

The Ripples of Responsibility: An Islamic-Inspired Analysis of Water Management

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Abstract & Indexing



Abstract

Water, as a vibrant resource, is central to the survival and prosperity of humanity. The increasing challenges posed by climate change, global warming, population growth, and industrial expansion necessitate a sustainable approach to water management. Islamic thought of nature conservation offer a comprehensive framework for the stewardship of natural resources, including water. This paper explores the principles of water management from an Islamic perspective, emphasizing the ethical, legal, and conservational responsibilities rooted in Islamic jurisprudence. Water experts consider that non-availability of clean water has become an ever more pressing issue of the entire world as well as Pakistan. No doubt, the current water dams of Pakistan are insufficient for the endurance of the natural environment and water needs of rapidly growing population. World research reports indicate that water level is falling gradually in the every corner of our country. Application of Islamic guidelines about water management can play an effective role to manage water resources properly. Wastefulness of natural resources is strictly forbidden in various Quranic verses and hadiths. By integrating these perspectives with contemporary water management practices, this research study aims to provide a holistic approach to addressing the issue water scarcity.

Key words:

Islam, Water, management, Responsibility, Water Projects.

Introduction:

Water management is a critical issue in today's world, with the sustainability of water resources being threatened by various factors, including climate change, overuse, and pollution. The growing scarcity of water resources has become a big challenge in contemporary times. The protection of water is also part of 'seventeen Sustainable Development Goals' of United Nations Organization. Moderate usage of water does lead to sustainable development in any state. Pakistan also suffers from issue of water scarcity in current times. Water reservoirs of our homeland cannot fulfill our water needs. It is a sad fact that water is being wasted blindly everywhere without caring its costs. The water crisis affects public health severely. Therefore, it is essential to prevent mismanagement of water resources. As nations strive to develop strategies for sustainable water usage, the role of religious principles in guiding these efforts is often overlooked. Islam, with its profound emphasis on environmental management, offers valuable insights into responsible water management. This research paper delves into the Islamic perspectives on water, exploring how they can enlighten modern water management practices.

Literature Review

Water is a priceless blessing of Allah Almighty for the entire humanity. Well-known authors and researchers have focused on water management in Islamic perspective. The popular book "Water Management in Islam" by N.I. Farooqi is a thought provoking work. This likely explores the principles and practices of water management within the context of Islamic wisdoms and traditions. Islam places significant emphasis on the conservation and ethical consumption of natural resources, including water. The text probably examines historical

examples of water management systems in Islamic societies, the legal and ethical frameworks provided by Islamic law (Sharia), and how these ideologies can be applied in contemporary water management challenges.

“Islam and Environment” by Dr. Mumtaz Hussain is a well-researched book that makes a significant contribution to the field of environmental ethics from an Islamic perspective. Hussain’s work is particularly valuable for its comprehensive approach, combining theological, legal, historical, and contemporary perspectives. The book is accessible to both scholars and general readers, making it a useful resource for anyone interested in the intersection of religion and environmentalism. However, the book could benefit from a more detailed discussion on the practical challenges of implementing Islamic environmental ethics in today’s globalized world. This book is an essential read for those interested in understanding the role of religion in environmental management. It offers a compelling argument for the integration of Islamic principles into contemporary environmental policies and practices, making it a valuable contribution to both Islamic studies and environmental ethics.

“Islam and the Environment” by A.R. Agwan is a notable piece of work that explores the relationship between Islamic teachings and environmental ethics. Agwan’s book delves into how Islamic principles address environmental concerns and provide a framework for sustainable living. Agwan provides a comprehensive overview of how Islamic teachings relate to environmental ethics and natural resources conservation including water. The book examines various aspects of Islamic environmental ethics, Quranic verses, Hadiths, theology, and historical practices to illustrate how Islam has traditionally viewed nature and its preservation.

The book “Qudrati Wasail aur Inka Istamal” by Dr. Abdul Manan Cheema is an insightful work that discovers the responsible use and management of natural resources from both an Islamic and practical perspective. The book, written in Urdu, aims at a broad audience, including scholars, students, and general readers interested in understanding how Islam can guide the sustainable use of natural resources. In this book, Cheema successfully integrates religious teachings with practical advice, making the book a valuable resource for anyone interested in the ethical use of natural resources. His approach is holistic, addressing both the spiritual and practical aspects of resource management. Cheema’s clear and straightforward language makes complex concepts easy to understand, which enhances the book’s educational value. No doubt, “Qudrati Wasail Aur Inka Istamal” is a commendable effort to bridge the gap between Islamic environmental instructions and contemporary environmental issues. This book offers valuable insights into how Islam can lead the sustainable management of natural resources and provides practical advice for individuals as well as communities. It is a recommended read for anyone interested in the intersection of religion, ethics, and environmental management, particularly within the Islamic context.

