup>.

### III. RESEARCH METHOD

The study of this article focuses on qualitative methods, namely interviews, surveys and literature review. Qualitative surveys were conducted to identify the public's perceptions of living in Brunei Darussalam to help researchers investigate the management of recreational services in Brunei Darussalam, producing a more generalisable perspective. The survey is done in the google form and distributed through social media. The interview with the professional individuals on the said topic will help researchers gain more in-depth findings, resulting in high legitimacy and validity. The researcher will interview Dr Suleiman Mohammad Hussein Boyo,

a lecturer from the Faculty of Islamic Development Management held at University Sultan Sharif Ali, Brunei Darussalam, an expert in Islamic Sustainable Development Goals (SDGs) Islamic Based Development.

The methodology for this study is based on a qualitative review of the literature on sustainability frameworks. The first part is about the literature review. Because the research on sustainability and quality of life is vast and varied, the researchers describe and analyse it. The literature and definitions were obtained from extensive and specialised publications, and research was undertaken to assess the trains of thinking. The second part is about the Sustainable Development Goals and Maqasid al-Shariah in managing the Quality of Life and ecosystem. The forests provide food and shelter to both animals and people. Building materials, energy, food, and biodiversity habitat are all provided by terrestrial ecosystems. They also contribute to the prevention of natural disasters such as floods and landslides, climate regulation, and the productivity of agricultural systems

#### IV. RESULT AND DISCUSSION

The survey asked respondents to share the age range they fell within; from the data, the researchers can see that 43.1 per cent of respondents were more than 30 years old. The fewest number of respondents were at the age of 18 and below at 6.8 per cent. The survey asked respondents how frequently they participate in environmental conservation and protection to improve and increase their quality of life and ecosystem; surprisingly, very few of the fortyfive sample who answered the survey, only sixteen (16), engaged in conserving and protecting. Seventeen (17) did not engage in the activities, while fourteen (14) did not ensure they were involved. However, 85.1 per cent of the respondents know the importance of preserving and protecting the recreation in Brunei Darussalam. Most of the respondents, 68.1 per cent, agree that the incentive of 3R (Reduce, Reuse and Recycle) helps preserve the environment and improve the Quality of life and Ecosystem. Yet, it is surprising that most respondents, 76.6 per cent, did not sure about the action taken by the certain parties in managing the recreation for quality of life and ecosystem in Brunei Darussalam

The survey findings are exciting since not everyone who answered cared about the actual pollution in Brunei Darussalam and their role in preserving the nature and environment. People know that an issue regarding pollution and the quality of life may be treated exists. However, they do not know the extent of how dangerous that may result in disturbing the quality of life and ecosystem.

Human beings have a huge responsibility as vicegerent of Allah on this earth. Humans are supposed to fulfil their duties polished and trained by religion. Moreover, in Islam, time is significant. As Allah SWT says in Surah al-Asr verse 1-2,

*“By the passage of time, indeed humanity is in the grave loss.”*

The five daily prayers train humans to be resilient and resistant to anything that human has to practice every day and train humans to preserve and sustain everything and develop an ethical element that is the primary tool for sustainable development. Sustainable development of the ecosystem and anything to implement on this earth needs ethical human beings because humans have virtue and values that let us maintain our ecosystem.

Furthermore, human value is a motivating tool in achieving development. While achieving the development, humans have to make sure that they are sustaining the development

they have already developed because achieving more development without sustaining the previous one is wasting time. The field of Western sustainability faces problems in economics. In contrast, the Islamic perspective's primary goal is to achieve the development value that pushed us to maintain it.

Brunei is the calibre in the right of the monarchy, which facilitates things for the authorities. Furthermore, Brunei adheres to the Islamic rules derived from the teachings of the Quran and the Prophetic traditions, so Brunei has no challenges in implementing Sustainable Development Goals (SDGs). However, if challenges come, they will come from the human being itself. Such as the Arab countries and the Muslim country with durable resources. The Arab countries feel that they maintain everything or they do not have any challenges but looking at Saudi Arabia such as Kuwait, Kuwait has already gone because when Iraq invaded Kuwait, Americans came to help then after that, they realised that they have to pay a hefty debt to American, so they have pay. However, Kuwait was one of the wealthiest countries in the world. Another country, for example, Saudi Arabia, does not feel that they have any challenges, but now Saudi Arabia is looking for other sources apart from petrol and gas. Turkey is feared as a European country because Turkey has been in Europe and the Middle East when it comes to Turkey. After all, they share a border with Syria, but they are more European in the Middle East. They have challenges with democracy; parties' positions constantly disturb the other parties, which always want to make sure that everything is sustainably according to the economy. So, it is about the country's system; hence, many Muslim countries, in general, have challenges, and many have not yet come up with a solution.

