Community Resilience Framework
Sri Lanka

DISASTER MANAGEMENT CENTER
MINISTRY OF DISASTER MANAGEMENT

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MESSAGE FROM SECRETARY, MINISTRY OF DISASTER MANAGEMENT

In today's context Disaster Management is not only about responding to emergencies in times of disasters but also about reducing risks and strengthening resilience of communities and individuals to ensure the development progress is not reversed. The challenge is to help people and communities to recover in a way that puts them in a stronger position to deal with the next crisis that is, to help them 'built back better'.

It is clear that the frequency and intensity of disasters will increase in years to come, while the impact of natural events will often be exacerbated by climate change, environmental degradation, significant food and energy price volatility, population growth, and rapid and unplanned urbanization, among others.

Therefore, it is necessary to change the way we "invest". We need to focus not only on addressing the consequences of disasters but on reducing the underlying causes of vulnerabilities and enhancing the preparedness and resilience of people and communities. While traditionally, people were assisted to withstand the consequences of disaster, we should now take a new approach which invests more in building the capacities of individuals and communities to reduce their vulnerability and adapt to existing and emerging risks in normal times so that they can bounce back from crises they encounter, and hopefully improve their lives.

The Sri Lanka Comprehensive Disaster Management Programme, which is the government strategic framework for five years mainly focusing to build a resilient nation through a multi-hazard, multi-sector, multi-agency and multi-stakeholder platform. I'm delighted to note, this framework came out through SLCDMP led by the DMC which will enabling the national vision of "Safer Sri Lanka" in bringing all actors to collaborate in risk sensitive development planning putting communities in the middle of the approach with more emphasis on sustainability.

S S Miyanawala
Secretary

MESSAGE FROM DIRECTOR GENERAL, DISASTER MANAGEMENT CENTER

ACRONYMS

ADPC	Asian Disaster Preparedness
ARPAs	Agrarian Research and Production Assistants
CBDRM	Community Based Disaster Risk Management
CBOs	Community Based Organizations
CCA	Climate Change Adaptation
CEA	Central Environmental Authority
DAD	Department of Agrarian Development
DDMCU	District Disaster Management Coordinating Unit
DMCU	Disaster Management Coordinating Unit
DesInventar	Sri Lanka Disaster Information System
DS	District Secretary
DIA	Disaster Impact Assessment
DM	Disaster Management
DMC	Disaster Management Centre
DoM	Department of Meteorology
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EW	Early Warning
GN	Grama Niladhari
HFA	Hyogo Framework of Action
IDNDR	International Decade for Natural Disaster Reduction
INGOs	International Non-Governmental Organizations
LA	Local Authority
LG	Local Government
MDM	Ministry of Disaster Management
NBRO	National Building Research Organization
NCDM	National Council for Disaster Management
NDMCC	National Disaster Management Coordination Committee
NGOs	Non- Governmental Organizations
NPD	National Planning Department
PC	Provincial Council
SFDRR	Sendai Framework for Disaster Risk reduction
SLCDMP	Sri Lanka Comprehensive Disaster Management Programme, 2014 – 2018
SLRCS	Sri Lanka Red Cross Society
UN	United Nations
UNDP	United Nations Development Programme

PREAMBLE

Given the increasing regularity and severity of extensive disasters, Sri Lanka Government has recognizes that a national, coordinated and cooperative effort is required to enhance its capacity to withstand and recover from negative consequences of adversities. A disaster resilient community is one that works together to understand and manage the risks that it confronts. Disaster resilience is the collective responsibility of all sectors of society, including all levels of government, business, the non-government sector and individuals. If all these sectors work together with a united focus and a shared sense of responsibility to improve disaster resilience, they will be far more effective than the individual efforts of any sector.

The Disaster Management Policy of Sri Lanka which has derived through major lessons of post Tsunami recovery process emphasizes, building a resilient community to withstand the debilitating impacts of disasters through a multi-dimensional and multi-stakeholder approach. The Ministry of Disaster Management has introduced "Sri Lanka Comprehensive Disaster Management Programme 2014-2018" as the strategic framework towards building a Safer Sri Lanka. The strategy emphasizes ensuring community resilience through long term disaster risk reduction, incorporated into development planning process at all levels. Further, risk governance and investing more towards building resilience are key thrust areas of the Sendai Framework for Disaster Risk Reduction (SFDRR 2015-2013) which the government of Sri Lanka agreed to strive towards building a safer nation.

The Community Resilience Framework proposes a risk sensitive development incorporating past lessons, current practices and looking at futuristic development gains in line with national and international strategies on building resilience.

ACKNOWLEDGEMENT

This framework represents the collective efforts of a large number of actors who are deeply committed to intensifying the opinions of government and development organizations in setting public agendas for advancing sustainable, resilient development.

This framework was a collaborative effort between the Disaster Management Center (DMC), Ministry of Disaster Management and its Comprehensive Disaster Management Programme and also the Disaster Risk Reduction Consortium under the DipECHO partners in Sri Lanka.

The Disaster Management Center wishes to acknowledge the tireless efforts of the Technical Working Group included; Sunil Jayaweera, Chathura Liyanaarachchi, Buddhika Hapuarachchi, Nuwan Madhawan Arachchi, U W L Chandradasa, Damitha Chanaka, Ajith Melder, Kaushal Atthanayake, Menake Wijesinghe, Gothami Chandraratne, Lafir Mohamed, Anoja Seneviratne, Sureka Perera, Sugath Dissanayake and Janaka Kodithuwakku. Foremost the Disaster Management Center wishes to extend special gratitude to Indu Abeyratne for his extensive work in authoring the framework and diligent function as the Technical Facilitator of the development process.

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Finally the DMC would like to pay sincere gratitude to all contributors for their energy, passion, and commitment in building safer nation.