The research paper “Islamic water management” by Hussein A. Amery offers a comprehensive exploration of how Islamic principles have historically shaped, and continue to influence, water management practices in Muslim-majority states. The paper delves into the religious, legal, and cultural dimensions of water use,

highlighting how Islamic traditions provide a framework for managing this critical resource in an era of growing scarcity.

In the article “Application of Islamic legal principles for advanced water management” Mr. Walid explores the potential for Islamic legal principles, particularly those derived from Islamic law, to contribute to modern water protection strategies. The article argues that Islam provides a robust framework for addressing contemporary water management challenges, particularly in Muslim-majority regions where water scarcity is an escalating concern.

The research paper “Water Crisis solution in the Light of Modern Science and Islamic Teachings” offers a multifaceted approach to addressing the global water crisis by integrating insights from modern science and Islamic teachings. It explores how these two distinct domains can provide complementary strategies for sustainable water conservation. The article argues that while modern science provides the technological tools and methodologies for water protection, Islamic teachings offer an ethical and moral framework that ensures the responsible and equitable use of water resources. This dual approach emphasizes the significance of not only technical solutions but also a spiritual and ethical commitment to conserving water.

The above-mentioned research works articulate the significance of water resources in Islam. However, addressing the water mismanagement consequences in the current times is essential. Therefore, the title for research study “The Ripples of Responsibility: An Islamic-Inspired Analysis of Water Management” was selected.

Research Methodology:

This study adopts a qualitative research methodology with an interpretive approach to analyze the role of Islamic principles of water management. The interpretive approach helps to understand the religious and ethical dimensions of water management as guided by Islam. This approach is suitable given the nature of the research study, which focuses on textual analysis and interpretation of religious doctrines. The primary data for this study is derived from the texts of Holy Qur'an and Hadith literature related to water conservation, and management. Academic articles, books, and theses that explore Islamic water management are reviewed thoroughly. The English translation of Holy Quran is taken from Mufti Taqi Usmani's “The Noble Quran” . Some tables are also designed to explain the significance of water management and water projects. Thus, the research methodology for this research study is designed to provide a comprehensive analysis of how Islamic principles can enhance modern water management practices.

Islamic-inspired Water Management Perspectives

Water holds a sacred position in Islam, being essential not only for physical sustenance but also for spiritual purification. The Qur'an, the holy book of Islam, and the Hadith, the sayings and actions of Prophet Muhammad (SAW), emphasize the status of water and outline principles for its equitable and sustainable management.

Water as a Divine Blessing:

Water is a fundamental and sacred element in Islamic literature, viewed as a divine blessing that sustains life, purifies, and serves as a sign of God's mercy and

provision. This concept is deeply rooted in the Qur'an and Hadith, where water is often mentioned as a symbol of life and a gift from Allah to all living beings. Various Islamic references highlight its theological, ethical, and practical implications. The Holy Qur'an frequently mentions water as a divine blessing, vital for life and a symbol of Allah Almighty's mercy.

It is stated in Holy Quran:

" وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ " ¹

" And We created from water every living thing. Would they still not believe?"

The above Quranic verse highlights water's vital role in creation. The recognition of water as a divine gift underscores the responsibility to use it wisely and protect it from wastage or harm.

Source of Cleanliness:

Water is considered as a source of cleanliness. In Islam, water is not only seen as a vital resource for sustaining life but also as a key element in spiritual and physical cleanliness. No doubt, water is regarded as a source of cleanliness as well as purification in Islam. In Islamic jurisprudence, cleanliness is closely associated with purity (taharah), which is essential for the performance of various religious acts. Water is the primary means of achieving this state of purity and cleanliness. Before performing prayers (Salah), a Muslim must cleanse specific parts of the body, hands, mouth, nostrils, face, arms, head, and feet with usage of water. This act of washing is called wudu (ablution), and it symbolizes both physical and spiritual purification. In certain situations, such as after sexual activity, menstruation, or childbirth, a full-body ritual washing known as ghusl (bath) is essential. Water is used to cleanse the entire body to achieve a state of ritual purity.

