

Adapting Social Work Education to Address Climate Change in Pakistan: Curriculum Reform, Climate Justice, and Community Resilience

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Abstract

In Pakistan, climate change has exacerbated social vulnerabilities which are experienced disproportionately by the marginalized populations in form of regular floods, heatwaves, droughts, displacement, food insecurity and disruption of livelihoods. Research Objectives of the study include: To investigate the level at which the concepts of climate change, environmental sustainability and climate justice have yet to be incorporated into the Pakistani university social work curricula. To determine the areas of knowledge, skills and pedagogical methodology gaps in current social work education that restrict the ability of practitioners to respond to social vulnerabilities and challenges related to a disaster caused by climate change. To suggest a contextualized curriculum redesign framework, which incorporates climate justice principles and community resilience approach in social work education in Pakistan. The proposed study has a qualitative research design to understand how the education of social work in Pakistan can be changed to mitigate climate change by changing the curriculum and incorporating climate justice. The use of an exploratory and descriptive approach is explained by the fact that not much empirical studies have been conducted on the topic of environmental social work education in Pakistan. Exploratory research can be used in the research that explores an underdeveloped field of study. The research will be carried out within some Pakistani institutions that run social work programs. The participants will be social work faculty, curriculum developers, administration, field supervisors and final year students. The input of data is collected using semi-structured interviews, focus group discussions, and document analysis. Interviews enable the participants to give experiences and institutional information Data are analyzed in the framework of thematic analysis. Inductive coding of the transcripts is done to discern patterns based on curriculum reform, climate justice, and resilience. The codes are grouped into more general themes that denote institutional strengths and weaknesses. The approach guarantees an orderly and stringent qualitative interpretation.

Keywords: Climate-Responsive social Work Education, Curriculum Reform in Higher Education, Climate Justice and Social Equity, Community Resilience, Environmental social Work Practice.

Introduction

Climate change is gaining recognition as an environmental crisis, as well as a highly social phenomenon with extensive consequences on human wellbeing, social equity and sustainable development (Intergovernmental Panel on Climate Change, 2022). The Global South countries, such as Pakistan, are vulnerable because of socio-economic factors, as well as low-adaptive capacity and structural disparities (Ahmed and Ali, 2021; United Nations Development Programme, 2020). Over

the past few decades, Pakistan has been facing increased climatic risks, such as historic floods, heatwaves, glacial melting, and droughts, that have destabilized livelihoods, increased poverty, and triggered psychosocial stress in deprived groups (Azhar et al., 2019; Kreienkamp and Khan, 2020). Such climate effects enhance societal inequalities and require contextual and interdisciplinary responses. In such a landscape, social work as a human-centered profession that revolves around social justice, empowerment, and community well-being is needed to take center-stage when it comes to addressing climate-related harms (Dominelli, 2012). Nevertheless, the recent social work education in Pakistan has not fully incorporated climate change as a fundamental pedagogical issue, and this is an indication of an urgent curriculum change, which needs to adjust professional training to the new climate conditions.

Although there is an increasing discussion about the environmental social work and eco-social justice in the world, the interdisciplinary incorporation of climate change into social work curriculum is still scant in Pakistan and LMICs (Healy, 2017; Ife, 2016). Conventional curricula focus on clinical practice and community development and human behavior without necessarily placing environmental crises in the frameworks of oppression, resilience, and justice in systems (Ibrahim and Rizvi, 2022). This disconnect limits the participation by graduates in climate adaptation, advocacy, policy participation and community resilience fields- skills that are imperative in climatic affected situations (International Federation of Social Workers and International Association of Schools of Social Work, 2018). To integrate climate change into curricular goals, it is necessary to incorporate content in the main domains, including policy analysis, participatory research, human rights, and disaster risk reduction, which are based on the global competency standards in addition to case studies of the issues regarding climate change in a specific state (Arthur et al., 2018). The pedagogical changes being proposed should focus on experiential learning, community, and interdisciplinary workload in order to equip the social work students to be agents of sustainable, rights-based change in a shifting climate.