Section 1: Background

Sri Lanka is vulnerable to disasters due to their high population density and economic activities which are mainly concentrated in flood prone and coastal areas. The disasters which threaten the country are mostly weather and water related such as flooding, landslides, lightning, and drought. Sri Lanka was severely affected by the 2004 Indian Ocean earthquake and tsunami, leaving thousands of people killed and displaced. Significant changes occurred to the disaster management system after this event. Development of disaster management plans from national to local level, establishment of coordination for risk reduction, initiating mainstreaming DRR into other development sectors, knowledge building programmes at various levels are some of key interventions in related to creating a culture of safety. The Disaster Management Policy of the country is mainly focusing collective responsibility, equality, diversity and inclusion in building a safer nation for all with increased resilience to disasters.

The Government of Sri Lanka (GoSL) affirms to create 2,500 cluster villages governed by the community itself to coordinate the development activities at the rural level (Economic Policy of Sri Lanka 2015). In addition, GoSL is in the process of developing model villages under one million housing program. However, inadequate understanding of risk may disrupt the national targets and anticipated development gains. There are nearly 15,000 Grama Niladhari Divisions (GNDs; refer to a community) in Sri Lanka. All these divisions (Communities) are vulnerable to natural or human induced disasters to some extent. Although complete elimination of disaster may not feasible and not realistic, reducing risk of communities is paramount. Therefore, building resilience of the community and its infrastructure and utility services is essential as the impact of disasters is ever increasing.

The resilience can be obtained through reducing vulnerabilities of people, namely reducing the socio-economic vulnerability, organizational & institutional vulnerabilities, physical and material vulnerabilities etc. Moreover, it is also necessary to look at community development from a broader development perspective which means that, community development investments are inclusive, safer, resilient and sustainable and ensure that it reduce the prevailing vulnerabilities and evading of creating new vulnerabilities in the communities. However, increasing population trend and accelerated growth of development activities and demand for land, compelling the communities to live in unsuitable marginalized lands prone to natural hazards. Therefore, frequent hazards such as floods, landslides, high winds are significantly impacts the rural areas of the country.

The need for enhancing community resilience is reinforced by the lessons learnt from the Sri Lankan experience in Disaster Risk Reduction (DRR) during past two decades. Even though communities have shown high resilience in the face of disasters traditionally, (see section 3), the efforts of the government and the civil society in Community-based DRR have in the past focused only on preparedness, immediate lifesaving responses, and recovery from disasters or crises. This has significantly affected the attitudes and the knowledge of the population at risk, who are also those with least control over development processes. In addition, DRR work had

limited impact as it was too often implemented in isolation, by few agencies, missing the opportunity of involving all the development actors, in particular at Divisional Level.

It is noted that risk reduction must be integrated into public investments policies and planning including community based interventions. Risk assessments at all levels, should be based on analysis of loss and estimation of potential future losses, are essential for informed decision-making. Governments, policy makers and other relevant key stakeholders should encourage the development and financing of plans in a coordinated and coherent manner across sectors recognizing community voices.

a. ***Need:*** The national concerns over the alarming threats of natural disasters has been intensified in recent times, disasters bring about multiple damages to the affected community, but its impacts on individuals depend on the level of exposure and the vulnerability.

   Disaster literature attests that vulnerable people and disadvantaged groups; women, children, marginalized people, are more vulnerable than their counterparts. Further, frequent outbreak of disasters hindered the potential growth momentum of nations in general. Therefore, finding ways and means to minimize disaster risk has been the prime motive of disaster management agencies, policy makers and humanitarian agencies in the recent past in Sri Lanka.

b. ***Methodology:*** The framework is developed through a yearlong consultative process based on the learning of Community Based Disaster Risk Management Programmes which are implemented for last two decades at various scales and also best practices in the region. A technical working group has assigned by the DMC which comprised with DRR practitioners and experts together with government officials to study and derive a conceptual framework for building community resilience in Sri Lanka.

   The draft document has reviewed in quite few forums and presented to district planning groups for initial adoptions at district and divisional level.

   The working group has proposed to test the developed framework for a considerable period of time through available avenues to incorporated DRR into development plans and bring the consensus of policy makers to ratify the framework in the country in building Community Resilience at large.

- ✓ ***The Framework to be tested at selected localities through a guideline (annexed) until June 2016 with the involvement of various stakeholders with the support of ongoing and planned disaster risk reduction programmes.***
- ✓ ***Further the Framework to be consulted at district development platforms, divisional development platforms and also at the national platform with the engagement of different sectors who are engaged in community development.***
- ✓ ***The Framework may finalize upon incorporating comments and suggestions received though the above process at the latter stage of 2016.***

Section 2: Goal & Objectives of the framework

The goal of the resilience framework is to achieve resilience through understanding underlying risk factors. It intends to provide an insight into community based resilience for any interested party working on DRR. For policy makers it is a document that would assist in designing strategies to overcome obstacles imposed due to natural or man-made hazards.

The objective of this framework is to guide and facilitate local authority (Including Divisional Secretariat and local governments) officials and Disaster Management Center members to work towards resilience building at local to divisional level. This entails development planning committee's to assess risks and accordingly plan disaster preparedness to reduce community vulnerability.

In this process the disaster risk assessment is led by the community and facilitated by the local authority development planning groups together with external stakeholders. Vulnerable community representatives will be a part of the risk assessment; whilst inclusion of women, children, persons with disability and aged needs to be ensured. Community Risk Assessment leads to the development plans at community level with adequate emphasis on risk reduction measures and exploring the required resources. Annual Divisional Development Plans and other sources facilitate the budgetary requirement, which leads to successful implementation of these plans. The implementation takes place considering mainstreaming the Disaster Risk Reduction into development.

