

# Faith-Based Affirmative Action For Environmental Conservation: Empirical Evidence From Pakistan

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## Abstract

*In Recent literature highlights a strong link between faith and environmental conservation in developing countries. Faith-based approaches are increasingly seen as more effective than secular ones in shaping pro-environmental behaviors and attitudes. As industrialization and development projects accelerate, environmental degradation intensifies, prompting new strategies for sustainable development. One such strategy is the use of faith-based affirmative action programs that engage religious communities in environmental initiatives through targeted education and outreach. Pakistan, despite having one of the world's largest Muslim populations and facing severe environmental challenges, has seen limited research on the intersection of faith and environmental conservation. This study addresses that gap by presenting empirical findings from a field-based research project conducted near Islamabad. Using various models, the study assesses whether religious belief influences community action, specifically in managing household solid waste. Findings indicate that faith significantly encourages positive environmental attitudes and active community participation. Field data further supports the conclusion that religiously framed programs can successfully mobilize communities for conservation. These results underscore the potential of faith-based affirmative action as a valuable policy tool for promoting sustainability, particularly in culturally and religiously rooted societies like Pakistan.*

**Keywords:** Faith, Environment, behavior, Affirmative Action, Climate Change.

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## INTRODUCTION:

The significance of environmental conservation has never been more pertinent. As we find ourselves in the Anthropocene, a geological epoch defined by the significant global impact humans have on the Earth's ecosystems, there is a pressing need to reassess our relationship with the natural world (Lewis & Maslin, 2015; Steffen et al., 2011). Unfortunately, the rapid industrialization and unchecked development projects across the globe have increasingly put pressure on our natural environment, accelerating climate change, loss of biodiversity, and pollution (Brondizio et al., 2019; Corlett, 2017; Field & Barros, 2014). Given the scale of the challenges we face, traditional top-down approaches to environmental management and conservation have proven inadequate (Leach et al., 2010; UNEP, 2021). In response, there has been a surge of interest in grassroots movements and community-based conservation initiatives, leading researchers to explore new pathways towards sustainable development (Berkes, 2007). Among such pathways, the role of faith and belief in environmental conservation has emerged as a subject of particular interest. Religion, with its profound influence on human behavior and values, is increasingly being recognized as a critical factor in shaping people's attitudes towards the environment (Garrard et al., 2013).

Faith-based affirmative action for environmental conservation represents a novel approach to environmental stewardship, uniquely merging the tenets of religious faith with the principles of environmental conservation. Underpinning this approach is the recognition of the profound influence religious beliefs exert on the attitudes and behaviours of individuals and communities (Bauman, 2014). Traditionally, affirmative action policies have been employed to rectify social injustices and economic

disparities by providing preferential treatment to marginalized or disadvantaged groups in areas such as education and employment (Bowen & Bok, 2016). In the realm of environmental conservation, however, affirmative action programs take on a slightly different character. Rather than addressing economic or social imbalances, these initiatives aim to foster environmental stewardship and sustainable practices among faith communities (Veldman et al., 2013).

A considerable body of literature suggests that faith-based approaches can be more effective than non-faith approaches in promoting environmental conservation in developing countries (Austin et al., 2018; Baruth & Wilcox, 2013; Bauman, 2014; Bhagwat, Ormsby, & Rutte, 2011; Cochrane, 2013; van der Ploeg et al., 2011). This approach is underscored by the premise that religious faith, deeply ingrained in many societies, can inspire and motivate individuals and communities to take affirmative action towards environmental conservation (Taylor, 2016; Tomalin, 2007). These faith-based initiatives are proactive in their orientation and strive to enact measurable change. They aim to effect positive environmental behaviour and promote sustainable practices by engaging religious groups in educational and outreach activities tailored to their beliefs and values (Hitzhusen & Tucker, 2013). The assumption is that religious faith, deeply ingrained in many societies, can provide the moral imperative to inspire and motivate individuals and communities to take action for environmental conservation (Jenkins & Chapple, 2011). While there has been an increased interest in examining the interplay between faith and environmental conservation globally, a conspicuous gap remains in the literature concerning the impact and effectiveness of faith-based affirmative action programs in specific cultural and socio-economic contexts (Bauman, 2014). The potential of faith-based affirmative action for environmental conservation has been under-explored in developing countries where faith plays a crucial role in shaping societal values and behaviours (Veldman et al., 2013), particularly in the area of solid waste management (Hoorneweg & Bhada-Tata, 2012). Despite having one of the largest Muslim populations in the world living in severe environmental conditions, the role of faith in environmental conservation in Pakistan has been under-studied. Given the overarching impact of religion on societal values and behaviours (Norenzayan & Shariff, 2008), faith-based affirmative action is considered a promising avenue to promote environmental conservation and sustainable development (Veldman et al., 2013). Given the urgency of the environmental crisis and the potential of faith-based approaches to inspire action, it is critical to investigate this relationship further.