The dominant element of this educational refocus is the idea of climate justice, which depicts the problems of environmental change as the ethical and human rights concern and disproportionately affects the most vulnerable (Schlosberg, 2013). Climate justice in Pakistan is seen as acknowledging and addressing the intersectional disadvantage of the low-income rural communities, women, and persons with disabilities and other historically marginalized groups having their vulnerabilities exacerbated by environmental stressors (Rashid and Qureshi, 2019; UNDP, 2020). The anticipatory social work education that predicts climate justice and community resilience does not only serve the profession in line with the ethical requirements of my profession, but it also makes the profession more relevant to the social challenges of the system and emergent social challenges. Through the incorporation of frameworks of climate justice, adaptive capabilities, and community-oriented approaches in curricula, social work implementation can help mould practitioners that are reflective and action-oriented: able to promote equitable climate responsiveness, impact policy, and build resilient communities in all the various socio-ecological settings of Pakistan.

Background of the Study

Climate change no longer remains a mostly environmental issue; today, it is a multidimensional crisis involving social systems, economic stability, population health, and human rights all over the world (Intergovernmental Panel on Climate Change, 2022). Greater rates and more severity of floods, droughts, heatwaves and glacial melt events have disproportionately affected nations that have weak infrastructures and low adaptive capacity. Although Pakistan has little contribution to global greenhouse emissions, it is ranked as one of the most climate-vulnerable countries across the world (Germanwatch, 2023). Poverty, displacement, food insecurity, and psychosocial distress have been amplified by the devastating floods in 2010 and 2022, extended heatwaves, shortage of water, and losses in agriculture, especially among the marginalized populations (Kreienkamp & Khan, 2020;

UNDP, 2020). These facts outline that climate change is essentially a social justice matter that needs to address both environmental sustainability and equity as well as human welfare.

In this regard, the social work profession has a special mandate that is based on human rights, social justice, and empowerment of the community (International Federation of Social Workers, 2018). Across the world, researchers have highlighted the rise of green or environmental social work, which demands the need to incorporate ecological issues in social work theory, research and practice (Dominelli, 2012). In Pakistan, however, social work education has always been based on clinical practice, poverty reduction, and community development without a systematic inclusion of climate change, environmental degradation, or sustainability models into the curricula (Ibrahim & Rizvi, 2022). Graduates who are not climate literate and do not have an environmental justice lens can be ill-equipped to respond to the emergent community demands as climate-related disasters that are more and more defining the social realities. The educational gap highlights the need to reform the curriculum to inculcate the concepts of climate change adaptation, disaster risk reduction, and resiliency-building competencies in the social work training.

Moreover, the problem of climate change in Pakistan increases structural inequalities based on gender, social classes, rural marginality, and displacement (Rashid & Qureshi, 2019). The women, small farmers, residents of informal settlements, and internally displaced populations are more vulnerable since they lack access to resources, the power to make decisions, and institutional support. It demands social workers who are trained in climate justice advocacy, collaborative planning, as well as inter-disciplinary collaboration as well as in traditional casework and community practice. It is, therefore, noted that the educational institutions have a significant role to play in developing future practitioners who can contribute to building resilience in the community and enhance fair adaptation measures. The idea of incorporating climate-responsive knowledge and skills into social work education is not an academic novelty; it is a professional and ethical requirement in accordance with the world-level sustainable development agenda and national climate pledges undertaken in Pakistan (Government of Pakistan, 2021). This research builds on this gap of necessity by aiming to understand how social work education in Pakistan may be redesigned to tackle climate change by designing curriculum based on climate justice and community resilience models.