Specific objectives through the framework are to;

- Direct decision makers to implement development plans with adequate incorporation of risk reduction measures and to mobilize resources towards resilience
- Provide direction to individuals, communities, organizations and practitioners to engage in building community resilience
- To provide a common implementing guideline for all actors who support and ensure that community resilience is strengthened, and community level risk reduction initiatives are sustainable

Target Audience

The resilience framework targets the decision makers at District, Divisional or Local Authority Levels and identifies a range of outcomes (see Section 5) that are to be achieved through adopting a unique approach in building community resilience. However some outcomes could be influenced by DRR interventions of organizations linked to national, sub-national or local levels and by factors such as socio-economic disparities and other macro-economic indicators such as health, education, economy and infrastructure.

The framework outlines a set of recommendations for practitioners in the field of community development, to be used in development planning, in identifying available investments and to maximize benefits to communities who face risks of disasters.

Section 3: Community based risk management System in Sri Lanka

There had been different community governance systems for different purposes such as agriculture, irrigation and social institutions in Sri Lanka during ancient times. "Wel Sabha, Variga Sabha, Daayaka Sabha" are some examples for such systems. These were abandoned by the colonial regime but, some of them reappeared upon identifying them as valuable tools for social governance. Although the term was not used, community participation was practiced at various levels in the post-colonial times. Community-based approaches are considered an important tool in bottom-up participatory development. Its value with respect to tapping into local knowledge and experience to arrive at relevant solutions, local capacity strengthening and building local ownership and commitment are well known.

Within the past two decade many different development agencies and the government specially the DMC piloted various approaches to promote community participation in the local level development planning processes at the GN level. While some organization had included DRR into development planning at GN level through inclusive approaches, other have confined their activities only to develop GN/Village level development plans without due consideration on risk reduction aspects.

a. Risk Management – Historical Review

Sri Lanka has historical evidence of managing disaster risk. This proven history of Disaster Risk Reduction (DRR) goes back to the village tank (reservoir) system which was based on an ecosystem management approach and supported the country's agrarian civilization for many centuries with those community systems.

In the of ancient cultural context water management was not taken as an isolated issue. Here the main objective of water management is to optimize the conditions of the proper function of the ecosystem. Water was mainly stored, in the soil and conveyed through the soil and the soil facilitated mainly the water purification process. Water was taken from the soil (from water table) then the used water is again put to the soil, which purify the water and feed the water table for reuse. Water was conserved in the soil (i.e. maintaining the water table).

The dominant pattern of human settlement during the last 2,500 years has consisted of village farming communities. Even in the 1980s, the majority of people lived in small villages and worked at agricultural pursuits. Traditional farming techniques and life-styles revolve around two types of farming--"wet" and "dry"—depending upon the availability of water. The typical settlement pattern in the rice-growing areas is a compact group of houses or neighborhood surrounding one or several religious centers that serve as the focus for communal activities. Sometimes the houses may be situated along a major road and include a few shops, or the village may include several outlying hamlets. The life-sustaining rice fields begin where the houses end and stretch into the distance. Some irrigated fields may include other cash crops, such as sugarcane, or groves of coconut trees. Palmyra trees

grow on the borders of fields or along roads and paths. Individual houses also may have vegetable gardens in their compounds. During the rainy seasons and thereafter, when the fields are covered by growing crops, the village environment is intensely verdant.

The priority given for the conservation of water and land in the ancient rural setup has shown a charisma of risk based approach on their habilitation and living patterns.

b. Community Based Approaches in Risk Reduction

In preparing for and implementing Pre disaster preparedness, mitigation and post-disaster relief, rehabilitation, reconstruction, and resettlement, Community-Based Disaster Risk Management (CBDRM) plays a major role in Disaster Risk Management (DRM). In this process at-risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their coping capacities.

Community involvement is essential in order to identify needs, patterns of vulnerability and to develop the legitimacy required to ensure social resilience acted upon. The involvement of most vulnerable social groups such as women, children, elderly, disabled people are considered as paramount in this process, while the support of the least vulnerable groups to them is necessary for successful implementation.

c. Limitations and challenges Community Based Disaster Risk Management (CBDRM) Approach

Community-based disaster risk management programmes are being implemented in Sri Lanka for last few decades in different scales. The post Tsunami quo has given ample avenue to implement wide range of CBDRM programmes around the country with more attention to empower communities where they, themselves are capable of handling disastrous events.

Community-based disaster risk management can be described as a proactive approach to information, motivate and involve people in all aspects of DRR in their own communities.

It is a process of active engagement, participation and involvement of at-risk community in:

1. the identification, analysis, treatment, and monitoring and evaluation of disaster risks, and
2. all phases of DRR (i.e. mitigation, preparedness, response and recovery)

It focuses on the most vulnerable, entails their involvement, complimented by supported from the least vulnerable. The approach involves enhance the capacity of communities to i) cope with disaster risk; ii) reduce their vulnerability to future disaster risks, and iii) enhance their capacities to manage and reduce risks through provision of training.

A key-element of CBDRM approach is that communities need to take an active role in the identification of their risk problems and in the decision-making of what should be done to solve these using terms like 'participation 'and 'local ownership'. The project-oriented

CBDRM approach actually consists of preconceived activities without adequate room for changes or adaptations based on local risk perspectives. 'Participation' rather means involving people in project activities which is assumed to make interventions more efficient, and people are mainly 'empowered' in terms of forming community organizations, a type and level of empowerment that poses no serious threat to prevailing power relations.

The project-oriented CBDRM approach largely ignores the physical, economic and governance origins of disaster vulnerability still 'seeing' disasters as sudden, external events. When CBDRM implementation gets delayed, animators attribute this to 'communication barriers' between facilitators and (in) formal leaders in the village. However, CBDRM interventions, like any intervention, involves negotiation, debates and struggles over resources and interests which requires time to arrive at appropriate risk solutions.

