

**Received:** 16 January, 2026

**Accepted:** 22 June, 2026

**Published:** 30 June, 2026

# Understanding Climate Migration and Trafficking Dynamics: A Multidimensional Study of Unskilled Labor in Khyber Pakhtunkhwa, Pakistan

**Ayesha Zakir**

SINES, National University of Science and Technology, Islamabad, Pakistan; ayeshazakir8@gmail.com

**Ume Laila**

Government and Public Policy Department, JSPPL, National University of Science and Technology, Islamabad, Pakistan

**Hamza Iftikhar**

Government and Public Policy Department, JSPPL, National University of Science and Technology, Islamabad, Pakistan

**Sakandar Hayat**

Riphah Institute of Public Policy, Riphah International University, Islamabad, Pakistan

---

## Cite this article:

Zakir, A., Laila, U., Iftikhar, H., & Hayat, S. (2026). Understanding Climate Migration and Trafficking Dynamics: A Multidimensional Study of Unskilled Labor in Khyber Pakhtunkhwa, Pakistan. *Cultura Científica*, (24), pp. 850–860.

---

## Abstract

The study aims to explore the interplay between climate change and migration and human trafficking in impacting the unskilled workforce residing in Khyber Pakhtunkhwa (KPK), Pakistan. The research utilizes the mixed-methods paradigm with the inclusion of quantitative survey analysis and qualitative interview data in order to identify the impact of climatic environmental shocks due to floods and droughts on the unskilled labor force and their exploitation. The study shows that the unskilled migrant workers without any safety nets and employment opportunities would be more prone to risks of trafficking and debt bondage and forced labor. The theoretical approaches include Systems Theory and Livelihoods Vulnerability Frameworks in analyzing the legal, institutional and economic structures increasing

vulnerability to exploitation across the society. It identifies the creation of exploitative environment through informal labor market mechanisms, gender discrimination and unregulated migration pathways, namely "Dunki" routes. Policy implications include prioritization of three key strategies, such as formulation of climate migration framework, enhanced regulation of labor markets and protection for migrants and refugees. The research contributes to vital information enabling Pakistan and other areas threatened by climate change to address the problem of climate-induced migration and human trafficking.

**Keywords:** Climate-induced migration, Human trafficking, Unskilled labor, Forced labor, Climate vulnerability, Environmental displacement

## 1. INTRODUCTION

Pakistan is one of the top 10 most vulnerable countries in terms of experiencing climate change. The country has faced many floods in addition to droughts and heat waves forcing people to flee from their homes especially in the agriculturally-rich areas of KPK since these disasters cause destruction of their source of livelihood. Climate change has many implications that not only affect humans but also nature in general. Increased frequencies of hot extremes that include heat waves are a result of the rise in temperatures. Current extreme heat waves would not be possible without recent global warming that has taken place. High temperatures give rise to situations conducive for starting forest fires. Climate change is responsible for causing higher frequencies of droughts and the severity of the droughts that occur in several parts of the world such as Mediterranean and central and western Africa.[1]

Unskilled laborers get affected by climatic hazards due to the nature of their jobs as it relates to the agricultural and informal sectors. "Lack of skills makes [laborers] more vulnerable to trafficking, because unskilled laborers can't find stable jobs' [2, 3]."

Increased damage done to Pakistan's economy and its climate situation has heightened the necessity of unskilled workers leaving their home environment, making them more prone to being exposed to human trafficking and exploitation in the workplace. Population movements caused by climate-related hazards such as floods, droughts, soil erosion, and weather extremeness have led the citizens of Khyber Pakhtunkhwa (KPK) to look for employment opportunities in risky urban environments or engage in illegal migration [4, 5]. The workers migrating under dangerous circumstances due to lack of labor legislation make an easy target for the traffickers since they seek safer working conditions or assistance in moving [6, 7, 8].

The victims targeted by human traffickers include individuals who have been displaced through illegal means and thus do not have adequate documentation or social protection and are not able to find suitable employment opportunities. The linkages between climate-induced population displacements and human trafficking still lack sufficient academic research, and policymaking fails to address human trafficking in relation to climate preparedness measures [10]. Environment-induced displacement is inadequately monitored by Pakistani organizations, causing thousands of vulnerable people to be at risk of labor trafficking into brickwork kilns and agriculture, domestic, and construction industries. Dunki migration practices and illegal migration paths keep growing in numbers in Pakistan due to poor immigration policies of the country [11, 12].