Problem Statement

In Pakistan, climate change has increased the social vulnerability of the population and has been disproportionately experienced by marginalized groups of people due to frequent floods, heatwaves, droughts, forced migration, food insecurity, and disruption of livelihoods (Intergovernmental Panel on Climate Change, 2022; Germanwatch, 2023). Although such climate-induced challenges have significant social, economic, and psychosocial impacts, the professional reactions in the social sector are not quite aligned with the environmental conditions. There is an increasing demand that social workers provide support to the disaster-impacted populations, advocate the equitable distribution of resources, and provide the community with resilience; nevertheless, in Pakistan, the social work education lacks a systematic framework of introducing climate change, climate justice, or environmental sustainability into the curriculum. The lack of formal climate literacy, interdisciplinary training and disaster responsive competencies in academic programs restrict graduates to be equipped effectively to participate in the social risks of climate, further increasing the disconnect of professional training and the socially needs.

Additionally, the problem of climate change in Pakistan is closely connected with institutional inequalities concerning poverty, gender, rural marginalization, and low institutional capacity (Rashid & Qureshi, 2019; UNDP, 2020). Unless the concept of climate justice is incorporated into social work education, new professionals might fail to find the critical analysis instruments that they need to approach the intersectional aspects of both environmental degradation and social marginalization. The conventional areas of practice, e.g., casework and community development, receive the primary focus in the current curricula without the overt inclusion of the ecological views, participatory climate

adaptation methods, and policy advocacy competencies specific to climate governance. As a result, there is a pressing necessity to explore the ways of changing the social work education in order to address the issues of climate-responsive knowledge, justice-based practice, and community resilience models. This gap is critical to fill in, so that social work professionals in Pakistan can be prepared to play a role in sustainable development, fair climate adjustment, and socially resilient societies in the long term.

Research Questions

1. How well is climate change, environmental sustainability and climate justice framework integrated into the teaching and training in the Pakistani universities in the social work curriculum?
2. Which skills, knowledge areas, and pedagogical strategies must be redesigned to transform social work education in Pakistan in order to meet the vulnerabilities caused by climate and resilience of communities?
3. What are the practical ways to implement climate justice principles in social work education to enhance the advocacy, policy involvement, and the fair practice of climate adaptation (in marginalized communities)?

Research Objectives

1. To examine the extent to which climate change, environmental sustainability, and climate justice concepts are currently integrated into social work curricula in Pakistani universities.
2. To identify the gaps in knowledge, skills, and pedagogical approaches within existing social work education that limit practitioners’ capacity to address climate-induced social vulnerabilities and disaster-related challenges.
3. To propose a contextually grounded curriculum reform framework that integrates climate justice principles and community resilience strategies into social work education in Pakistan.

Conceptual Framework:

Independent Variables	Dependent Variables
<ul style="list-style-type: none"> • Curriculum Reform in Social Work Education • Integration of Climate Justice Frameworks • Climate Change Pedagogical Approaches (Teaching & Training Methods) 	<ul style="list-style-type: none"> • Climate Competency of Social Work Graduates • Advocacy and Policy Engagement Capacity • Community Resilience Outcomes

Conceptualization & Operationalization

Independent Variables

Curriculum Reform in Social Work Education

- Means the consistent introduction of climate change, environmental sustainability, and disaster risk reduction as a part of the traditional social work courses.
- Also involves curriculum redesign, course content transformation and integrates climate-responsive learning outcomes.

Integration of Climate Justice Frameworks

- Includes the incorporation of the social work education with principles of equity, human rights, and environmental justice.
- Assures students of the unequal climate effects to the poor and vulnerable groups.

Climate Change Pedagogical Approaches

- Means new ways of teaching like experiential education, field-based learning and interdisciplinary cooperation.
- Engages community, participative research, and disaster-response modeling to develop applied skills.

Dependent Variables

Climate Competency of Social Work Graduates

- Indicates the level of knowledge, skills, and attitudes, in regard to climate adaptation, mitigation, and resilience-building, of the students.
- Demonstrates readiness to deal with environmental dangers at work.

Advocacy and Policy Engagement Capacity

- Refers to the skills of graduates to impact the policies related to climate and encourage a fair distribution of resources.
- As another related skill, there is the ability to advocate rights-based, engage stakeholders, and collaborate with institutions.

Community Resilience Outcomes

- Refers to enhanced adaptability and viability in climate susceptible societies.
- In terms of enhanced local coping capacity, social cohesion and preparedness to disaster.

