

ENHANCING LIVELIHOOD SECURITY THROUGH SUSTAINABLE
DEVELOPMENT WITH A SPECIAL EMPHASIS ON DISASTER MANAGEMENT



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Abstract

Disasters have the capacity to inhibit socio-economic growth as well as development. The effects of any disaster present a significant obstacle to realizing sustainable goals. Additionally, the capacity of each household to withstand stress and repeated shocks varies greatly. When dealing with relief and reconstruction following disasters, developing nations frequently experience post-event financial issues which have several detrimental implications on their long-term development objectives. There will be growing threats to livelihood security along with leading a safe and secure life as the symptoms and effects of climate change become more and more obvious. In this light, this article tries to emphasize the necessity to include livelihood security as a crucial component of disaster management that also aligns with sustainability goals. The concept of sustainable livelihood security goes beyond the conventional definitions and approaches for eradicating poverty in an effort to more thoroughly improve security of livelihood. A way of life is deemed sustainable when it can endure external shocks and stress factors, recover from them, and maintain or develop its asset base. To improve people's capacity to deal with disaster across the full range of physical, social and economic difficulties, new adaptive strategies are required. Economic and social progress greatly depends on either people or facilities, and hence, livelihoods are interconnected. Successful livelihood strategies should lead to a variety of economic and non-economic benefits, such as higher income and improved economic viability. Large-scale communal facilities are crucial for safeguarding and advancing livelihoods. Moreover, it is understood that the interaction of social, economic and political strategies and infrastructures pre- and post- disaster is a necessary component of disaster management and eventually sustainability and livelihood security.

Keywords: Climate Change, Disaster Management, Sustainability and Livelihood Security.

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Introduction

More people are being affected by natural disasters on a global scale, with climate-related occurrences being the most severe, pervasive and frequent. Scientists contend that anthropogenic climate change is to blame for the unpredictable nature of the climate (Shultz & Rechkemmer, 2022). Climate predictions, for instance, show that in the driest regions of the planet, the frequency of days with exceptionally heavy rainfall has grown by 1 to 2% every decade. Over the ensuing decades, this increase in rainfall will cause more flooding (Guiteras, 2009). A severe threat to food security in many rural economies is revealed by recent studies on how climate change affects agriculture in

developing countries. Rising temperatures and varying precipitation levels have an impact on human security. Disasters can be thought of as a serious disruption of a society's ability to function, resulting in significant losses of people, property or the environment that exceed the ability of the affected society to deal with the situation using its own resources and necessitate a request for external assistance on a local, national or international level (Holzmann & Jørgensen, 2001).

Disasters have the potential to halt socioeconomic and development progress, bringing millions of people into utter poverty or, in the majority of disaster zones, further impoverishing the already impoverished. Although the effects of these disasters are felt

worldwide, poor countries frequently bear the brunt of their effects, particularly the poor and marginalized populations there. So, in addition to being a humanitarian concern, the effects of disasters pose a serious hurdle to achieving the Millennium Development Goals (Karen et al. 2013). Disasters can result in the significant damage of physical, human, financial, environmental and social capital, which obviously has a negative impact on overall development and economic stagnation. Long-lasting consequences can be left behind by disasters. Since some traumatic experiences may affect norms in ways that enhance group behavior in the wake of a disaster, the effect of disasters on social capital is less evident. Therefore, it is evident that disasters have a very large and primarily negative impact on sources of livelihood, which increases vulnerability, lowers food security, degrades development goals, and increases poverty (Maxwell, et al., 2013). Even though there is little disagreement in the literature about the overwhelming effects of disasters on communities and their livelihood, many organizations, in particular the Department for International Development, CARE, Oxfam, and United Nations Development Program, have well developed and tested a number of conceptual frameworks on sustainable livelihoods in an effort to lessen the detrimental effects of natural disasters on individual, household, and community livelihood (Scoones, 2009). These livelihood methods place a strong emphasis on comprehending the context in which people live, the resources at their disposal, the livelihood strategies they employ in defiance of established institutions and policies and the intended livelihood outcomes (Adugna and Wagayehu, 2008).