It is stated in Quran:

" إِنَّ اللَّهَ يُحِبُّ التَّوَّابِينَ وَيُحِبُّ الْمُتَطَهِّرِينَ " ²

"Surely Allah loves those who are most repenting, and loves those who keep themselves pure."

This verse encapsulates two key points of Islamic spirituality: repentance (tawbah) and purification (taharah). Both are fundamental to a Muslim's relationship with Allah, reflecting a deep commitment to spiritual and physical cleanliness.

Mumtaz Hussain notes:

"Water is considered as the most efficient cleansing agent. Its destined task is to remove pollutants, dirt, dust, and other impurities."³

The Prophet Muhammad (SAW) emphasized the significance of keeping the body, clothing, and surroundings clean, and water is integral to achieving this. This emphasis on cleanliness extends to personal hygiene practices such as bathing, brushing teeth, and washing hands.

In Islamic metaphors and spiritual perspectives, water often symbolizes purity, life, and the mercy of Allah. The Holy Qur'an frequently references water as a sign of Allah's provision and a means to cleanse the earth and human beings.

It is stated in Holy Quran:

" وَأَنْزَلْنَا مِنَ السَّمَاءِ مَاءً طَهُورًا " 4

“And We have sent down purifying water from
the heavens”

The above Quranic verse reflects the significance of water as a divine blessing in Islam, emphasizing its purity and essential role in sustaining life and purifying the earth.

Equitable Water Distribution:

Islamic teachings advocate for the equitable distribution of water. Equitable water distribution is a key principle in Islam, deeply rooted in the values of justice, stewardship, and communal responsibility. Water is considered a divine blessing in Islam, and its fair distribution is crucial for maintaining social harmony and fulfilling ethical obligations. The concept of equitable distribution is supported by various Qur'anic verses, Hadiths, and historical practices in Islamic societies.

It is stated in a Hadith:

“حدثنا عبد الله بن سعيد قال: حدثنا عبد الله بن خراش بن حوشب الشيباني، عن العوام بن حوشب، عن مجاهد، عن ابن عباس، قال: قال رسول الله ﷺ: " المسلمون شركاء في ثلاث: في الماء، والكلا، والنار، وثمنه حرام " 5

“Ibn Abbas reported that The Messenger of Allah (SAW) said,
"Muslims are partners in three things: in water, pasture, and fire,
and their price is forbidden.””

This Hadith emphasizes the communal nature of water resources, highlighting that certain basic necessities should be shared and not commodified for profit. No doubt, water is a shared resource, not to be monopolized or wasted. This principle of shared ownership obliges communities and individuals to ensure that water's availability to all the people, especially the vulnerable.

Prohibition of Wastefulness:

Islam emphasizes the ethical and proper use of water. The Prophet Muhammad (SAW) advised against wastefulness, even when water is abundant. This principle underscores the significance of water conservation and responsible usage as an act of worship and respect for God's creation. Islam prohibits wastefulness (Israf) in all aspects of life, including water usage.

It is stated in Holy Quran:

" أَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا ۚ إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ " 6

“Eat and drink and do not be extravagant. Surely, He does not
like the extravagant.”

This Quranic verse provides essential guidance on moderation in consumption, emphasizing the balance between enjoying the bounties provided by Allah and avoiding excessiveness.

The Prophet Muhammad (SAW) instructed his followers to be mindful of water consumption, even when performing ablution for saying prayer, a religious duty. This instruction is particularly relevant in the context of modern water management, where overconsumption and inefficient practices often lead to resource depletion.

It is stated in a Hadith:

"عن عبد الله بن عمرو، أن رسول الله ﷺ مر بسعد، وهو يتوضأ، فقال: ما هذا السرف فقال: أئني الوضوء إسراف، قال: نعم، وإن كنت على نهر جار-"⁷

"Abdullah ibn Amr narrates that the Messenger of Allah(SAW), passed by Sa'd while he was performing ablution. He said: "What is this wastefulness?" Sa'd replied: "Is there wastefulness in Wadu(ablution)?" The Prophet said: "Yes, even if you were on a flowing river."

The above Hadith provides deep insight into the Islamic understanding of wastefulness, particularly in the context of water usage, and reflects broader principles that are integral to Islamic teachings on resource management, moderation, and environmental stewardship.