This study aims to bridge current knowledge gaps by exploring through quantitative analysis the impact of climate change on rapid migrations and increased risk of human trafficking among the population in Pakistan with particular attention paid to KPK. In addition to examining the socio-economic factors of migration due to climate change, this study will investigate the techniques used by traffickers and the policies employed by governments to perpetuate this phenomenon. Using analytical approaches, this study will explore the results of surveys and stakeholders' interviews to suggest evidence-based recommendations for addressing issues of environmental displacement, migrations, and enhanced risk of human trafficking in Pakistan. Policy-makers may be interested in the outcomes of this project, as it can be assumed that at least a 5-10% reduction in the number of unskilled laborers involved in trafficking can be attained by implementing appropriate migration policies (IOM Pakistan, Migration Data Portal).

The research objectives include the following:

- Determining the socio-economic and climate change related factors that make unskilled migrant workers vulnerable to human trafficking in Pakistan.
- Investigating the techniques used by traffickers to exploit unskilled migrant workers in Pakistan under changing climate conditions.

## 2. LITERATURE REVIEW

Global trends in human migration are significantly affected by contemporary trends in climate change. The regional variations in the climate of KPK create conditions that make the province prone to climate disasters that impact agriculture and cause rural poverty [13]. The people living in KPK are facing lower productivity and food insecurity, and the changing climate conditions of the region are considered a driving factor behind forced displacement. The flooding events of 2010 in KPK left 3 million citizens homeless and migrated them toward urban regions and even to other countries with hazardous conditions [14]. The people migrating from KPK due to climate reasons have not developed sufficient adaptation measures and are hence vulnerable to human trafficking when seeking jobs due to poor conditions [15].

Khyber Pakhtunkhwa (KPK) has undergone significant structural changes in its socioeconomics due to climate warming since its rural sector relies on agriculture and livestock farming to sustain itself. According to the Global Climate Risk Index (2021), Pakistan is a climate-vulnerable country experiencing unusual weather conditions and rising temperatures along with natural disasters like floods and droughts. These climatic changes caused lower agricultural outputs and livestock

failures, thus deteriorating the land which led to adverse economic consequences for the rural people in KPK. Large portions of agricultural lands in KPK failed due to the devastating floods of 2010 which remained Pakistan's worst-ever flood event [16].

The growing changes of climate around the world have been one of the key factors behind the human displacement and have further made human trafficking vulnerable for those unskilled migrants who are unable to do any professional jobs. There are numerous environmental issues, like flooding along with deforestation, erosion of the soil, and droughts that have led to unemployment among the agricultural workers in Khyber Pakhtunkhwa (KPK) in Pakistan. The Intergovernmental Panel on Climate Change noted that people's displacement due to climate change would grow as there would be frequent weather disasters.

KPK continues to maintain itself as the top region of sending laborers to countries of the GCC in the Middle East. Untrained laborers from KPK will remain employed only in construction jobs and domestic servants and poorly paid factory jobs as they live in poor countries and lack any employment opportunities. Workers faced with economic exploitation face the threat of forced labor and human trafficking due to recruitment agencies' unethical practices.

Communities suffering in the Swat Valley have been undergoing serious exploitation ever since natural disasters such as floods struck. Swat acted as the country's agriculture hub but faced a series of environmental disasters due to inconsistent monsoon rainfall and glacial lake outburst floods [17]. The 2022 floods led to family displacements in large numbers where people who trafficked them promised young males that jobs were available to construct buildings within urban areas (Dawn, 2023).

Climate change has become one of the major factors responsible for human migration and trafficking, especially in areas that are facing the impact of climate-related changes. Laborers that migrate from their native places due to environmental degradation and natural disasters end up working as bonded laborers due to lack of proper laws in place and unavailability of any job. Migration is usually seen as a strategy adopted by the affected population but it exposes them to various types of exploitations [18].

Though most scholarly literature deals with mass migrations from farms to construction sites, little attention is paid to distinguishing free movers from people who leave due to the unfriendly environment and end up working in exploitative conditions, such as brick kilns, bonded labor, construction and domestic work [19].

There is a paucity of research on the link between climate change and patterns of human trafficking in Pakistan, particularly KPK. Although climate-induced migration is recognized by the global academic world, the specific impacts of climate change on unskilled labor migration and human trafficking in the context of Pakistan remain understudied. This correlation was established internationally through various reports by the IPCC in 2021, but empirical work has yet to be done.

Environmental displacement is disregarded by forced migration through migration theories while being the key reason for people's evacuation from their places of origin. The international law on human trafficking pays attention to sexual exploitation and trafficking only. The law is silent about labor trafficking and domestic migration in light of environmental factors [20].

