Sarhad Journal of Legal Studies
ISSN: 3106-7441 (Print) 3106-745X (Online)
January-June 2026, Vol. 02, No. 01, [58–70]
Published: 18th June 2026
Publisher: Sarhad Institute of Legal Studies, SUIT
https://journal.suit.edu.pk/index.php/sjls
RESEARCH PAPER

Weaponizing Indus Waters: Humanitarian Fallout and Environmental Migration in Pakistan

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ABSTRACT

Pakistan faces growing challenges from climate change and water insecurity, both of which contribute to environmental migration and humanitarian crises. This study examines the relationship between climate warfare and environmental migration, focusing on the strategic significance of the Indus Basin and the implications of water-related tensions between Pakistan and India. Using a qualitative research design, the study draws upon secondary data, including policy documents, legal frameworks, statistical reports, and case studies of major climate-induced disasters in Pakistan. The analysis explores how climate-induced displacement, intensified by floods, droughts, and perceived water manipulation under the Indus Waters Treaty (1960), affects national security, socio-economic stability, and human welfare. The findings indicate that climate-related disasters have displaced millions of people, increased pressure on urban infrastructure, and heightened vulnerabilities among affected communities. The study further identifies legal and policy gaps in addressing environmental migration and highlights limitations within the Indus Waters Treaty in responding to contemporary climate challenges. It concludes that strengthening climate adaptation policies, enhancing transboundary water diplomacy, and developing legal protections for climate migrants are essential for reducing future humanitarian risks and improving regional stability.

Keywords: Climate Warfare, Environment Migrants, Floods, Indus Water Treaty.

INTRODUCTION

According to the Climate Risk Index Report (since 2022), Pakistan has been ranked as the most vulnerable country to climate change, standing at the first position globally and the only South Asian country on top of the index (Adil et al., 2025). Even though the contribution of greenhouse-gas emissions to global climate in the country is less than 1 percent, Pakistan faces one of the most acute adversities connected with climate. These disasters include increasing temperature, inconsistent rain patterns, disastrous cloud bursts that lead to extreme flooding, the significant decrease in the size of its glacier by about 45 percent. It continues to suffer from increasingly frequent and severe hydro-climatic disasters, particularly flash floods, riverine

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inundations, and glacial lake outburst floods (GLOFs). In 2025 alone, a devastating series of pre-monsoon and monsoon-based floods ripped through Khyber Pakhtunkhwa (KP), Punjab, Sindh, and other areas, killing more than 800 people, injuring thousands, and displacing colossal numbers of people. (National Disaster Management Authority [NDMA], 2025)

In mid-August 2025, KP, AGK and GB experienced devastating flash flooding and landslides, the worst being in Buner and Shangla District, where over 474 people lost their lives in under 48 hours, with five crewmen dying in a tragic helicopter crash during rescue and rescue efforts (NDMA, 2025). Punjab is reeling under monsoon deluges worsened by upstream dam releases from India, which forced the evacuation of more than 150,000 people and pushed the death toll close to 800. As these flood waters are moving downstream, they continue their course through Punjab and will enter Sindh, threatening further devastation in the lower riparian regions. Cultural heritage and physical resources have been destroyed through the submerging of historically important sites, including Kartarpur Sahib. The observed phenomena do not simply include spatial displacement but also accelerated influx of climate-induced migration that forces people to leave their homes and livelihoods in reaction to ecological disasters.

The concept of climate warfare, in the form of the strategic management of water resources as a tool of influence, has acquired a new relevance in South Asia, especially around the Indus Basin, when considering climate-related pandemonium. The conflict of shared water resources, which is amplified by climatic stressors, has fuelled the tensions between upstream India and Pakistan, therefore, making hydrological control a tool of human displacement.