Similarly, it is stated in another Hadith:

"عن عائشة، أن النبي ﷺ كان يغتسل بالصاع، ويتوضأ بالمد-"⁸

"The Prophet Muhammad (SAW) was used to perform ghusl (bath) with one sa' (4 liters) of water and perform wudu with one mudd (1 liter) of water."

The above-mentioned Hadith is a reflection of the Prophet's (SAW) practice of moderation, even in personal hygiene, and provides valuable insights into the Islamic principles of water resource management, conservation and simplicity.

Concept of Responsibility:

The concept of responsibility in Islam, particularly in relation to water management, is deeply embedded in the faith's teachings about stewardship, justice, and the proper use of natural resources. Water, being a vital resource, is considered a trust (Amanah) from Allah, and its management is seen as a significant responsibility for all the humans especially Muslims. Stewardship (Khilafah) in Islam refers to the responsibility bestowed upon human beings as caretakers of the planet Earth. This role involves managing and preserving the environment and its resources, including water, in a manner that is pleasing to God. The Qur'an describes human beings as "Khalifah" (vicegerents or stewards) on Earth, entrusted with the responsibility to act justly and maintain the balance (Mizan) in the natural world.

The concept of stewardship (Khilafah) extends to all of God's creations, including natural resources. Human beings are stewards of the Earth, responsible for its care and preservation. This stewardship includes the protection of water bodies from pollution and the maintenance of ecosystems that depend on water. The stewardship refers to the responsibility that human beings have to care for and manage the Earth and its resources, recognizing that they are entrusted to us by God. This concept is deeply rooted in Islamic teachings and is known as "Khilafah" (vicegerency/stewardship), which emphasizes the role of humans as protectors of the planet Earth. The Holy Qur'an refers to human beings as "Khalifah" (stewards or vicegerents) on Earth. This designation implies that human is appointed by Allah to manage and care for the world's blessings responsibly.

It is stated in Holy Quran:

وَأَقَالَ رَبُّكَ لِلْمَلِئِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً ۖ قَالُوا أَتَجْعَلُ فِيهَا مَن يُفْسِدُ فِيهَا وَيَسْفِكُ الدِّمَاءَ ۚ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۖ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ⁹

" (Remember) when your Lord said to the angels, :I am going to create a deputy on the earth! They said, :Will You create there one who will spread disorder on the earth and cause bloodshed, while we proclaim Your purity, along with your praise, and sanctify Your name? He said, :Certainly, I know what you know not."

This Quranic text highlights the trust and responsibility given to humans to act as stewards/caretakers of the Earth, a role that carries significant ethical and environmental implications.

It is stated in Holy Quran:

قُلْ أَرَأَيْتُمْ إِنْ أَصْبَحَ مَاؤُكُمْ غَوْرًا فَمَنْ يَأْتِيكُمْ بِمَاءٍ مَّعِينٍ¹⁰

“Say, :Tell me, Should your water vanish into the earth, who will bring you a flowing (stream of) water?”

The above-mentioned explores significance of water for humans. It shows this is a great blessing of Allah and no one provide water except one Allah.

In Islam, the concept of responsibility in water management is rooted in the principles of stewardship, moderation, justice, and ethical conduct. Muslim Ummah is called upon to manage water resources wisely, ensuring equitable access, preventing waste and pollution, and maintaining the balance of the natural world. This responsibility extends beyond individual actions to include communal efforts to protect and sustain water resources for present and future generations.

Water Projects in Muslim and Non-Muslim World

Here are given two tables summarizing significant water projects across the Muslim and non-Muslim world to understand the contemporary water management system.

Significant Water Projects in Muslim World

No.	Country	Project Name	Description
1	United Arab Emirates	Dubai Water Canal	Construction of an artificial canal running through Dubai, connecting the business district with the sea.
2	Turkey	Southeastern Anatolia Project (GAP)	A multi-sectoral development project involving the construction of 22 dams and 19 hydroelectric plants.
3	Saudi Arabia	King Abdullah Initiative for Saudi Agricultural Investment Abroad	Investment in agricultural lands abroad to reduce domestic water use for agriculture.

