



« **EMPOWERING
COMMUNITIES
&
STRENGTHENING
RESILIENCE** »



LAO PDR

STRENGTHENING INSTITUTIONAL AND HUMAN CAPACITIES
FOR DISASTER RESILIENCE



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« Preface »



Dear readers,

It is my great pleasure to present to you Strengthening Institutional and Human Capacities for Disaster Resilience for Lao PDR as part of the Empowering Communities & Strengthening Resilience series. The series serves to document more than two decades of community resilience building activities for five Asian countries in which ADPC has been active: Bhutan, Lao PDR, Mongolia, the Maldives and Thailand.

This edition is focused on Lao PDR, where ADPC has worked with a range of partners to improve arrangements and provisions for effective disaster preparedness as well as supporting efforts to address the underlying drivers of disaster risk at community, district, provincial and national levels.

As this publication demonstrates, ADPC's initiatives in Lao PDR cover a wide range of concerns including supporting effective governance for flood resilience, skills and training for community members, enhancing systems for early warning, engaging schools for disaster preparedness, improving networking and dissemination as well as the provision of resilient community infrastructure. The variety of activities pioneered by ADPC in Lao PDR have worked towards an overarching goal of strengthening institutional and human capacities for effective disaster management in the country.

Documenting lessons learned and sharing experiences of past endeavors is particularly important as we step forward into the post-2015 era under the guidance of the Sendai Framework for Disaster Risk Reduction. We trust that this publication focused on Lao PDR and the ongoing series can provide a valuable insight into ADPC's continuing efforts to create a safer and more disaster-resilient Asian region.

Prof. Dr. Krasae Chanawongse

Chairman

Asian Disaster Preparedness Center

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« Background »



In terms of disaster risk, Lao PDR is mainly affected by hydrometeorological hazards including drought, riverine and flash flooding, as well as storm events such as tropical storms or typhoons¹. The country has also experienced landslides, earthquakes as well as significant disease outbreaks and epidemics². Exposure of vulnerable populations to such recurring natural hazards has resulted in notable human and economic losses in the country in recent years.

Over the past decade significant disasters have underlined the need to strengthen disaster management provisions in the country. The impacts of Typhoon Ketsana which struck the Lao PDR in 2009, affecting the southern provinces of Savannakhet, Salavan, Attapeu, Sekong, and Champasack were particularly wide reaching. Various sectors suffered damage and losses resulting from the disaster including social components (housing, health and education), productive resources (agriculture, commerce, industry and tourism), infrastructural assets (transport, communications and electricity) as well as water and sanitation resources³.

Disasters which affected the country in 2011 further emphasized the challenges which Lao PDR faces in coping with ongoing hazard risks. Typhoons Haima and Nockten and tropical storm Haitang hit the country in June, July and September respectively. This led to major flooding and subsequent landslides across 12 provinces of the country. Over the course of the year there were 30 reported deaths, over US\$170 million of damage caused and widespread disruption to transport, agricultural and irrigation assets⁴.

1 Data sourced from EM-DAT - The OFDA/CRED International Disaster Database (2015)

2 National Disaster Management Committee, Government of Lao PDR (2010). Developing a National Risk Profile of Lao PDR - Part 1: Hazard Assessment.

3 Government of Lao PDR (2011). Typhoon Haima in the Lao People's Democratic Republic: Joint Damage, Losses, and Needs Assessment.

4 UNDP (2013). Integrated Disaster and Climate Management Project in Lao PDR.



Hazards affecting Lao PDR such as flooding can cause major disruption to human activities including those related to livelihoods

In the face of these ongoing hazard risks, the government of Lao PDR has worked with a variety of partners to improve the country's disaster management arrangements and preparedness for natural hazards at a range of scales, including interventions at the national, provincial, district and local levels. These efforts were carried out at the initiative of relevant agencies in Lao PDR and as part of wider action under frameworks such as the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) at the regional level and the Hyogo Framework for Action (HFA) at the global level. In the Lao PDR context, the need to protect development gains and safeguard livelihoods adds particular importance on engaging communities to implement effective disaster risk reduction interventions at the local level.

This document provides an overview of key community resilience building projects in Lao PDR in which ADPC has played a role. Activities aimed to build the capacity of relevant agencies in view of ongoing hazards, provide support for more effective disaster management planning, strengthen livelihoods against natural hazards, as well as improve the ability of communities for emergency response and health facility preparedness. Particular attention is given to lessons learned throughout the implementation process as well as the ways in which they have empowered communities across Lao PDR to enhance their resilience to a range of natural hazards. Future steps for a resilient landscape are also considered as the post-2015 era of disaster risk reduction under the Sendai Framework (SFDRR) gets underway.

« Key Interventions: Resilience Building in Lao PDR »»

Over the course of the past two decades ADPC has worked with a range of partners across Lao PDR with the aim of improving disaster management arrangements, enhancing the capacity of relevant agencies and institutions in view of disaster preparedness as well targeting underlying risk factors such as vulnerability and exposure to natural hazards. ADPC has been active both at the community level and with actors and organizations at a variety of other district, provincial and national scales to strengthen the disaster preparedness and coping capacity of communities across the country.



Activities under the Lao PDR Urban Disaster Mitigation Project (LUDMP) targeted Luang Pra bang province (shown above)

The **Asian Urban Disaster Mitigation Program (AUDMP)** was a region wide initiative running from 1995-2005 with the goal of reducing the disaster vulnerability of urban populations and infrastructure⁵. Under the program ADPC worked with a wide range of partners including local and national government agencies, city authorities, NGOs as well as academic institutions to develop sustainable operational strategies at the city level. Crucially, AUDMP placed local people at the heart of decision making processes to identify an appropriate mix of structural and non-structural mitigation measures for target locations whilst recognizing the need for risk sensitive development planning at the local level. National demonstration projects in each of the target countries provided a working example of urban hazard mitigation in action through regional training courses, demonstration activities and networking initiatives.

Under AUDMP, the **Lao PDR Urban Disaster Mitigation Project (LUDMP)** provided country specific interventions with a focus on reducing the disaster vulnerability of people, infrastructure, and economic assets. The initiative targeted urban areas of Luang Pra bang province, in particular fire hazard risk. ADPC partnered with The National Disaster Management Office (NDMO), the Urban Research Institute (URI)⁶, and the Fire Protection and Prevention Department to conduct risk assessments, build the capacity for prevention and response within Luang Pra bang city's emergency service departments and conduct public awareness campaigns. Resource books for Vientiane, Pakse and Luang Pra bang were also developed to inform future city planning and urban development.

Another initiative, **The Partnerships for Disaster Reduction - Southeast Asia (PDRSEA)** project was a multi-phase⁷ endeavor aimed at addressing a regional need for coordinated disaster preparedness, management and mitigation efforts. This included strengthening the capacities of at risk communities from natural disasters through training and information exchange in target countries. Over the course of the four phases of PDRSEA a number of interventions relevant to community based disaster risk reduction (CBDRR) were implemented at the regional level which relevant actors and agencies in Lao PDR were able to benefit from. Training courses were delivered at the regional level on: capacity and vulnerability assessment as well as preparation and production of public awareness materials. Trainings on project development and management of community-based preparedness and mitigation projects and information management were also provided to partner organizations.

5 Activities were carried out in Bangladesh, Cambodia, India, Indonesia, Nepal, Philippines, Sri Lanka, Thailand, Vietnam as well as Lao PDR

6 In 2007 the Urban Research Institute was renamed as Public Works and Transport Institute (PTI)

7 Four phases from 2001-2008: partners over the course of PDRSEA included ADPC, the United Nations Economic and Social Commission Humanitarian Aid Department (UNESCAP) and the European Commission Humanitarian Aid Department (DIPECHO) for interventions in Cambodia, Lao PDR, the Philippines, Indonesia, Thailand and Vietnam.

At the country level in Lao, a National Consultation Workshop for PDRSEA phase three involving NDMO, government ministries, local NGOs and UN agencies was organized to facilitate framework development and action planning of the institutionalization of community based disaster risk management (CBDRM) in government policy, planning and implementation. Furthermore, this assisted government agencies in developing strategies and action plans to support and mobilize community action for disaster risk management. A notable legacy of the fourth and final phase of PDRSEA was the development of a comprehensive set of tools and resources including critical guidelines on CBDRM, a guidebook on advocacy of CBDRM, a toolkit for media engagement on CBDRM issues, a participant's handbook to accompany training sessions on CBDRM for local authorities as well as a field practitioners' handbook.

ADPC carried out work relevant to community resilience through its efforts to mainstream Disaster Risk Reduction in the education sector in Lao PDR. Under the Regional Consultative Committee (RCC) - for which ADPC acts as secretariat - the **Mainstreaming Disaster Risk Reduction into Development Policy, Planning and Implementation (MDRD)** programme sought to integrate disaster risk reduction into planning and processes for the major sectors of agriculture, urban planning, education, health and housing. For education, The Hanoi RCC statement (an outcome of the RCC meeting of May 2005) highlighted the need for progress on the following sub-themes: integrating disaster risk reduction modules into the school curriculum; promoting hazard resilient construction of new schools; and introducing features into schools for their use as emergency shelters. This guidance formed the basis of an **'MDRD-Education'** project carried out by ADPC, the United Nations Development Programme and the European Union Humanitarian Aid and Civil Protection department (ECHO) to support the respective Ministries of Education (MoE) in Cambodia, Lao PDR and the Philippines.



Mainstreaming Disaster Risk Reduction in the Education Sector in Lao PDR

Integrating Disaster Risk Reduction in the School Curriculum
Impacts of Disasters on the Education Sector
School Construction: Current Practices and Improvements Needed

April 2008



The 'MDRD Education' project included Lao PDR under regional efforts to integrate disaster risk reduction principles into the planning processes of key sectors

In Lao, disaster risk reduction modules were designed for the curriculums of lower secondary schools. These were endorsed by the national MoE and taught in selected schools. Training of teachers from target communities in Bolikhamsay, Khammouane, Sayaboury provinces and Vientiane Municipality took place to facilitate the teaching of disaster risk reduction material in 15 schools in pilot locations. At the national level the mainstreaming of disaster risk reduction into education was also supported by a national advocacy workshop to build consensus amongst relevant ministries such as planning and finance to raise awareness and support for investment in disaster risk reduction in education. It helped showcase achievements of the MDRD Education project in Lao PDR, share experiences of other organizations and NGOs carrying out similar activities and suggested future actions for integration of disaster risk reduction in education at the national and regional level.

