

SOCIAL WORK APPROACHES TO PREVENTING CLIMATE-INDUCED LIVELIHOOD RISKS AND IMPLICATIONS FOR THE MEKONG DELTA

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Abstract: Climate change is increasing livelihood risks in vulnerable regions, especially in areas where people depend heavily on natural resources, agriculture, fisheries and coastal ecosystems. The Mekong Delta is strongly affected by salinity intrusion, drought, land subsidence, erosion, production instability and livelihood-related migration. This article reviews social work approaches relevant to the prevention of climate-induced livelihood risks and proposes an applied framework for the Mekong Delta. The article uses a narrative literature review combined with conceptual synthesis, drawing on literature on green social work, eco-social work, disaster risk reduction, sustainable livelihoods, climate justice, social protection and studies of livelihood risks in the Mekong Delta. The review indicates that social work can contribute to livelihood risk prevention through vulnerability assessment, risk communication, community group work, resource linkage, support for just livelihood transition and policy advocacy. The article proposes an integrated social work framework with six components, adding a social dimension to livelihood adaptation programmes in the context of climate change.

Keywords: social work; climate change; livelihood risks; green social work; Mekong Delta.

1. INTRODUCTION

Climate change is increasing risks to people's livelihoods, particularly in areas dependent on natural resources, agricultural production, fisheries and vulnerable ecosystems. According to IPCC (2022), the vulnerability of people and ecosystems to climate change varies substantially across and within regions and is shaped by social inequality, poverty, development pathways, governance, land use and adaptive capacity. This shows that climate risk is not only an environmental issue but also a social issue, because its impacts are unevenly distributed across population groups.

In development studies, livelihoods are understood as the combination of capabilities, assets and activities required for a means of living (Chambers & Conway, 1992). The sustainable livelihoods framework developed by DFID emphasizes that livelihoods are linked to people's access to and use of human, social, natural, physical and financial capital (DFID, 1999). From this perspective, climate-induced livelihood risks can be understood as the possibility that climate-related shocks and stresses undermine livelihood capitals, livelihood strategies, coping capacity and the well-being of individuals, households and communities.

The Mekong Delta plays a central role in Viet Nam's food security, agricultural production and fisheries. At the same time, the livelihoods of many communities in the region depend directly on land, water, seasonal cycles and riverine-coastal ecosystems. Studies show that drought and salinity intrusion have created serious challenges for the livelihoods of coastal communities, particularly small-scale agricultural households and groups with limited resources for adaptation (Tran et al., 2021). These impacts are intertwined with land subsidence, erosion, migration and unequal access to adaptive resources.

Existing studies on climate change and livelihoods in the Mekong Delta have often been approached from environmental science, agriculture, development economics, resource management and community-based adaptation. These perspectives are important, but they do not fully clarify the role of social work in preventing livelihood risks, especially in relation to identifying vulnerable groups, strengthening social capital, providing psychosocial support, linking resources, promoting social protection, organizing communities and advancing climate justice.

Internationally, the relationship between social work, the environment and climate change has been developed through approaches such as green social work, eco-social work, disaster risk reduction social work, community-based social work and climate justice. Green social work highlights the relationship between environmental crises, poverty, inequality and environmental justice (Dominelli, 2012). The Sendai Framework for Disaster Risk Reduction also emphasizes reducing disaster risk and losses in lives, livelihoods, health and economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries (UNDRR, 2015).

This article aims to review and analyse social work approaches relevant to the prevention of climate-induced livelihood risks and to propose an integrated social work framework for the Mekong Delta. The article does not seek to construct an empirically validated model. Instead, it proposes a conceptual and practice-oriented framework based on literature synthesis, with implications for field research, social work education, community practice and livelihood adaptation policy in the context of climate change.