Literature Review

Climate change is becoming understood as a multidimensional social crisis, which does not just stop at environmental degradation but extends to include economic instability, displacement, risks to the health of the population, and growing inequality (Intergovernmental Panel on Climate Change, 2022). Climate induced hazards are disproportionately exposed to developing nations especially South Asian countries because of the structural vulnerability and the lack of adaptive capacity (Kreienkamp & Khan, 2020). Frequent floods, heat waves, melting glaciers, and water shortages have been a major issue in terms of livelihoods, food security, and stability of communities in Pakistan (Germanwatch, 2023). Even the 2022 floods displaced millions of people as well as revealed the systemic gaps in governance and the social protection systems. These effects underscore the fact that climate change is not just an environmental occurrence but a social justice and development issue that needs interdisciplinary intervention of which social work professionals should participate.

The inclusion of environmental issues in social work theory and practice has been in the limelight with the evolution of green social work and eco-social (Dominelli, 2012). Social work Environmental social work acknowledges that human well-being and ecological systems cannot exist independently and is demanding transformative practice in regard to environmental injustice (Besthorn, 2012). According to scholars, climate change does not address social inequalities that exist but worsens them and requires rights-based interventions based on communities (Ife, 2016). Green social work systems focus on sustainability, participatory communities and structural advocacy. Nevertheless, regardless of increased discussion globally, institutionalization of environmental content in social work education is unequal especially in the low- and middle-income countries (Healy and Link, 2012). This gap identifies the necessity of putting environmental social work in perspective to the socio-ecological realities of Pakistan.

The structures of climate justice point at how marginalized populations are disproportionately affected by the negative impact of environmental harm, and the need to be more equitable, recognizing, and inclusive (Schlosberg, 2013). In Pakistan, the overlapping of climate and poverty

with gender inequality, rural marginalization, and displacement occur (Rashid and Qureshi, 2019). Women residing in agrarian societies, individuals in informal settlements and internally displaced face even higher vulnerability because of inadequate resources and lack of power to make decisions (UNDP, 2020). Social work being based on the principles of human rights and social justice is in a unique position to curb these inequities. Nonetheless, unless the concept of climate justice is incorporated into the education syllabus, the next generation of practitioners might not possess an analytical instrument that would allow tackling the problem of systemic environmental injustice. It is hence necessary to consider climate justice embedded in training to help the professional ethic to be in line with current environmental issues.

Universities are very important in equipping individuals who would handle the new global challenges. The Global Standards of Social Work Education make it clear that the curricula should address the current social problems, both local and global (International Federation of Social Workers & International Association of Schools of Social Work, 2018). However, the studies suggest that the material on climate change is usually marginal or not included in social work courses (Ibrahim and Rizvi, 2022). Curriculum reforms need to incorporate environmental sustainability in the center subjects, which include policy practice, community development as well as human behaviour in the social environment. Strategies that should be suggested to improve climate competence are experiential learning, interdisciplinary collaboration, and field-based training in disasters (Lysack, 2010). In Pakistan, there is a gap in knowledge as very little empirical research has studied the level of integrating such reforms into the social work programs.

Social work students need to be provided with climate-responsive competencies using innovative pedagogical methods. Learning models based on experience and community enable students to have direct interaction with populations that are affected by climate and develop critical thinking and practical skills (Dominelli, 2012). This ensures that the interdisciplinary partnership between environmental sciences, public health and policy studies promotes a comprehensive comprehension (Healy, 2017). The models of participatory action research and service-learning also enhance the ability of the students to advocate and build resilience. It is hinted that sustainability principles which are touched upon in professional education make graduates better equipped to meet complex environmental problems (Besthorn, 2012). Thus, instructional change should be at the core of the adaptation of social work education to climate adaptation and mitigation in Pakistan.