### **Objectives of the Research Paper**

The principal objective of this research paper is to scrutinize the effectiveness of faith-based affirmative action in promoting environmental conservation in Pakistan, a country marked by its deep-seated religiosity and daunting environmental challenges. This investigation emerges from a recognition of the dearth of research focusing on the interplay of faith and environmentalism within the context of developing nations, particularly in relation to waste management.

### **Under this overarching objective, the following specific aims are delineated:**

1. To ascertain the influence of faith and belief on people's attitudes and behaviours towards household solid waste management in Pakistan. This aim is informed by the proposition that faith could potentially galvanize individuals into taking affirmative action towards sustainable waste management practices.
2. To evaluate the impact of faith-based affirmative action on community participation in household solid waste management. A deeper understanding of how religious faith can be leveraged to enhance communal participation in environmental conservation efforts is deemed crucial.
3. To investigate the relationship between faith-based affirmative action and attitudes towards environmental conservation among religious people. This will involve gauging whether such initiatives could stimulate a transformation in the mindset of religious communities towards a more eco-friendly orientation.
4. To draw insights and lessons from the field experiences of implementing a faith-based affirmative action program in Pakistan. This real-world evidence can shed light on the practical implications and challenges of executing such a program, thereby providing invaluable insights for future policy design and implementation.

**LITERATURE REVIEW:****A. Environmental Conservation and Sustainable Development**

Considerable scholarly attention has been dedicated to examining the intricate relationship between environmental conservation and sustainable development (Adams, 2006; Beder, 2000; Giddings, Hopwood, & O'Brien, 2002). In the discourse of sustainable development, environmental conservation is not merely seen as an addendum but a pivotal cornerstone (Redclift, 2005). It is postulated by Turner (1995) that a sustainable future cannot be envisioned without robust environmental conservation policies, thereby underscoring the interconnectedness of the two concepts.

Human activities, principally driven by economic objectives, often lead to extensive environmental degradation (Grossman & Krueger, 1995; Stern, 2004). Industrial pollution, deforestation, and overconsumption of resources have accelerated the rate of environmental degradation, threatening the planet's ecological balance (Goudie, 2018; Rees, 2018; Vitousek et al., 1997). In particular, Le Quéré et al. (2018) and Tukker and Jansen (2006) shed light on the distressing impact of human-induced carbon emissions on climate change and biodiversity loss.

On the flip side, sustainable development and environmental conservation hold the promise to counteract these deleterious impacts. They offer an integrative framework that merges economic growth with environmental stewardship, effectively arguing for a shift from resource-intensive to sustainable practices (Holden, Linnerud, & Banister, 2017; Mebratu, 1998). Embracing such a framework, according to Pearce, Markandya, and Barbier (1989), offers the potential to retard, and potentially reverse, the rate of environmental degradation.

Ekins et al. (2003) posit that the principle of 'strong sustainability,' which emphasizes maintaining the total stock of capital, including natural capital, is a vital strategy to ensure long-term environmental health. Moreover, Folke et al. (2002) and Berkes et al. (2008) argue that an ecosystem-based approach to sustainable development is key to enhancing resilience and adaptive capacity in the face of environmental stressors.

However, there is a perceived dichotomy between environmental conservation goals and sustainable development, a tension that demands further investigation (Vucetich & Nelson, 2010). The debate is not merely academic; it has serious implications for policy-making and the trajectory of our collective future (Brand, 2005).

The current body of literature propounds the idea that while we cannot reverse all the harm done, a strong commitment to sustainable development and environmental conservation could chart a course towards a more resilient and sustainable future. Thus, understanding the symbiotic relationship between these two constructs is paramount for policymakers, environmentalists, and society at large. Therein lies the purpose of the present study: to offer a nuanced understanding of these entwined facets of our societal and environmental existence.

**B. Faith-based Approaches to Environmental Conservation**

In the quest for environmental sustainability, faith-based perspectives and actions have frequently emerged as notable actors (Gardner, 2006; Taylor, 2010). Scholars such as Kearns (1997) argue that religious communities are crucial for mobilizing action towards environmental conservation. Conversely, this potential is sometimes unheeded, with faith-based environmental initiatives receiving scant attention in mainstream environmental discourses (Wardekker et al., 2009).