A project for the **Implementation of the DesInventar Database in Laos (IDDLO)** was carried out from August 2010 to April 2011. Funding support was provided by UNISDR under this project to expand the utilization of DesInventar, a web-based tool for the development of databases of loss and damage caused by disasters and to create the Lao National Disaster Information System. This built on previous activities earlier carried out under the Lao-Australia NGO Cooperation Agreement Programme (targeting Sayaboury Province) which is documented later in this publication. Key activities under IDDLO included conducting a regional training on the collection of historical disaster data using government sources to facilitate the entry of information from an additional six provinces (Phongsaly, Bokeo, Oudomxay, Luang Pra bang, Houaphan and Lungnamtha) into the DesInventar system.

In 2012 ADPC worked alongside NDMO to develop a National Assessment Report on Disaster Risk Reduction for Lao PDR with a particular focus on 'linkages between poverty and disaster risk'. This was a key output of a project to **Strengthen Institutional Capacity for Development of Lao National Assessment Report (LAR-2012) on Disaster Risk Reduction in Lao PDR**. The report, completed with financial support from UNISDR, was the Lao Government's contribution to the United Nation's Global Assessment Report on Disaster Risk Reduction in 2013. To facilitate the completion of the report a technical working group was established under the chairmanship of the Director General of NDMO which included representatives from key ministries and government departments for key sectors across Lao PDR. The report used outputs from the DesInventar methodology to present the current status of disaster risks in Lao PDR as well as providing a comprehensive assessment of past and existing initiatives by national and provincial government agencies and development partners.



The National Assessment Report was produced in both English and Lao language

The 5th Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) held in Yogyakarta, Indonesia in 2012, highlighted 'Strengthening Local Capacity for disaster risk reduction' as a key regional disaster management concern. This provided the initiative for a project aimed at **Strengthening Disaster Risk Reduction Capacity in Selected ASEAN Countries** funded by New Zealand Aid running from October 2013 to September 2015. In Lao PDR and Myanmar the project focused on addressing the need for strengthened capacities on local level risk assessment. Activities in Lao PDR were led by the Department of Disaster Management and Climate Change (DDMCC), Department of Meteorology and Hydrology (DMH), Ministry of Natural Resources and Environment (MoNRE) as well as NDMO. Project interventions most relevant to community resilience building efforts were those focused on the local level application of disaster risk and climate change information to enhance early warning systems (EWS). Following the selection of pilot sites in Phonxai district in Luang Prabang province, ADPC plans to conduct community gap assessments ahead of simulations and drills focusing on the hazard of local flash flooding.

ADPC activities related to community resilience under six other projects are also considered in detail below, namely: Operationalizing Strategic Plan for Disaster Management (OSPDM), Program for Enhancement of Emergency Response (PEER), Flood Emergency Management Strengthening (FEMS), Lao-Australia NGO Cooperation Agreement (LANGOCA), Community-Based Approaches to Flood Management (CBFM) and Mainstreaming Disaster and Climate Risk Management into Investment Decisions (MDCID). The key interventions, implementation experience and lessons learned from these projects which can inform future community resilience building efforts are also considered.

Operationalizing Strategic Plan for Disaster Management (OSPDM)

Geographical Coverage:

Saravanh province:
Khongxedon and Ta Oy districts;

Sekong province:
Kalum and Lamam districts;

Attapeu province:
Sanamxay and Sanxay districts

Duration:

June 2010 - August 2012

Funding Support Agencies/Donor:

GFDRR through the World Bank

Partners:

- Ministry of Natural Resources and Environment (MoNRE)
- National Disaster Management Office (NDMO)
- Department of Meteorology and Hydrology (DMH)

Project Overview

The overall objective of the Operationalizing Strategic Plan for Disaster Management (OSPDM) project was to strengthen the disaster risk management capacity of the Government of Lao PDR.

Technical assistance was provided to the country's Water Resource and Environmental Agency (WREA)⁸, Department of Meteorology and Hydrology (DMH) and NDMO. This included support for the implementation of the National Strategic Plan on Disaster Management (NSPDM). Specific aspects related to CBDRR included institutional training and capacity building and improvement of EWS.

⁸ WREA was renamed as the Ministry of Natural Resources and Environment (MoNRE) in 2011

Key Interventions and Achievements

- Training on community based flood and drought risk reduction in selected hazard affected provinces was carried out. Standard training manuals on disaster risk management planning and CBDRM planning were developed and utilised during one national Training of Trainers (ToT), two regional ToT and three provincial training courses while the CBDRM planning manual was used for six district trainings (two district trainings in each target province).
- Under OSPDM, a National Strategy on EWS was developed for Lao PDR. Significantly, this helped establish communication lines between the DMH, NDMO, provinces, districts, and communities using formalized guidelines for early warning procedures. Pilot early warning projects, activities and simulations took place at the village level in three pilot communities (one in each target province). Community risk assessments were conducted in each of the target locations along with the establishment of a community flood warning system consisting of water level gauging stations and community flood information bill-boards.
- Standard Operating Procedures (SOP) for flood EWS based were drawn up, informed by a national consultation and discussions based on field-based experiences. This contributed to outlining the roles and responsibilities of community members as well as concerned departments and organizations during warning dissemination processes.
- A scenario-based community simulation exercise was conducted at Ban Hom, which is located along the Sekong River in Attapeu Province. This tested the SOPs for EWS and assessed mechanisms and information channels so as to identify gaps in warning dissemination arrangements. It helped raise awareness of end-to-end EWS at national, provincial and community levels and amongst media and private sector partners.
- Prior to the community simulation exercise two preparatory events were held: 1) a national workshop in Vientiane with DMH and NDMO to familiarize them with principles of conducting such exercises 2) a table-top exercise in Attapeu to assess the gaps and strengths of warning dissemination systems from national to community levels including community based responses.

Implementation Experience and Lessons Learned

- Simulation exercises underlined the importance of allocating specific roles and responsibilities to different organizations in view of response and warning dissemination for disasters.
- Whilst engaging community members in resilience building is crucial, it remains important for relevant agencies to take ownership and provide leadership. In the case of this project, the role of MoNRE and NDPCCS as lead agencies helped drive the implementation of the project forward.
- Establishing strong coordination and cooperation amongst relevant agencies at national and local levels can help to maintain momentum generated by interventions. MoNRE and NDPCCS were able to carry forward the experiences gained under this project and apply knowledge gained for future projects.

Program for Enhancement of Emergency Response (PEER)

Geographical Coverage:

Community Action for Disaster Response (CADRE):
Khammouane and Savanakheth provinces

Hospital Preparedness for Emergencies (HOPE):
Luang Pra bang, Attapeu, VangVieng, Savanakheth, Sayabouly, Champasak, Salavan, Khammouane provinces

Duration:

April 2009-August 2014

Funding Support Agencies/Donor:

USAID/OFDA through American Red Cross

Partners:

- Department of Hygiene and Prevention, under the Ministry of Public Health
- National Disaster Management Office (NDMO)
- Lao Red Cross Society (LRCS)

Project Overview

The Program for Enhancement of Emergency Response (PEER) is a regional program implemented by ADPC, initiated in 1998 by the United States Agency for International Development (USAID) Office of U.S. Foreign Disaster Assistance (OFDA). PEER aims to enhance local and regional disaster preparedness and build the response capacities of vulnerable countries in Asia.

To achieve this goal, PEER is working on the institutionalization of sustainable disaster preparedness training programs and emergency response systems. The primary focus of PEER was to develop the capacity of emergency responders through disaster response training courses. These courses are: Medical First Responder (MFR) and Collapsed Structure Search and Rescue (CSSR) and Hospital Preparedness for Emergencies (HOPE) - linking pre-hospital emergency care to tertiary care health facilities.

During PEER Stage III (2009-2014), Cambodia, Lao PDR, Vietnam and Thailand comprised the project countries together with Philippines, Indonesia, Bangladesh, Pakistan, India and Nepal. A new component, the Community Action for Disaster Response (CADRE), was added to extend the reach of PEER to the community level.

In Lao PDR, PEER was implemented in partnership with NDMO, Department of Hygiene and Prevention under the Ministry of Public Health and the Lao Red Cross Society. ADPC supported NDMO and relevant line agencies to enhance disaster preparedness planning as a cross-sector approach for government ministries.

Key Interventions and Achievements

CADRE: enhanced existing capacities for community based first response

- A National Pilot Course and Adaptation Workshop were conducted at Napakuang, Vientiane province: a total of 28 participants from LRCS and NDMO attended the course.
- Local level training was carried out in pilot communities in Savanakheth and Khamouane Provinces: a total of 55 community responders were trained at the national and community level and 25 national CADRE instructors were certified.

HOPE: prepared healthcare facilities to provide emergency healthcare to affected populations during disasters

- 264 health facility staff completed basic training with a further 55 instructors trained under HOPE in Lao PDR.
- The HOPE National Pilot Course was conducted in Napakuang, Vientiane Province with participation from representatives from hospitals in Vientiane and surrounding provinces. The initial batches of national instructors were trained in Bangkok during the regional TFI Course along with participants from Cambodia and Vietnam.
- A total of 10 basic HOPE Courses were conducted in Lao PDR around the country in Luang Pra bang, Attapeu, Vientiane, Savanakheth, Sayabouly, Champasak and Salavan Provinces.
- Support and technical guidance was given for the establishment of two model hospitals (Mithaphab Hospital in Vientiane Capital and Luang Pra bang provincial Hospital). Technical support included development of hospital emergency response plans, hospital incident command systems including equipment for hospital command center as well as simulation exercises.