2. METHODOLOGY

This article adopts a narrative literature review combined with conceptual synthesis. This approach is appropriate because the study does not aim to measure the effectiveness of an implemented intervention model. Instead, it systematizes social work approaches related to the prevention of climate-induced livelihood risks and develops an applied framework for the Mekong Delta. Grant and Booth (2009) note that review types vary in their degree of systematization, search scope, appraisal procedures and purposes of synthesis. A narrative review is suitable here because the topic lies at the intersection of social work, climate change, livelihoods, disaster risk reduction and community development.

Conceptual synthesis is also consistent with the nature of the article. Conceptual articles do not merely describe published literature; they clarify relationships among concepts, identify gaps in existing understanding and propose analytical frameworks for research problems (Jaakkola, 2020). In this article, concepts such as livelihood risk, vulnerability, adaptation, resilience, climate justice, green social work, eco-social work and community-based social work are brought together to clarify the potential role of social work in preventing climate-induced livelihood risks.

The literature was selected from four main groups. The first group includes foundational literature on climate change, vulnerability, disaster risk reduction and sustainable development. The second group includes studies on sustainable livelihoods, livelihood risks and livelihood adaptation. The third group covers social work literature in environmental and climate contexts, including green social work, eco-social work, disaster social work, community-based social work and climate justice. The fourth group includes studies on the Mekong Delta, especially those concerning salinity intrusion, drought, land subsidence, livelihood transition, migration and the vulnerability of communities dependent on agriculture, fisheries and natural resources.

Two sets of search terms were used. The first focused on social work theory and practice, including “green social work”, “eco-social work”, “environmental social work”, “social work and climate change”, “social work and disaster risk reduction”, “community-based social work” and “climate justice and social work”. The second focused on the livelihood and climate-change context, including “sustainable livelihoods framework”, “livelihood risk”, “livelihood vulnerability”, “community-based adaptation”, “Mekong Delta climate change”, “salinity intrusion Mekong Delta”, “drought Mekong Delta” and “livelihood adaptation Mekong Delta”.

Documents were included if they were relevant to climate change, livelihood risks, livelihood adaptation or community vulnerability; if they made a clear theoretical or practical contribution to social work in environmental, climate, disaster or community development contexts; if they related to the Mekong Delta or comparable contexts; and if they had academic credibility. This article is not a systematic review following PRISMA and does not seek to quantify the total body of evidence on intervention effectiveness. Its contribution lies in theoretical synthesis and conceptual framework development.

Table 1. Orientation of the literature review and analysis

Document group	Main content used	Role in the article
Climate change and disaster risk reduction	Vulnerability, climate risk and resilience	Establishes the context and rationale for risk prevention
Sustainable livelihoods and livelihood risks	Livelihood capitals, livelihood vulnerability and adaptation	Clarifies the concept of livelihood risk and the capitals that need protection
Green and eco-social work	Environmental justice and human-environment relations	Provides the theoretical foundation for social work in climate contexts
Disaster social work and community-based social work	Risk assessment, risk communication and community organization	Clarifies applicable social work practice methods
Studies on the Mekong Delta	Salinity intrusion, drought, subsidence, migration and livelihood transition	Establishes the context for application and practical requirements

Source: Author's synthesis.

3. RESULTS

3.1. Climate-Induced Livelihood Risks in the Mekong Delta

The Mekong Delta is a climate-vulnerable livelihood region because many communities depend directly on land, water, seasonal cycles, fisheries and riverine-coastal ecosystems. Climatic and environmental changes can rapidly become livelihood risks for individuals, households and communities. Salinity intrusion, drought, sea-level rise, land subsidence, riverbank and coastal erosion, changing flows and declining freshwater availability have increased livelihood vulnerability in the region. Minderhoud et al. (2017) show that groundwater extraction has contributed substantially to subsidence in the Mekong Delta, thereby intensifying long-term risks when combined with sea-level rise and other environmental pressures.

From the perspective of sustainable livelihoods, climate risk in the Mekong Delta does not merely reduce agricultural output or household income. It also affects fundamental livelihood capitals. Natural capital declines when land becomes saline, freshwater is reduced or coastal ecosystems are altered. Financial capital is weakened when households face crop failure, income reduction, increased production costs or debt. Physical capital is threatened by erosion, flooding, damage to houses and loss of production assets. Human capital is affected through health, labour capacity and access to information. Social capital may be weakened by migration, community fragmentation or conflicts over natural resources.