Community resilience means the ability of communities to foresee, adapt and recuperate environmental shocks whilst preserving social integration and health (IPCC, 2022). Social workers are involved in resilience in the sense that they help the local participation, enhance social networks and promote equal distribution of resources (Dominelli, 2012). Community-based disaster risk reduction projects have proved the relevance of local knowledge and involvement in planning in Pakistan (Kreienkamp and Khan, 2020). Nevertheless, a sustainable resilience-building process must have professionals with training on both the social justice and climate adaptation framework. By incorporating the resilience theory into social work education, the graduates will be equipped to respond to a disaster within a short time as well as enable communities and empower them in the long term and enhance development. In this way, climate justice and resilient curriculum reform is essential to the enhancement of the adaptive capacity of Pakistan.

Methodology

Research Design

This research design was used a qualitative research approach to examine how the social work education curriculum in Pakistan can be modified to meet the needs of climate change in the form of curriculum changes and the inclusion of climate justice. The qualitative method was suitable in analyzing perceptions, institutional practices, and contextual realities (Creswell and Poth, 2018). The research is based on an interpretivist paradigm and aims to comprehend the way stakeholders create

meanings in relation to climate responsive education (Denzin and Lincoln 2018). Such a design was allow exploring gaps in the curriculum and reform opportunities in depth.

Research Approach

Limited empirical research on the environmental social work education in Pakistan is led to an exploratory and descriptive approach. Exploratory research is appropriate in case of studying poorly developed fields of study (Maxwell, 2013). The descriptive part enables the systematic analysis of the teaching strategies and content in the curriculum. It was facilitate the formulation of contextual based reform recommendations in line with the international standards (IFSW & IASSW, 2018).

Study Setting

The research is carried out in the chosen Pakistani universities where social work is being done. In Pakistan, flooding, heatwaves, and other climate-related catastrophes make the country highly vulnerable to them, and the situation creates a crucial context in the exploration of curriculum responsiveness (IPCC, 2022). Universities are also important in training the professionals to be adaptable in climate conditions and resilient in the community. To provide details of the differences in structure of the curriculum and engagement with the environment, to capture these differences, various institutional settings are represented.

Population and Sampling

The study population and sampling was included 100 respondents chosen at random from 100 female university students. The social work faculty, curriculum developers, administrators, field supervisors, and last-year students. These stakeholders have first hand experience of the curriculum design and training of professionals. The purposive sampling method is applicable in the selection of information-rich cases (Patton, 2015). The stage of data collection was go on until saturation is achieved, which is most often 20-30 participants (Guest et al., 2006).

Data Collection Methods

The information was collected by semi-structured interviews, focus groups, and document analysis. The interviews enable participants to provide experience and institutional knowledge (Creswell and Poth, 2018). Focus groups are used to reveal the perceptions of students on climate preparedness. The syllabi and curriculum outline analysis of documents can be used to evaluate formal integration of climate content (Bowen, 2009).

Data Analysis

The thematic analysis is done to analyze the data according to the Braun and Clarke (2006) framework. The coding of the transcripts is done inductively to discover patterns concerning curriculum reform, climate justice, and resilience. The codes are grouped into wider themes that represent institutional strengths and weaknesses. This is the means of systematic and strict qualitative interpretation.

Trustworthiness

Credibility, transferability, dependability and confirmability are all used to ensure trustworthiness (Lincoln and Guba, 1985). This is because triangulation of various sources of data increases credibility. Transferability is backed by detailed descriptions of situations. Reflexive documentation enhances confirmability and has a methodological transparency.

Ethical Considerations

Ethical consent is acquired before the collection of data. Respondents give an informed consent and are guaranteed of confidentiality and participation. The anonymity of the institutional identities is

used to cover the participants. The ethical practices are in line with the international standards of qualitative research (Denzin and Lincoln, 2018).

Data Analysis

Introduction

This chapter presents the findings derived from thematic analysis of semi-structured interviews, focus group discussions, and document analysis. Data were analyzed using Braun and Clarke's (2006) six-step framework, resulting in four major themes and several sub-themes. The analysis focuses on curriculum gaps, institutional barriers, climate justice integration, and pathways for reform. Findings reflect perspectives of faculty members, administrators, field supervisors, and final-year students.