LITERATURE REVIEW

Climate change has increasingly become a major driver of human displacement across the globe. Environmental migration refers to the movement of people who are forced to leave their homes because of sudden or gradual environmental changes that negatively affect their livelihoods and living conditions. According to the International Organization for Migration (IOM), environmental degradation, floods, droughts, desertification, and sea-level rise are among the primary causes of climate-induced migration (International Organization for Migration [IOM], 2025). Developing countries are particularly vulnerable due to limited adaptive capacity and heavy dependence on climate-sensitive sectors such as agriculture. Pakistan, despite contributing less than one percent of global greenhouse gas emissions, remains one of the countries most exposed to climate-related disasters (Adil et al., 2025). Events such as the devastating floods of 2010 and 2022 displaced millions of people, damaged infrastructure, and increased socio-economic vulnerabilities, demonstrating the growing relationship between climate change and human mobility (Kirsch et al., 2012; World Bank et al., 2022).

The concept of climate warfare has emerged as an important dimension of contemporary security studies. Climate warfare refers to the strategic use or manipulation of environmental resources to exert political, economic, or military pressure on another state or population. Among these resources, water occupies a central position because of its importance for agriculture, energy production, and human survival. Gleick (2014) argues that water can function both as a trigger and a weapon in conflicts when access to water resources is intentionally restricted or manipulated.

Climate change further aggravates these challenges by altering precipitation patterns, accelerating glacier melt, and increasing the frequency of extreme weather events. As a result, environmental resources are no longer viewed solely as ecological assets but also as instruments of geopolitical influence and strategic leverage.

The Indus Basin represents one of the most significant examples of hydro-political interaction in South Asia. Shared primarily between Pakistan and India, the basin supports millions of people and serves as the backbone of Pakistan's agricultural economy. The Indus Waters Treaty (IWT) of 1960, negotiated with the assistance of the World Bank, has long been regarded as a successful framework for transboundary water management (World Bank, 2021). The treaty allocated the eastern rivers to India and the western rivers to Pakistan while allowing limited use of shared waters under specified conditions. Despite its durability, scholars have identified several weaknesses within the treaty, particularly its inability to address contemporary challenges such as climate change, environmental sustainability, groundwater management, and increasing water demand (Salman & Uprety, 2002). Political tensions between India and Pakistan have further intensified concerns regarding the security of water resources, with public statements and disputes over hydropower projects contributing to perceptions of water being used as a strategic tool (Rossi, 2020).

Existing research suggests that water insecurity can have significant humanitarian consequences. In countries heavily dependent on river systems, disruptions in water availability can affect agricultural productivity, food security, employment, and public health. Pakistan relies on the Indus Basin for approximately ninety percent of its agricultural production and freshwater supply (Islamabad Policy Research Institute [IPRI], 2021). Any actual or perceived threat to water availability can therefore have far-reaching socio-economic implications. Such pressures may encourage rural-to-urban migration as communities seek alternative livelihoods and safer living conditions. Rapid urbanization resulting from climate-induced displacement often overwhelms existing infrastructure, increases pressure on public services, and contributes to poverty and social instability (Angaria, 2024).

The legal protection of environmental migrants remains one of the most debated issues in international law. Unlike traditional refugees protected under the 1951 Refugee Convention, individuals displaced by climate-related factors do not enjoy a specific legal status under international law (United Nations High Commissioner for Refugees [UNHCR], 2025). Consequently, millions of people affected by environmental disasters remain without formal international protection mechanisms. Within Pakistan, climate and disaster-management policies primarily focus on emergency response and adaptation measures rather than long-term migration management. Existing legal frameworks do not provide a comprehensive mechanism for recognizing, protecting, or rehabilitating environmental migrants. This legal and policy gap increases the vulnerability of displaced populations and limits the state's capacity to address future migration challenges resulting from climate change and water insecurity.

Although substantial literature exists on climate change, environmental migration, water security, and the Indus Waters Treaty, these themes are often examined independently. Limited attention has been given to the interconnected relationship between climate warfare, hydro-

political tensions, and environmental migration in Pakistan. Moreover, few studies have explored how the strategic manipulation or politicization of water resources may contribute to humanitarian crises and population displacement. This study seeks to address this gap by examining the nexus between climate warfare and environmental migration within the context of the Indus Basin while also evaluating the legal and policy challenges associated with climate-induced displacement in Pakistan.