Implementation Experience and Lessons Learned

- For programs such as PEER to have an impact going forward there is a need for continued advocacy and awareness to encourage interest for the program at national and sub-national levels for further such initiatives. In Lao PDR, strong support was provided by the Ministry of Health in formulating an emergency management plan at Mittaphab hospital under HOPE. As lead implementing agency, the ministry was able to leverage its expertise to support the implementing team in developing context specific guidelines on risk assessment, technical support and drawing up appropriate simulation exercises.
- CADRE activities proved important in raising awareness that community members can play an active role in contributing to emergency response in target locations. In Lao PDR a primary challenge was finding ways to build on this success by identifying funding sources in order to expand the project interventions to other communities through the Lao Red Cross Society (LRCS), including the need to integrate CADRE as part of existing CBDRM programs in the country.
- Engaging CADRE graduates in refresher activities and simulation exercises and ensuring that they play an important part in future activities in Lao PDR was also identified as an important way of maintaining progress made under PEER to contribute to the long term sustainability of the programme.

Flood Emergency Management Strengthening (FEMS)

Geographical Coverage:

In Lao PDR, under GIZ support: Khammouane province (Nong Bok, Xebangfai, Hin Boun, Mahaxay and Nhommalath districts) and Savannakhet province (Xaybouly district).

Under ECHO support: Khammouane province (Nongbok and Xebangfai districts).

The program in total encompassed 11 flood prone provinces in the Lower Mekong Basin with flood preparedness programs in 30 vulnerable districts across Cambodia, Vietnam, Thailand and Lao PDR.

Duration:

2003-2010 across four Mekong Lower Basin countries

Funding Support Agencies/Donor:

GIZ and ECHO through Mekong River Commission (MRC)

Partners:

- Lao National Mekong Committee (LNMC)
- National Disaster Management Office (NDMO)
- Provincial Disaster Management Committees (PDMC) of Khammouane and Savannakhet provinces
- District Disaster Management Committees

Project Overview

The Mekong River Commission's (MRC) Flood Management and Mitigation Programme (FMMP) was targeted at reducing civil and socio-economic losses in flood prone provinces and districts of Cambodia, Lao PDR, Thailand and Vietnam in the Mekong river basin. The programme aimed to reduce civil and socio-economic flooding losses while preserving environmental benefits.

ADPC's efforts in the provinces of Khammouane and Savannakhet focused on component four of the programme 'Flood Emergency Management Strengthening (FEMS)'. This addressed the needs of communities vulnerable to flooding whilst identifying how the operations of national, provincial, district and communal government agencies could be enhanced.

Under FMMP in Lao PDR a focus was placed on capacity building, knowledge sharing and public awareness for flood preparedness and emergency management at a range of levels, including at risk communities as well as enhancing communication and coordination between relevant stakeholders.

Key Interventions and Achievements

- IEC materials on child protection against drowning and flood safety measures for schools and households were developed: posters and information billboards were installed in 20 villages of five target districts.
- School flood safety activities including teacher orientations in four target districts and 29 school flood safety campaigns were conducted in five target districts. IEC materials included a teacher information kit and educational DVD.
- Flood preparedness planning programs were implemented in two provinces and five districts of Lao PDR. 20 Village Disaster Management Units (VDPUs) and Flood Preparedness plans were developed in five target districts.
- A strategy paper on disaster risk reduction integration into local development planning was developed and a disaster risk reduction training session was included in the training program of the Training Center for Economy and Planning under the Ministry of Planning and Investment (MPI). Disaster risk reduction considerations were also acknowledged in the 7th National Socio-Economic Development Plan, 2011-2015.
- Training Needs Assessments (TNA) and four sets of three day needs-based training courses on flood preparedness and emergency management were organized for VDPU members of 20 villages in four target districts with the aim of strengthening the capacity of community level institutions.
- An emergency management manual was developed and utilized as part of a five day national (ToT) conducted in Vientiane on flood preparedness.
- A three day regional workshop focused on 'People-Centered Flood and Land Management' was organized in Luang Pra bang.
- Joint planning and information exchange between neighboring Lao and Thai provinces of Khammouane and Nakhon Phanom was initiated. Transboundary assistance and cooperation for training of trainers as well as field trips, educational tours and joint disaster drills were facilitated.

Implementation Experience and Lessons Learned

- Planning and implementation efforts assisted line departments at provincial, district and commune levels as well as community stakeholders to clarify and understand their roles in disaster preparedness and resource mobilization. This helped to facilitate improved information sharing, understanding and cooperation amongst these groups.
- A comprehensive planning process can help national, provincial and district DM committees to recognize that their role is not limited only to response, but also other components of the disaster management cycle such as preparedness and mitigation.
- Building good working relationships with officials at district and provincial levels may take time, but can prove significant in helping to ensure sustainability of the planning and implementation process for community interventions.

Lao-Australia NGO Cooperation Agreement (LANGOCA) Programme

Geographical Coverage:

SIHMP:

Sayaboury and Xienghone districts, Sayaboury province

EDIS:

Xienghone district, Sayaboury province

DREC:

Sayaboury District, Sayaboury province

Duration:

SIHMP:

July 2007 - February 2013

EDIS:

July 2008 - May 2011

DREC:

July 2007 to June 2008

Funding Support Agencies/Donor:

Save the Children Australia / Department of Foreign Affairs and Trade,
Government of Australia (Formerly Australian Aid)

Partners:

- National Disaster Management Office (NDMO)
- Save the Children Australia

Project Overview

The Lao-Australia NGO Cooperation Agreement (LANGOCA) Programme looked to maximize the strengths and experience of NGOs in implementing community based programs. ADPC was engaged with activities aimed at reducing the vulnerability of the poor, with a specific focus on addressing the impact of natural disasters whilst other LANGOCA programme components were focused on reducing risk posed by unexploded ordnance in Lao PDR.

Under LANGOCA, ADPC partnered with Save the Children Australia to implement three projects: 1) Sayaboury Integrated Hazard Mitigation Project (SIHMP) 2) Disaster Risk Education for Children (DREC) and 3) Establishment of Disaster Information System (EDIS)/ Tools for Disaster Risk Assessment (TDRA) in Xienghone district.

Key Interventions and Achievements

1) SIHMP utilized a CBDRM approach to address vulnerability and strengthen the resilience of rural livelihoods in Sayaboury province

- This component sought to enhance both institutional as well as community capacities for disaster risk reduction planning, management and implementation for targeted communities in Sayaboury Province. It supported government planning agencies to improve provincial, district and village level capacity in disaster risk reduction planning. Furthermore, SIHMP aimed to improve the technical capacity of selected line agencies whilst promoting resilience and secure livelihoods by mainstreaming disaster risk reduction into their plans and operations.
- Community resilience efforts engaged with village disaster management committees and with counterparts at the district, provincial and national levels to help identify the most vulnerable individuals and groups and directly mitigate the impact of risks and hazards in efficient and cost-effective ways.

2) DREC encouraged active participation of children as well as the support of their teachers and parents in community disaster preparedness efforts.

- This initiative aimed to reduce the vulnerability of children, their families and teachers in Sayaboury province to hazards and risks through increasing the knowledge and understanding of children about disaster risk reduction.
- Disaster risk reduction modules for teaching in primary and lower secondary schools were developed. Teachers were given training and teaching aids to support the delivery of this content. Disaster risk topics were included as part of regular lessons and extra-curricular activities for students in selected secondary schools.

3) TDRA and EDIS provided Sayaboury provincial authorities and NDMO with technical support to develop local and national disaster information systems

- The EDIS project utilized the web based system (DesInventar), previously tested in Sayaboury province under the TDRA pilot project implemented in 2008-2009, to develop a disaster information system including incident reporting for local hazards.
- NDMO representatives and key officers from line ministries developed their skills to collect and input information into the database with support from ADPC. These efforts assisted in the creation of a comprehensive nationwide disaster risk management information database for Lao. It also facilitated NDMO's collection of historical information and data going forward at the district, provincial and national levels.
- Under EDIS a DesInventar manual in Lao language was developed and a national disaster risk information system was established to enable NDMO to become the lead organization in maintaining the system at the national level as well as supporting the system in Sayaboury and Xieng Hone districts. NDMO was also supported to become the main actor in preparation and organization of the regional training on DesInventar for 17 other provinces in Lao PDR with the assistance of staff from Sayaboury province and Xieng Hone district.

Implementation Experience and Lessons Learned

- Effective CBDRR interventions require a degree of pre-implementation preparation. This can involve taking time to build up rapport and trust between those seeking to implement disaster risk management programmes and local communities. It is necessary to factor this preparation time into project timelines so as to ensure that project activities are informed by the situation on the ground and the experiences of local people. SIHMP and EDIS benefited from building on the efforts of earlier programmes, meaning the projects were able to introduce interventions more efficiently from the outset.
- Whilst CBDRR facilitators can act on behalf of community actors and influence interventions it is important for the long term sustainability and practicality of interventions that appropriate mitigation measures are selected by community members themselves so as to encourage a sense of ownership on the part of the communities.
- Field work carried out in target areas of Sayaboury province emphasized that communities are rarely homogenous - this can have practical implications for project implementation. It can be time consuming to adapt or translate material for sub-sections of a community such as ethnic minority groups especially when using technical language.

Community-Based Approaches to Flood Management (CBFM)

Geographical Coverage:

Riverine flood:

Ban SuanLuang, Xieng Ngeun district, Luang Pra bang province.

Flash flood:

Ban Keo Manee, Nan district, Luang Pra bang province.