Livelihood Security in light of Disaster Management

One needs suitable and ongoing access to income and resources in order to meet basic needs such having enough access to food, potable water, healthcare facilities, educational opportunities, housing and time for community involvement and social integration. Each household may have a number of entitlements that make up its means of subsistence. These privileges are determined by the household's resources and standing within the social, political and economic system (Drinkwater and McEwan, 1992). Risk of livelihood failure determines how exposed a household is to income, food, health and nutritional instability. In order to reduce risks, diminish shocks, and be

ready for emergencies, households' livelihoods are secure when they possess or have access to resources and income-generating activities, including reserves and assets. When a livelihood "can cope with and recover from the stress and shocks, maintain its capability and assets, and create sustainable livelihood possibilities for the future generation," according to Chambers and Conway (1992), it is considered to be sustainable. Unfortunately, not all homes can handle stress and frequent shocks in the same way. The complicated balancing act poor individuals engage in between opposing needs for now and future food supplies, asset preservation, and revenue production (Maxwell and Smith, 1992).

Swaminathan (1991) defined sustainable livelihood options as those that are socially just, economically viable, and ecologically secure. He emphasized the importance of these three factors. The three pillars of competency, equality, and sustainability were established as the core of the idea of rural livelihood security by Chambers and Conway in 1992. The principle encompasses the protection or assurance of the means of subsistence for the masses both now and in the future, demonstrating care for both intra- and inter-generational justice. The approach to sustainable livelihood security has an impact on both macro and micro levels. The macro-level proposals for ensuring sustainable livelihood security include stabilising the population, reducing forced migration, restricting exploitation, encouraging long-term sustainable resource management, and others. At the micro- and local levels, "sufficient stocks and flows of food and currency to meet basic needs" and "access to resources, income and assets to counteract shocks" are crucial components of sustainable livelihood security (McCracken and Pretty, 1988). Even if distress migration may be managed primarily by reducing regional imbalances of economic development, resource degradation and social exploitation can only be minimized by equitable distribution, asset ownership, and access to natural and technological resources. The maintenance of economic prosperity also requires the assurance of ecological security. Because it tries to provide the tools for doing so, sustainable livelihood security is more sustainable as a tool for policy than as a strategy focused just on meeting fundamental needs. By assuring sustainable livelihood stability and enabling people to meet their own needs, lessening environmental pressure would enable more people to meet their future livelihood demands. Beyond the traditional definitions and

approaches for eradicating poverty, the concept of sustainable livelihood reflects an effort in this direction. Conventional definitions of poverty were a limited idea since they primarily focused on particular characteristics or expressions of it, such as poor income, and neglected other important factors like vulnerability and social exclusion. It is now acknowledged that more focus needs to be placed on the different elements and procedures that improve the ability of the poor to support themselves in a way that is sustainable in terms of the economy, the environment, and society.

Additionally, livelihood involves controlling social interactions, maintaining individual and collective identities, and coordinating these duties with one another. Livelihood can also refer to people's efforts, willingness, and capacity to deal with disruptions, risks, and stresses like natural disasters, epidemics, financial crises, or armed conflicts, as well as competition on a national and international level. In addition to creativity and new opportunities these reduced definitions of livelihood also account for the various goals of ending poverty through the accelerated development of human and social capital. As a result, the term "livelihood" is quite inclusive and refers to anything related to human wants and abilities.

Coping Mechanism towards Disaster Management in context of livelihood Security

A concept created to better comprehend and assess the livelihoods of the poor was the idea that livelihood assets are subject to climatic variability with grave consequences for food security and sustainable livelihood (Ashley and Carney, 1999). The idea of a sustainable living combines the weaknesses of family and individual survival tactics. These basically consist of people's pursuits and resources that allow them to maintain a sufficient standard of living, as well as other goals like risk reduction and the circumstances that permit or impede access to pursuits and resources by different people (Ellis, 2000). Beginning with the vulnerable environment in which people reside and the resources (human, social, ecological, physical, and financial capital) they have access to in order to sustain their livelihoods, the strategy takes a holistic approach. The conventional framework identified a variety of problems and difficulties that needed to be addressed, such as the requirement to acknowledge the "uneven emphasis or neglect" (Ashley and Carney, 1999) of specific problems that receive insufficient attention and

comprehend sustainability and the connection to poverty. Among these, disaster management is an important aspect. However, the framework has the advantage of emphasizing the development of "shared values" and avoiding intellectual "hard selling", opening the door for the incorporation of a stronger Disaster Management approaches under its aegis. It consists of three elements: the first is the presence of efficient disaster management organizations within the relevant regional government and within the national government that can serve as transformative institutions. Second, efficient Disaster Management systems, such as resource allocation and emergency planning, can change the way things are on the ground. Last but not least, a greater comprehension of methods for decreasing the likelihood of disasters, especially those related to flood control that will ensure genuine actions to reduce vulnerabilities and are not just restricted to urgent disaster response.