Although communities are involved in the CBDRM process, they don't seem to experience a shift in mind-set meaning that they still view their vulnerable position in society as unchangeable, accepting prevailing norms, values and institutions that legitimate current relationships and arrangements. Even when CBDRM-teams are linked to local authorities and government, it remains unclear how such partnership can guarantee sustainability or achieve community resilience. The CBDRM-teams are not equipped with leadership skills, like lobby and negotiation skills or speaking in public. They often don't know where to go for additional DRM support. Since the disaster management is not a devolved subject in the paradigm of local governance system, local authorities are not in a position to allocate considerable resources for the implementation of DRR activities. Meanwhile most of local authorities do not consider DRR activities programmes as their own programmes and most of the time expect outside support and believe the programmes are exceedingly supported through the international agencies.

These approaches aim to rework and develop institutional arrangements with government, engage with disaster management units and relevant line departments in their lobby and dialogue efforts, which remains a challenge and require efforts beyond current project-timeframes and also standing planning arrangements. Aside of the lack of knowledge and understanding of the new responsibilities at the various government levels and departments concerning DRR, the decentralization did not result in the decentralization of revenues.

This implies that districts or divisions can set their priorities but are not sure whether they will have the funding for implementation. In the end, it remains unclear what exactly has been decentralized which prevent district governments to look beyond investments in evacuation shelters and awareness raising initiatives on disaster risk reduction. This example shows the importance of institutional reform at different administrative levels and the urgent need of local communities to engage with local government with the support of civil society in realizing a resilient society.

Section 4: Key Lessons Learnt

As a tropical country located strategically in the center of the monsoon zone in the Indian Ocean, droughts, floods and landslides are not novel to Sri Lanka. However, the 2004 tsunami disaster was different in terms of the intensity and the extent of the human, infrastructure and capital damage it caused. It was the most devastating natural disaster that the Sri Lankans experienced in recent memory in view of its suddenness and gravity. In a matter of minutes at least over 30, 000 people died. The tsunami affected two thirds of the coastline of the country over 1000 kilometers in total.

The first, spontaneous response came from the community. The people in the areas not affected by the tsunami stood up to the occasion. The outpouring of the public sympathy and the massive community response, often unorganized and chaotic, were remarkable. Government also responded swiftly by declaring an emergency in the affected districts. National emergency and security services were deployed. However, the mobilization of the instruments of the state, other than the forces was chronically slow. In this context, before the agencies of the state intervened, the people had entered the scene to attend on the urgent requirements of the survivors.

The Sri Lankan track record in meeting the tsunami disaster is a mixed one. In five years after the tsunami, Sri Lanka has almost recovered from the trauma. The communities that were badly affected have emerged once again as live entities laying aside the traumatic experience they underwent. It was proved that community action and societal resilience would be sufficient only to get out of the debris.

Whether a disaster is major or minor, of national or local proportion, it is the people at the community or village level who suffer its adverse effects. They use coping and survival strategies to face and respond to the situation long before outside help from the government or NGOs arrives. They are interested to protect themselves from the damage and harm. Within the last decade, growing recognition of the necessity of community participation for sustainable disaster reduction was translated into actions to realize community based disaster management. At the same time, individuals and communities facing simultaneous or repeated shocks, such as economic crises, disease epidemics, or natural disasters with destruction of shelter or productive assets, are better supported when humanitarian action also addresses the underlying vulnerabilities and builds capacities to better cope with future shocks.

Efforts and lessons through pre-post Tsunami called for a shift in perspective from the prevailing emergency management framework to disaster risk management to reverse the trend of exponential increase in disaster occurrence of and loss from small- and medium-scale disasters. These highlighted the need for proactive disaster management activities and the significant role of local communities. The community based approach also corrected the defects of the top-down approach in development planning and disaster management which

failed to address local needs, ignored the potential of indigenous resources and capacities, and may have even increased people's vulnerabilities.

Community based disaster risk management (CBDRM) is anchored in the disaster risk reduction framework. CBDRM covers a broad range of interventions, measures, activities, projects and programs to reduce disaster risks, which are primarily designed by people in at-risk localities and are based on their urgent needs and capacities. Simply put, the aim of CBDRM is to 1) reduce vulnerabilities and increase capacities of vulnerable groups and communities to cope with, prevent or minimize loss and damage to life, property, and the environment, 2) minimize human suffering, and 3) hasten recovery.

With the shifting of paradigms from reactive emergency management to disaster risk reduction, there is more stress on proactive pre-disaster interventions, which are usually categorized as prevention, mitigation, and preparedness.

However all these sectors are not in the control of community themselves and beyond their jurisdiction. Apart from this most of disasters are transboundary which cannot be prevented or mitigated only at particular geographical boundary (GN or community) which needs higher level interventions in reducing risk factors. This clearly shows limitations of existing CBDRM framework and to shift risk sensitive development together with community centered approach a "blend".

Thus a more comprehensive approach is required which enables risk sensitive development while adopting the principles of CBDRM. It is noted that risk reduction must be integrated into public investments policies and planning including community based interventions. Risk assessments at all levels, should be based on analysis of loss and estimation of potential future losses, are essential for informed decision-making. Policy makers and other relevant key stakeholders should encourage the development and financing of plans for in a coordinated and coherent manner across sectors recognizing community voices.

Section 5: Community Resilience Framework

Conventionally, much of the humanitarian effort focuses on immediate lifesaving responses, relief and recovery to disasters or crises. At the same time, individuals and communities facing simultaneous or repeated shocks, such as economic crises, disease epidemics, or natural disasters with destruction of shelter or productive assets, are better supported when humanitarian action also addresses the underlying vulnerabilities and builds capacities to better cope with future shocks.