The impacts of climate change are not evenly distributed. Poor households, land-poor or landless households, small-scale farming households, coastal aquaculture households, women, older persons, children, persons with disabilities, informal workers and migrants often have fewer resources to prepare for, adapt to or recover from shocks. By contrast, groups with more financial capital, technical knowledge, social networks and access to policy support often have more opportunities to transform production or diversify livelihoods. Livelihood risk is therefore not only an economic issue but also a question of social justice in the context of climate change.

Salinity intrusion and drought are two prominent risks. When salinity moves further inland, freshwater for domestic use and production declines, agricultural land is affected, cropping calendars change and adaptation costs increase. Prolonged drought increases the cost of water, irrigation and storage, while also affecting health, sanitation and daily life. For poor and small-scale producer households, limited investment capacity often leaves them in a reactive position in the face of climate shocks.

Livelihood transition and migration are common responses to climate risks, but these responses may also generate new social risks. Shifting from rice cultivation to aquaculture, from agriculture to non-agricultural work or from staying in the locality to labour migration requires capital, skills, information, social networks and risk tolerance. Without appropriate support, livelihood transition can lead to debt, production failure, unsafe work, risky migration or disruptions in family care.

From a social work perspective, these risks indicate the need to add a social dimension to livelihood adaptation programmes. Technical solutions such as irrigation infrastructure, adaptive crop varieties or climate forecasting are necessary, but without a social approach they may overlook vulnerable groups, increase inequality or create unsustainable forms of adaptation. Social work can contribute through vulnerability assessment, community mobilization, strengthening social capital, service linkage, decision-making support, protection of vulnerable groups and promotion of equity in climate adaptation.

Table 2. Climate-induced livelihood risks in the Mekong Delta and social work responses

Livelihood risk	Vulnerable groups	Social consequences	Social work responses
Salinity intrusion and freshwater decline	Rice and fruit-growing households, poor households, women and older persons	Reduced income, higher water costs, family stress and conflict over water use	Risk communication, household planning support, and linkage to clean water and livelihood support
Prolonged drought	Small-scale producers, undercapitalized households and seasonal agricultural workers	Crop failure, debt, reduced health and education expenditure, and declining health	Needs assessment, linkage to social assistance and support for self-help groups
Subsidence, erosion and land loss	Riverbank and coastal households, households without reserve assets	Relocation, loss of housing, psychological insecurity and community disruption	Psychosocial support, linkage to resettlement policies and protection of vulnerable groups
Unsafe livelihood transition	Poor households, land-poor households, women and older workers	Investment debt, production failure and unemployment	Livelihood decision-making support and linkage to vocational training, credit and appropriate services
Migration due to livelihood decline	Young workers, migrant women, children and older persons left behind	Care disruption, labour risks and limited access to social services	Safe migration information, service linkage and support for families with migrant members

Source: Author's synthesis.

3.2. Social Work Approaches to Preventing Climate-Induced Livelihood Risks

Climate change makes livelihood issues more than matters of production, income or occupational transition. Livelihood risk results from the interaction of environmental change, social inequality, resource deficits, limited policy access and the self-organizing capacity of communities. Based on the literature review, five social work approaches are particularly relevant to the prevention of climate-induced livelihood risks.

First, green social work provides an important foundation. Dominelli (2012) develops green social work by arguing that environmental crises cannot be separated from poverty, inequality, power relations and social justice. For livelihood risk prevention, this approach places vulnerable groups at the centre of adaptation strategies and asks who has the capacity to adapt, who is left behind, who benefits from adaptation programmes and who bears new risks during livelihood transition.

Second, eco-social work emphasizes the relationship between people, communities and the natural environment. Ramsay and Boddy (2017) analyse environmental social work as a field connecting people and the environment, arguing that social problems cannot be fully understood when separated from ecological conditions and the material contexts in which people live. This approach prevents the reduction of livelihoods to income alone and enables analysis of relationships among households, resources, community networks, institutions and ecosystems that support livelihoods.