METHODOLOGY

This study adopts a qualitative research methodology to examine the relationship between climate warfare and environmental migration in Pakistan, with particular emphasis on the strategic significance of the Indus Basin and the implications of transboundary water politics. The research is primarily based on doctrinal and descriptive methods, utilizing secondary sources of data to analyze the legal, political, environmental, and humanitarian dimensions of the issue. Data were collected from a wide range of sources, including academic literature, policy reports, international legal instruments, government publications, and reports issued by international organizations such as the United Nations (UN), International Organization for Migration (IOM), United Nations High Commissioner for Refugees (UNHCR), World Bank, and Pakistan's National Disaster Management Authority (NDMA). Relevant statutes, treaties, and legal frameworks, particularly the Indus Waters Treaty (1960), the Vienna Convention on the Law of Treaties (1969), and international principles governing transboundary water resources, were also examined to assess legal obligations, loopholes, and liabilities associated with water governance.

The study employs qualitative content analysis to evaluate existing literature and policy documents concerning climate-induced displacement, water security, and hydro-political tensions between Pakistan and India. Case studies of major climate-related disasters in Pakistan, including the floods of 2010, 2022, and 2025, were analyzed to understand patterns of environmental migration and their socio-economic and humanitarian consequences. These cases provide practical insights into how climate-related events contribute to large-scale displacement and intensify vulnerabilities among affected populations.

Furthermore, a doctrinal legal analysis was conducted to examine the effectiveness of existing national and international legal frameworks in addressing environmental migration and water-related disputes. The study critically evaluates the adequacy of current legal protections available to climate migrants and assesses whether existing treaty mechanisms can respond to emerging challenges posed by climate change and water insecurity. By integrating legal analysis, policy evaluation, and case-study evidence, this methodology provides a comprehensive understanding of the nexus between climate warfare and environmental migration in Pakistan and facilitates the development of policy recommendations aimed at strengthening climate resilience, water diplomacy, and the protection of displaced populations.

UNDERSTANDING CLIMATE WARFARE AND ENVIRONMENTAL MIGRATION

Climate change has become more than a separate environmental issue, it has become a political and security problem. The concept of climate warfare, to use environmental resources, namely water, to exert political influence on enemies, weaken them, or destabilize any society, is

a relevant, controversial aspect of this nexus. Such warfare is manifested through modifications to the flow of rivers, regulated releases or withholding of dam water, massive deforestation, and systematic laxity in responding to disasters. These measures in sensitive areas may trigger large-scale humanitarian crises and force people to leave their homes. Simultaneously, displacement as the result of climate has created a new type of vulnerable population, the so-called environmental migrants. The International Organization for Migration (IOM) defines environment migrants as "persons or groups of persons who, for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes"(International Organization for Migration [IOM], 2025). There is no formal international law protection of environmental migrants as was the case with refugees who were safeguarded under the 1951 Refugee Convention. When they move within the same country they are often grouped into internally displaced persons (IDPs), as was experienced in Pakistan after major floods and droughts.

The connection between climate warfare and environmental migration is now developing more clearly. When environmental resources are politicized, like banning irrigation water, building upstream dams, or discharging sudden floodwaters the downstream impacts may include food insecurity, destroyed livelihoods and mass displacement. This effect is especially acute in the countries of South Asia where trans-boundary rivers like Indus, Ganges, and Brahmaputra are providing hundreds of millions of people. In this kind of situation, any small alterations in the flow of water are likely to trigger humanitarian crises and, because of them, the affected communities will have to migrate.

For Pakistan, the issue is especially acute. About 90 percent of the agricultural output and potable water used in the country is dependent on the Indus Basin system (Islamabad Policy Research Institute, 2021). At the same time, its geographical situation also makes it vulnerable to water shortage and water floods, droughts in Sindh and Balochistan trigger rural-urban migration, and as seen in 2022 events and the 2025 flooding, unprecedented in history, have millions of people displaced. In this weakened framework, politicization of water resources by upstream states can act as a kind of climate warfare and thus increase Pakistan's existing high levels of environment migration. Thus, the nexus of climate warfare and environmental migration is not only an abstract concept, but a pressing necessity in policy formulation, legal provisions, and humanitarian aspects in Pakistan. This trend highlights how the issues of environmental problems, which were regarded as apolitical, have been transformed into issues that are closely interconnected with international relations, human rights, and national security.