Thus it is imperative in developing a resilient nation where people and communities are able to build back better after shock or a disaster. To meet these ambitions the Disaster management Center and the Ministry of Disaster management is planning develop a roadmap towards building community resilience by combining the humanitarian concern for imminent threats with the sustainable and longer-term approaches and institutional strengthening incorporated with development.

The proposed framework includes socioeconomic context, shocks, stresses, community livelihood assets, social capital, and community social and governance dimensions. Together, these factors constitute the community's capacities for collective action that influence community resilience.

a. What is Resilient Community in Sri Lanka

A review of tsunami impact in Sri Lanka shows that assets of community sub-systems (Human, Social, Environmental, Economic, Physical) were destroyed. Though, normalcy of systems was restored through community, government and external interventions it took a longer period which set back usual socio-economic gains. This means that the drivers of many of these sub-systems are external and thus, beyond the control of the community. Because each sub-system is under the jurisdiction of many players, this clearly impedes quick recovery.

In order to protect communities from impacts of disasters, concern over gaps in the recovery process in the country needs to be addressed. Many of these gaps relate to issues of people's inclusion in decision-making; justice; accountability; poverty reduction; employment/livelihood; environment; security for women and children; sustainable development and DRR; and post-disaster rehabilitation and reconstruction. All of these are fundamental concerns for the decentralization of DRR, local development planning and local governance.

Community resilience or the sustained ability of a community to withstand and recover from adversity has become a key policy issue at all levels, including in the National development strategy. Since resources are limited in the wake of an emergency, it is increasingly recognized that resilience is critical to a community's ability to reduce long recovery periods after a disaster.

Resilient communities can take deliberate actions to deal with disasters. Resilience building can also serve as a useful integrating framework for integrated risk management, community-driven development, livelihood assessments, and disaster preparedness and planning. Livelihoods have been placed at the center of development efforts in protecting communities from the adverse effects of natural disasters. Strong social networks, social capital, habitat creation and restoration, financial mechanisms, markets linkages, and utilization of low cost and effective fees from information communication methods make significant contributions to strengthening capacities of local communities.

Thus community resilience defined as ***"ability of a community to 'bounce back' and recover using its own resources' and also the ability of groups or communities to cope with external shocks and stresses as a result of social, environmental and political change"*** *which is depicted in the below diagram.*

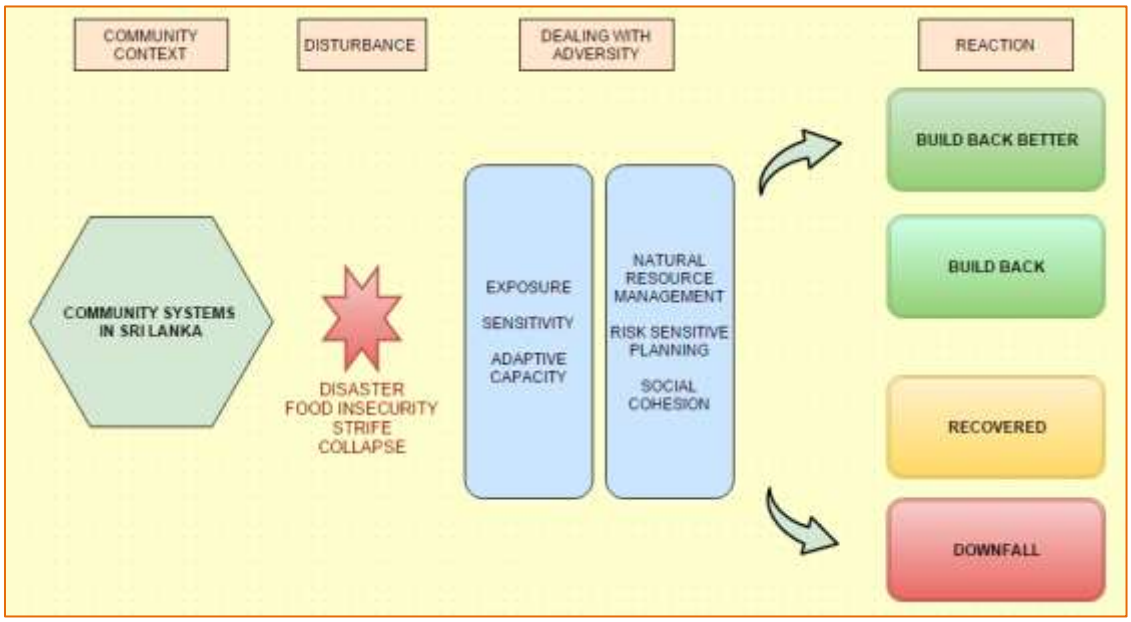

Figure: Community Resilience

b. Building Community Resilience- System Based approach to achieving resilience

While there is general consensus that community resilience is defined as the ability of communities to withstand and mitigate the stress of a disaster, there is less clarity on the precise resilience-building process. In other words, we have limited understanding about the components that can be changed or the "levers" for action that enable communities to recover rather quickly. The literature to date has identified factors likely to be correlated with achieving resilience for communities, including reducing pre-disaster vulnerabilities and conducting mitigation activities to minimize the negative consequences of disaster; however, these domains have been rather broad and lack the specificity required for implementation.

Further, community resilience in the context of development represents a unique intersection of community development, environmental stability, emergency management, public health, and, risk knowledge with its emphasis on vulnerability reduction and community capacity building.

The overall objective of the proposed community resilience framework is to provide a comprehensive understanding of the factors and processes influencing vulnerability and resilience at the community level. Within constantly changing natural, social, and economic environments, a conceptual framework for community resilience should ultimately help stakeholders specify, measure, and model heterogeneous resilience and vulnerability pathways at the community level.