The repercussions of natural disasters can usually be dealt with by more developed countries, while poorer countries suffer significant population losses that have an influence on their resources and ability to support important social and economic initiatives. The ability of poor countries to finance or manage relief and recovery activities following disasters is sometimes hampered by post-event liquidity difficulties, which has a substantial influence on their long-term development goals. For instance, recovery funds from the central government and other sources were drastically insufficient after the 2001 earthquake in Gujarat, India, and actual support only covered about 30% of the demands of the state government for post-disaster rehabilitation. Therefore, such a lack of financial stability might also indicate extremely detrimental fiscal impacts as a result of natural disaster events. Due to these, the majorities of developing countries typically react by using funds from their budgets or previously compensated development loans, as well as by depending on assistance from the international community, which is frequently insufficient, associated with longer time lags, and hardly acts as an incentive for risk reduction. Therefore, enhanced resource management and growth in disaster areas, particularly in developing nations, require good risk management to prevent disasters and disaster-appropriate response systems when disasters happen.

According to Rusel et al., (2015) the post-disaster rehabilitation phase must prioritise the preservation and improvement of livelihoods. As sustainable livelihoods transition from the

transitional period to the developmental phase, pragmatic livelihood solutions are needed to support, protect, and advance them. To increase people's ability to handle crises across the full spectrum of physical, social, and economic obstacles they face and to recover even more powerfully than before, new solutions are needed. Resilience in this context refers to a person's capacity to deal with adversity and emerge from a significant catastrophe, such as an earthquake, stronger than before. If there is no shift from offering short-term help to longer-term support for communities in danger, there is this risk of wasting money and weakening the target resilience.

Sustainable Approach to Livelihood Security in purview of Disaster Management

Adequate adaptation strategies are necessary to reduce hazards, with a stronger emphasis on the connections to disaster management. Concerns were raised about how natural disasters would affect people's ability to support themselves. This was crucial for developing countries, which are home to the vast majority of the world's poor and where livelihoods are anticipated to become unstable due to the negative effects of an increase in natural disasters, including but not limited to those caused by climate variability, as they are expected to have an adverse impact on their economies (Guha Sapir et al. 2011). Everyone believes that climate change and the subsequent natural disasters have an impact on the security of one's means of subsistence, particularly in less developed countries where states and risk markets are not active (Morton, 2007).

The sustainable livelihood method involves adapting to anything from seasonal floods or droughts to changing family dynamics, economic cycles, or political upheaval and is seen as a normal part of coping with difficulties and change in life. This is a substantial shift from the traditional approach to risk reduction, which starts with hazards, vulnerabilities, and disaster risk and then looks for connections and correlations with development and ways to integrate disaster management into development (Dewanti, et al., 2019). A way of life is deemed sustainable if it can endure external shocks and stress, recover from them, and maintain or expand its asset base. When a way of life can endure external shocks and stressors, recover from them, and maintain or expand its asset base, it is said to be sustainable. The expected outcomes of effective livelihood strategies include better access to services like health, water, power and education as well as better

nutrition. Increased well-being (which includes intangible elements like self-esteem, a sense of control and inclusion, personal safety, community participation and political enfranchisement and preservation of cultural heritage) is also expected. Working with livelihoods to reduce disaster risk is frequently categorised into three main areas of intervention: providing for livelihoods, protecting livelihoods, and promoting livelihoods. The idea of "livelihood transformation," which refers to changing social relations by making people vulnerable and limiting their possibilities for a living, has gained a lot of attention recently.

It is useful to describe the operational framework by which livelihood interventions are frequently designed and implemented in order to frame the narratives and ensure discussion. This approach obliquely divides livelihood interventions into three overlapping phases that typically correlate to the population's immediate, near-term and long-term needs. Providing essential food and non-food products required for survival during the acute period of a disaster is usually a part of the livelihood provisioning operations. To protect, replace and restore the productive assets needed to begin or maintain a livelihood are the objectives of the livelihood protection phase of interventions. The livelihood promotion interventions work to build livelihood resilience to future disasters by establishing and improving livelihoods to make them more economically and environmentally sustainable.

These phased activities will typically build on one another. Each set of activities will require a different amount of time depending on the simultaneous interventions that need to be made because households' and communities' recovery rates will vary. Protecting your livelihood aims to improve your household's present coping and management strategies. It typically focuses on conventional programmes, such as risk mitigation and disaster planning, and it can also involve a variety of support measures, such as transferring food or supplies, distributing seeds and tools, or carrying out public projects. Many of the steps that organisations in drought-prone areas must take to preserve livelihoods can be viewed as general development interventions in addition to disaster mitigation.