## V. CONCLUSION AND RECOMMENDATION

### 5.1. Conclusion

Humans are a part of the ecosystem, so it is crucial. The world comprises several systems that communicate with one another in various ways. Humans have an ecosystem, which is made up of all living and non-living things that play an essential role in creating and maintaining the environment. Suppose the earth has a healthy and sustainable ecosystem due to recreation management. In that case, it will be able to combat and maintain itself in adverse and challenging conditions, such as climate change. Having forests on the land provides humans with a significant amount of food and resources for vegetation. It also provides oxygen to humans and keeps the ecosystem healthy to combat global warming. Humans would not have to worry about pollution and its damaging effects if the ecosystem was in good shape since everything around them would be pure and refreshing.

Another significant reason leisure and recreation can help improve people's overall quality of life are that they help them strike a positive balance and regulate their lives. Physical activity, mainly sporting hobbies, is linked to increased self-esteem, allowing us to feel good about ourselves in anything we do. There is little doubt that spending time in nature may transform a person's view on life and their overall health and mental and spiritual equilibrium.

Brunei follows Islamic teachings based on Maqasid al-Shariah to achieve success and wealth, drawn from the Quran and Prophetic traditions. Individual and societal well-being are the goals of Islamic Shariah. Islamic rules were founded to safeguard this precise purpose: to aid in the world's development and perfection of human lives. Knowing and applying Maqasid al-Shariah is a philosophy that is required to improve both the world's and Islam's quality of life. His Majesty the Sultan and Yang Di-Pertuan of Brunei Darussalam spoke during the 34th

National Day Celebration of Brunei Darussalam in 2018, “As a progressive Islamic country, the strengthening of Maqasid al-Shariah is a precondition for the country’s success. This strengthening is important as a catalyst towards ensuring that the country continues to reap prosperity and well-being”. Brunei Darussalam’s government is committed to environmental protection, and its institutional and legal underpinnings for environmental management and policy have improved over time. Humans intend to preserve the ecosystem and natural heritage to provide a clean environment for future generations.

## 5.2. Recommendation

One of the most significant ongoing problems in conserving and strengthening ecosystem resilience is developing and giving access to the necessary knowledge and technologies. There are efforts underway to collect information on current and prospective changes and incorporate the data into research and analysis that helps humans understand probable ecosystem outcomes. Federal agencies have built several sciences and data provider networks, developed various climate tools and services, and introduced various modelling and prediction breakthroughs to accommodate the need for data. On the other hand, the government cannot handle all of the consequences of climate change on our natural resources. Addressing climate change and ensuring the resilience of our natural resources will necessitate utilising the entire country’s skills, tools, and ideas. Improving collaboration and enhancing the ability of all parties to bring resources to the table to help the nation preserve and restore its natural resources will be required to foster this level of innovation and adaptive capacity to address changes..