Usually a community is a group of people who share a common physical environment, resources, and services, as well as risks and threats. It is also a collective body that has boundaries (often geographic), internal and external feedbacks, and "a shared fate." Because of this, a community is a complex physical and social system comprised of several sub-systems. What makes one community bounce back from a disruption quickly while another will struggle for years? What is resilience in a community setting? Simply put, it is the ability of a community to absorb a disturbance while retaining its essential functions. This does not mean that its degree of functionality remains in a constant state but that functionality will return in one form or another in a relatively short period of time. To be resilient, the community must have both the resources available and the ability to apply or reorganize them in such a way to ensure essential functionality during and/or after a shock.

The framework suggests the systems (existent in a community structure) based approach in building community resilience through sustainable livelihood model practiced and adopted for last few decades widely. Ultimately, the framework helps to explain why certain communities are relatively resilient, whereas others, as a consequence of being less resilient, are on a descending pathway of vulnerability. Perhaps most importantly, the framework enables identification of the key leverage points to focus on as part of a theory of change, and the interventions that should be included in programs aimed at enhancing community resilience.

Figure: Conceptual Framework on Building Community Resilience in Sri Lanka

i. Human Sub System

Human subsystem outlines the risk-coping capacities of individuals in a community. In a resilient community, individuals should have a minimum knowledge such as sound environment management, sensitivity to risk information, knowledge in identifying risk, and skills to cope with possible hazards. Furthermore lifestyles of individuals should ensure minimizing risk on one's self and others.

Salient features

- *Individuals are having appropriate risk coping strategies and adaptation methods for possible climate change impacts*
- *Individuals are healthy and prepared for emergencies and are well informed about potential hazards*

ii. Social Sub System

A community is expected to have adequate risk coping strategies and positive interrelationships to endure disasters and bounce back following a disaster. In

particular sociocultural stability through implementing strategies such as inclusive decision making, and increasing opportunities for social cohesion would support coping abilities of a community. Such strategies should be promoted through appropriate policies, and legal and organizational support.

Salient features

- *Social networking and civic contribution of a community is in place with common understanding of potential risks*
- *Social safety nets are available and support is guaranteed during emergencies to prevent escalation of risk*

iii. Environmental Sub System

Humans are an important part of a community's ecosystem but they are not the only important part. Without outside resources, humans cannot survive if the local environment does not support agriculture or provide enough clean water. Some parts of an Environmental subsystem will be beyond the control of a community, but are nonetheless helpful in describing a community's setting and the natural resources the community can use to provide for critical functions in times of disruption.

The important task for each community is to look at the aspects of the ecological systems most valued in order to consider them when the community is forced to bounce back from a surprise. This would result in appropriate risk sensitive environmental management strategies being included in the development agenda directly or indirectly, leading to risk minimization.

Salient features

- *Policy, legal and institutional support is available and is used to maintain environmental equilibrium*
- *Development planning follows conservation principles so that risk is minimized due to protection of the environment*

iv. Economic Sub System

Economic systems are comprised of people, firms and institutions that interact to accomplish the production, distribution, and consumption of goods and services. A resilient economy can be essential for recovery efforts in a post-disaster setting.

Economic subsector illustrates systems that ensure minimum risk to economic activities of individuals in a community. The role of financial institutions, financial allocations for emergencies and risk avoiding methods such as insurance, play a major role in reducing economic risk. At the same time

policies and strategies of administrative bodies must be consistent with the above systems.

Salient features

- *Communities are having adequate resources i.e. financial and physical, to cope with shocks and are with risk transferring mechanisms*
- *Divisional level plans are in place to regulate markets and sustain the value chain following a shock*

v. Physical Sub System

Physical infrastructure "refers to the substructure or underlying foundation or network used for providing goods and services; especially the basic installations and facilities on which the continuance and growth of a community, state, include roads, water systems, communications facilities, sewers, sidewalks, cable, wiring, schools, power plants, and transportation and communication systems."

Resilience of a particular society depends fundamentally on the availability and the quality of supporting infrastructure. Availability of basic amenities and their use in case of an emergency is critical in reducing risk. Risk sensitive urban/rural planning, buildings with standards sensitive to safety emergency response and special needs such as disabilities, needs of women and children are essential in supporting coping abilities of any society.

Salient features

- *Constructions follow standards and land-use practices minimize risk*
- *Infrastructure is adequate to allow communities to access basic needs before, during and after emergencies*

c. Cross Cutting Features

i. Governance Sub System

Systems of governance include the public organizations (political, administrative, legislative, and judicial institutions) that contribute to the administration of government functions of the community. Governance also includes the processes through which government institutions, or any group of people with a mandate or with a common purpose, make decisions.

The exercise of political, economic and administrative authority in the management of a country's affairs at all levels. It comprises mechanisms, processes and institutions through which citizens and groups articulate their

interests, exercise their legal rights, meet their obligations and mediate their differences. Governance systems should enable people at risk or affected by disasters and climate change to demand accountability for their decisions, actions and omissions.

Transformative capacity relates to governance mechanisms, policies/regulations, infrastructure, community networks, and formal social protection mechanisms that are part of the wider system in which communities are embedded.

Salient features

- *Multiple stakeholders at divisional level are well aware of their role of DRR and contribute to strategic planning on community resilience*
- *Emergency response plans are in place with humanitarian standards and ensure rights of different groups with adequate resources for immediate dispatch and deployment*

ii. Risk Knowledge

Risk knowledge is a cross-cutting requirement within each resilience element. Enhancing resilience in all of these elements is considered essential to reduce risk from coastal hazards, accelerate recovery from disaster events, and adapt to changing conditions in a manner that is consistent with community goals.

Analysis of disaster and climate change risk should seek to complement local and traditional knowledge with the results of scientific research in order to continue to co-generate new knowledge. Measures to build disaster and climate resilience should promote replication of effective practices, encourage autonomous innovation and introduce, where appropriate, external technology to help address new or magnified challenges.