INDUS BASIN AND CLIMATE WARFARE DYNAMICS

The Indus is the twelfth largest river system in the world, with a flow which is twice that of River Nile, 2021). It has its origins in the Tibetan plateau and is shared between four countries; Afghanistan, Pakistan, India and China, with nearly two thirds of the river flowing through Pakistan. The Indus Basin is Pakistan's lifeline, supporting over 220 million people and irrigation of close to 90 percent of the agricultural lands in the country (World Bank, 2021). Its significance goes beyond environmental factors, including deep geopolitical aspects since the basin is shared by two historically hostile neighbours, the upstream riparian India, and the downstream riparian

Pakistan. This geographical imbalance gives an advantage to India such that it can control the flows of the three eastern rivers whereas Pakistan is grossly reliant on the western rivers of the Indus system.

The 1960 Indus Waters Treaty (IWT), negotiated by the world bank has been seen as a model of cross-boundary water cooperation. The treaty gave India control over the eastern rivers; Ravi, Beas and Sutlej, whereas Pakistan got control over the western rivers; Indus, Jhelum and Chenab. The agreement however is open to the limited use of the western rivers by India on non-consumptive purposes like hydroelectric projects. With time, India has increased the number of such projects including construction of large-scale dams and hydroelectric projects on the western rivers such as the Kishanganga and Baglihar projects. Successive Indian governments have over the last several decades publicly indicated plans to use hydrological resources as a political instrument in their struggles with Pakistan, a tactic which was most evident following military crises. Following the 2016 Uri attack and the ensuing escalation, the Prime Minister of India, Narendra Modi, famously declared, "Blood and water cannot flow together," hence implying that India would be willing to review its commitments under the Indus Waters Treaty. Similarly, following the Pulwama incident in the year 2019, Indian officials again stated that it might reduce or redirect water releases that flow into Pakistani soil (Riaz et al., 2023). More recently in the May 2025 conflict, where Indian missiles have been fired against Pakistan in retaliation over the allegations on the Pahalgam attack, Indian officials reaffirmed that they planned to abrogate the treaty. These rhetoric and behaviors do not just contradict the spirit of such treaty, but also emphasize the politicization of water as a strategic tool within the broader definition of climate warfare.

Climate change adds a dangerous layer to these tensions. Reduction in the mass of glaciers of the Himalayas, unpredictable precipitation, and increasing flooding pressure put pressure on the Indus Basin. To Pakistan, the possibility of weaponizing the water in the basin goes beyond mere bilateral conflict; it is an issue of national existence. Agriculture contributes about 24 percent of the gross domestic product of Pakistan, and it also occupies close to 37- 40 percent of the labour force (Pakistan Bureau of Statistics, 2025). Any interruption in Indus flows thus threatens rural livelihoods, might render millions of people homeless and may cause mass internal migration. Existing mega-cities like Karachi, Lahore and Islamabad already host growing populations of climate displaced people, thus overloading infrastructure, housing and civic platforms.

The image of water insecurity destabilizes the region. Migratory impulses can thus gain momentum irrespective of the true hydrology provided the Pakistani farmers lose confidence in the predictability of the Indus water. This is an example of how conflict created by climate not only leads to tangible migratory outcomes but also to psychological and social destabilization as a result of political signaling or manipulation. Overall, the example of the Indus Basin can be described as the intersection of climate warfare and the migration ecology. It not only is the most important environmental resource in Pakistan, but also is the place where climatic changes, hydro politics and human displacement come into collision. To respond to these dynamics, it is necessary to go beyond technical water-sharing arrangements to include the human and security aspect of displacement caused by climate.