Third, disaster risk reduction and resilience-oriented social work are closely linked to livelihood risk prevention. The Sendai Framework emphasizes understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction and enhancing preparedness for response, recovery and better reconstruction (UNDRR, 2015). These priorities are compatible with social work's preventive orientation, in which social workers may participate in risk assessment, prevention planning, risk communication, support network development and strengthening community self-organization.

Fourth, community-based social work and community-based adaptation view communities not merely as recipients of policy or services but as actors with knowledge, experience, resources and self-organizing capacity. This approach is relevant to the Mekong Delta because local people possess detailed knowledge of seasonal calendars, water sources, land conditions, kinship networks, occupational groups and informal support channels. Social work can help organize community groups, promote dialogue, strengthen social capital and bring the voices of marginalized groups into adaptation processes.

Fifth, climate justice and social protection emphasize that different groups do not experience climate impacts in the same way and do not have equal adaptive capacity. From a social work perspective, preventing livelihood risks requires attention to the rights, voice, resource access and protection of vulnerable groups. Social protection in this context is not only post-crisis assistance but also a system that helps people anticipate, cope with and recover from risks through social assistance, vocational training, appropriate credit, health and education services, safe migration support and poverty reduction programmes.

These five approaches are not separate but mutually reinforcing. Green social work offers a value orientation toward social and environmental justice; eco-social work provides a systems view of people, livelihoods and ecosystems; disaster risk reduction social work emphasizes prevention and resilience; community-based social work identifies methods of participation and group organization; and climate justice and social protection ensure that adaptation processes do not exclude or further harm vulnerable groups.

Table 3. Social work approaches related to climate-induced livelihood risk prevention

Approach	Core content	Value for livelihood risk prevention	Implications for the Mekong Delta
Green social work	Links environmental crises with poverty, inequality and social justice	Identifies disadvantaged groups and promotes equity in adaptation	Places poor households, land-poor households, women, older persons and informal workers at the centre
Eco-social work	Views people, livelihoods and ecosystems as interdependent	Analyses livelihood risk as a social-ecological problem	Assesses the effects of salinity, subsidence and livelihood transition on families, communities and social capital
Disaster risk reduction social work	Emphasizes risk understanding, prevention, recovery and resilience	Shifts from post-crisis support to risk prevention before major losses occur	Maps livelihood risks, communicates salinity-drought risks and develops household and community preparedness plans
Community-based social work	Regards communities as actors with knowledge, experience and self-organizing resources	Strengthens social capital, participation and self-help groups	Develops groups affected by salinity intrusion, women's livelihood groups and community risk monitoring groups
Climate justice and social protection	Focuses on unequal climate impacts and the right to support	Ensures adaptation does not increase inequality	Links social assistance, vocational training, safe migration support and equity monitoring in livelihood transition

Source: Author's synthesis.

3.3. An Integrated Social Work Framework for the Mekong Delta

On the basis of the approaches discussed above, this article proposes an integrated social work framework for preventing climate-induced livelihood risks in the Mekong Delta. The framework is not an empirically validated model but a conceptual and practice-oriented framework that may inform further research, social work education and community intervention design.

The proposed framework is based on three principles. First, livelihood risk should be viewed as a social-ecological issue in which environmental impacts are connected to economic conditions, social relations, household resources, local policies and community capacity. Second, livelihood risk prevention should take place before households and communities fall into crisis. Third, livelihood adaptation should be equitable, meaning that vulnerable groups must have access to information, resources, services and opportunities to participate in decision-making.

The first component is livelihood risk assessment and vulnerability mapping. Social work needs to identify who is at risk, at what level the risk occurs and what coping resources are available to households, groups and communities. Assessment should include income, dependence on climate-sensitive livelihoods, access to land and water, debt, health, occupational skills, care burden, access to information and access to support policies.