Consideration to enhancing livelihood security vis-à-vis Disaster Management

Livelihoods are interrelated, and all productive initiatives depend on either resources (people or infrastructure). Disaster risk reduction

programmes must be able to implement a similar integrated approach when it comes to livelihoods, and livelihood development must be supported by livelihood protection (Jones, et al., 2010). There are many different intervention kinds that can increase the resilience of livelihoods, but choices should be made with a specific objective in mind and as part of a set of policies that will work in harmony. A single area of development might occasionally yield numerous advantages in terms of improved livelihood and risk reduction. Since the household serves as the basis for many livelihood activities, interventions in support of livelihoods frequently centre on it. However, it's important to consider the impact on the whole. People and households depend on the assistance of the community and its institutions to varying degrees. Large-scale communal facilities are essential for preserving and improving means of subsistence. Infrastructure built locally or within a community, such as irrigation channels, storm drainage systems, tube wells, water pipes, sewerage and sanitation systems, flood defences, retaining walls, reservoirs, roads, bridges and footpaths, significantly contributes to the community's resilience and well-being as well as to the maintenance of livelihoods and the promotion of economic activities like public schools, health clinics, and shelters.

Building, renovating, and upgrading such infrastructure has a quick and noticeable impact. It also plays a crucial role in many disaster risk reduction activities. Additionally, it helps the community by generating jobs, giving people the chance to learn new skills, and it can make the best use of local resources and technologies. It is becoming increasingly clear that sustainability depends on buildings being connected to infrastructures like grids, roads, public transportation, parks, etc. Even if local scale sustainability efforts have been common, it is clear that connections with infrastructures need to be taken into account.

Underdevelopment and ineffective development strategies raise exposure to risks, which breeds more disasters—big or small—of all sizes. In turn, calamities make future development more challenging for communities devastated by disasters who have lost their means of subsistence. It is advantageous to have a stable policy environment in which local solutions could emerge (Collins, 2009). There is widespread agreement that post-disaster help, recovery, and development must be better integrated, which points to the need for a longer-term strategy. In essence, it means that rather than merely reinstating the risk that already exists, relief and rehabilitation activities

should, whenever possible, promote long-term growth and the reduction of vulnerability. Operationally, it is beneficial to search for parallels in their core beliefs: intervene as early in the disaster cycle as feasible to safeguard livelihoods and lessen susceptibility; include development concepts in disaster relief efforts (e.g., strengthen local capacity-building efforts and employ participatory strategies); disaster aid should be used to rebuild livelihoods and restore assets in addition to providing for immediate necessities; using disaster relief to ease tensions between communities; surviving on one asset is not enough. It must consider the complexity of livelihood strategies and the possibility that multiple-level interventions would be required in order to restore devastated livelihoods.

Livelihoods are dependent on both assets and talents (Shrinivasan, et al., 2005). Livelihoods may depend on assets in the public or corporate sectors in addition to personal assets. A livelihood is sustainable if it can withstand stress and shocks and bounce back from them, if it can enable or improve its capabilities and assets, and if it doesn't deplete the natural resource base. Sustainable livelihood is the long-term goal for reducing poverty that gives proper priority to development on many levels, scales, and sectors. It is regarded as a conceptual framework that may be used to assess and analyze the sustainability, competence, security and resilience of livelihoods on different scales and under different conditions. It strives to come up with comprehensive answers under challenging and adaptable political and economic circumstances.

Conclusion

Climate change and the resultant impacts continue to pose significant threats to socio-economic progress and development wherein livelihood security forms and important aspect in the socio-economic fabric. The ability of a society to function is seriously disrupted by disasters, which cause significant losses of people, property and/or environment that are more than what the affected society can handle on its own and call for the use of disaster management solutions. However, it has been discovered that these interventions are primarily focused on rebuilding infrastructure-related losses with little effort put towards making up for lost livelihood. There is an urgent need to coordinate disaster management to incorporate livelihood security as an important goal and target that supports sustainable development at the same time as the impact of climate change is discovered to be increasing and becoming more

common. The goal of the livelihood protection phase of interventions is to safeguard, replace and rebuild the productive assets required to start a new or existing livelihood. The livelihood promotion interventions aid in building livelihood resilience to upcoming disasters by establishing and enhancing livelihoods to make them more economical and sustainable. Fundamentally, it means that disaster management should, if possible, promote long-term development and reduce vulnerability rather than merely re-creating the risk that already exists.

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