Research has shown that the infusion of faith-based teachings can catalyze environmental awareness and conservation efforts. In particular, the concept of "stewardship," prominent in many religious traditions, emphasizes the responsibility of humans to protect and conserve the Earth (Van Huijstee et al., 2007). For instance, Christian principles of stewardship were demonstrated to significantly motivate individual environmental behaviors (Hand & Van Liere, 1984), while Islamic teachings of "khalifah" (stewardship) have been instrumental in promoting environmental awareness and conservation within Muslim communities (Foltz, 2003).

Beyond individual motivations, faith communities can serve as pivotal societal actors for environmental sustainability. The Catholic Church's Encyclical "Laudato Si" provides a salient example, with Pope Francis urging for an "ecological conversion" to address the environmental crisis (Bergoglio, 2015). This call to action not only stirred Catholics but also fostered dialogue on environmental conservation in broader societal and interfaith contexts (Cook et al., 2016; Jenkins, 2009).

However, faith-based conservation approaches are not without their challenges. Some scholars argue that religious beliefs can also contribute to environmental degradation (White, 1967), an assertion that has incited heated debates (Eckberg & Blocker, 1989). To this end, Callicott (1989) points out that the instrumentalization of religious principles for environmental ends may lead to "faith-washing," where faith is merely utilized as a tool to support pre-existing environmental agendas.

The complex relationship between faith and environmental conservation is further nuanced when considering sociopolitical factors. Veldman et al. (2013) found that political conservatism among religious groups in the United States, for example, can correlate with climate change skepticism, highlighting the intersectionality of religious, political, and environmental beliefs.

The influence of faith-based initiatives on environmental conservation is a vibrant field of study, one that begs further exploration and greater recognition within the larger narrative of environmental conservation. This brings us to the central question: How do faith-based approaches impact environmental conservation efforts? And within this question lie several interrelated queries:

1. How do faith-based teachings and practices shape individual and collective attitudes towards environmental conservation?

2. What role do religious institutions and faith communities play in driving or inhibiting environmental sustainability?

3. How does the intersectionality of religious, political, and environmental beliefs influence faith-based environmental conservation efforts?

By investigating these questions, a more nuanced understanding of the role and potential of faith-based approaches in environmental conservation may be uncovered. It is our hope that such an understanding will contribute to a more inclusive and holistic approach towards environmental sustainability.

### **C. Successes and Challenges of Faith-based Affirmative Action Programs for Environmental Conservation**

In the contemporary discourse on environmental conservation, scholars and practitioners alike have turned their attention towards the potential of faith-based affirmative action programs. Robina & Fernandez (2018) found that religious institutions can exercise considerable influence over their adherents' attitudes towards the environment, thereby promoting sustainable practices. Meanwhile, Harris (2008) observed that faith communities often embody values of stewardship, which can translate into active conservation efforts.

Notably, these programs have reported numerous successes. For instance, faith-based organizations have been instrumental in local conservation and reforestation initiatives (Palmer & Finlay, 2003; Kellert & Wilson, 1995). Further, Tirosh-Samuelson (2002) demonstrated that interfaith collaborations can significantly amplify the reach and impact of environmental initiatives, promoting cross-cultural understanding and collective action. Indeed, faith-based action has shown potential to foster community-led conservation efforts (Chandler, 2004; Chapple, 2006).

However, the effectiveness of faith-based affirmative action programs in environmental conservation is not without debate. Several researchers have raised concerns over the inconsistency of these programs. Some studies, such as those conducted by Kearns (1997), indicate that although religious teachings may promote environmental stewardship, this does not always translate into meaningful action on the ground. In contrast, others, like Taylor and Van Wieren (2016), posit that religious worldviews can sometimes contribute to anthropocentric perspectives and exacerbate environmental degradation.

Furthermore, the intersection of faith-based affirmative action and environmental conservation presents unique challenges. As observed by Foltz (2003), some faith-based organizations may face resistance from their constituents for engaging in activities outside their traditional remit, such as environmental conservation. Gerten and Bergmann (2012) added that navigating the intricate relationships between religious doctrines, institutional practices, and environmental beliefs can often be a challenging endeavor. Despite these challenges, faith-based affirmative action programs hold promise in the environmental conservation landscape. However, there is a pressing need for more nuanced research on this subject. What does the available literature suggest about the mechanisms through which these programs can optimize their impact on environmental conservation? How can these programs navigate the challenges inherent in melding religious and environmental agendas? Answers to these questions could greatly enhance our understanding of the role faith-based affirmative action programs can play in environmental conservation.

In sum, the study of faith-based affirmative action in environmental conservation is ripe with complexities. It presents a mosaic of promising triumphs interspersed with significant challenges. The task for scholars and practitioners is to carefully untangle these threads, thereby unearthing pathways towards more effective faith-based environmental stewardship.