The second component is risk communication and adaptive capacity building. Risk communication should not be limited to technical information about drought, salinity intrusion or weather forecasts. It should help people understand how such risks relate to livelihoods, health, family care, expenditure, debt, migration and access to social services. The objective is to help households and communities make safer livelihood decisions under uncertainty.

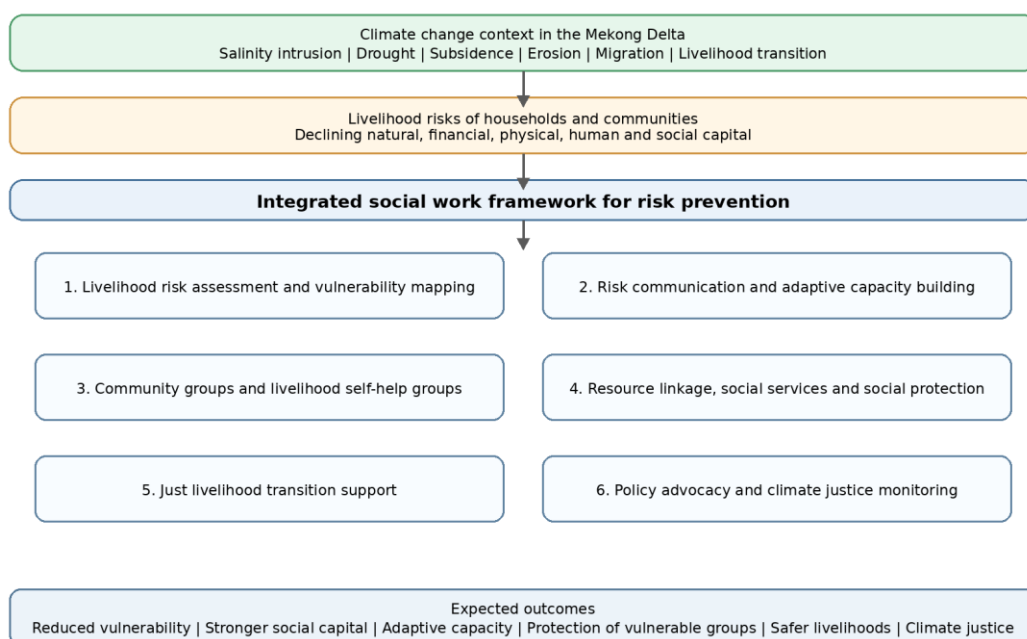
The third component is organizing community groups and livelihood self-help groups. Groups such as households affected by salinity intrusion, women undergoing livelihood transition, poor coastal households, return migrants or young people developing green livelihoods can provide spaces for sharing experience, psychosocial support, skills learning, information access and collective linkage to external resources.

The fourth component is resource linkage, social services and social protection. Social work can link people to social assistance, vocational training, appropriate credit, insurance, health care, education, clean water, housing, relocation support, migrant support and poverty reduction programmes. This linking role is particularly important for households that lack information, documents, application capacity or voice in resource allocation.

The fifth component is support for just livelihood transition. Livelihood transition should consider household financial resources, health, working age, occupational skills, gender roles, care responsibilities, access to land and water, social networks and tolerance of risk. Social work does not replace agricultural, economic or environmental expertise, but it can help people identify the social risks of livelihood choices and connect them with appropriate support.

The sixth component is policy advocacy and climate justice monitoring. Social work should reflect the voices of vulnerable groups, identify policy gaps and promote more inclusive adaptation programmes. Climate justice monitoring asks whether poor households can access livelihood transition capital, whether women have a voice in livelihood decisions, whether older persons, persons with disabilities and children are considered in relocation plans, and whether migrants can access social services at destination areas.

Figure 1. Integrated social work framework for preventing climate-induced livelihood risks in the Mekong Delta



Source: Author's proposal based on social work approaches and the sustainable livelihoods framework.

Source: Author's proposal based on social work approaches and the sustainable livelihoods framework.