LEGAL DIMENSIONS, LOOPHOLES, AND LIABILITY UNDER THE INDUS WATERS TREATY (1960)

IWT is a partitioning and not a water-sharing treaty. Legally, the treaty provides for a permanent regime for the allocation, control and use of the rivers of the Indus Basin. Article II and III states the principle of partition subject to certain restrictions regarding India's rights of non-consumptive, domestic and certain agricultural uses. The approach reflects an absolute territorial sovereignty model rather than the modern principle of equitable and reasonable utilization that has become the guiding principle of international water law (Salman & Uprety, 2002). A key legal aspect of the treaty is that it has indefinite duration. Article XII states that the treaty "shall remain in force until terminated by mutual consent," thus precluding all possibility of unilateral withdrawal or suspension. This makes the IWT highly binding under international law and prevents either party from resorting to doctrines like rebus sic stantibus (fundamental change of circumstances) without violating treaty obligations. This provision is in line with the principle of pacta sunt servanda, later enshrined in the Vienna Convention on the Law of Treaties (1969), which, although not ratified by India or Pakistan, comes closest to codifying customary international law (United Nations, 1969). In addition, the treaty has a dispute settlement mechanism embedded in Article IX. The Permanent Indus Commission is the first forum for bilateral interaction; issues of difference not resolved in this forum are taken up by a Neutral Expert (for technical issues) or a Court of Arbitration (for legal issues). These mechanisms highlight the compatibility of the IWT with Article 33 of the UN Charter, which imposes on States an obligation to settle the disputes by peaceful means (United Nations, 1945).

However, the IWT is rife with loopholes and liability issues that are coming under greater scrutiny. First, the Treaty says nothing about important contemporary issues, including groundwater use, environmental sustainability, and climate change. At the time of its negotiation, these were not at the heart of international water law. Today, however, this omission has left a liability gap as neither state is called upon under the IWT to guarantee ecological flows, to conduct environmental impact assessments, or to adapt to climate-induced hydrological stress.

Second, the uncertain formulation of provisions relating to India's rights to "non-consumptive uses" of the western rivers has been a perennial area of dispute. Provisions have been the subject of third-party adjudication in projects like the Baglihar Dam and the Kishanganga Hydroelectric Plant. In both cases, neutral and arbitral tribunals accepted India's limited rights but placed limits to protect downstream flows to Pakistan and illustrate how ambiguous language in the law can create persistent liability and distrust between the parties (Salman & Uprety, 2002).

Third, the Treaty does not have explicit enforcement procedures. While decisions can be adjudicated, there are no enforceable sanctions or non-compliance remedies, so enforcement must be political. This was one of the shortcomings which have been pointed out specifically since the Treaty is followed up by such modern tools as the UN Convention on the Law of the Non-Navigational Uses of International Watercourses (1997), which codifies the principles of "no significant harm" and "equitable utilization" (United Nations, 1997). The lack of such principles means that the IWT has limited capacity to deal with emerging challenges especially those associated with sustainability and equity.

Finally, a rigid design of the Treaty raises problems of intergenerational equity. Pakistan says this amount is no longer fair, given rapid population growth, demand for water and climate variability. Yet, Article XII of the IWT only allows modification or termination by mutual consent and unilateral withdrawal would constitute a breach of international law under the Vienna Convention on the Law of Treaties (1969). This rigidity limits the ability of the Treaty to evolve resulting in liability for future generations that are dependent on the Indus basin.

In short, the IWT institutional framework is both resilient and fragile: it has successfully maintained water-sharing during times of conflict, but its loopholes (environmental sustainability, vague legal drafting, lack of enforcement) make it unable to adapt to contemporary international legal norms. While the Treaty continues to be a vital component of regional stability, it needs to be reinterpreted or supplemented to meet the legal, ecological and political challenges of the twenty-first century.

IMPACT ON ENVIRONMENTAL MIGRATION IN PAKISTAN

Pakistan has emerged as one of the most climate-vulnerable countries in the world, consistently ranked among the top 10 on the Global Climate Risk Index (Adil et al., 2025). Climate warfare, together with natural calamities, has catalyzed frequent humanitarian calamities that bring about the displacement of millions of people. Through widespread floods to regular drought and the increase in the level of sea, climate-induced migration is emerging as a main issue that threatens the social, economic and political stability of Pakistan.

Flood-Induced Displacement

Floods are the single largest driver of environmental migration in Pakistan. The unique geography of the country, glacial endings in the north, monsoon, and vast low-lying floodplains makes it highly vulnerable to hydrologic catastrophes.