#### **D. Role of Faith in Environmental Conservation in the Developing World**

Over the past few decades, a significant body of literature has explored the intricate connection between faith-based communities and environmental conservation, particularly in the developing world. This analysis begins with understanding the potency of faith in shaping human behaviors and attitudes, not excluding environmental stewardship (Sponsel, 2012; Dudley, Higgins-Zogib, & Mansourian, 2009). A key underpinning lies in the assertion that faith-based communities harbor significant potential for steering environmental conservation due to their extensive influence and reach, especially in developing countries (Bhagwat, Dudley, & Harrop, 2011; Palmer & Finlay, 2003).

In a prominent study, Bhagwat, Dudley, & Harrop (2011) posited that in many developing societies, faith and spirituality remain the main social fabric connecting people, where religious teachings often play an instrumental role in shaping their actions towards the environment. This sentiment was echoed by Colding and Folke (2001), who identified that sacred groves, linked with religious customs, have played a vital role in conserving biodiversity in various parts of the developing world. Similarly, Verschuuren et al., (2010) cited numerous examples of sacred sites serving as unofficial nature reserves, thereby nurturing environmental sustainability.

Conversely, some scholars critique faith-based environmental conservation as overly simplistic, arguing that it does not fully account for the intricate socio-cultural, political, and economic factors in these regions (Tomalin, 2002). Still, there is an emerging consensus that faith-based environmental conservation can be integrated with scientific and policy-based approaches to make a more holistic and effective conservation strategy. Such integration, however, requires a thorough understanding of how faith-based practices can harmonize with secular environmental principles (Gardner, 2002; Palmer & Finlay, 2003).

Case studies illustrate this point. In a study focused on African traditional religions, Sheridan (2008) showed how belief systems led to the successful conservation of forests in Tanzania. Similarly, studies from the Mekong region demonstrated how Buddhist monastic communities have taken active roles in forest preservation, relying on religious teachings to foster environmental consciousness (Cui et al., 2022; Sponsel, 2012). A Hindu faith-based initiative in India showed a similar trajectory, where sacred groves contributed to local biodiversity conservation (Malhotra, 2008).

Despite these successful narratives, faith-based environmental conservation is not without challenges. Tomalin (2009) highlighted the issue of contradictions within religious doctrines that may sometimes promote exploitation of nature. Moreover, religious institutions might face difficulties in navigating the terrain between spiritual and environmental mandates (Wardekker et al., 2009). Addressing these challenges requires a nuanced understanding of the interplay between faith and environment in specific cultural contexts.

#### **This prompts the following questions:**

1. How can faith-based conservation practices be harmoniously integrated into mainstream conservation strategies in the developing world?
2. How can faith-based communities in the developing world be effectively mobilized to combat pressing environmental issues such as deforestation, climate change, and biodiversity loss?
3. What are the potential conflicts and synergies between faith-based environmental conservation and existing secular or scientific conservation approaches?

#### **E. Faith-based Affirmative Action for Environmental Conservation in Pakistan**

The relationship between religion, faith-based communities, and environmental conservation has been a subject of profound exploration for many sociologists and environmentalists over the years (Djupe & Hunt, 2009; Eckberg & Blocker, 1996; Guth et al., 1995; Hand & Van Liere, 1984). Within the Pakistani context, however, this intersection has been significantly under-researched, despite the country's religiously devout population and pressing environmental concerns.

Research has previously established that religious values and teachings can shape human attitudes towards the environment. For instance, religion can influence environmental concern and stewardship by fostering an ethical perspective towards the natural world (Woodrum & Hoban, 1994). Furthermore, religious groups and institutions have been reported to play instrumental roles in promoting

environmental sustainability by encouraging community mobilization (Veldman et al., 2013; Wardekker et al., 2009).

Regarding Islamic perspectives on environmental conservation, they often emphasize a doctrine of "stewardship" or "khalifa," a religious principle that holds human beings accountable for the preservation of the Earth (Foltz, 2003; Saniotis, 2012). As Pakistan is predominantly an Islamic country, these principles are widely prevalent and hold potential for environmental conservation activities.

Still, there is a dearth of empirical evidence that interrogates how these faith-based principles can be employed within an affirmative action framework for environmental conservation in Pakistan. The socio-cultural fabric of Pakistan is deeply intertwined with religious sentiments and values, making it imperative to address this gap in the literature.

Contrarily, some studies indicate that the interplay between faith-based communities and environmental conservation is not always straightforward. Scholars such as Taylor (2007) and White (1967) argue that religious dogmas can sometimes hinder environmental conservation efforts due to their anthropocentric orientations. Moreover, religious institutions might not always prioritize environmental concerns in their mission (Gottlieb, 2006). These potentially conflicting trajectories warrant a nuanced analysis of faith-based environmental conservation initiatives in Pakistan.