Duration:

May 2013 - November 2015

Funding Support Agencies/Donor:

World Meteorological Organization (WMO)

Partners:

- Department of Disaster Management and Climate Change (DDMCC) and its provincial and district offices
- National Disaster Management Office (NDMO)
- Department of Water Resources (DWR) and its regional offices
- Ministry of Planning and Investment (MPI) and its provincial and district offices
- Lao Red Cross (LRC)
- Provincial and District Natural Resources and Environment Office
- Provincial and District Administrative Offices

Project Overview

ADPC worked alongside the World Meteorological Organization (WMO) and a range of country partners to implement the Community-Based Approaches to Flood Management (CBFM) project in Lao PDR and Thailand. Interventions were aimed at building the capacity of target localities in community based approaches for flood management. Communities were supported to undertake rapid assessments of flood related problems and evaluate existing capacities in order to identify appropriate flood risk reduction measures.

Key Interventions and Achievements

- Community-Based Flood Management Committees (CBFMC) were formed and supported in the preparation of flood management and implementation plans and guidance manuals as well as conducting simulation activities.
- CBFMC members were familiarized with flood/disaster management concepts and engaged in undertaking participatory risk assessments (PRA) for flooding so that they would be able to undertake such activities independently in the future.
- Established links between community based organizations and institutions at district and national levels including for forecasting and early warning.
- The sustainability of pilot interventions was strengthened by encouraging the mainstreaming of CBFM initiatives into local, provincial and national development plans.

Implementation Experience and Lessons Learned

- It is crucial to build good relationships with communities. An important step is to establish realistic expectations for project outcomes both on the part of community members and those responsible for project implementation.
- Project activities should try to involve local administrations as much as possible as they can provide information on communities which fall under their jurisdiction. In turn, this can help strengthen the relationship between community and local administration which benefits the community in the long run.
- Where possible, the project should consider building on efforts and linking with activities from different organizations to integrate development activities which take place in selected local areas. This can help prevent duplication of activities and help to strengthen networks between organizations for further development of projects.

Mainstreaming Disaster and Climate Risk Management into Investment Decisions (MDCID)

Geographical Coverage:

Pilot activities and interventions:

Bountai District, Phongsaly Province; Kasy District, Vientiane Province; Beng District, Oudomxay Province; Phoukhoun District, Luang Pra bang Province; and Bolikhan district, Bolikhamxay Province

Duration:

February 2012 – January 2016

Funding Support Agencies/Donor:

The World Bank

Partners:

- Department of Planning (DoP) of the Ministry of Planning and Investment (MPI)
- Department of Irrigation (DoI) of the Ministry of Agriculture and Forestry (MAF)
- Department of Roads (DoR) and the Department of Housing and Urban Planning (DHUP) of the Ministry of Public Works and Transport (MPWT)

Project Overview

The main goal of the Government of Lao PDR under the project was to mainstream disaster and climate risk management into public infrastructure investments for the key sectors of urban planning, road transport and irrigation. This was with the aim of decreasing the vulnerability of the population and national economy to the effects of climate change and natural hazards through more informed decision making for planning and infrastructure.

Key Interventions and Achievements

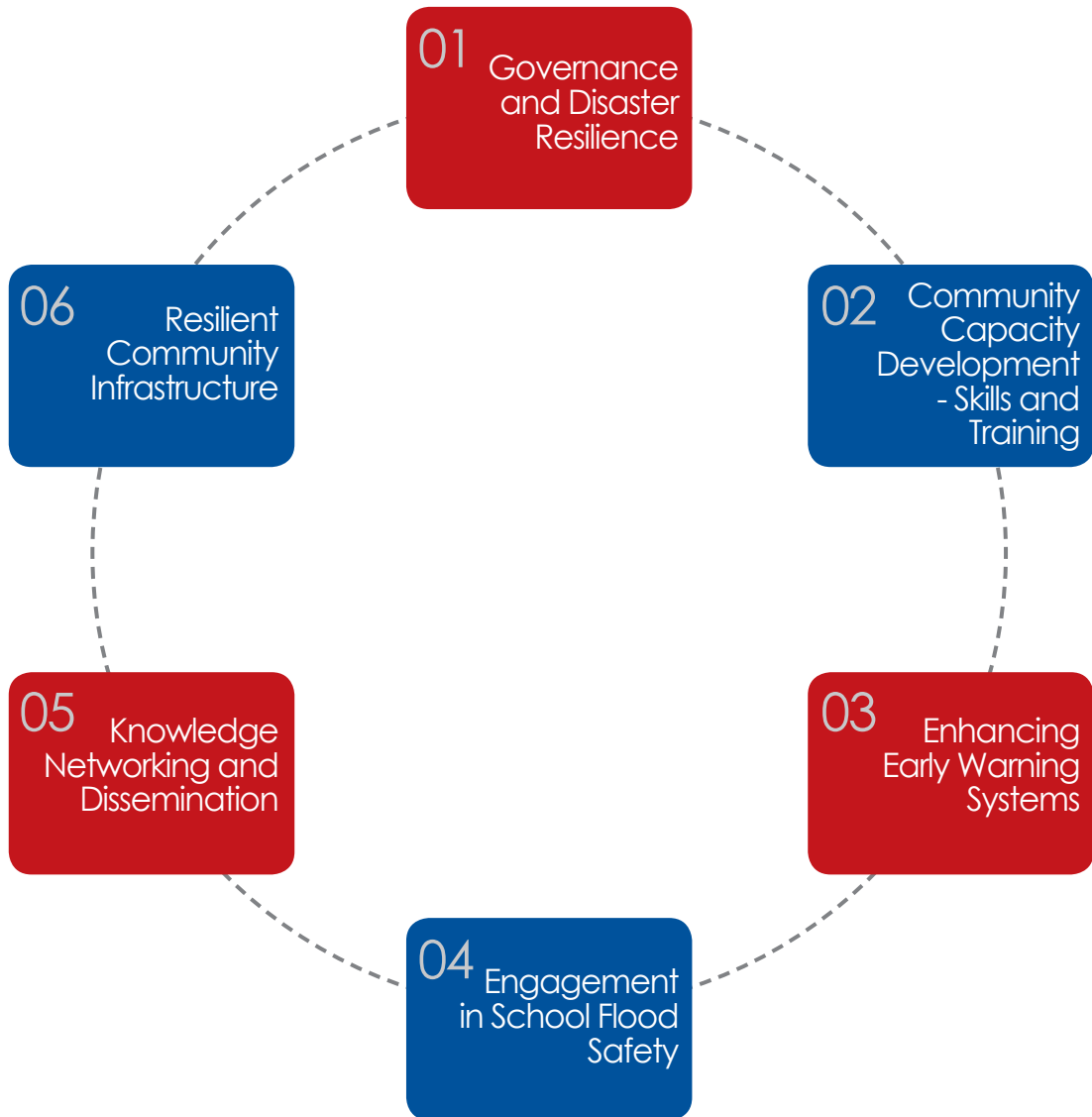
- As well as general project management and assistance for ongoing monitoring and evaluation, ADPC was able to provide technical assistance on a number of aspects for the MDCID initiative to support the mainstreaming of disaster and climate risk management into local development planning investments and decision making.
- Risk assessments were conducted to gain a fuller understanding of key hazard risks as well as specific vulnerabilities and exposure in target locations. Risk (exposure) assessment of national and provincial roads based on road number type, road surface type and category of road were completed and a draft landslide inventory map prepared.
- Key outputs for risk assessment were: National and Provincial Level Risk Assessment Report of Lao PDR; Hazard Maps and Risk Profiles of Beng and Bolikhan Districts; Risk assessment Guidelines for the irrigation, rural housing and transportation sectors and landslide inventory framework for critical national and provincial roads.
- Mainstreaming disaster and climate risk management into investments: provided assistance to MPI and line ministries in terms of appropriate infrastructure development especially for road transport, urban land use planning, and irrigation at all levels. Guidelines and strategies were developed to mainstream risk maps as well as disaster and climate risk management into planning, budgeting and monitoring and evaluation processes.
- Institutional strengthening and capacity building on disaster risk sensitive practices and implementation. Based on Training Needs Assessments (TNA) training activities on Geographic Information Systems (GIS), Risk Assessment, Resilient Infrastructure Design and Safer Construction Practices were conducted at national and local levels.
- Pilot sub-projects in the disaster-prone provinces of Phongsaly and Vientiane were initiated to demonstrate disaster-resilient construction practices for irrigation systems, embankments and culvert improvement as well as enhancement of road infrastructure (including drainage systems and slope stabilization) informed by earlier risk assessments.

Implementation Experience and Lessons Learned

- The project placed a key focus on ensuring that the lessons learned over the course of the initiative could be documented and carried forward for use in similar projects in the future. For example, demonstration sites showcasing 'resilient techniques' for the transport and irrigation sectors were used to illustrate practical examples of good practices for disaster resilient infrastructure introduced under the project.
- The need to achieve an effective balance between structural and non-structural measures was recognized under the project. On one hand, structural design and implementation informed by risk information was a key focus of project activities. However, strengthened knowledge, increased capacity, mutual cooperation and consultation, proactive participation and a sense of ownership of concerned stakeholders also proved to be important factors under the MDCID project.

Resilience Building in Lao PDR - How were Communities Empowered?

ADPC's approach to resilience building in Lao PDR has focused on improving the ability of communities to prepare more effectively for disasters at the local level and address particular hazards, vulnerabilities and exposure to the risks they face. Alongside these efforts, the institutional capacities of relevant agencies and groups at district, provincial and national levels were also enhanced to enable them to better support local level disaster preparedness interventions. Notably, collaboration with actors from relevant governmental agencies helped these agencies to enhance their awareness and knowledge of relevant hazards and risks in Lao PDR. In this section ADPC's efforts to enhance disaster resilience by empowering communities across Lao PDR are considered in terms of the following themes: Governance and Disaster Resilience, Community Capacity Development - Skills and Training, Enhancing Early Warning Systems, Community Engagement in School Flood Safety, Knowledge Networking and Dissemination and Resilient Community Infrastructure.