This means recognizing that top-down programming and policies must support bottom-up initiatives, in order to build on the people's knowledge and capacities. It means identifying that local resilience comes from the ability to organize, prepare for and respond to local shocks and stresses.

d. Principles in Building Resilience–

i. People centered is a must (Resilience is not something outsiders can do or bring to individuals or communities)

ii. Recognize local Ownership and diversity (Local ownership, assets and capacity must be fully respected and relations with local government and other local actors)

iii. Comprehensive cross sector assessments, planning and implementation (Understanding the diverse underlying causes of vulnerability and disaster and crisis risks requires holistic assessments, planning and implementation across various sectors)

iv. Long Term Perspective (strengthening resilience does not happen overnight and requires long-term engagement and investment)

v. Partnerships (Creating and brokering relevant partnerships or advocating for support and sustainability)

vi. More emphasis on inclusion, disability, disadvantaged, social cohesion

vii. Strengthen disaster laws and policies (The legal framework should mandate involvement by vulnerable people and their communities)

Section 6: Key implementation strategies

Clearly, the implementation of community-based disaster risk management projects and activities involve both the commitment of community residents and the structures of government at divisional levels. The government's role should be emphasized since it provides the enabling environment and the mandate to manage disasters and its risks. Given this platform, local authorities are at the forefront of providing much needed support structures to sustain community-based risk management initiatives with specific emphasis to build risk sensitive annual plans in their locality.

Disaster risk management agencies have recognized that the divisional planning platform is the arena for forwarding disaster risk management activities as a component of the overall socio-economic development of a divisional secretariat or a particular locality. This recognition has been reinforced by the rationalized local planning system of Sri Lanka, wherein disaster risk reduction has to be integrated. The people are to be given the opportunity to take part in decision-making and in the implementation process. After all, Risk Reduction as experienced by external agencies succeeds only with the mutual cooperation among national and local governments and the community.

Development programmes and projects need to be reviewed for their potential to reduce or aggravate vulnerability and hazard. Compensatory disaster risk management (such as disaster preparedness and response) stands alongside development planning and is focused on the amelioration of existing vulnerability and reduction of natural hazard that has accumulated through past development pathways.

As implementation bodies of national programmes on the ground, local governments play a key role in reducing disaster risk. Being most accessible to the people, they are also best positioned to address community priorities with the support of stakeholders. Numerous examples of local government initiatives spurred by community advocacy emerged during discussions with community members widely.

It is evident that a community-led approach to resilience combines actions to advance knowledge, demonstrate solutions, mobilize communities and build relationships with decision makers. Support for this approach calls for decentralized, flexible mechanisms that enable multidimensional, multi-stakeholder strategies.

Bringing disaster risk reduction and development concerns closer together necessitates would be guided through:

- *Collation of basic information on disaster risk and development of planning tools to track the relationship between development policy and disaster risk;*
- *Collection and dissemination of best practices in development planning and policy that reduce disaster risk; and*
- *Spurring political will to reorient the development and risk management sectors*

- *Pave prominence on spatial and physical planning and technology advancement on geographical information systems and related products to look at future intervention with adequate emphasis on linking science, institutions and society*

Grassroots community views on resilience and their standing practices confirm that their resilience priorities are best addressed when communities are mobilized and organized for collective action; knowledgeable and experienced in protecting themselves from danger; and work in collaboration with local government to ensure that programmes are responsive and accountable to the vulnerable.

In achieving the set targets resilience building programmes are to be implemented through a guideline which comprises with step approach. The community centered approach is suggested with community sub-system model which is implemented and tested widely. The approach stressing to build strong local level platform on development process. The key is the governance factor which suggested being a crosscutting in the each step ensuring risk sensitive decisions are made in reducing risk at all levels.

Section 7: Measuring Resilience and Sustainability

Meaningful implementation of the framework depends on a comprehensive monitoring system, which focuses on opportunities at the local level for collaborative risk reduction. It has to be identified whether precise plans are being developed and shared among agencies to collaborate in achieving joint targets. This would prevent overlaps and gaps in implementation. Monitoring should also ensure initiatives which are essential and to incorporate actions suggested by this framework in to plans of respective organizations.

The critical elements of a local resilience assessment include an unflinching look at the five subsystems as they really are and an inclination to see possibilities for putting resources together in new ways in the event of a shock. At a minimum, a comprehensive community resilience measurement would entail an examination across each of the five subsystems that make up the community, as described above.

An important step in identifying the most appropriate way to measure disaster resilience for a particular context is to look at which elements of resilience are included in the measure:

a. measuring **well-being** before and after a disaster

b. measuring **vulnerability**

c. measuring **resilience capacities** to cope, adapt, and transform in case of a disaster