On a positive note, studies carried out in other Muslim-majority countries have highlighted the potential of mosques, madrasas, and other religious institutions in fostering environmental consciousness and conservation actions (Foltz, 2000; 'Izz al-Dīn, 2000; Saniotis, 2012). Considering the high density and influence of such institutions in Pakistan, a faith-based approach to environmental conservation could yield promising results.

However, significant questions still need to be addressed: How effectively can faith-based principles be integrated into environmental conservation policies in Pakistan? Can religious leaders play a significant role in promoting environmental consciousness among their followers? How can religious institutions be mobilized to contribute towards tangible environmental conservation outcomes? And more importantly, how can such interventions be designed to be sensitive to the diverse religious beliefs and cultural norms prevalent in Pakistan?

In summation, the dialogue around faith-based affirmative action for environmental conservation in Pakistan is still in its nascent stages. Given the centrality of religious belief systems in Pakistani society and the escalating environmental challenges, it becomes crucial to undertake further research in this domain. A comprehensive exploration of this intersection would not only enhance the sociological understanding of faith-based environmental interventions but could also inform policy recommendations towards achieving sustainable environmental conservation in Pakistan.

## METHODS

### A. Description of the Action-Based Research Project

The action-based research project set out to address the pressing issue of solid waste management in Islamabad, particularly focusing on Bhara Kahu, one of the city's peripheral areas that experiences significant waste dumping. As Islamabad produces tons of waste per day, it becomes pertinent to adopt an integrative and multidisciplinary approach to solve the solid waste management crisis. The project borrowed its guiding principles from the 'waste management hierarchy', also known as the 5Rs (Refuse, Reduce, Reuse, Recycle, and Recovery), while deploying an innovative four-phase research strategy.

Phase One centered on a comprehensive Knowledge, Attitude, and Practice (KAP) survey, intended to evaluate existing perceptions, practices, and knowledge gaps relating to solid waste generation and its management (Makarichi, Jutidamrongphan, & Techato, 2018). The methodology involved conducting a household survey along with in-depth interviews to quantify and categorize the types of household waste produced. Additionally, an effort was made to map the community's demographic and need-based profiles, an approach which is endorsed by sociologists for effective community-focused interventions (Moloney, Horne, & Fien, 2010).

Phase Two leaned on the insights garnered from the first phase, allowing the project to tailor effective community interventions. This phase was partitioned into two stages: the first involved categorizing the solid waste with reference to the 5Rs hierarchy, while the second stage revolved around awareness campaigns and training workshops. The latter aimed at community mobilization and incorporated representatives from various spheres of community life, including administrative, educational, and religious institutions.

The third and fourth phases worked on implementing an intervention scheme based on the learnings from the previous phases. Training for waste collectors, logistics arrangements related to waste collection, and fostering a symbiotic relationship between the local municipality and potential private waste management partners constituted the core elements of this phase. The last stage, in particular, was designed to assess the outcome of the research project and was subsequently followed by an evaluation study (Denzin & Lincoln, 2018).

The action-based research project offered an avenue for the involved stakeholders to actively promote a circular economy in relation to the town's waste management. The objective was to create a comprehensive waste management plan that could be emulated in other similar urban peripheries (Holmberg & Robèrt, 2000). This novel research strategy places a strong emphasis on community engagement and provides valuable insights for future endeavors to tackle the solid waste management crisis in similar sociocultural and environmental contexts.

### **B. Explanation of Data Collection Method**

This research utilized an integrated, multidisciplinary approach, employing various data collection methods throughout its various stages. This approach is crucial in assessing the effectiveness of faith-based affirmative action on solid waste management in Bhara Kahu, an urban periphery of Islamabad.

Phase 1 implemented a mixed-methods approach, deploying both quantitative and qualitative research techniques. A Knowledge, Attitude, and Practices (KAP) survey was conducted to gauge the community's understanding and behaviors concerning solid waste generation and management. A representative sample of the project area was selected through systematic sampling for this survey, and the collected data was subsequently analyzed using IBM SPSS Statistics software.

Concurrently, in-depth interviews and focused group discussions were conducted, particularly with representatives from religious, political, and administrative institutions. These interviews provided a more nuanced understanding of solid waste management within the community, offering an opportunity to identify gaps in knowledge or practices, understand the local waste generation process, and assess primary and secondary collection methods. This phase also helped to develop a demographic and needs-based profile of the community (Bryman, 2012).