01 Governance and Disaster Resilience

Although ADPC's Community Resilience interventions in Lao PDR were mainly implemented at the local level, these efforts engaged with government agencies and officials at a variety of scales. In particular, activities to strengthen flood resilience underlined the importance of involving relevant individuals at local, district, provincial and national levels. Enhancing the awareness of relevant officials of the importance of addressing local hazard risks and supporting them to gain a more in-depth understanding of issues and challenges which local people face played a part in consolidating the long term sustainability of project initiatives beyond their stated duration. From a practical perspective, interventions which were well integrated into planning at higher scales were able to mobilize the necessary finances, resources and decision making authority to be utilized for the benefit of communities.

In Lao PDR, developing capacity in terms of skills and training at the national, district and provincial level was of particular importance due to recent changes in the country's institutional disaster management arrangements. The NDMO, under the Ministry of Labour and Social Welfare (MoLWS) previously served as the country focal point for disaster management. However, under government re-structuring in mid-2013, NDMO and its functions were transferred to the Department of Disaster Management and Climate Change (DDMCC) under the Ministry of Natural Resources and Environment (MoNRE). As such, there was a clear need to build the capacity of DDMCC in line with its organisational mandate as well as to strengthen its ability to coordinate and oversee the delivery of disaster management efforts across relevant ministries, international agencies and at various levels of government.



Ban Keo Manee, Xieng Nguen district in Luang Pra bang province was an example of a target community where local government officials were actively engaged in resilience building initiatives under the CBFM project

“DDMCC as the Secretariat of the National Disaster Protection and Control Committee (NDPCC) is responsible for taking the lead in turning policy into practice to reduce disaster impacts at the local level,”

Mr. Souphasay Komany, Department of Disaster Management and Climate Change.

Strengthening community-based flood risk management capacities for relevant institutions in Lao PDR

Under the CBFM project, a five day workshop training on Community Based Flood Risk Management was organized at the initiative of the DDMCC. This activity recognized the need to strengthen the capacity of institutions and governmental agencies as well as community members under project interventions. Officials from Luang Pra bang province, XiengNgeunand Nan districts and representatives from two target villages (Ban Suan Luang and Ban KeoManee) province participated in the workshop. The workshop activities aimed to improve general understanding of flood risk and flood management concepts and terminology as well as to introduce participants to CBFM concepts and Participatory Risk Assessments (PRA) tools with specific content and learning for riverine and flash flood affected communities. Participants were given the opportunity to conduct field exercises in two target villages, Ban KeoManee (prone to flash floods) and Ban Suan Laung (at risk from riverine flooding). This gave participants experience of conducting PRAs towards helping target villages develop effective community flood management plans. First hand learning encouraged officials and community members to gain an in-depth level of understanding so they could replicate the activities in other target areas.



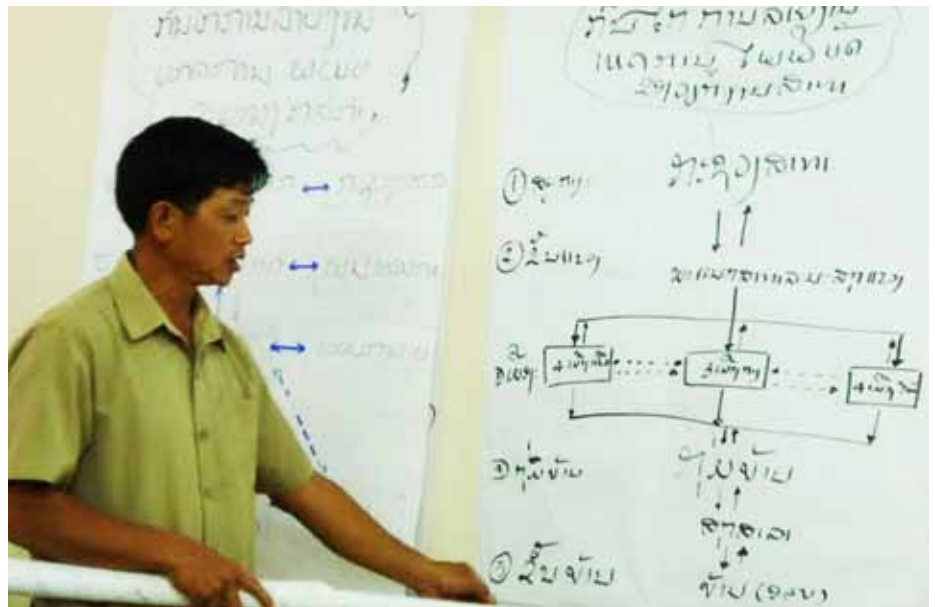
Participants of the November 2014 Training Workshop under the CBFM project included provincial and district level officials and community members

For ADPC's Flood Emergency Management Strengthening (FEMS) activities under FMMP, support was given to the national government to develop and revise existing guidelines and training handbooks on flood disaster risk reduction. National and sub-national training of trainers (ToT) workshops on flood risk reduction and needs based training focusing on public awareness, flood preparedness programs and integration of flood risk reduction into local development planning were conducted. Furthermore, a district level ToT curriculum on flood preparedness and emergency management was developed and guidance on disaster risk reduction planning, principles of EWS, resource inventory skills and public awareness campaigns were carried out. Other interventions included assisting national and provincial authorities in creating and maintaining a comprehensive database of trainers. These actions demonstrated a recognition of the need to strengthen the capacities of relevant authorities at national, provincial and district levels from the top down so that the benefits could be passed on to risk prone communities.

Improving disaster information management systems at national, provincial and district levels

ADPC worked with partners to improve the technical capacity of responsible government agencies, most notably under the EDIS component of the LANGOCA project which assisted the National Disaster Management Office (NDMO) in developing and strengthening disaster information systems. EDIS helped establish an improved disaster information system (utilizing the web based software Desinventar) for national, provincial and district staff. The system provided a means of maintaining and updating information on hazards and strengthened the ability of responsible institutions to be more informed about hazard risks affecting communities in Lao PDR.

The NDMO and local provincial and district authorities acquired key skills to establish and maintain disaster risk information systems and networks linking districts and provinces to the national level. The activity contributed to the standardization and sustainability of information systems at all levels by establishing central and local information focal points. This was supplemented by conducting community and district level disaster risk assessments in three target locales in Xieng Hone district to enable vulnerable communities to identify and respond to local hazard risks. The EDIS project responded to a clear need identified by the NDMO, as well as the Provincial and District Disaster Management Committees for improved data collection and analysis of local hazards. Enhanced disaster information systems facilitated the effective identification of disaster risks and underlying risk factors and therefore contributed to more informed preparedness and response initiatives at the community level by strengthening institutional capacities from the top down.



Consultation with provincial and district representatives for disaster reporting systems in Lao PDR hosted in Sayaboury District

02 Community Capacity Development – Skills and Training

ADPC's community capacity development efforts entailed developing skills, improving knowledge and providing training both at the local and institutional levels to help community members in at-risk areas of Lao PDR to prepare more effectively for shocks and stresses. An important component was developing skills for risk assessment in hazard prone communities. This facilitated greater participation from local people in determining the nature and magnitude of local hazards and the negative impacts they may have on assets, including people, households, facilities such as schools and health facilities, livelihoods and economic activities. Improved capacities for risk assessment helped to strengthen and inform community resilience planning efforts including identification and selection of specific disaster risk reduction measures, key stakeholders and their specific responsibilities as well as available resources and requirements in addition to establishing a timeframe for the implementation of interventions.



Community risk mapping exercises carried out in Kalum district under the OSPDM project

Enhancing risk assessment and planning capacities of risk prone communities from the top-down

Field activities under OSPDM provided training on both theoretical and field-based knowledge of disaster risk management, including CBDRM. The project placed a key focus on strengthening the institutional capacity of responsible agencies in Lao PDR on disaster risk management including the National Disaster Prevention and Control Committee (NDPCC), Provincial Disaster Prevention and Control Committees (PDPCC), District Disaster Protection and Control Committees (DDPCC) and Village Disaster Protection and Control Committees (VDPCC). Training curriculums were created for disaster risk management planning (DRMP) and community-based disaster risk management planning (CBDRMP) with supporting training manuals on these two topics also developed.

CBDRM training was conducted in six target villages (two villages in each of Sekong, Attapeu, Saravanh provinces) for DDPCC members and VDPCC members to build their capacity and skills on the use of PRA tools for community disaster risk assessment and planning. The courses familiarized participants with CBDRM planning theories and methodologies, provided field practice on conducting PRAs and allowed time for data analysis and discussion of lessons learned. The provincial trainers acted as the main facilitators throughout the sessions, while trainers from NDPCC secretariat office and ADPC gave support during the PRA sessions. Provincial trainers were fully in charge for the training, giving them first-hand experience of preparing and delivering trainings.