d. measuring disaster-related **shocks, losses and stress**

e. measuring the **reaction** to and recovery from disasters

f. measuring **programme results**

Category	Definition	Examples	Potential Indicators	
Physical	The basic infrastructure (roads, railways, telecommunications) that people use to function more productively	Infrastructure – roads, water, electricity, telecoms • Access to new technologies / equipment • Land security / ownership	Capital • Access to roads • % households with electricity supply	Capacity • % households with year round access to clean water • Water storage / reserve capabilities • Crop storage / reserve capacity
Human	The sum of skills, knowledge, labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood outcomes.	• Educational and skill levels of household members • Food security of household • Health and nutritional status of household members	Capital • % households requiring formal food/cash assistance • % global and severe acute malnutrition rates • Gross / net enrolment rates	Capacity • # Households members with secondary education or higher • # Household members economically active
Economic	The cash that enables people to adopt different livelihood strategies. This can be in the form of savings, or a regular source of income such as a pension or remittance. The inputs that support livelihoods, as well as the producer goods (tools, equipment, services) that contributes to the ability to increase financial capital.	Income reliability and growth • Opportunities for employment and trade • Productivity of livelihood • Price and income variations • Functioning markets • Risk financing / insurance • Assets owned and goods produced – livestock/crop /stock • Access to financial services	Capital • Income level • % of households with secure access to land for livelihood purposes • Livestock numbers and value • Crop production / value	Capacity • # household sources of earned income • Access to functioning markets • Access to saving and credit facilities • Access to agri / livestock extension services
Environmental	The environmental resources (land, forests, water) and associated services (e.g. erosion protection, storm protection) upon which resource-based activities (e.g. farming, fishing etc.) depend.	Access to and quality of natural resources – land / rangeland / forests, water, soil • Sustainable management and regulation of natural resources • Carrying capacity – human and animal populations	Capital • Extent of natural tree cover • Households undertaking reforestation activities • # functional NRM/ rangeland management committees	Capacity • % time quality pasture available • Quality of rangeland management • Rate of deforestation
Social	Access to and participation in networks, groups, formal and informal institutions. Cohesion and security.	• Local kinship support networks • Number, scale and functionality of community organizations / governance structures and self-help groups • Participation in the above groups • Community ability to plan, mobilize resources and implement; o Conflict reduction o Improved services o Natural resource management • Fair and transparent access to resources • Leadership role of women	Capital • # functioning local structures / committees • % of households with woman and marginalized groups involved in local planning processes	Capacity • Quality of leaders /institutions (fair, responsive, non-corrupt) • % population living in peace and security • % year there are no incidences of conflict / insecurity • Community resources raised to build resilience

The above table shows a resilient measurement which was adopted from CoBRA model of UNDP on measuring resilience.

Integrated sector programmes build the foundations of resilient livelihoods with the aim of reducing dependency on external assistance. Determining which sectors to integrate requires a systems analysis of the drivers of vulnerability in any given context. In addition, a consistent focus on context monitoring at the local level through a real-time early warning/early action system enables a more responsive and flexible approach to programming that can adapt based on predicted future risk scenarios.

Multi-hazard risk assessment and resilience approaches for all sectors should be built into programme management systems (assessment, design, monitoring and evaluation (M&E)) when implementing long-term development interventions so that sector projects are risk-sensitive and address the root causes of vulnerability to shocks and stresses. This helps the design process by addressing key questions of resilience to what, and for whom? That is, what is the nature of risk in a given context, and how can the risks be mitigated? Who has the greatest exposure to risk?

Enabling peer-to-peer learning and knowledge-sharing through communities of practice has a catalytic and positive effect on staff capacities and competencies. Communities of practice that actively promote interaction between development practitioners, regional resilience coordinators and funding/policy offices can see the multiplier effect of connecting people across complex multi-layered organizations.

Integration of resilience concept into various sectoral programmes at district and divisional level enables stronger institutionalization of risk sensitive component in long term development planning. This would be most efficient and effective way of making built-in risk reduction programmes in the longer run with adequate resources with special focus on risk governance and investing in risk reduction productively.

Advocacy is far more effective when carried out through coalitions and built on a strong evidence base. The policy influence must bring to bear on the current and future direction of Sendai Framework for Disaster Risk Reduction (SF-DRR) and associated in-country policies through integrated efforts with all actors should always build on local-level consultations with communities. This enables partners to pursue far greater consistency between policy objectives and real needs on the ground.

GLOSSARY

Adaptation: the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. (UNISDR 2009)

Capacity Development: the process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions. (UNISDR, 2009)

Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external forces, or to persistent anthropogenic changes in the composition of the atmosphere or in land use. In Article 1, the United Nations Framework Convention on Climate Change defines "climate change" as: "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods". (Intergovernmental Panel on Climate Change: 2001)

Disaster: a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. (UNISDR 2009)

Disaster risk management: the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. (UNISDR 2009)

Disaster risk reduction: the concept and practice of reducing disaster risks through systematic efforts to analyses and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. (UNISDR 2009)

Early warning system: the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss. (UNISDR 2007)

Emergency management: the organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps. (UNISDR 2007)

Food and nutrition security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Hazard: a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. (UNISDR 2009)

Local Authority: Refers to an administration and decision making body at local level which may be elected body or may be a local level arm of the government

Local Government: An elected body of the local level which are primarily functioning as the service delivery institutions

Mitigation: the lessening or limitation of the adverse impacts of hazards and related disasters. (UNISDR 2009)

Natural hazard: natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. (UNISDR 2009)

National platform for disaster risk reduction: A generic term for national mechanisms for coordination and policy guidance on disaster risk reduction that are multi-sectoral and inter-disciplinary in nature, with public, private and civil society participation involving all concerned entities within a country. (UNISDR, 2009)

Preparedness: the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. (UNISDR 2009)

Preparedness planning: aims to establish a standing capacity to respond to a range of different situations that may affect a country or region by putting in place a broad set of preparedness measures. This includes for example early warning systems, ongoing risk and vulnerability assessment, capacity building, the creation and maintenance of stand-by capacities and the stockpiling of humanitarian supplies. (OCHA, UNISDR 2008)

Prevention: the outright avoidance of adverse impacts of hazards and related disasters.
(UNISDR 2009)

Resilience: "resilience to shocks" is the ability to prevent and mitigate disasters and crises as well as to anticipate, absorb, accommodate or recover and adapt from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, food and nutrition, health, economy etc.

Response: The provisions of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. (UNISDR, 2009)

Risk: The combination of the probability of an event and its negative consequences. (UNISDR, 2009)

Sustainable Development (SD): The concept of sustainable development was introduced in the World Conservation Strategy (IUCN 1980) and had its roots in the concept of a sustainable society and in the management of renewable resources. Adopted by the WCED in 1987 and by the Rio Conference in 1992 as a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. SD integrates the political, social, economic and environmental dimensions. (IPCC, 2007 WG III)

Vulnerability: the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. (UNISDR 2007)

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