2010 Super Floods: The 2010 Super Floods are considered one of the most destructive events in the recent history of Pakistan as it covered about the fifth part of the national territory. More than 20 million people were affected, and it displaced over 2 million; many of them permanently settled in the city centres. About 70 percent of families displaced failed to get back home highlighting the lasting demographic changes caused by these floods (Kirsch et al., 2012).

2022 Catastrophic Floods: Caused by accelerated glacial melting and record monsoon rainfall the 2022 floods affected 33 million individuals, rendered 2.1 million homeless, and devastated 897,000+ homes, 13,000km of highways, and almost 14,000 bridges. The human cost was also huge: 1739 lives were lost, 647 children were among them and 13000 people were injured (Encyclopaedia Britannica, n.d.). Economic losses were calculated to be between US $15-40 billion and 8 million people displaced with many migrating to Karachi and Hyderabad (World Bank et al., 2022).

2025 Floods (June-August): There were heavy pre-monsoon rainfalls and cloudbursts that destroyed parts of KPK, Punjab, Sindh and Balochistan. About 711 deaths, 965 injuries, and 209 missing persons were verified by mid-August. Torrential flooding in Khyber Pakhtunkhwa alone killed 484 people, injuring 355. In Punjab, the evacuation of over 167,000 individuals was caused

by exacerbated monsoon flooding, exacerbated by releases of up-stream dams in India, and over one point five million individuals were impacted by the devastation in the province. When the water subsides it will find its way to Sindh and increase the destruction in lower riparian districts. Overall, the floods resulted in 853 deaths and 1,130 injuries, destroyed more than 9,000 houses, killed around 6,000 livestock, and forced 250,000 individuals to relocate across the country due to the continual effect of repeated flood cycles, and this is how the repetitive processes of these events would continue to lead to eventual migration (NDMA, 2025).

Drought And Scarcity-Induced Migration

While floods trigger sudden displacement, droughts in Tharparkar (Sindh) and Balochistan drive slow-onset migration. In 2018, nearly 33,000 residents of Noshki (Balochistan) were displaced due to water shortages (Shah, 2018). In Tharparkar, recurring droughts have led to seasonal migration, with families moving to urban centers in search of food and work. Many such migrants face housing shortages, job insecurity. and lack of social safety nets.

Coastal Displacement and Sea-Level Rise

In Thatta and Badin communities, coastal erosion, salinity intrusion, and rising sea level, are being experienced. These effects have already seen over one million people displaced with many of them immigrating to Karachi. Estimates suggest that more than 2.3 Million climate migrants can move to Karachi alone, by the year 2050, which would place a great burden on urban infrastructure, housing and the services provided to the population (Angaria, 2024).

Urban Overload and Humanitarian Consequences

In cities like Karachi, Lahore and Islamabad, climate migrants are consuming most of them, which has resulted in:

1. Informal settlements (katchi abadis).
2. Pressure on sanitation, healthcare, housing, and employment opportunities.
3. High social tension, unemployment and insecurity in the cities.

Migration as a National Security Concern

Environmental migration is also a security issue rather than a humanitarian issue. Massacres displace people from their homes, industrializing cultivated lands, encouraging unplanned urbanization, and increasing ethnic and political tensions. Furthermore, when upstream water control by India is suspected to be intentional, migration takes on a geopolitical level, turning climate displacement into a human-rights challenge and a national-security issue.

LEGAL AND POLICY GAPS IN ADDRESSING ENVIRONMENTAL MIGRATION IN PAKISTAN

Pakistan is facing one of the highest rates of climate-induced displacement in the world, but its policy and legal structures are largely silent on environmental migrant protection. There is a great disparity between the scale of the crisis and the legal protections, both at the international and domestic levels.

Lack of International Legal Recognition

International law does not recognize "climate migrants" or "climate refugees" as a protected category. The Convention of 1951 on refugees provides a definition of a refugee as anyone who fled persecution due to race, religion, nationality, membership of a given social group or political opinion. This is not the case with environment factors like floods, droughts or water weaponization (UNHCR, 2025). This has left stateless individuals in Pakistan as internally displaced persons (IDPs) without the benefits of international refugee protection including right of asylum. Even though the United Nations High Commissioner for Refugees (UNHCR) and the IOM are now starting to respond to climate-related displacement in the framework of their humanitarian mandates, no international treaty compels states to safeguard climate migrants. Countries like Pakistan, which experience cyclical environmental migration, are left without a well-defined international framework to aid them as a result of this lacuna.