The trained trainers at district level facilitated participatory community planning efforts in Ban Keo Manee, Xieng Nguen district, Luang Prabang province



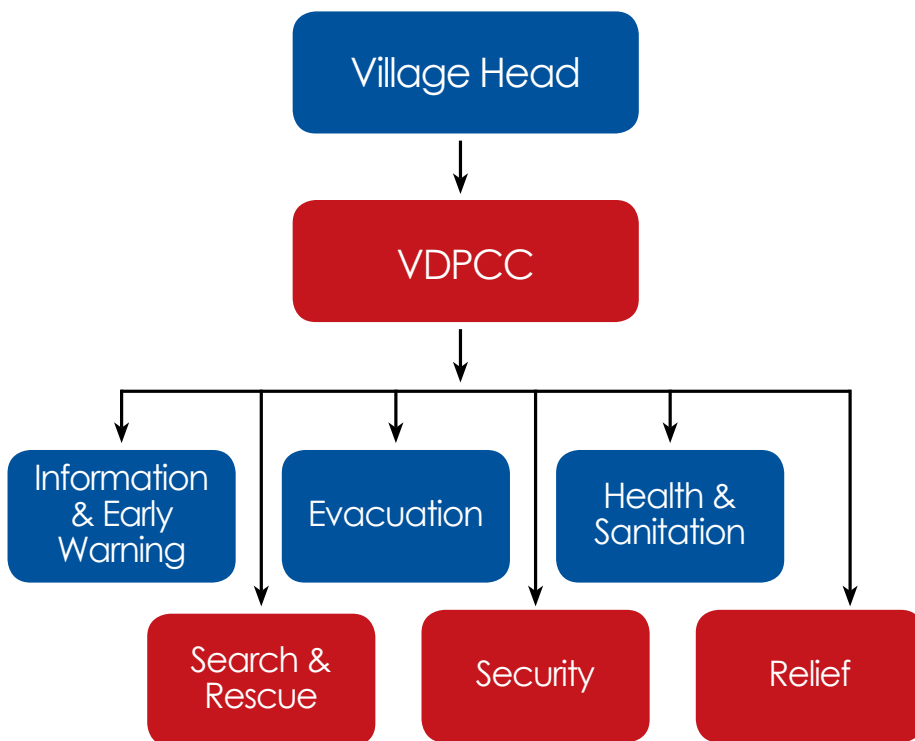
The trained trainers at districtlevel facilitated participatory community planning efforts in Ban Keo Manee, Xieng Nguen district, Luang Prabang province

Engaging in Participatory Risk Assessments (PRA) provided communities with the opportunity to identify and rank local disaster risks according to priority of action. The outputs from these assessments supported planning processes as community stakeholders were able to contribute to proposing specific risk reduction measures and inform detailed activities to be undertaken, resources required, the level of capacity needed, responsible persons and agencies as well as a timeline for action.

Enhanced community resilience through skills and training at the village level

Aside from institutional capacity building for responsible agencies in Lao PDR, a focus was also placed on improving the skills, knowledge and resources of individual community members through training initiatives and courses concerning different aspects of disaster preparedness. This element of resilience building looked to develop a 'culture of preparedness' across at-risk communities in Lao PDR by emphasizing the personal responsibility each community member has in view of contributing to the collective resilience of their local area.

The formation of Village Disaster Prevention and Control Committees (VDPCC) such as those under the CBFM project directly aimed to empower community members through their participation in planning efforts for disaster preparedness. Based on their previous skills, experience and areas of interest, VDPCC members were assigned to work under dedicated sub-teams for early warning, search and rescue, evacuation, security, health as well as relief. The creation of these groups helped assign roles and responsibilities to individual community members at the village level and guided them in what to do before, during and after disaster events.



“From the three trainings, we are very glad that we now have improved knowledge on these topics. Earlier we did not have such in-depth knowledge. After these trainings, we will use this information so that if the flood occurs, we can help each other to be safer over time. In the past, we did not know how to help and make it safer,”

Ms. Senkham, Head, Information and Early Warning Sub-Committee, Ban Suan Laung, Xieng Nguen district, Luang Pra bang province.

An important follow up to the development of village plans was the validation and testing of these plans through field-based simulation activities. Simulation activities formed part of training for the development of disaster preparedness skills allowing VDPCC members to practice carrying out their allocated tasks in line with village emergency plans based on scenarios developed for each target community.



Community members in Ban Suan Luang inspect a recently installed water gauge as part of simulation activities – participants wore different colored bibs based on their specific roles they played in the simulation exercise

Comprehensive training and simulation exercises for community level first responders

CADRE activities under PEER were aimed at establishing effective first responder systems at the community level in selected countries, including Lao PDR. This involved enhancing the capacity of community level first responders and familiarizing trainees with basic life-saving skills so that their communities could be better prepared for dealing with emergencies. This is particularly important in the first few hours following a disaster when external professional support and equipment may not be accessible. In Lao PDR a national pilot course and workshop with support from the regional level underlined the approach of strengthening in-country capacities from the top down. Pilot communities were then selected for local level training to be conducted. Community members underwent a short-course in simple elements of medical first response, dealing with mass casualty disasters and how to undertake collapsed structure search and rescue as well as improving their knowledge on how to better prepare their families for disaster events.



Participants of the CADRE Training for instructors course held in Vientiane which included simulation activities

Assistance and support for the establishment of disaster ready health facilities

The HOPE component of PEER helped enhance the quality and standards of hospital emergency preparedness in Lao PDR with a focus on improving the ability of health facilities to cope with disaster events. As with ADPC's other community resilience building activities, this involved strengthening capacities at both the national and provincial levels in addition to working with community members. Health facility management and medical staff were the target groups for capacity building. National HOPE instructors for Lao PDR were trained in Bangkok during the regional Training for Instructors (TFI) course after which the HOPE National Pilot course conducted at Napakuang, Vientiane Province was attended by representatives from hospitals from Vientiane Capital and surrounding provinces.



Participants from health facilities in Vientiane and the University of Health and Science take part in assessment and simulation activities during HOPE course conducted in Vientiane

Health facility risk assessments were crucial in identifying vulnerabilities, technical needs and gaps for capacity building support for the establishment of model hospitals in Mithaphab and Luang Pra bang Hospital. These assessments were supported by consultations with the Ministry of Health (MoH) and the World Health Organization (WHO) country office for Lao PDR. The initial assessments undertaken at these hospitals were used as a baseline starting point from which progress in building capacity could be measured. Hospital staff were assisted to hold an emergency planning workshop and establish hospital incident command systems. Support to establish hospital command centers was also provided by the PEER team with these centers utilized as part of hospital exercises to validate updated hospital emergency plans.

Capacity building efforts in Lao PDR under HOPE therefore enhanced the skills of medical personnel and health facility staff through training. Technical support for comprehensive assessment and planning also improved the ability of hospitals to cope with emergency events more effectively. Participants from health facilities who participated in HOPE training courses gained vital skills in planning for hospital disaster preparedness, managing mass casualties, coordinating with emergency services and authorities and effective communication procedures for public health.

03 Enhancing Early Warning Systems

Community-based early warning systems can help encourage local management of risk. This empowers communities to take first hand action to safeguard lives and assets as well as protecting livelihoods and development gains. Early warning systems (EWS) refer to provisions and arrangements made to disseminate timely and meaningful warning information which enable individuals, communities and organizations threatened by hazard risks to respond in sufficient time to reduce the possibility of harm or loss. EWS related activities in the Lao context required engagement at the local level with community members as well as enhancing the capacity of relevant actors and agencies at district, provincial and national levels with practical and technical support.



Developing community skills for early warning in Ban SuanLuang, Luang Pra bang province

Engaging communities for developing and maintaining effective early warning systems

Community based flood management planning took place in Khammouane and Savannakhet provinces, helping local people improve knowledge and skills for developing and maintaining effective EWS. It was important to work with communities in the initial stages of the project in order to establish their expectations of resilience building programs and ascertain acceptable levels of risk in order to select the most appropriate interventions for each locality. FEMS interventions carried out under FMMP also recognized the importance of ensuring the inclusivity of resilience building interventions. Under this project, a survey and capacity building activities on dealing with floods of women-headed households were undertaken. This underlined the importance of engaging with a wide range of community members and utilizing their knowledge to address their needs in terms of flood risk management.

Levels of community involvement in the establishment, maintenance and utilization of warning systems was raised by developing the skills of local people in recognizing warning signals as well as enhancing their means of disseminating and communicating warning messages. Training on community based flood management was undertaken for commune disaster management committee members and volunteers was undertaken. Presenting materials related to EWS in an appealing, easy to understand format helped in the transfer of knowledge and principles to community members and encouraged them to take practical steps for improving local warning systems.



Community leader of Ban Keo Manee reported updates of the flood situation to district natural resources and environment officials during the simulation exercise- participants wore different colored bibs based on the specific roles they played in the exercise

Defining clear roles and responsibilities for community members under early warning systems

Establishing appropriate country specific CBDRR standards (in the form of SOPs and requirements for local authorities) for EWS at the national level was an important step ahead of implementation at the community level. This helped establish a clear, consistent approach to CBDRR which is integrated from the top down to the local level and was tailored to a specific national context. The development of SOPs, allowed communities to respond to warning information in a more systematic and organized manner. These early warning SOPs guided community members in view of their roles and responsibilities as part of a wider hazard response and warning systems.

Greater community involvement was supported by enhancing the technical aspects of established systems through upgraded equipment and integration of new technology into warning systems. Improved relationships and co-ordination with relevant local officials also strengthened the position of community members for utilizing warning systems. These efforts empowered communities by engaging local people in management of risk through strengthening of warning systems and allowing them to play an active role in protecting their own lives, assets and livelihoods.



The Village Disaster Protection and Control Committee (VDPCC) members of Ban Keo Manee reviewed their roles & responsibilities before the simulation exercise

“Installation of standard rain gauges in two pilot communities helped improve flood forecasting and early warning systems in Luang Prabang. The capacity building for community on early warning will help the community to be able to measure the rain levels by themselves. They will then be able to prepare and better respond to flooding,”

Mr. Bounphan Vongpanya, Head of Meteorological and Hydrological Section, Provincial Office of Natural Resources and Environment, Luang Pra bang, and Head of Provincial Disaster Prevention and Control Committee (PDPCC) Secretariat.

Formulated a national strategy for early warning and guidelines for dissemination of messages

A national strategy on EWS was developed and finalized through a series of consultations between the DMH, MoNRE, NDPCCS and relevant line agencies, international organizations and development partners. The strategy outlined existing governance, institutional and legal arrangements, gaps and needs for improvement of EWS and identified a road map for operationalization of the strategy from 2010-2015 outlining short, medium and long-term interventions. Communication guidelines for early warning were also developed to support effective communication between the DMH, NDPCCS and other stakeholders at national and local levels. Specific guideline elements included advice for the timing of warning messages, content of warning bulletins, selection of warning recipients, and steps for developing an information dissemination website.

04 Community Engagement in School Flood Safety

Schools are an important focal point for community resilience building efforts. Structurally, schools can be utilized as secure areas for community members in the event of an emergency - this means that they should be well-prepared and equipped for disaster events. However, it is important that regular school activities are not disrupted by engagement with community preparedness efforts. Teachers in risk prone communities can play an important role in improving the knowledge and basic practical skills of students to cope more effectively with hazards they are exposed to in their local area. Integrating disaster knowledge into regular school activities using innovative and interesting materials can encourage young people to share this knowledge with parents and across their community. Schools can therefore be an effective entry point for raising awareness of disaster preparedness in hazard affected communities.