Phase 2 used the findings from the KAP study to organize awareness campaigns, training programs, and workshops addressing solid waste management issues. The local waste was characterized using the 5Rs hierarchy model (Refuse, Reduce, Reuse, Recycle, Recovery), a strategy that considers the social aspects of waste management. This characterization involved collecting data on the composition of the waste and subsequently dividing it into categories based on its potential for reduction, reuse, recycling, or recovery. The second stage of Phase 2 focused on implementing awareness and training campaigns. This phase was instrumental in social mobilization, involving local community members and representatives from different societal sectors. This allowed for direct observation and data collection regarding the engagement and commitment of various community actors to the project's objectives. Techniques such as door-to-door pamphlet distribution and use of social media campaigns provided a platform for wider reach and awareness, subsequently contributing to data collection about community participation.

The third phase involved implementing a pilot project to address issues identified in the previous phases. This involved collecting data on the effectiveness of training for waste collectors, the logistics of waste collection, and the process of collaboration between the local municipality and private waste management companies.

In the final stage of the project, an evaluation study was conducted to assess the outcomes of the project and gauge its success. This involved an analysis of the compiled data from all previous phases to assess whether the project objectives were met and to identify any areas that may need improvement.

The data collection methods implemented in this research project were designed to provide a comprehensive understanding of the issue of solid waste management in Bhara Kahu, Islamabad. The combination of quantitative and qualitative techniques allowed for a more nuanced understanding of the complex interplay of social, cultural, and religious factors that affect attitudes and practices towards solid waste management. This integrative approach has been increasingly recommended in sociological research to ensure the collection of rich, contextually grounded data that captures the complexity of social phenomena (Johnson, Onwuegbuzie, & Turner, 2007).

### **C. Details of Field Experience**

The field experience took place in the Bhara Kahu region on the outskirts of Islamabad, a diverse and rapidly urbanizing area of Pakistan. Bhara Kahu was an ideal location to assess the impact of faith-based

affirmative action initiatives due to its distinct religious character, evident in the visible religious practices and institutions throughout the community.

Bhara Kahu presents a rich tapestry of socio-economic and cultural diversity, with the religious practices deeply embedded in everyday life. The researchers found that the residents of this area had a high reverence for religious teachings, and the community leaders were deeply engaged in interpreting and disseminating these teachings.

The researchers spent extensive periods embedded in the community, engaging directly with community members, attending religious gatherings, and participating in environmental conservation activities. One of the primary faith-based initiatives undertaken was an educational program on environmental conservation, which was framed within the context of religious teachings on stewardship. This initiative was designed in collaboration with local religious leaders, who played a crucial role in communicating the religious imperative for environmental stewardship.

In addition to the educational program, the researchers initiated a community clean-up event. This event incorporated elements of religious teachings on cleanliness and responsibility towards the community, drawing a direct connection between faith and environmental action. It was observed that framing the clean-up within the context of religious teachings fostered greater participation and enthusiasm among community members.

Finally, the research team initiated a faith-inspired waste management project, which sought to reduce the environmental impact of household waste by promoting recycling and composting practices. By invoking religious teachings on the care for creation, the project engaged community members in practical actions to manage their waste in an environmentally responsible manner.

Throughout these experiences, the researchers documented the responses, attitudes, and behaviours of the community towards these faith-based initiatives. The field experiences provided rich qualitative data that contributed to a nuanced understanding of the impact of faith-based affirmative action on environmental conservation in this specific cultural context.

## **Findings:**

### **A. Faith and Household Solid Waste Management**

#### **1. Impact on Attitudes and Behaviours**

The findings from our research in the Bhara Kahu region reveal a significant impact of faith-based affirmative action on attitudes and behaviours towards household solid waste management. The introduction of religious teachings in the context of environmental conservation resulted in a marked shift in attitudes. Participants who attended the educational programs exhibited a heightened sense of responsibility towards the environment, viewing waste management not merely as a civic duty, but as a religious obligation.

For instance, the conversion of a street into 'model street' reflected the change in community attitudes. Participants enthusiastically painted walls with eco-friendly messages, cleaned their streets, and installed dustbins made of recycled items. The process of converting a regular street into model one became symbolic of the transformation in their environmental consciousness. Participants expressed a sense of pride and accomplishment in their actions, viewing their contributions as a form of religious service, thus demonstrating the powerful influence of faith in shaping behaviours.

#### **2. Level of Community Participation**

The research findings also pointed towards a significant level of community participation, driven by the faith-based affirmative action program. Women and children, traditionally overlooked in community initiatives, actively participated in household solid waste management trainings. The community's willingness to send their women and children to these training programs indicated the acceptance and endorsement of the faith-based initiative.

Interestingly, participants cited religious teachings on stewardship and communal responsibility as the primary motivators for their participation. The belief that caring for the environment was a way of practicing their faith fostered a sense of collective purpose within the community.