Pakistan's Domestic Legal Vacuum

Pakistan has achieved some advance in the creation of climate-related policies, which include National Climate Change Policy (2012, updated 2021) and National Disaster Risk Reduction Policy (2013). Nevertheless, the main emphasis of these documents is on disaster management and mitigation measures; they are not concerned with the long run resettlement. and the rights of environmental migrants. No dedicated law or policy:

1. establishes environmental migrants as a category of the law
2. funds for long housing, livelihood rehabilitation, or compensation
3. guarantees political representation or inclusion of displaced populations in processes of planning: or
4. establishes special safeguards on vulnerable groups (women, children, minorities) in the context of migration.

This has caused displaced populations to depend on ad hoc relief programs, which are facilitated by provincial disaster management authorities (PDMAs), non-governmental organizations, or even international donors. Such initiatives are not long-term and cannot effectively deal with permanent socio-economic recovery of affected families Environmental migrants are in an awkward position because they are not legally recognized. Most of such families displaced and living in urban areas live in informal settlements which are not tenured and they are at risk of being evicted, leaving them without access to clean water, sanitation, health and education. Specifically, women and children are faced with exploitation and mistreatment at the systemic level in the overcrowded relief camps that multiply in the environment of climate-driven disasters. The right to dignity, housing, and livelihood is entrenched in the Constitution of Pakistan but the constitutional guarantees to the right to such remain largely unattainable to climate migrants who remain out of the legal protection that essentially applies to the general population. The gap in statutory protection is even more acute through the prism of climate warfare. When the upstream states manipulate water or discharge dam outflows, triggering a displacement, Pakistan has a very limited range of legal remedy to protect its own citizens particularly when the diplomatic protests have to be put on hold according to the provisions of the IWT. As a result, the environment

migrants in such a situation are left in a precarious role of victims, as they are left between the blind spots of the domestic policy weaknesses and the international law.

CONCLUSION

Climate change and its militarized exploitation constitute immediate realities for Pakistan rather than distant threats. The nation is struggling with the disastrous effects of flooding, droughts, accelerating glacial melts, and increasing water levels all of which contribute to trends in environmental migration. Natural resources, specifically water, are weaponized and this adds a new layer of insecurity to an already delicate situation. Pakistan is troubled by the political nature of the environmental issues as a source of power given by historical claims on the diversion or limiting of the water flows of Pakistan by the Indians and the lack of stability in the region. The internal displacement crisis in Pakistan during which millions of people were forced to move during the 2010, 2022 and 2025 floods sheds light on the dire need to consider environmental migration as a national security issue and not a humanitarian one. Unchecked, climate warfare and forced migration will exacerbate social inequalities, enhance poverty, increase urban slum populations, foster unemployment, and may possibly become a source of extremism by depriving people of a livelihood. Pakistan is geo-strategically vulnerable and therefore requires domestic and international cooperation.

Recommendations

National Adaptation & Migration Policy: Develop a holistic approach to environmental migration which acknowledges climate-related displacement, safe resettlement, and offers rehabilitation, education, and employment of internally displaced persons (IDPs).

Strengthening Water Diplomacy: Rejuvenate and strengthen Indus Waters Treaty (1960) processes by dialogue, third party mediation (e.g. World Bank) and regional water sharing to avoid weaponization of water.

Disaster Preparedness & Resilient Infrastructure: Invest in climate-resilient housing, early warning systems, and flood-management infrastructure, especially in flood-prone regions such as Sindh and Southern Punjab.

Regional Cooperation: Foster a South Asian Climate Security Dialogue at SAARC or other similar platform to discuss common vulnerabilities, especially to cross-border migration, glacial meltdowns and river-related conflicts.

International Support & Climate Justice: Support the introduction of loss-and-damage financing by developed nations in UN climate talks (COP) to help Pakistan to rehabilitate climate migrants. Seek green financing and climate adaptation funds through multilateral organizations such as the World Bank, Asian Development Bank, and UNDP.