Students and teachers participate in school campaign activities at a school in Nonglom, Nongbok district

Schools were crucial community focal points for the enhancement of disaster preparedness knowledge

School Flood Safety Programs (SFSP), such as those carried out in Khammouane and Savannakhet provinces under FEMS, were a relatively new approach for Lao PDR when they were pioneered by ADPC in 2009. The programs were designed with the objective of implementing flood preparedness programs in selected vulnerable schools and enhancing the wider capacity of at risk communities for coping with floods. School initiatives specifically targeted young people who could take on the role of informal risk reduction communicators within their communities.



Teachers at Ban Khamhe School, Yommalathof Khammouane Province district utilized resources such as the teacher's information booklet on flooding preparedness which was developed under the FEMS project

The importance of teachers for communicating disaster preparedness knowledge to students in easy to understand ways was recognized. Support was given for the development of educational and IEC materials which could be integrated into lesson plans and regular school curricula. Three one-day SFSP teacher orientation workshops organized by the district education offices were conducted in target districts of Mahaxai, Xaibouly and Hinboun. The final version of an SFSP teachers' information booklet, flood facts booklet and posters were distributed at the workshops.

Commune level training in Khammouane and Savannakhet provinces for disaster preparedness used schools as a focal point around which activities were centered. The coverage of school activity days was expanded by inviting parents to join their children and teachers to engage in activities. The importance of inclusiveness was recognized with women's groups and older community members also engaged in activities. Popular activities from the SFSP included painting, asking students to explain posters, question and answer sessions, telling short stories related to flooding, fishing games, singing competitions and poem writing contests which were used to inform school children about basic disaster preparedness topics.

Development of specialized learning materials and curriculum content for schools in risk prone communities

Assistance was provided by the Secretariat of the Provincial Disaster Management Committee to disseminate educational posters, booklets and flood information kits to District Disaster Management Committeemembers, target villages as well as schools in Hinboun, Mahaxai, Yommalath and Xaibouly districts. IEC materials were distributed at teacher orientation workshops, school flood safety campaigns and public awareness events at commune level and other meetings. Materials were also distributed at the national level to other relevant NGOs partners for use in their projects in other target areas.



Students and teachers participate in school campaign activities at schools in Nongbok district

DREC activities under the LANGOCA project also utilized schools in Sayaboury District to inform young people about disaster risks and enable them to play an important role as risk communicators in their community. Disaster risk management modules and learning materials compatible with local and national requirements were developed in conjunction with the central and local departments of DoE for upper primary and lower secondary levels. This used participatory approaches so as to promote awareness of disaster risk reduction amongst teachers, parents and school children. Secondary school children from selected schools directly benefited from disaster risk topics being included as part of lessons and extra-curricular activities. Teachers underwent an orientation training course before pilot modules and learning materials were tested for effectiveness in selected schools. Based on feedback, modules were revised for potential use in other schools and target locations.

05 Awareness Raising and Knowledge Dissemination

The informed participation of stakeholders at all levels is an important consideration for effective resilience building efforts. Identifying appropriate and effective means of improving community knowledge of local hazards and disaster preparedness was therefore an important aspect of ADPC's community resilience work in Lao PDR. Use of IEC materials suited to the local context was an effective way to inform community members about project aims and activities. Forums and workshops at the regional, national and international level were also utilized in order to share experiences, best practices and disseminate lessons learned in terms of community resilience building across Lao PDR and from other national contexts. Networking and sharing of ideas across different sectors was important in helping to mainstream disaster reduction principles across the work of different agencies and organizations in Lao PDR engaged in community resilience building efforts.

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Series of posters developed by ADPC and partners under FEMS covering a range of topics including (from top left to bottom right): household safety measures for before, during and after flooding and advice for children against drowning

Collaboration for the development of IEC materials on disaster risk knowledge

Partnership and networking was an important part of developing IEC resources and dissemination of knowledge enhancement material. IEC materials under the FEMS project were produced using a collaborative process. Existing IEC resources which had been developed by different partners were studied. This allowed successful elements of past materials and best practices in the region (materials from Thailand and Cambodia were also reviewed) to be applied to new IEC materials such as posters, booklets and kits for teachers. The materials were utilized for various public awareness trainings, village capacity building campaigns and school flood safety programmes.



Consultative meeting for government and disaster management practitioners for the development of IEC materials

Under its different projects ADPC helped to develop a range of IEC materials targeting at-risk communities. Raising public awareness regarding disasters and local hazards was crucial in engaging communities and providing them with the knowledge to contribute to resilience building interventions. Community flood information billboards and posters were installed in Khammouane and Savannakhet provinces providing community members in flood prone areas with visual prompts to be vigilant in preparing for hazard risks in their local area. The billboards - which adapted the household safety measures as depicted in the flood posters - were installed in appropriate locations within communities for people to view them easily during everyday activities. Temporary billboards were also erected during high profile events in target provinces such as the annual boat racing festival in Thakhek, Khammouane Province. These formed part of exhibitions hosted in busy locations so that a high volume of people would be able to view them and raise their awareness on local flood risk issues.

Strengthening institutional capacities for public awareness raising efforts

Project activities under FEMS looked to improve the capacity of responsible organizations for carrying out public awareness raising campaigns and enhancing the general knowledge of community members on disaster risk matters. For the first time in Lao PDR, public awareness on flood risk reduction was included in the National ToT Training curriculum for disaster management practitioners. This was a key component of the district training for the members of District Disaster Management Committees who took ownership of the public awareness program. Public awareness on flood risk reduction was also included as an important module of the national ToT curriculum.

Experiences in Lao PDR and from other Mekong River Commission member countries on public awareness activities were compiled and used as part of the national training manuals developed by NDMO. The content of the training course was tested at a national ToT Training in Vientiane held in May 2010. Public awareness on flood risk reduction was also an important module of needs based training (NBT) at district and village levels. The module was delivered by the provincial and district trainers trained at the earlier National ToT Training. Four NBTs were conducted, one in each target district. More than 120 participants including the members of Village Disaster Preparedness Units of 20 target villages (five villages per district) and District Disaster Management Committee members of the four target districts were trained on public awareness for flood risk reduction.

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IEC material including the information booklet on flooding hazards (above) supported FEMS activities in Lao PDR

Forums for the sharing of best practices and lessons learned for flood risk reduction

Workshops, forums and conferences were important platforms for the sharing of ideas and best practices, drawing on the input of actors from the community as well as international and regional levels. A notable example of this under the FEMS project was a three-day international workshop on 'People-Centered Flood and Land Management in the Mekong River Basin: Sustained Implementation and Planning for Future Challenges at the sub-national levels'. The workshop was jointly organized by the Mekong River Commission secretariat, ADPC and GIZ. The workshop brought together more than 150 participants including 75 key national and sub-national officials of the Mekong Basin countries dealing with flood and land management and mitigation activities to share experiences and challenges from interventions carried out across the region. Topics included innovative practices of flood and land management, children's flood safety and discussions on how to encourage the utilization of public private partnerships for flood risk reduction.



Three-day international workshop hosted in Luang Prabang in February 2011

06 Resilient Community Infrastructure

It is important for disaster risk reduction interventions at the community level to be integrated into development planning at various scales. This allows disaster and climate resilience concerns to be considered in the implementation of public infrastructure. ADPC has focused on structural and non-structural approaches for safer communities in hazard prone locations in Lao PDR. These efforts helped to disaster proof key community infrastructure for the sectors of transport (mainly road systems) and irrigation. Structural work focused on the technical design and construction methods of these assets. Non-structural measures were also recognised as a core factor of success, such as the leadership and ownership of concerned line departments and local administrations and communities who are the direct beneficiaries of the investments. Furthermore, efforts were made to mainstream disaster and climate risk management into public infrastructure policies and investments and to enhance human and institutional capacities through training at national, provincial, district and community levels in the design and implementation of resilient infrastructure.



Safe road construction, including the installation of slope stabilization structures, was a key part of providing safer community infrastructure in risk prone locations

Perspectives on resilient infrastructure for transport and irrigation sectors

Considering insights from community members as well representatives from concerned agencies and organizations demonstrate the specific ways in which disaster-resilient construction practices were able to benefit communities in Lao PDR. Interventions under the MDCID project included enhanced irrigation systems, embankments and culverts as well as enhanced road infrastructure (including drainage systems and slope stabilization). Significantly, it was highlighted that this enhanced infrastructure was able to improve conditions for community members not only directly in terms of safer environments but also in terms of helping to achieve more secure spaces in which local livelihood activities could prosper. Feedback was also given for trainings carried out on safer construction practices in disaster prone areas which were conducted for national and provincial level technical personnel to enhance their knowledge on resilient design measures.



New canal systems were installed as part of the irrigation scheme in Kay district, Vientiane province

“Importantly the farmers are very pleased that the new irrigation scheme can provide waters to more paddy fields through the canals. It is for sure that this year productivity will be increased,”

Mr. VilayOuanpaseuth, current head of PhonNgam village,
Kasy District, Vientiane.

“The pilot projects introduced new kinds of standard design of road slope stabilization approaches which included slope protection techniques. Many people travelling along the road gain benefit from the road pilot projects due to enhanced safety and uninterrupted traffic. These are the first road slope stabilization projects and I hope similar works will be constructed in many critical landslide spots,”

Mr. Somphet Sisangvone, Head of Bountai District Public Works and Transport Office District.



Slope stabilization structures were completed along key roads in Bountai District, Phongsaly Province

“Landslides along the Road are very common and during the rainy season people are scared from landslides when travelling. Good roads and safer road slopes enable the villagers - who are mainly farmers - to sell their products,”

Mr. Phone Insouk, head of Bounyong village,
Phongsaly province.