Unskilled workers take part actively in traditional occupations in Pakistan, which lack any kind of labor policies and labor inspection mechanisms. The economy of KPK relies entirely upon unregulated labor due to the involvement of labor force in daily wage labor and construction works and agriculture and brick kiln operations without the benefit of contracts or safety measures in laws [21]. The involvement of displaced persons in unregulated labor after environmental displacement puts such workers at great risk of various forms of abuse [22].

Unskilled migrants in KPK face immense challenges since there are no adequate legal safeguards for them. Unskilled migrants that were displaced due to climate disasters have to engage in job opportunities where they are excluded from labor laws and wage and safety regulations in Pakistan [23]. The regulatory mechanism provided by the government is inadequate for protecting these unskilled laborers, and majority of migrants do not know about their rights and justice mechanisms.

Unskilled migrants that are displaced due to environmental disasters tend to find themselves working under hazardous conditions within brick kiln factories, construction sites, and even in bonded labor camps [24]. It is women and children who are the most vulnerable, since they are trafficked under domestic and forced labor schemes before being coerced into commercial sexual exploitation.

The majority of these individuals are often tricked into becoming slaves because of the vulnerable state that their poverty puts them in. They are offered jobs at distant factories and even other countries' factories where they have to work as slave laborers, producing goods like fabrics and metals. The agricultural workers in KPK are especially vulnerable to such tricks as they do not have any education about trafficking [25].

Debt bondage in the brick kilns of Pakistan is one of the most serious types of human trafficking in Pakistan. As per the Global Slavery Index 2022, there are over 3.1 million people in modern slavery in Pakistan, and most of them are involved in bonded labor. These people are usually unskilled migrants, many of whom are environmental refugees from

KPK province.

The recruitment process by means of subcontracting, along with the involvement of intermediary labor brokers called "thekedars," makes these workers vulnerable because they suffer from job insecurity and poor working conditions. Unfavorable work conditions in the case of unskilled migrant workers make them highly vulnerable to being victims of human trafficking because they will be completely abandoned from the legal perspective owing to the disappearance of their wages or any form of maltreatment they may be subjected to.

It is impossible for workers to get redressed against exploitation because of no presence of formal employment contract and due to the presence of corruption that makes their access to redressal systems limited once they become victims of forced labor and trafficking. Policy issues and other bureaucratic complications have rendered social safety nets such as the Benazir Income Support Program (BISP) inaccessible to migrant workers [26].

It gets tougher for female migrants to migrate because of cultural barriers that prevent them from migrating freely and make them financially dependent on their employers or traffickers because they control their remuneration and movement. In case of displacement on account of climatic change, separation occurs among the families and renders women and children more vulnerable to forced marriage and sexual exploitation [27]. In cases where climate displacement occurs, families are disrupted, making it easier for women and children to be coerced into exploitative practices and forced marriage, among other abuses (Amnesty International, 2022).

### **3. THEORETICAL FRAMEWORK**

In the current paper, there will be applied Systems Theory and Risk Assessment Theory to identify how climate change contributes to human trafficking of unskilled workers in Khyber Pakhtunkhwa (KPK). The two theoretical frameworks make it possible to analyze the different vulnerabilities of climate refugees and the systemic risks resulting in their victimization.

#### **3.1. SYSTEMS THEORY**

Systems theory was introduced by Ludwig von Bertalanffy who explained that social systems should be analyzed from an integral perspective as a whole rather than focusing on each element separately. Thus, using this approach, it is possible to provide insights into the climate change impact on migration leading to higher human trafficking risks. Vulnerability system related to unskilled labor migrants can be analyzed with regard to environmental degradation and labor market failures, economic instability, and legal issues. These four factors function as interconnected subsystems of the overall system under consideration.

Labor migration is distorted while traffickers obtain opportunities for taking advantage of workers due to unregulated migration flows following environmental catastrophes. It is shown that lack of proper climate adaption systems results in patterns of population displacement increasing chances of exploitation. In order to find ways to prevent human trafficking issues, it is crucial to conduct comprehensive system analysis to identify key intervention points. The systems theory approach emphasizes the importance of feedback mechanisms and the fact that if there is no legal protection and proper regulation, labor migration leads to economic instability.

System Theory shows how feedback processes work since one part does not work when there is no legal protection resulting in economic and social unrest. The holistic approach can be useful for developing methods for solving all the problems associated with trafficking. [28].

#### **3.2. LIVELIHOODS VULNERABILITY FRAMEWORK**

Livelihoods Vulnerability Framework focuses on how environmental threats affect livelihood strategies that ultimately result in forced migrations among at-risk populations. In KPK, climate change has affected agricultural productivity as the major source of income for its residents due to unreliable monsoon rains and a shortage of water. Environmental stress forces them to abandon their livelihood opportunities in rural settings as they try to look for better-paid employment in urban centers.