4	Pakistan	Diamer-Bhasha Dam	A large dam on the Indus River, aimed at water storage, flood control, and hydroelectric power generation.
5	Oman	Wadi Dayqah Dam	Construction of a dam to store water and supply it for domestic and agricultural use.
6	Morocco	National Water Plan	A comprehensive plan to improve water use efficiency, build dams, and implement desalination projects.
7	Malaysia	Pahang-Selangor Raw Water Transfer Project	Transfer water from Pahang to Selangor to meet the growing demand in the Klang Valley region.
8	Kazakhstan	Aral Sea Basin Program	International effort to restore the Aral Sea and manage water resources in the basin.
9	Jordan	Red Sea-Dead Sea Water Conveyance Project	Transfer water from the Red Sea to the Dead Sea, with desalination for drinking water and brine disposal in the Dead Sea.
10	Iran	Karkheh Dam	A dam on the Karkheh River for irrigation, hydroelectric power, and flood control.
11	Indonesia	Jakarta Coastal Defense Strategy	A comprehensive plan to protect Jakarta from coastal flooding and land subsidence, including sea walls and water retention systems.
12	Egypt	Toshka Project	Divert Nile water to irrigate new agricultural lands in the desert.

13	Bangladesh	Ganges Barrage Project	A proposed project to store Ganges River water for dry season use and flood control.
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Table: Water Projects in Muslim world

The above table provides a comprehensive overview of significant water management projects across various Muslim-majority countries. Each project is briefly described, offering insight into the diverse approaches these nations are taking to address water-related challenges. The projects listed in the table cover a wide range of water management activities, including dam construction, water transfer, agricultural investments, flood control, and coastal defense. This diversity reflects the varying geographic, climatic, and economic conditions across the Muslim world. The table includes both domestic projects, such as the Wadi Dayqah Dam in Oman and Karkheh Dam in Iran, and international or regional initiatives, like the King Abdullah Initiative for Saudi Agricultural Investment Abroad and the Aral Sea Basin Program in Kazakhstan. This mix demonstrates the multifaceted nature of water resource management, which can range from local infrastructure to broader regional cooperation.

Water Projects in Non-Muslim World

No.	Country	Project Name	Description
1	Australia	Snowy Mountains Hydro-Electric Scheme	A major hydroelectric and irrigation complex in southeastern Australia, diverting water from rivers to arid regions.
2	Brazil	Belo Monte Dam	A large hydroelectric dam on the Xingu River in the Amazon, one of the largest in the world.
3	Canada	Columbia River Treaty Project	A series of dams on the Columbia River for flood control and hydroelectric power generation.
4	China	South-North Water Transfer Project	A massive infrastructure project to divert water from the Yangtze River in southern China to the dry northern regions.
5	Germany	Emscher River Restoration	A project to restore the heavily industrialized Emscher River, transforming it from an open sewer to a natural waterway.

6	India	Narmada Valley Project	A series of large dams on the Narmada River, aimed at irrigation, hydroelectric power generation, and water supply.
7	Israel	National Water Carrier	A system of pipelines, canals, and tunnels to transport water from the Sea of Galilee to central and southern Israel.
8	Russia	Volga-Don Canal	A canal connecting the Volga and Don rivers, facilitating navigation and irrigation.
9	United Kingdom	Thames Tideway Tunnel	A large infrastructure project to upgrade London's sewer system, preventing sewage overflow into the Thames River.
10	United States	Hoover Dam	A large dam on the Colorado River, providing hydroelectric power, water storage, and flood control.

The above table effectively captures a range of significant water projects in the non-Muslim world, illustrating the diverse strategies countries employ to manage their water resources. These projects highlight the critical role of water management in energy production, environmental restoration, and economic development. However, they also underscore the importance of balancing engineering solutions with environmental sustainability and social considerations.

In the Muslim world, technological advancements are being integrated into water projects, as seen in the Red Sea-Dead Sea Water Conveyance Project, which combines desalination with water transfer. However, the need for more innovative solutions remains, particularly in addressing the unique challenges of arid and semi-arid regions. In the Non-Muslim World, In contrast, countries like China and Israel are leading the way in large-scale infrastructure projects that utilize advanced technology for water transfer and desalination. The South-North Water Transfer Project is one of the most ambitious infrastructure projects globally, demonstrating the potential of engineering solutions to manage water scarcity.

The comparison between water projects in the Muslim and non-Muslim world reveals both commonalities and differences in how countries approach water management. While both groups of countries face challenges related to water scarcity, urbanization, and climate change, their strategies reflect their unique geographic, economic, and cultural contexts. Muslim-majority countries are increasingly integrating Islamic principles of water management and community involvement into their projects, while non-Muslim countries often emphasize large-scale infrastructure and technological innovation.