Theme 1: Limited Integration of Climate Change in Curriculum

Participants consistently reported that climate change content is either absent or minimally addressed in existing social work curricula. While disaster management is occasionally discussed, it is not framed within broader climate justice or sustainability perspectives. Document analysis of course outlines confirmed the lack of dedicated modules on environmental social work. Faculty members acknowledged that climate issues are treated as peripheral rather than core professional concerns.

Sub-theme 1.1: Absence of Structured Climate Courses

Most universities do not offer specialized courses on climate change or environmental justice within social work programs. Any discussion of environmental issues occurs informally within community development or social policy subjects. Students expressed that they lacked theoretical grounding in climate adaptation frameworks. This gap limits professional preparedness in climate-affected contexts.

Sub-theme 1.2: Outdated Curriculum Frameworks

Participants highlighted that curriculum revisions have not kept pace with emerging global challenges. Existing syllabi focus heavily on traditional casework and welfare models. Environmental sustainability is rarely integrated into learning outcomes or assessment criteria. This reflects a structural lag between academic programming and societal needs.

Theme 2: Institutional and Structural Barriers

The second major theme relates to barriers hindering curriculum reform. Faculty members identified limited institutional support, lack of interdisciplinary collaboration, and insufficient training in environmental content. Universities often prioritize conventional subject areas over emerging global concerns. Resource constraints further restrict curriculum innovation.

Sub-theme 2.1: Limited Faculty Expertise

Several participants acknowledged limited faculty specialization in climate-related subjects. Without professional development opportunities, educators feel underprepared to teach environmental social work. This creates resistance to curriculum expansion. Capacity-building initiatives were widely recommended.

Sub-theme 2.2: Policy and Administrative Constraints

Curriculum changes require approval from academic boards and regulatory bodies, which can be slow and bureaucratic. Participants noted that climate change is not yet prioritized at policy levels within social work education. This institutional inertia delays reform efforts. Structural change is therefore necessary for sustainable integration.

Theme 3: Need for Climate Justice-Oriented Education

Participants emphasized that climate change disproportionately affects marginalized communities in Pakistan. Faculty and students recognized the importance of integrating climate justice frameworks rooted in human rights and equity. Respondents stressed that social workers must be equipped to address intersectional vulnerabilities. However, such perspectives are not systematically embedded in current curricula.

Sub-theme 3.1: Intersectionality and Vulnerability

Participants highlighted how poverty, gender inequality, and rural marginalization intensify climate impacts. Students reported limited exposure to intersectional analysis within environmental contexts. Climate justice education was seen as essential for ethical professional practice. Integrating rights-based frameworks was strongly recommended.

Sub-theme 3.2: Advocacy and Policy Engagement Skills

Respondents stressed the need to strengthen advocacy competencies related to climate governance. Current programs provide minimal training in environmental policy analysis. Participants suggested incorporating modules on climate policy, sustainable development goals, and community mobilization. Such skills are vital for systemic change.

Theme 4: Pathways for Curriculum Reform and Community Resilience

The final theme identifies actionable reform strategies. Participants recommended integrating climate content across core subjects rather than limiting it to elective courses. Experiential learning, field-based disaster training, and interdisciplinary collaboration were emphasized. Reform should aim to enhance graduate competency and community resilience.

Sub-theme 4.1: Experiential and Community-Based Learning

Students expressed strong support for practical exposure in climate-affected communities. Field placements in disaster-prone areas were suggested to build applied skills. Service-learning and participatory research were viewed as effective pedagogical strategies. Such approaches enhance resilience-building competencies.

Sub-theme 4.2: Development of a Climate-Responsive Framework

Participants proposed the development of a structured curriculum framework incorporating sustainability, climate justice, and resilience theory. Embedding climate learning outcomes across policy, community development, and human behavior courses was recommended. This integrated model would align social work education with Pakistan's climate realities. Reform was framed as both a professional and ethical imperative.