Furthermore, the influence of faith leaders was critical in driving community participation. Their involvement in the project added credibility and motivated the community to engage actively. The willingness of community members to participate in the clean-up event, and their sustained efforts in the waste management project, demonstrated the potency of faith as a mobilizing force.

These findings highlight the effectiveness of faith-based affirmative action in changing attitudes and behaviours towards household solid waste management. They underline the value of incorporating religious teachings into environmental conservation initiatives, particularly in contexts where faith plays a significant role in shaping social values and behaviours.

## **B. Impact of Religious Faith on Environmental Conservation**

### **1. Changes in Attitude Towards Environmental Conservation**

The field experience from the Bhara Kahu region indicated a discernible shift in attitudes towards environmental conservation, prompted by faith-based affirmative action. In the context of almost 100% Muslim population, the infusion of environmental stewardship principles within the broader teachings of Islam instigated a new perspective on the role of individuals in preserving their environment.

As the religious teachings emphasized the importance of protecting God's creation, community members began to perceive their involvement in environmental conservation as an integral part of their faith practice. This perception was visible in their attitudes towards the care of public spaces, the use of resources, and the disposal of household waste. The understanding that environmental conservation was a form of religious obligation inspired a change in how community members treated their surroundings, leading to a more respectful and conscientious interaction with the environment.

### **2. Engagement of Religious Communities in Conservation Efforts**

One of the most notable findings from our research was the active involvement of religious leaders in the community's environmental conservation efforts. The imams of local mosques and religious teachers played a pivotal role in advocating for environmental stewardship, spreading awareness about the importance of proper waste management and its alignment with Islamic teachings.

Particularly, their willingness to use Jumma sermons - a platform with significant influence - to spread environmental awareness illustrated the profound impact of faith-based affirmative action. They pledged to regularly address issues of environmental conservation and waste management in their sermons, drawing parallels between these actions and religious values of cleanliness, respect for God's creations, and community responsibility.

The active participation of religious leaders played a key role in legitimizing and reinforcing the importance of the environmental conservation initiatives. As respected members of the community, their involvement in the project added a level of credibility and encouraged the community to engage more enthusiastically.

These findings underscore the effectiveness of faith-based affirmative action in engaging religious communities in environmental conservation efforts. By drawing upon the power of religious faith, the program was successful in shifting attitudes towards environmental conservation and promoting community participation in conservation initiatives. This suggests that faith-based approaches can be a powerful tool in fostering environmental stewardship, particularly in regions with strong religious underpinnings.

## **DISCUSSION**

### **A. Implications for Sustainable Development and Conservation Practices**

The findings of this research hold significant implications for sustainable development and conservation practices, particularly in societies where faith plays a dominant role in shaping social values and behaviors. It is evident that in contexts like Bhara Kahu, faith-based affirmative action has a profound impact on attitudes and behaviors towards environmental conservation.

Traditionally, discussions surrounding sustainable development and conservation practices have been framed within a secular context, emphasizing the need for responsible management of resources, reduction of environmental harm, and promotion of sustainable lifestyles. However, these secular perspectives often fall short in mobilizing individuals and communities, particularly in societies where faith plays a central role.

The results from Bhara Kahu suggest that integrating faith into conservation strategies, rather than focusing solely on secular values, can catalyze transformative changes in attitudes and behaviors. By connecting environmental stewardship with religious teachings, individuals perceive their conservation efforts not only as a civic duty but also as a sacred obligation. This perception reorients environmental action from being an optional altruistic endeavor to a moral necessity.

Furthermore, this research underscores the potential of religious communities as powerful agents of change. The active participation of religious leaders in conservation initiatives provides these initiatives with a level of legitimacy and endorsement, encouraging wider community engagement. Thus, the involvement of faith leaders is essential in effectively mobilizing religious communities for environmental conservation.

Moreover, the incorporation of faith into environmental action brings an ethical dimension to conservation efforts. It reframes environmental stewardship as a moral duty, a manifestation of respect for God's creation, and a form of spiritual practice. This ethical framing resonates deeply with individuals' values and beliefs, prompting a profound shift in attitudes towards environmental conservation. It adds a moral urgency to conservation efforts, invoking not just a sense of responsibility, but also of morality and conscience.

In essence, the integration of faith-based affirmative action in environmental conservation initiatives signifies a shift from a largely utilitarian approach towards a more holistic, ethically grounded perspective. This approach acknowledges the interconnectedness of human spirituality, ethics, and the natural environment, and advocates for a more sustainable, equitable, and conscientious interaction with our planet.

### **B. Comparison with Findings from Other Regions**

The findings from the Bhara Kahu region, which demonstrate the significant impact of faith-based affirmative action on attitudes, behaviours, and community participation in household solid waste management and environmental conservation, align with and extend the existing body of literature in this domain.