The loss of livelihood opportunities among the affected people leaves them with limited options to seek shelter, thus compelling them to migrate as the best option of surviving under difficult circumstances. The displaced migrants do not have access to any form of protection, either legal or social. This makes them more vulnerable to forced labor exploitation and trafficking. The framework illustrates how forced migration becomes inevitable as the livelihood strategies available at the local levels are no longer effective.

It takes into account the importance of incorporating an intersectionality approach in explaining vulnerability in terms of gender, class, ethnicity, and age. For instance, women who suffer from displacement in KPK as a consequence of climate change face a double burden as they become marginalized socially, and therefore, they cannot find any job security. The uneducated workers who come from poor socio-economic backgrounds and belong to ethnic minorities face additional vulnerabilities since they cannot access jobs and have to take irregular migration routes to earn money.

It is possible to argue that migrant populations have varying levels of vulnerability as the identity elements intersect in multiple ways. From the research, it is evident that there are differences in vulnerability among the displaced people depending on various social determinants.

### 3.3. PARADIGM OF HUMAN SECURITY

The paradigm of human security by applying the modern approach that shifts away from the state-centric methodology requires societies to ensure the protection of basic human requirements, including provision of food, shelter, jobs, and respect for human dignity. In the case of climate-induced displacement, this requirement becomes especially pertinent since the affected people lack the necessary resources. People who suffer from environmental problems in KPK lose their reliable means of income, and due to such issues as environmental destruction they find themselves working under dangerous conditions that allow exploitation. The human security paradigm would require implementing policies based on the principle of protecting people through safeguarding their interests instead of ensuring territorial integrity and economic advancement. It is expected from the organization that those people who are displaced are provided with legal status and security by providing them with housing, health services, and social services so that they could avoid any kind of victimization including human trafficking.

## 4. CONCEPTUAL FRAMEWORK

The framework of the research is developed through the presentation of the way how climate change can be viewed as a powerful external force leading to migration and increasing the risks associated with human trafficking among individuals with no relevant skills. Environmental destruction can occur through extreme weather conditions, such as floods, droughts, heatwaves, which have adverse effects on natural resources and cause economic downfall in the affected communities. People are forced to migrate from their homes since these areas become inhabitable for individuals, requiring them to look for sustainable living opportunities.

Migration appears as a key process connecting environmental devastation and the increased threats of human trafficking in the developed model. People who leave their homes due to the identified challenges experience a collapse of all the systems related to social support and economic stability in the place of origin. Thus, migrants end up being isolated and vulnerable to different types of exploitation due to their status and the need for employment.

A non-linear relationship occurs between climate change, migration and human trafficking according to the presented framework. The connection of climate change and migration dynamics and patterns of human trafficking activities is moderated by various elements, such as the availability of social capital, geographical mobility of people, legal protections and policy measures aimed at preventing exploitation. The presence of strong legal protection mechanisms and active policies helps to make undocumented migrations safe and decrease the risks associated with forced relocation. In case people lack necessary protections and services, they become increasingly vulnerable and more exposed to risks of trafficking.

The presented conceptual framework relies on Systems Theory and the Livelihoods Vulnerability Framework to show how stress in the environment leads to migration and increases the risks of human trafficking among unskilled laborers who work in KPK regions.

## METHODOLOGY

Since the current research study is exploring the connection between climate change and the interaction of forced migration and human trafficking, it employs a mixed-methods approach to analyze this connection since it focuses specifically on identifying the conditions under which unskilled migrant workers from Khyber Pakhtunkhwa (KPK) Pakistan become vulnerable to climate change-induced problems such as forced migration and human trafficking. The use of mixed methodologies helps to better explore and analyze the studied phenomenon as it employs statistical data and personal experiences obtained from different contexts. The current research study collected quantitative data by applying a survey design to 303 unskilled migrant workers that were sampled in several stages to ensure diversity of the participants; namely, Swat district was selected due to high climatic vulnerability of this area. Stratified random sampling was used to ensure representation of participants representing different occupations and the collected data were analyzed quantitatively by means of descriptive analysis and correlations in SPSS. Qualitative information was gathered through in-depth semi-structured interviews and through document analysis within case studies. In order to gather qualitative data, key stakeholders such as governmental officials, NGO/INGO personnel, academics, and media professionals were recruited until data saturation was achieved. Inductive thematic analysis helped to develop emergent themes for each participant's experience, thereby ensuring an exploratory nature of the study. The Quadruple Helix model guided this component which enabled multiple sectors to share their knowledge about climate vulnerability and how institutions respond to it.