Islamic-Inspired Water management Projects

The concept of water management inspired by Islamic principles emphasizes stewardship, responsibility, and the equitable sharing of resources. The projects that embody these principles reflect both religious values and practical approaches to addressing water scarcity, environmental sustainability, and community well-being in the Muslim world.

Simon notes:

“Islamic civilization has acquired a great reputation in terms of its ability to develop ingenious approaches to water management and to agricultural practices that are well adapted to particularly harsh climatic conditions.”¹¹

Islam emphasizes the concept of humans as stewards (khalifah) of the Earth, responsible for protecting and managing natural resources, including water. Projects like the Water Wise Women Initiative in Jordan embody this principle by empowering local communities, particularly women, to manage water resources sustainably. This initiative promotes water conservation at the grassroots level, aligning with the Islamic duty to preserve the environment for future generations. Similarly, The use of traditional Qanat systems in Iran and Afghanistan, which are ancient underground water channels.¹² These systems are being rehabilitated and modernized in some areas to enhance water distribution.

Islam inspires for the responsible and moderate use of resources, including water. Projects like the Morocco ‘National Water Plan’¹³ incorporate this principle by promoting efficient water use, reducing wastage, and enhancing the sustainability of water resources through measures such as dam construction and desalination. The plan's emphasis on sustainability aligns with the Islamic concept of avoiding israf (wastefulness) and ensuring that resources are available for future generations.

Islamic-inspired water projects contribute to economic development by improving water access for agriculture and industry. The King Abdullah Initiative for Saudi Agricultural Investment Abroad¹⁴ is an example of how Islamic principles can be applied to ensure that economic activities are sustainable and do not deplete domestic water resources.

The Toshka Project¹⁵ in Egypt aims to develop new agricultural lands in the desert, providing economic opportunities while ensuring sustainable water use. Although the project's long-term environmental impacts are still debated, its alignment with the goal of balancing economic growth with environmental management is evident.

Islamic-inspired water management projects are increasingly focusing on the need to adapt to climate change, which poses significant challenges to water availability in many Muslim-majority countries. Projects like the Jakarta Coastal Defense Strategy in Indonesia¹⁶, while not exclusively Islamic in inspiration, reflect the broader Islamic ethos of protecting communities from harm and ensuring the equitable distribution of resources in the face of environmental changes.

Jordan, one of the most water-scarce countries in the world, has incorporated Islamic principles into its national water strategy. The government has

emphasized equitable distribution, water conservation, and the protection of water resources, drawing on Islamic teachings to guide its policies.

Denny notes:

“Jordan is considered one of the countries in the world with the scarcest of water resources. Water conservation is being pursued through increased water recycling, improved irrigation techniques and reducing water loss in distribution; whilst on the supply side is examining the potential for increased desalination, including schemes to transport seawater from Aqaba to the Dead Sea to restore its level and generate potable water, and further investment in dams and domestic reservoirs to collect and hold rainwater.”¹⁷

In Indonesia, Islamic leaders have launched Eco-Islam initiatives that promote environmental stewardship, including sustainable water management. These initiatives involve religious leaders in educating communities about the importance of water conservation, based on Islamic values.

Dewayanti notes:

“Three Islamic organizations have been at the forefront of championing environmental issues. The Ulama Council of Indonesia (MUI) has released fatwas on the environment, including several pertaining to the forest fires in Kalimantan and Sumatra. Nahdlatul Ulama (NU) and Muhammadiyah have also established sub-units that specifically aim to raise environmental awareness and promote initiatives ranging from plastic waste management to green lifestyle.”¹⁸

It is stated about eco-project Wane of Indonesia:

“With an area of over 900,000 km², Indonesia is home to the third largest area of tropical rainforest in the world. However, this wonder of nature with its immense diversity has been in danger for many years. From 2002 to 2019 alone, Indonesia lost 26.8 Mha of its rainforests to slash-and-burn agriculture, of which 36% were primary forests. The resulting degradation and erosion of these areas has led to an enormous release of CO₂ and is also destroying adjacent ecosystems, including coastal marine systems such as coral reefs. To address this broad problem, the project aims to inspire the local community to work together to implement environmentally sustainable systems. In this way, a self-sufficient future is to be made possible, in which economic development and a healthy life are in harmony with nature conservation.”¹⁹

Morocco's traditional water systems, such as the khattara²⁰ (underground irrigation canals), reflect the Islamic principles of equitable distribution and resource conservation. These systems, which have been used for centuries, continue to provide sustainable water management solutions in arid regions.