Summary of Findings

The thematic analysis reveals significant gaps in the integration of climate change within social work education in Pakistan. Institutional barriers, limited faculty expertise, and outdated curricula hinder reform. However, strong consensus exists regarding the need for climate justice-oriented education and experiential learning models. The findings underscore the urgency of curriculum transformation to strengthen graduate competencies and enhance community resilience.

Discussion

The findings of this study reveal a significant gap between the growing social impacts of climate change in Pakistan and the preparedness of social work education to address these realities.

Consistent with global scholarship on environmental social work (Dominelli, 2012), participants acknowledged that climate change remains peripheral within existing curricula, often limited to brief discussions under disaster management or community development courses. Document analysis further confirmed the absence of structured modules explicitly focused on climate justice, sustainability, or resilience frameworks. This curricular deficiency reflects broader trends identified in international research, where professional education systems struggle to integrate rapidly evolving global challenges into traditional disciplinary frameworks (Healy & Link, 2012). In the context of Pakistan one of the countries most vulnerable to climate-related disasters (IPCC, 2022) such gaps undermine the profession's capacity to respond effectively to emerging social risks.

The study also highlights institutional and structural barriers that constrain curriculum reform, including limited faculty expertise, bureaucratic approval processes, and insufficient interdisciplinary collaboration. These findings align with prior research emphasizing that transformative curriculum change requires institutional commitment and capacity-building (IFSW & IASSW, 2018). Participants' concerns about inadequate training in environmental content suggest that professional development initiatives are critical for enabling educators to confidently integrate climate justice perspectives into teaching. Furthermore, the limited focus on environmental policy advocacy within social work programs reflects a missed opportunity to strengthen graduates' engagement in climate governance and rights-based advocacy. Given that climate change disproportionately affects marginalized populations in Pakistan particularly women, rural communities, and low-income households (Rashid & Qureshi, 2019) embedding intersectional and justice-oriented frameworks into curricula is essential for aligning education with the profession's ethical mandate.

Importantly, the findings underscore strong support among stakeholders for reform-oriented strategies grounded in experiential learning, community engagement, and resilience-building approaches. Participants emphasized the value of field-based learning in climate-affected communities and the integration of sustainability principles across core courses. These recommendations resonate with eco-social work theory, which advocates for holistic and participatory approaches to addressing environmental injustice (Dominelli, 2012). By embedding climate justice, interdisciplinary collaboration, and adaptive competencies within social work education, universities can strengthen the profession's relevance in responding to Pakistan's socio-ecological challenges. Ultimately, curriculum transformation is not merely an academic adjustment but a strategic intervention to enhance community resilience, promote equitable climate adaptation, and reinforce social work's commitment to sustainable development.

Conclusion

This study concludes that social work education in Pakistan remains insufficiently aligned with the escalating social impacts of climate change, despite the country's high vulnerability to environmental disasters (Intergovernmental Panel on Climate Change, 2022). The findings indicate that climate change and environmental justice are not systematically embedded within existing curricula, limiting graduates' preparedness to address displacement, livelihood insecurity, and widening inequalities intensified by climate hazards. This gap reflects broader concerns in international scholarship that professional education has been slow to integrate ecological perspectives into mainstream social work training (Dominelli, 2012; Healy & Link, 2012). In a context where marginalized communities disproportionately bear the burden of environmental degradation, the absence of structured climate-responsive competencies weakens the profession's ability to fulfill its social justice mandate.

The study further emphasizes that meaningful curriculum reform requires institutional commitment, interdisciplinary collaboration, and faculty capacity-building consistent with global standards for social work education (International Federation of Social Workers & International Association of Schools of Social Work, 2018). Integrating climate justice frameworks particularly those addressing gendered and socio-economic vulnerabilities in Pakistan can enhance advocacy, policy engagement, and community resilience outcomes (Rashid & Qureshi, 2019). Embedding sustainability principles

across core courses and strengthening experiential learning opportunities would enable future social workers to contribute effectively to equitable climate adaptation and sustainable development. Therefore, adapting social work education to climate realities is not merely curricular innovation but a professional and ethical imperative aligned with global environmental justice discourse (Dominelli, 2012; IPCC, 2022).