#### 4.1. ETHICAL ISSUES

The research adhered to ethical issues highlighted in the Helsinki declaration framework. Approval for conducting the research was acquired from the Ethics Review Committee of the National University of Science and Technology. Ethical approval was obtained based on international standards that ensured protection of all research data in terms of confidentiality and safety.

Data collection in the research took place after obtaining consent from the participants. The research abided by the ethical requirement to obtain consent and maintain confidentiality of the participants' information. In addition, special attention was paid to handling trafficking cases since the participants were vulnerable.

### 5. RESULTS AND DISCUSSION

In order to extract meaningful insights from the stakeholder interviews, thematic analysis was performed. A number of themes and sub-themes have been derived while taking into account relevant literature and their themes.

#### 5.1. CLIMATE DISRUPTION AND MIGRATION DECISIONS

Push-pull migration theories are undergoing changes. The migration process does not revolve around the mere presence of economic disparities alone. "Traditionally formulated push and pull models of migration are increasingly losing relevance due to the impact of social competition (status paradox) and network migration on migration trends," as stated by the officials. In other words, migrants may be motivated both by the desire to achieve social status as well as the presence of migrant social networks, leading to continuous migration.

Unskilled workers, mainly working in the agricultural sector and informal economy, have been observed to be exposed to the dangers of climate events such as flooding or drought, being more vulnerable to unemployment and displacement as well as lacking necessary information and alternative options. As a result, they are easy targets for traffickers. "Lack of skills makes one more vulnerable to human trafficking as one is unable to find stable jobs," the officials noted.

Workers skilled in their trades often enjoy various employment opportunities. Additionally, they are more able to withstand any environmental or economic shocks.

The population most frequently moving to another place after experiencing some disaster belongs to the age group of 18 to 35, since they need to search for places to earn money. Members of this particular age bracket are physically healthy and have certain needs which force them to go elsewhere. People having limited resources experience increased risk of human trafficking since they get deceived by impossible chances. The statement that "migrantes often believe in better prospects of employment and fall prey to exploitation," has become reality.

Children and adolescents suffer from certain specific risks due to displacements of entire families. As a result of such actions, the former experience domestic servitude and forced labor as a consequence of deception. Migrants from among older persons (over 50 years) account for a smaller number. Sending younger family members to work increases the probability of job hazards for the latter.

Women aged between 15 and 25 years usually migrate with the purpose of working domestically and end up being in situations of servitude or even forced marriages. According to officials, "these individuals, not knowing much about life and lacking any resources are cheated into doing hazardous tasks." The typical occupations of men include construction jobs and working at the kilns; moreover, they frequently find themselves in a position of bonded labor through "Dunki" migration practices.

Climate change has worsened the existing gender and livelihood-related problems of individuals. Scientists concluded that "unskilled workers are more directly exposed to climate risks because their jobs rely on agriculture and informal work." Additionally, economic shocks caused by smog that forces factories to close down and agricultural lands becoming housing estates hit poor families hard and push them towards migration. As officials learned, "such economic shocks left families with no other livelihoods options left."

#### 5.2. EXPLOITED ROUTES AND TRAFFICKING

It was argued by respondents that "the Dunki migration phenomenon has been facilitated mostly because of lack of information, exploiting unskilled labor, who don't have any other choice for their safe migration". The reason behind unskilled laborers moving through unregulated and illegal routes was because of traffickers who misguide the migrants about getting safe documents and work. It was revealed by the respondent that due to lack of knowledge about how to migrate safely through regulated routes, these laborers had paid huge money to the brokers to give them safe passage and job opportunities but unfortunately, they were deceived.

The unregulated recruitment route that operates on the "thekedar" system manages the recruitment demands for construction work, brick kiln operations, and agriculture. Displaced laborers, specifically, are exploited via brokers

through informal recruitment networks. Unregulated recruitment through sub-contractors and labor brokers results in hazardous work conditions for laborers, according to one of the respondents. He argued that the laborers face not only unsafe jobs but also poor working conditions. Moreover, there are no contracts made with the laborers; therefore, they remain vulnerable to bonded labor.

Recruitment agents are used by traffickers in conducting their business through offering them jobs leading to Gulf states, Karachi, and Punjab. Upon arrival, migrants find themselves in situations where they face restrictions that make them earn little money or no pay at all. As an example, one migrant stated, "We were promised employment in construction in Lahore. But as soon as we arrived, our IDs were taken, and we had to work in kiln without getting any pay for three months". The practice of debt bondage is common as migrants are offered advance loans that they cannot pay, leading to debt bondage.