Community-Based programs in Resilience: Mobilize the local communities with the aim of alleviating their vulnerability to displacement by empowerment through climate education, sustainable agriculture and diversification of livelihoods.

Legal Recognition of Climate Migrants: Promote the introduction of the concept of climate refugees under international law to provide international legal and humanitarian protection to the displaced populations.

Updating and Amending IWT:

1. Incorporate provisions addressing the effects of climate change, such as glacier retreat, erratic rainfall and extreme floods, which were not considered in 1960.
2. Include provisions for liability for violations of the treaty (including unilateral diversions) and provisions for compensation to the impacted party.
3. Replace protracted disputes-especially those that may lead to political tensions-with a more efficient, timely, and binding system of arbitration.
4. Promote hydropower projects under a strictly environmental and legal framework to benefit the common good instead of unilateral profit-taking.
5. Transform from just water allocation to water management, which includes conservation, groundwater management, flood management and sustainable irrigation.

REFERENCES

Adil, L., Eckstein, D., Künzel, V., & Schäfer, L. (2025). Climate risk index 2025: Who suffers most from extreme weather events? Germanwatch. https://www.germanwatch.org/en/93013

Angaria, W. A. (2024, November 1). Karachi expected to receive 2.3 million climate migrants by 2050: Report. Mongabay. https://news.mongabay.com/short-article/2024/11/karachi-expected-to-receive-2-3-million-climate-migrants-by-2050-report/

Encyclopaedia Britannica. (n.d.). Pakistan floods of 2022. https://www.britannica.com/event/Pakistan-floods-of-2022

International Organization for Migration. (2025). Who we are. https://www.iom.int/who-we-are

Islamabad Policy Research Institute. (2021, March 17). Climate change and Pakistan's water security. https://ipripak.org/climate-change-and-pakistans-water-security/

Kirsch, T. D., Wadhwani, C., Sauer, L., Doocy, S., & Catlett, C. (2012, August 22). Impact of the 2010 Pakistan floods on rural and urban populations at six months. PLOS Currents Disasters. https://currents.plos.org/disasters/article/impact-of-the-2010-pakistan-floods-on-rural-and-urban-populations-at-six-months/index.html

National Disaster Management Authority. (2025). Monsoon sitrep – 2025. https://www.ndma.gov.pk/sitrepm

Pakistan Bureau of Statistics. (2025). Agriculture statistics. https://www.pbs.gov.pk/content/agriculture-statistics

Riaz, S., Shah, B. H., & Rahman, G. U. (2023). Press-government relations in the subcontinent under the East India Company. Regional Studies, 37(1), 62–91. https://www.researchgate.net/publication/372235361

Rossi, K. (2020). Blood, water, and the Indus Waters Treaty [SSRN Working Paper]. SSRN. https://ssrn.com/abstract=3510327

Salman, S. M. A., & Uprety, K. (2002). Conflict and cooperation on South Asia's international rivers: A legal perspective. World Bank. https://hdl.handle.net/10986/15171

Shah, S. A. (2018, October 26). Drought-like situation in Noshki forces residents to migrate. Dawn. https://www.dawn.com/news/1441559

United Nations. (1945). Charter of the United Nations. https://www.un.org/en/about-us/un-charter/full-text

United Nations. (1969). Vienna Convention on the Law of Treaties, 1155 U.N.T.S. 331. https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf

United Nations. (1997). Convention on the law of the non-navigational uses of international watercourses. https://legal.un.org/avl/ha/clnuiw/clnuiw.html

United Nations High Commissioner for Refugees. (2025). The 1951 refugee convention and its 1967 protocol. https://www.unhcr.org/about-unhcr/overview/1951-refugee-convention

World Bank. (2021, March 25). Managing groundwater resources in Pakistan's Indus Basin. https://www.worldbank.org/en/news/feature/2021/03/25/managing-groundwater-resources-in-pakistan-indus-basin

World Bank, United Nations, & Government of Pakistan. (2022, October 28). Pakistan floods 2022: Post-disaster needs assessment (PDNA). https://documents1.worldbank.org/curated/en/099910001032330716/pdf/P17999109c267907f0aaa70f55da13e2371.pdf