The Qatar National Vision 2030²¹ includes water management strategies that align with Islamic principles of sustainability and stewardship, aiming to ensure that the country's water resources are resilient to the impacts of climate change. These initiatives demonstrate the potential for Islamic teachings to inform modern approaches to climate adaptation and water management. Here is a table of Islamic-Inspired Projects:

No.	Country	Project Name	Islamic Inspiration	Impact/Goals
1	Bangladesh	Coastal Afforestation and Water Management in the Sundarbans	Guided by the Islamic ethic of stewardship (Khilafah) and respect for nature	Enhance coastal resilience, protect freshwater resources, and support sustainable livelihoods.
2	Egypt	Sustainable Water Use in Islamic Cairo	Reflects Islamic teachings on the sanctity of water and responsible usage (Amanah)	Preserve water resources, protect heritage sites, and promote sustainable urban living.
3	Indonesia	Green Mosque Initiative	Inspired by Islamic principles of conservation and cleanliness (Tahara)	Reduce water consumption in religious spaces, promote environmental awareness among worshippers.
4	Iran	Qanat Revitalization Projects	Based on the Islamic principle of fair resource sharing (Adl)	Sustainably manage water resources, improve irrigation, and preserve traditional water practices.
5	Jordan	Water Wise Women Initiative ²²	Inspired by Islamic teachings on the equitable distribution of resources and community responsibility (Fard Kifayah)	Enhance water conservation at the household level, promote community awareness, and empower women.
6	Malaysia	Islamic Garden at Putrajaya	Reflects Islamic principles of harmony with nature and conservation (Mizan)	Enhance urban green spaces, promote water management through traditional Islamic garden design.
7	Morocco	Al Akhawayn University's Sustainable Water Management Program ²³	Based on principles of stewardship (Khilafah) and conservation (Israf)	Educate and promote sustainable water use, integrate Islamic ethics into water management.
8	Oman	Falaj System Preservation	Rooted in Islamic values of balance (Mizan) and justice (Adl)	Ensure sustainable irrigation, protect cultural heritage, and promote fair water

				distribution.
9	Pakistan	Barani Area Development Project	Inspired by Islamic teachings on efficient resource use and communal welfare (Maslaha)	Improve water availability, support sustainable agriculture, and enhance community resilience.
10	Saudi Arabia	Hima System Revival	Rooted in the traditional Islamic concept of Hima (protected areas)	Preserve water sources, promote community-managed conservation areas, and ensure sustainable use.
11	Turkey	Water Mosque Project	Inspired by Islamic environmental ethics (Tawhid and Mizan)	Promote water conservation through religious buildings, set examples for sustainable architecture.

Islamic-Inspired Water Projects

Table: Islamic-Inspired Water Projects

Islamic-inspired water management projects highlight the potential for religious principles to guide sustainable and equitable water use. These projects reflect a deep respect for environmental stewardship, community involvement, and the responsible use of resources, all of which are central to Islamic teachings. As these projects continue to evolve, they offer valuable lessons for integrating traditional values with modern water management practices, contributing to the global discourse on sustainable development.

Various Islamic-inspired water projects have made significant progress in improving water management, ensuring their long-term sustainability remains a challenge. This includes the need for continuous community engagement, adequate funding, and the integration of modern technologies with traditional practices. The success of these projects depends on their ability to adapt to changing conditions while staying true to the Islamic principles that inspire them. Additionally, large-scale infrastructure projects, such as dams and water transfer initiatives, should be carefully managed to avoid negative environmental impacts. Balancing the immediate benefits of these projects with their long-term sustainability is essential for their success in aligning with Islamic management principles.

Conclusion

Islam offers a profound and comprehensive framework for water management, emphasizing responsibility, moderation, equity, and environmental stewardship. By integrating these principles into modern water management practices, it is possible to create more sustainable and fair systems that address the global water mismanagement and its consequences. The ripples of responsibility, as inspired by Islamic philosophy of conservation, extend beyond individual actions to encompass collective efforts at local, national, and global levels. As the world

grapples with growing water challenges, the wisdom embedded in Islamic literature provides valuable guidance for safeguarding this precious resource for future generations.



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