“It was fortunate that I participated in the monitoring of the road pilot project construction. The gained knowledge and experiences gave me confidence to implement similar construction works in the future”.

Mr. Latsamy Chittabounty, a road engineer from District Public Works and Transport Office of Bountai district.

Future Steps for a Resilient Landscape in Lao PDR

The beginning of the post-2015 era under the Sendai Framework for Disaster Risk Reduction (SFDRR) should be utilised as an opportunity for relevant actors and agencies in Lao PDR to take stock of past efforts so as to inform future efforts for disaster preparedness. In this section, Future Steps for a Resilient Landscape in Lao PDR are considered in the context of relevant frameworks and agreements at the international and regional level, actions which can be taken at the national level as well as efforts concerned with resilience building at the community level.



International and Regional Level

Consider the lessons learned and future outlook areas proposed under the HFA

Successes, challenges and lessons learned over the course of the Hyogo Framework for Action (HFA) era should be taken into account when considering future steps for enhanced disaster resilience in Lao PDR.

The 'Future Outlook' areas as detailed in the final national progress report for the implementation of the HFA, provide a useful reference point for disaster management activities in Lao PDR⁹. A number of these suggested areas which were published shortly before the post-2015 Sendai Framework for Disaster Risk Reduction came into effect are directly relevant to Community Resilience.

Future Outlook Area 2 of the progress report highlighted the need for the "development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards". Under this area it was noted that there was a great difference in levels of development, planning and capacity amongst communities in Lao PDR. It was proposed that a more centralized approach to Community Resilience could help in terms of budget allocation and determining coverage of interventions in order to target communities most in need. Future Outlook Area three emphasized the need to further strengthen EWS provisions at the local level. A suggested first step to achieving this is the enhancement of disaster



National Level

Continue to develop the capacity of relevant institutions for effective management of disaster risk

As noted throughout this document it was imperative to build the institutional capacity of relevant organizations at national, provincial and district levels for effective disaster risk management in Lao PDR. This strengthened the ability of relevant actors in carrying out interventions at the community level. As such assessments to identify remaining institutional gaps and weaknesses should be carried out to maintain the ability of these institutions to support interventions carried out at the local level.

For SFDRR, the development of country status reports are an important preliminary step which countries are undertaking as part of their commitment to work towards the reduction of disaster risk. These will serve as baseline against which disaster risk reduction measures can be gauged against as progress reporting takes place throughout the post-2015 era. Therefore, the completion of a comprehensive disaster risk management status report for Lao PDR can help guide relevant actors and stakeholders as the SFDRR gets underway, including interventions for community resilience building.



Community Level Resilience Building

Consider lessons learned over the past decades of community resilience building efforts in Lao PDR and across the region

As documented, ADPC has contributed to a range of initiatives aimed at enhancing the resilience of at risk communities across Lao PDR over the past decades. Taking stock of the lessons learned and implementation experiences of these projects can inform the expansion of resilience building activities to include at-risk communities which may not have benefited from such efforts thus far. In Lao PDR, efforts to strengthen community resilience have encompassed wide ranging issues including safer schools, building the capacity of local responders, establishing and maintaining systems for early warning and improving health facility preparedness.

Based on ADPC's wider regional experiences, a further component of community resilience building which can be addressed in Lao PDR is engaging the private sector in disaster risk management efforts. Greater private sector engagement in disaster risk management should be encouraged so as to increase the scope and number of sectors benefiting from interventions.

⁹ Lao People's Democratic Republic - National progress report on the implementation of the Hyogo Framework for Action (2013-2015). Available at: http://www.preventionweb.net/files/41813_LAO_NationalHFAprogress_2013-15.pdf



information management and dissemination for which the establishment of a dedicated Emergency Operations Center (EOC) at the national level was also recommended.

Support implementation and operationalization of the SFDRR in Lao PDR

Action at the local level - including CBDRR - remains a key concern for disaster management practitioners under the post-2015 agenda for disaster risk reduction. The HFA was widely regarded as having helped lead to an improvement in disaster management arrangements and procedures. However, an area which required progress is the need for a better understanding and tackling of disaster risk drivers and the root causes of disasters i.e. the exposure of vulnerable people, assets and infrastructure to hazards.

This is reflected in the SFDRR which states that resilience building should be a multi-scalar, multi-stakeholder ‘all of society’ endeavor. It also emphasizes the need to “assign clear roles and tasks to community representatives” (UNISDR 2015). This highlights the importance of continued participation of community members in risk prone areas of Lao PDR to help enhance preparedness and recovery for disasters.

Actively engage in disaster management forums at the regional level

Relevant actors and representatives of responsible agencies in Lao PDR should continue to be actively involved in disaster management platforms at the regional level. Notable forums include the Asian Ministerial Conferences on Disaster Risk Reduction (AMCDRR) and the Regional Consultative Committee on Disaster Management (RCC).



Push forward with efforts for the establishment of a national platform for disaster risk reduction

‘Strengthening disaster risk governance to manage disaster risk’ is one of the four Priorities for Action of the Sendai Framework. The framework urges improved coordination and strengthening of multi-sectoral and multi-stakeholder platforms at local, national, regional and global levels. Attempts to improve collaboration between actors already working towards enhanced disaster preparedness can also help to enhance community resilience strengthening efforts in Lao PDR.

ADPC is a key actor in supporting recent activities carried out by the French Red Cross to encourage greater co-operation and collaboration between organizations with experience of carrying out CBDRR interventions in Lao PDR. In support of the Government’s efforts, and as part of a wider framework of a DIPECHO project set up in consortium by the Lao Red Cross, French Red Cross, Oxfam Solidarité, Save the Children Norway and Care Deutschland-Luxemburg funded by ECHO, are working with the DDMCC on the establishment of a National Platform for disaster risk reduction and climate change adaptation in Lao PDR.



This underlines recognition that many areas in Lao PDR are undergoing rapid development. This in turn has raised the importance of risk sensitive development and investment as well as the mainstreaming of disaster risk reduction considerations into planning at a variety of scales and across different sectors.

Small and Medium enterprises (SMEs) account for 98% of firms and generate more than 81% of employment Lao PDR¹⁰. The 7th Five Year National Social-Economic Development Plan for Lao PDR also underlined the importance of SMEs as essential for poverty reduction and contributing to further raising standards of living¹¹. Therefore, ensuring that SMEs in particular are engaged in community resilience building should be prioritized to help safeguard the economic wellbeing and livelihoods of community members.

Establish a set of definitive and comprehensive guidelines for organizations carrying out CBDRR actions in Lao PDR

ADPC is actively supporting work being carried out at the initiative of the French Red Cross (working in collaboration with the national Red Cross Society of Lao PDR) to develop a model for CBDRR Activities and standardized IEC materials for use at the community level in Lao PDR.

10 International Trade Centre - World Trade Organization (2014). SME Competitiveness and Aid for Trade: Connecting Developing Country SMEs to Global Value Chains. Available at: <http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/SME%20Competitiveness%20and%20Aid%20for%20Trade-connecting%20developing%20country%20low-res.pdf>

11 The Seventh Five-Year National Socio Economic Development Plan (2011-2015) for Lao PDR. Available at: http://www.la.undp.org/content/dam/laopdr/docs/Reports%20and%20publications/LA_7th%20NSED_P_Eng.pdf



The AMCDRR is a regional gathering organized jointly by UNISDR and a different Asian country on a biannual basis which provides an effective platform for the exchange of ideas, innovations and best practices related to disaster risk management. The upcoming 7th AMCDRR, to be hosted in India in 2016, should serve to focus disaster management efforts in Lao PDR, as the meeting will be used to endorse a regional implementation plan based on the SFDRR specifically for Asia.

Likewise, Lao PDR should continue in its efforts as an active member of the RCC for which ADPC acts as the secretariat. Since 2000 the RCC has provided a regional dialogue platform for consultation and cooperation and to bring countries in the Asian region together to achieve common goals on reducing disaster risk. A key outcome of the most recent RCC meeting hosted in Bhutan in June 2015 was the Thimphu statement which underlined the need for member countries to “assist in developing community-based disaster risk management strategies, options and practices”¹².

In previous years both the AMCDRR and RCC forums have proven crucial in bringing together relevant stakeholders and identifying pertinent themes and topics for disaster risk reduction in the region. Over the course of the HFA era six AMCDRR gatherings contributed to the periodic review of the achievements, strategies, and plans for enhancing the implementation process. The 6th AMCDRR in Bangkok which focused on the theme of “Promoting Investments for Resilient Nations and Communities” also helped to prepare for the Post-2015 Framework on disaster risk reduction agreed upon in Sendai. Future AMCDRR meetings are therefore likely to be important platforms in guiding States to carry out activities under the SFDRR in line with regional priorities and needs for which relevant actors in Lao PDR should remain fully engaged.



In line with UNISDR guidelines, the National Platform’s main objective would be to mobilize all sectors and relevant stakeholders to work, under the leadership of the National Disaster Prevention and Control Committee (NDPCC) to strengthen disaster risk reduction and climate change adaptation in Lao PDR. This would represent an important step towards the establishment of stronger partnerships between relevant governmental and NGO agencies for disaster risk management at the national level in Lao PDR and can in turn strengthen community resilience building from the top down.



This process is informed by consultations with key actors with experience of carrying out CBDRR interventions in Lao PDR including Care International, Caritas Luxembourg, Child Fund, Oxfam, Plan International, SCI, World Vision, UNDP, the Lao Red Cross and UNICEF. The expected outcome of this initiative would be the formulation of a uniform set of CBDRR guidelines which represents an important step towards ensuring a more integrated approach to community resilience building in Lao PDR. In addition, to raise awareness on natural hazards, causes of natural disasters and current and future risks related to climate change, IEC materials which have been compiled during the consultation meetings with different key stakeholders will be reviewed and used to develop new context specific materials for the country.



LAO PDR
STRENGTHENING INSTITUTIONAL AND HUMAN CAPACITIES
FOR DISASTER RESILIENCE



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