Recommendations/Suggestions

1. Integrate dedicated courses on climate change, environmental justice, and sustainability within undergraduate and postgraduate social work curricula.
2. Embed climate-responsive learning outcomes across core subjects such as social policy, community development, and human behavior in the social environment.
3. Provide faculty development and specialized training programs to strengthen educators' capacity in environmental and climate justice frameworks.
4. Promote interdisciplinary collaboration between social work, environmental sciences, public health, and policy departments.
5. Incorporate experiential and field-based learning opportunities in climate-affected communities to enhance practical competencies.
6. Introduce modules on climate policy advocacy and governance to strengthen graduates' engagement in rights-based environmental decision-making.
7. Align social work curricula with global standards and Sustainable Development Goals (SDGs) related to climate action and social equity.
8. Develop partnerships with governmental and non-governmental organizations working in disaster risk reduction and climate adaptation.
9. Establish research centers or thematic clusters within universities focusing on environmental social work and community resilience.
10. Institutionalize periodic curriculum review mechanisms to ensure responsiveness to evolving climate risks and socio-ecological challenges in Pakistan.

References

- Ahmed, N., & Ali, S. (2021). *Climate change impacts and adaptation strategies in South Asia*. Routledge.
- Arthur, R., Lough, B. J., & Hokenstad, M. C. (2018). Climate change and social work: A review of opportunities for intervention. *International Social Work, 61*(6), 837–848. <https://doi.org/10.1177/0020872817715297>
- Azhar, G. S., Majeed, A., & Saleem, S. (2019). Floods in Pakistan: Implications for public health and social policy. *Journal of Humanitarian Affairs, 1*(2), 57–69.
- Besthorn, F. H. (2012). Deep ecology's contributions to social work: A ten-year retrospective. *International Journal of Social Welfare, 21*(3), 248–259.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27–40.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design* (4th ed.). Sage.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The Sage handbook of qualitative research* (5th ed.). Sage.
- Dominelli, L. (2012). *Green social work: From environmental crises to environmental justice*. Polity Press.
- Germanwatch. (2023). *Global climate risk index 2023: Who suffers most from extreme weather events?* Germanwatch e.V. <https://www.germanwatch.org>
- Government of Pakistan. (2021). *Pakistan's updated nationally determined contributions (NDCs) 2021*. Ministry of Climate Change.

- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, 18(1), 59–82.
- Healy, L. M. (2017). *International social work: Professional action in an interdependent world* (3rd ed.). Oxford University Press.
- Ibrahim, Z., & Rizvi, R. (2022). Integrating environmental sustainability into social work curriculum: Challenges and pathways. *Journal of Social Work Education*, 58(1), 45–62.
- Ife, J. (2016). *Human rights and social work: Towards rights-based practice* (3rd ed.). Cambridge University Press.
- IFSW & IASSW. (2018). *Global standards for social work education and training*.
- Intergovernmental Panel on Climate Change (IPCC). (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the IPCC. Cambridge University Press.
- IPCC. (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. Cambridge University Press.
- Kreienkamp, J., & Khan, M. (2020). Health and disaster risk in Pakistan: An overview of climate impacts. *Climate Risk Management*, 28, 100222.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Maxwell, J. A. (2013). *Qualitative research design* (3rd ed.). Sage.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.
- Rashid, S., & Qureshi, H. (2019). Gendered impacts of climate change in rural Pakistan. *Gender, Place & Culture*, 26(7), 866–885.
- Schlosberg, D. (2013). Theorising environmental justice: The expanding sphere of a discourse. *Environmental Politics*, 22(1), 37–55.
- United Nations Development Programme (UNDP). (2020). *Pakistan climate change risk assessment 2020*. UNDP Pakistan. <https://www.undp.org/pakistan>
- United Nations Development Programme. (2020). *Pakistan climate change risk assessment 2020*. UNDP Pakistan.