When relief camps were opened following the flooding incidents of 2022, the youth were targeted by traffickers who promised them means of transport and employment options. Trafficking brokers organized themselves using Dunki network, thus finding hundreds of migrants stuck at urban construction sites, working in the absence of labor contracts as well as lacking meals.

Migrants agree with being smuggled, but once transported, the coercion is changed for trafficking, and the brokers take full charge of them. According to experts, "brokers exploit blurred lines between smuggling and trafficking, controlling migrants by deceit, debt, and confinement".

The brokers have freedom to conduct their operations due to lack of legal protection and corruption within the system. "Law enforcement in KPK is very poor. As per NGO respondent, there are no inspections being done either in kilns or agricultural fields where these migrants work. Migrants suffer from two issues because they cannot lodge complaints and should be silent regarding their problems."

### 5.3. GENDER AND AGE-BASED VULNERABILITIES

It appears that females and children are the main victims of trafficking. This is stated in the following way by the experts, "Females and children from flood-affected areas are highly vulnerable, as there is always an incidence of females and children being trafficked on the pretext of jobs."

Displacement camps prove to be among the most risky places and expose migrants to various risks of exploitation. Experts think that "The displacement camps, which were supposed to be safe zones, usually lack security and heighten the vulnerability of migrants." Moreover, it seems that experts also think that "Displacement camps become the center of trafficking activities, where criminals take advantage of the migrants by making false promises of employment, protection, and a bright future."

As said by officials and experts, "Unskilled migrants, who come for smuggling but end up in forced labour in order to pay their debts to smugglers become victims of trafficking during this process."

### 5.4. STATE RESPONSE AND POLICY DISCONNECT

PDMA has dealt with climate displacement using its programs without taking any initiatives to formulate proactive strategies. "There is no formal system in Pakistan for dealing with climate-induced migrations which means most governmental funds are spent on disaster response operations rather than formulating permanent recovery options". PDMA offers assistance in a crisis situation by providing tents, food, and temporary shelters but fails to address issues which cause climate migration and lead to displacement. The policy leaves room for traffickers to take advantage of climate migrants who lose all protection after receiving humanitarian assistance.

FIA needs to ensure that human trafficking is controlled in a climate change scenario to overcome two main barriers including the existence of governance obstacles and poor interagency coordination. Representatives from the government claim that there exist serious difficulties when enforcing the policies due to limited financial and human resources within local agencies to combat trafficking among climate migrants. There exist no procedures for responding to climate migration-induced human trafficking cases which leads to underreporting and a lack of victim protection.

NGOs and INGOs took the initiative to fill gaps in the institutional response created by the state itself. According to officials, "Civil society organizations play a crucial role since they offer shelter and legal and rehabilitation assistance to those victims who do not receive sufficient help after the government failed them". There exist three major barriers to the work of NGOs in this area such as lack of financing and political support, as well as weak connections with governmental agencies. Representatives said that "Civil society organizations carry out campaigns about raising awareness but civil society organizations and governmental organizations fail to cooperate which leads to inefficiency". It becomes impossible to conduct advocacy efforts because of the political and financial barriers preventing them from implementing systemic changes.

There is no functioning labor inspection system within the nation of Pakistan that covers all places of work. There is a

significant challenge when it comes to enforcing legislation due to the informal nature of the economic sector within the country. Climate change causes the people to move from one location to another and during this process, they become exploited due to working without a contract and without protection. The government must create a system that will monitor informal employment since this is where trafficking happens once they lose their home. It was indicated by stakeholders that, "Government initiatives were often driven by political agendas rather than the needs of displaced communities."

### 5.5. PERCEPTION OF COMMUNITY AND SOCIAL RESILIENCE

These migrants showed awareness of structural injustices and trafficking threats and worked against them using the secret networks. For instance, Respondent O who is a 36-year-old laborer shared, "We know there are traffickers, we've seen what they do—but what choice do we have when our land back home is no longer farmable?" We continue to work for 12 hours daily with unpaid salaries, but despite all the sufferings, we keep surviving and helping other workers."

The importance of media was reflected in raising the voices of these less privileged sections of the society. A representative of the media organization stated that "Media professionals used storytelling and documentary work to expose exploitation and force officials to take necessary steps. People relied on testimonies provided by migrants to form an idea of the situation."

Human beings migrate for the sake of living in a much better environment. Several interviews revealed that people sold their goats due to floods and moved out from the area. This necessitated fighting for their life according to the statements. Migrant females from female-headed households resorted to informal domestic activities that led to making considerable sacrifices, as mentioned by Respondent N. "Employers promised me high salary but they forced to work unpaid and detained in their facility." Food scarcity and borrowing, family displacement were other methods used by the migrants to deal with issues. The migrants now consume just one meal per day since they need to pay agent their money or lose housing facilities."