## ENDNOTES

- <sup>1</sup> Keles, R. (2011). The Quality of Life and the Environment. *Procedia - Social and Behavioral Sciences*, 23-32.
- <sup>2</sup> Lahny, M. A. (2019). Halal Recreation Potential in Indonesia in Improving Tourists and Global Economy. *MPRA*, 1-10.
- <sup>3</sup> Manning, R. E. (1996). Recreation Management in Natural Areas: Problems and Practices, Status and Trends. *Natural Areas Journal*, 142-146.
- <sup>4</sup> Patrizia Gazzola, E. Q. (2017). The Connection between the Quality of Life and Sustainable Ecological Development. *European Scientific Journal*, 361-375.
- <sup>5</sup> Robert Costanza, e. a. (2005). Quality of Life: An Approach integrating opportunities, human needs and subjective well-being. *Ecological Economics*, 267-276.
- <sup>6</sup> IAMAT. (2020, 16th April). Retrieved from Brunei Darussalam General Health Risk: Air Pollution: <https://www.iamat.org/country/brunei-darussalam/risk/air-pollution#>
- <sup>7</sup> Yahya, S. H. (2016, 13th April). *Media Permata*. Retrieved from Over 500 Hectares of Forest have Burned Since January: <https://m.facebook.com/BeritaBrunei/posts/lebih-500-hektarhutan-terbakar-sejak-januariapr-13-2016oleh-salawati-haji-yahya/897185480390358> <sup>8</sup> H., S. Y. (2019, 26th September). *Media Permata*. Retrieved from Hentikan Pembakaran Terbuka: <https://mediapermata.com.bn/hentikan-pembakaran-terbuka/>
- <sup>9</sup> Pelita Brunei. (2020, 10th April). Retrieved from 564 Panggilan Kebakaran Hutan, Rumput diterima:
- <sup>8</sup> <http://pelitabrunei.gov.bn/Lists/Berita%202008/NewDisplayForm.aspx?ID=26229&ContentTypeId=0x01000AD708F3C215FA4CB59342165B677943>

<sup>10</sup>Azlan Othman (2021). Brunei Joins Efforts to Conserve Forests, Ecosystem. Borneo Bulletin, The Independent newspaper in Brunei Darussalam, Sabah and Sarawak.

<sup>11</sup>Wan Mohamad Sahran Wan Ahmadi (2020). JASTRe Rancang Tingkatan Kapasiti Pengawalan, Penguatkuasaan. Pelita Brunei. The Newspaper of Brunei.

## REFERENCES

Azlan Othman (2021). Brunei Joins Efforts to Conserve Forests, Ecosystem. Borneo Bulletin, The Independent newspaper in Brunei Darussalam, Sabah and Sarawak.

H., S. Y. (2019, September 26). *Media Permata*. Retrieved from Hentikan Pembakaran Terbuka: <https://mediapermata.com.bn/hentikan-pembakaran-terbuka/>

IAMAT. (2020, 16th April). Retrieved from Brunei Darussalam General Health Risk: Air Pollution: <https://www.iamat.org/country/brunei-darussalam/risk/air-pollution#>

Kementerian Pembangunan Brunei Darussalam. (n.d.). Retrieved from Larangan Pembakaran Terbuka: <http://www.mod.gov.bn/SitePages/Larangan%20Pembakaran%20Terbuka.aspx>

Keles, R. (2011). The Quality of Life and the Environment. *Procedia - Social and Behavioral Sciences*, 23-32.

Lahny, M. A. (2019). Halal Recreation Potential in Indonesia in Improving Tourists and Global Economy. *MPRA*, 1-10.

*Pelita Brunei*. (2020, April 10). Retrieved from 564 Panggilan Kebakaran Hutan, Rumput diterima:

<http://pelitabrunei.gov.bn/Lists/Berita%202008/NewDisplayForm.aspx?ID=26229&ContentTypeId=0x01000AD708F3C215FA4CB59342165B677943>

Manning, R. E. (1996). Recreation Management in Natural Areas: Problems and Practices, Status and Trends. *Natural Areas Journal*, 142-146.

Patrizia Gazzola, E. Q. (2017). The Connection between the Quality of Life and Sustainable Ecological Development. *European Scientific Journal*, 361-375.

Robert Costanza, e. a. (2005). Quality of Life: An Approach integrating opportunities, human needs and subjective well-being. *Ecological Economics*, 267-276.

Wan Mohamad Sahran Wan Ahmadi (2020). JASTRe Rancang Tingkatan Kapasiti Pengawalan, Penguatkuasaan. Pelita Brunei. The Newspaper of Brunei.

*World Health Organization*. (2021, October 30). Retrieved from Climate Change and Health: [www.who.int/news-room/fact-sheets/detail/climate-change-and-health](http://www.who.int/news-room/fact-sheets/detail/climate-change-and-health)

Yahya, S. H. (2016, 13th April). *Media Permata*. Retrieved from Over 500 Hectares of Forest have Burned Since January: <https://m.facebook.com/BeritaBrunei/posts/lebih-500hektar-hutan-terbakar-sejak-januariapr-13-2016oleh-salawati-hajiyahya/897185480390358/>