In summary, the proposed integrated social work framework does not replace technical, economic or natural resource management solutions in climate adaptation. Instead, it adds the social dimension of livelihood risk prevention by emphasizing vulnerability assessment, community mobilization, resource linkage, protection of vulnerable groups, support for just livelihood transition and policy advocacy.

4. DISCUSSION

The review and proposed framework suggest that preventing climate-induced livelihood risks should be approached as a social-ecological issue rather than only a technical, environmental or economic problem. In the Mekong Delta, risks such as salinity intrusion, drought, subsidence, erosion, livelihood transition and migration not only reduce production or income but also affect family structures, health, care arrangements, community networks, access to services and social equity.

A key point is the shift from livelihood support to livelihood risk prevention. In many development programmes, livelihood support is understood as providing capital, vocational training, technical transfer or production models. These activities are necessary, but insufficient if they are not accompanied by social risk assessment, identification of vulnerable groups, decision-making support and equitable access to resources. Livelihood risk prevention focuses on the stage before crisis occurs, helping households and communities recognize risks, prepare resources and avoid unsafe adaptation decisions.

This approach also broadens the concept of livelihoods in social work research and practice. If livelihoods are understood only as income or employment, solutions tend to be economically oriented. However, within the sustainable livelihoods framework, livelihoods consist of multiple forms of capital. Climate change can weaken these capitals simultaneously, leaving households not only with reduced income but also with weaker support networks, insecure housing, poorer health, limited information and reduced participation in decision-making.

The article also emphasizes that not all adaptation strategies are equitable. Households with more capital, land, technical knowledge and wider social networks often access adaptation opportunities more easily. Poor households, land-poor households, women, older persons, persons with disabilities, informal workers and migrants may face greater barriers. If adaptation policies do not address these differences, adaptation may increase inequality. Social work therefore needs to integrate climate justice into analysis and practice.

Theoretically, the article contributes to expanding the scope of social work in the context of climate change. Approaches such as green social work, eco-social work, disaster risk reduction social work and climate justice show that social work can take a more proactive role in risk prevention rather than only intervening after harm has occurred. Practically, the proposed framework can serve as an initial guide for social work education, community development programmes and field research design in the Mekong Delta.

The article has several limitations. It is a conceptual review and has not empirically tested the proposed framework in specific communities. In addition, population groups across the Mekong Delta differ in livelihoods, culture, resources and exposure to risk. The framework therefore needs to be adapted to specific localities, population groups and risk types before practical application.

5. CONCLUSION AND IMPLICATIONS

Climate change is increasing livelihood risks in the Mekong Delta not only through direct impacts such as salinity intrusion, drought, subsidence, erosion and production instability, but also through social consequences such as declining income, household debt, migration, weakened community networks, psychological insecurity and unequal access to adaptive resources. Climate-induced livelihood risks should therefore be viewed as social-ecological risks.

Based on the review of social work approaches related to climate change, the article shows that social work has a necessary role in preventing livelihood risks rather than only providing support after losses have occurred. The proposed integrated framework includes six components: livelihood risk assessment and vulnerability mapping; risk communication and adaptive capacity building; community groups and livelihood self-help groups; resource linkage, social services and social protection; support for just livelihood transition; and policy advocacy and climate justice monitoring.

Theoretically, the article contributes to broadening social work research in the context of climate change. In social work education, training institutions may integrate climate change, green social work, eco-social work, disaster risk reduction, sustainable livelihoods and climate justice into courses on community social work, community development, social welfare and social policy.

In practice, social workers, local social officers and community organizations in the Mekong Delta may use the proposed framework to identify intervention points in livelihood risk prevention. The role of social work is not to replace agriculture, environmental management or natural resource governance, but to add a social dimension, protect vulnerable groups and promote community participation in adaptation processes.

Because this article is based mainly on literature review and conceptual synthesis, the proposed framework needs further testing in field studies. Future research may examine selected provinces strongly affected by salinity intrusion, drought, erosion or livelihood-related migration in order to analyse needs, resources and the applicability of the integrated social work framework.

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