The migrants created unofficial support groups that helped each other through information sharing. Members of this group describe their procedure as they have to seek help collectively for looking for jobs due to individual seeking being too risky. Together with CBOs, the NGOs created several projects aimed at enhancing the resilience of the community. According to one of the interviewees, he benefited from some initiatives undertaken by the NGOs where they cooperated with the government as they assisted them legally and helped to educate them. They were taught and educated which was critical as it ensured that they retained their dignity and had a purpose in life. Migrant workers revealed that due to the efforts made by one NGO, he was able to send his son to school. This small hope holds much value for him.

The research respondents asked media houses and NGOs to take up responsibility to make sure that they enlighten the general public about their work. They stressed that media should fully cover the happenings since "Media should tell the full story-not just floods but what happens after." They requested that their stories be told to policymakers because they believe that this way, permanent positive change will occur in the future. Their message is that "We are not asking for charity. Just rights, and a chance to live without fear." This study concluded that resilience serves as a link between individual empowerment and systemic transformation.

## 6. CONCLUSION

Climate-related environmental disasters such as floods, droughts, and the decline of agriculture have a connection with the increase in unskilled labor migration, and the findings of the research confirm it. The analysis of the stakeholder interviews shows the role of migration as a mediation factor between vulnerability related to climate and increased exposure to human trafficking, thereby corroborating [29] statement. In the course of conducting case studies and analyzing interviews, the researchers found that climate-related poverty forces citizens to seek employment in the informal economy sector, where there is no legal protection. As a result, individuals become victims of wage theft, debt bondage, and coercive recruitment, among other issues. The testimonies provided by the respondents illustrate the impact of climate-related poverty on the life of women and children, as there are no legal and financial resources available to enable their safe migration. Trafficking networks can easily exploit victims of climate-related disasters because there is nothing to hold them accountable since governance weaknesses prevent the existence of climate migration-related legal measures.

The results obtained during the research are consistent with theoretical propositions of the systems theory and livelihoods vulnerability framework. Systems theory allows scientists to examine different systems functioning together in order to cause particular conditions which result in trafficking. Systemic issues that include lack of control of the labor market and poor migration policy result in the interconnection of climate change, trafficking, and migration. The livelihoods vulnerability framework describes how environmental events force rural population to move to other places in order to find new sources of livelihoods.

Studies in Bangladesh, the Philippines, and Sub-Saharan Africa have revealed that vulnerable countries in the Global South have started incorporating climate-induced displacement in their adaptation strategies by formulating National

Adaptation Plans. The Pakistani government relies on its current strategies for managing climate migration while other countries have set up mechanisms to protect their people through the national protection of labor rights.

The paper outlines all of the policy and practices recommendations that arise from the study findings. To start, there is an immediate need for establishing a National Climate Migration Policy to provide legal status to the displaced population so that they can avail themselves of social security and labor rights. This would be in line with the international guidelines set forth by the ILO and human rights instruments. Secondly, reforms of labor markets must be carried out in order to manage the informal sectors where climate migrants are usually exploited. This will entail creating a National Labor Inspection Authority which will conduct workplace inspections in order to secure employees' salaries. An anti-trafficking task force with a focus on addressing climate displacement must be established as well. There will be an emphasis on rehabilitation of victims and international cooperation through collaboration with agencies like UNODC and Interpol. There is a need to establish climate-resilient livelihoods for reducing the number of people undertaking dangerous migration in the future. Social protection programs such as BISP and Ehsaas need to be strengthened to include climate migrants who belong to particularly vulnerable groups including widows, single mothers, and bonded laborers. There is a need for capacity building as the concerned authorities such as police departments, NGOs, and media personnel must be able to recognize and tackle climate displacement trafficking.