Our findings resonate with the work of Bergmann (2021), who explored the intersection of climate impact studies and religion, suggesting that religious teachings can influence human and cultural dimensions of environmental conservation. Similarly, our study found that the introduction of religious teachings in the context of environmental conservation resulted in a marked shift in attitudes, with participants viewing waste management not merely as a civic duty, but as a religious obligation.

Bloomfield (2019) also highlighted the potential of religion to intervene in environmentalism, suggesting that religious teachings can influence responses to climate change. This is consistent with our findings, which showed that participants began to perceive their involvement in environmental conservation as an integral part of their faith practice.

The significant level of community participation observed in our study, particularly among women and children, echoes the findings of Chitando, Conradie, and Kilonzo (2022), who suggested that religious beliefs can be used to respond and adapt to the challenges posed by climate change. This aligns with our observation that participants cited religious teachings on stewardship and communal responsibility as the primary motivators for their participation.

The role of faith leaders in driving community participation, as observed in our study, is also supported by the work of Mrozowska and Hintz (2020), who found that church authorities can influence climate policy in the European Union. Similarly, we found that the involvement of faith leaders in our project added credibility and motivated the community to engage actively.

Our findings extend the work of Shoko (2022), who argued that African Traditional Religion (ATR) can contribute towards mitigating the effects of climate change. We found that the infusion of environmental stewardship principles within the broader teachings of Islam instigated a new perspective on the role of individuals in preserving their environment.

The active involvement of religious leaders in the community's environmental conservation efforts, as observed in our study, aligns with the findings of Murray and Xing (2020), who suggested that religion can influence climate responses. In our study, religious leaders used their influence to spread environmental awareness, further illustrating the profound impact of faith-based affirmative action.

Our findings also align with and extend the existing body of literature, highlighting the effectiveness of faith-based affirmative action in changing attitudes and behaviours towards environmental conservation and promoting community participation in such initiatives.

### **CONCLUSION**

In contemplating the terrain of environmental conservation, the exploration of faith-based affirmative action emerges as a substantial component. It is within the framework of a burgeoning empirical understanding that the present study situated itself, delving into the entwined strands of faith, community

action, and environmental stewardship. The ebb and flow of our findings weave a compelling narrative: faith is not merely a passive bystander but a potent catalyst in the promotion of environmental conservation within the urban confluence of Bhara Kahu, Pakistan.

Refracting the light of faith-based affirmative action through the prism of household solid waste management revealed compelling shifts in attitudes and behaviours. Our study, like an archaeologist unearthing hidden relics, discovered the profound transformation of mundane waste management routines into acts imbued with a sense of sacred duty and profound communal responsibility. This resulted in a vibrant tapestry of community engagement, where environmental stewardship became not just an act of civic duty, but a lived expression of faith.

Moreover, the powerful current of community participation underscored the potential of faith as a mobilizing force. The surging involvement of women and children, often marginalized in such initiatives, sends ripples across traditional gender roles and power dynamics, challenging prevailing norms and forging new societal frontiers. This transformative potential of faith-based affirmative action in driving active participation constitutes a significant stride in galvanizing collective action towards environmental conservation.

Broader implications of our research findings permeate beyond the local context, resonating with global discourses around environmental conservation. The research unveils the versatile nature of faith as an agent of environmental change, a potential that, though enacted within the specificity of Bhara Kahu, can be translated into different religious and cultural contexts. This emergent universality reconfigures the concept of faith-based affirmative action as a global strategy, sparking a reevaluation of environmental policies and practices.

While faith-based initiatives are a potent tool, their role within the vast machinery of sustainable development is complex and multifaceted. Nonetheless, the study paints a promising panorama where faith-based affirmative action strategies could bridge the chasm between current practices and sustainable environmental conservation, driving a paradigm shift towards sustainable development.

However, this research, akin to an uncharted territory with hidden landscapes, is not devoid of limitations. The specific socio-cultural milieu of Bhara Kahu, while rich in its distinct religious fabric, may not be seamlessly transferable to other regions or contexts. Additionally, the focus on household solid waste management, although critical, is but one facet of the kaleidoscope of environmental conservation. Future explorations could journey into the unexplored terrains of other aspects of environmental conservation.

In conclusion, the research reverberates with the echoes of faith, revealing its power to shape attitudes and inspire action towards environmental conservation. In the symphony of sustainable development, faith-based affirmative action emerges not as a solitary note but as a resonating chord, harmonizing the melody of environmental stewardship. Despite the limitations, the study charts new territories in the nexus of faith and environmental conservation, providing a novel lens through which we can reimagine and redesign our collective efforts towards a sustainable future.

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