## REFERENCES

- [1] Zittis, George, et al. "Climate change and weather extremes in the Eastern Mediterranean and Middle East." *Reviews of Geophysics* 60.3 (2022): e2021RG000762.
- [2] Buckley, Paul, et al. "How has COVID-19 affected migrant workers vulnerability to human trafficking for forced labour in Southeast Asia?—a narrative review." *Journal of Public Health and Emergency* 6 (2022).
- [3] Giri, Monika, et al. "Climate change vulnerability assessment of urban informal settlers in Nepal, a least developed country." *Journal of Cleaner Production* 307 (2021): 127213.
- [4] Hafeez, Assad, et al. "The state of health in Pakistan and its provinces and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019." *The Lancet Global Health* 11.2 (2023): e229-e243.
- [5] Muzamil, Muhammad Rafay. "Climate-related disasters, conflict and development: Reflections about the past and insights into the future from the Khyber-Pakhtunkhwa Province of Pakistan." (2021).
- [6] Feldmann, Rebecca L. "Preventing Trafficking by Protecting Refugees." *Utah L. Rev.* (2023): 659.
- [7] Gauci, Jean-Pierre. "Protecting trafficked persons through refugee protection." *Social Sciences* 11.7 (2022): 294.
- [8] van Nierop, Petra, Lisa Schönenberg, and Petar Terziev. "Counteracting undeclared work and labour exploitation of third-country national workers." European Labour Authority, Bratislava, Slovakia (2021).
- [9] Schroeder, Elyssa, et al. "Do social service interventions for human trafficking survivors work? A systematic review and meta-analysis." *Trauma, Violence, & Abuse* 25.3 (2024): 2012-2027.
- [10] Lowe, Christina. "Annex 1: Review of existing theories linking social protection and humanitarian assistance."
- [11] Ahmad, Ishaq, and Upper Dir Sheringal. "Human Trafficking in Pakistan: A Qualitative Analysis." (2022).
- [12] King, Russell. "On migration, geography, and epistemic communities." *Comparative Migration Studies* 8.1 (2020): 35.
- [13] Memon, Manzoor Hussain, and Rafiq Ahmed. "Multi-topographical landscape: Comparative vulnerability of climate-induced disaster-prone rural area of Pakistan." *Natural Hazards* 111.2 (2022): 1575-1602.
- [14] Abbas, Muhammad, et al. "The 2022 floods in Khyber Pakhtunkhwa, Pakistan: an assessment of the impacts on the Afghan Refugees." *Liberal Arts and Social Sciences International Journal (LASSIJ)* 8.2 (2024): 219-241.
- [15] Boskovic, Milica, and Brankica Jankovic. "Forced migrations and the risk of human trafficking." *Handbook of research on the regulation of the modern global migration and economic crisis*. IGI Global Scientific Publishing, 2023. 18-36.
- [16] Manzoor, Zaira, et al. "Floods and flood management and its socio-economic impact on Pakistan: A review of the empirical literature." *Frontiers in Environmental Science* 10 (2022): 1021862.

- [17] Khan, Motiur Rahman. "Impact of land use and climate change on monsoon flow of Ganges river basin using swat model." (2021).
- [18] Boersma, Martijn, and Justine Nolan. "Modern slavery and the employment relationship: Exploring the continuum of exploitation." *Journal of Industrial Relations* 64.2 (2022): 165-176.
- [19] Parsons, Laurie. "Thermal inequality in a changing climate: Heat, mobility, and precarity in the Cambodian brick sector." *Climate change in the global workplace*. Routledge, 2021. 15-31.
- [20] Smith, Mikaila V. "Applying the united nations trafficking protocol in the context of climate change." *Chi. J. Int'l L.* 22 (2021): 299.
- [21] Breman, Jan. *Good times and bad times in rural Java: Case study of socio-economic dynamics in two villages towards the end of the twentieth century*. Vol. 195. Brill, 2021.
- [22] Brown, David, et al. "Modern slavery, environmental degradation and climate change: Fisheries, field, forests and factories." *Environment and Planning E: Nature and Space* 4.2 (2021): 191-207.
- [23] Salik, Kashif Majeed, Maryam Shabbir, and Khansa Naeem. "Climate-induced displacement and migration in Pakistan: Insights from Muzaffargarh and Tharparkar Districts." (2020).
- [24] Ball, Cambrie. "The harmful effects of living in brick kiln communities in the South Asia Region." *Ballard Brief* 2024.1 (2024): 10.
- [25] Zahid, Muhammad Ahmar. "Issue of Human Trafficking; The Legal Framework and Case Study of Pakistan." *Research Journal of Human and Social Aspects* 1.4 (2023): 37-52.
- [26] Grosh, Margaret, et al. "Improving targeting outcomes through attention to delivery systems." M. Grosh, P. Leite, M. Wai-Poi, & E. Tesliuc (Eds.), *Revisiting Targeting in Social Assistance* (2022): 203-252.
- [27] Broad, Rose, Nicholas Lord, and Charlotte Duncan. "The financial aspects of human trafficking: A financial assessment framework." *Criminology & Criminal Justice* 22.4 (2022): 581-600.
- [28] Preble, Kathleen M., Andrea Nichols, and Megan Owens. "Assets and logic: Proposing an evidenced-based strategic partnership model for anti-trafficking response." *Journal of Human Trafficking* 9.2 (2023): 131-147.
- [29] Bharadwaj, Ritu, et al. "Climate change, migration and vulnerability to trafficking." *International Institute for Environment and Development* 2006 (2022).