

# Safer Cities 3

Case studies on mitigating disasters in Asia and the Pacific

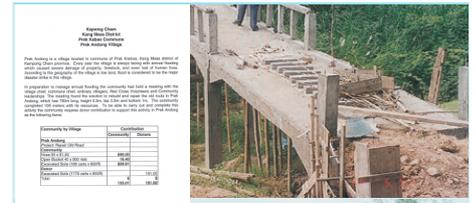
## Mitigating flood risk in Cambodian communities *Empowering communities to manage disaster risk*

Three hundred forty-seven persons were reported dead and more than 3.5 million people affected, many of whom had to evacuate from their flooded homes for more than a month. The 2000 flood in Cambodia inflicted damage amounting to USD145 million. The 2001 flood followed a similar pattern with even higher water levels in some communities (IFRC, 2001). To reduce flood vulnerability, a community-based approach to disaster management is empowering villages to implement flood mitigation and preparation strategies they themselves have formulated.

### Introduction

Cambodia is particularly susceptible to annual river flood during the monsoon season along two major watersheds, the Tonle Sap Lake and the Mekong River. Localized flood caused by monsoon thunderstorms also poses a serious threat. The Community-Based Flood Mitigation and Preparedness Project (CBFMP) of the Asian Urban Disaster Mitigation Program (AUDMP) under the Asian Disaster Preparedness Center (ADPC) responded to this predicament by building the capacities of communities to plan and implement mitigation solutions (or micro-projects) that reduce their vulnerability. CBFMP counted on a network of Red Cross Volunteers (RCVs) and village-level Disaster Management Committees (DMCs) to lead communities in protecting themselves from the impact of flood in their localities.

This case study is the second of a two-part series about CBFMP. The first part (*see ADPC Safer Cities 2*) explored the methodology for establishing and sustaining an organizational framework in which community groups identified needs and cost-effective mitigation strategies that would be implemented and maintained by the communities themselves. This process, which was carried out by selecting project sites, training community volunteers, establishing local disaster management committees, and risk mapping in villages, had led to participatory identification of mitigation strategies. From this, community members prioritized, planned and implemented mitigation solutions to minimize the impact of flood. This part looks into lessons drawn from planning and implementing the mitigation solutions.



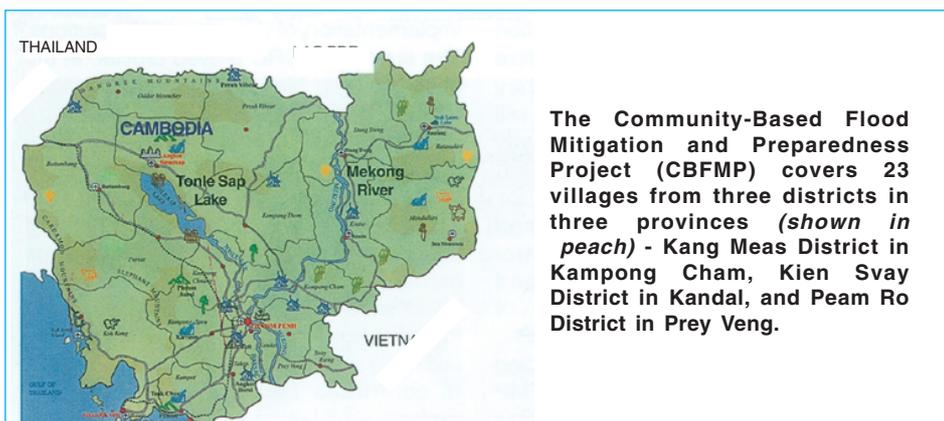
### Abstract

This case study resulted from the experiences of 23 Cambodian villages involved in the Community-Based Flood Mitigation and Preparedness Project (CBFMP). It focuses on lessons learned in the areas of: (1) resource mobilization and proposal development; (2) implementation of mitigation solutions; and (3) preparedness planning.

Examples of conflict resolution, consensus building, resource mobilization, leadership and community participation are explored. The impact of the 2000 and 2001 floods on the communities and their mitigation solutions (or micro-projects); the communities' future plans; and the implications for governmental, non-governmental and community initiatives for disaster preparedness and mitigation are also discussed.

### The inside story

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Does everyone agree with the mitigation solution?



Where will we get funding?



How do we mobilize resources?



How do we mobilize people?



How do we maintain the mitigation solution?



Mitigation minimizes the impact of flood, but what about preparing for it?

## Resource mobilization and proposal development

*Communities gear up for project implementation*



A network of Red Cross Volunteers (RCVs), with the support of the Cambodian Red Cross (CRC), International Federation of Red Cross and Red Crescent Societies (IFRC) and Private Agencies Cooperating Together (PACT), worked with communities to organize and mobilize people and resources in order to develop and implement mitigation strategies. RCVs identified and relied on local authorities such as the chiefs of the communes and villages, village groups, *wat* (or temple) committee members, monks, and village elders taking advisory or organizing roles to mobilize community resources and complete their projects. This had the advantage of adding credibility to the activities.

### Volunteers help villages find solutions

The RCVs, with the cooperation of the village chief and the DMC members, took the opportunity presented by community

gatherings at special events or traditional ceremonies to gather consensus on the mitigation solutions and request for villagers' contributions (in kind and in cash) for planned activities. Addressing the villagers at community events also facilitated gathering of new ideas and inputs from community members. Community awareness and involvement in deciding on the mitigation solutions for implementation is crucial because it is difficult to mobilize people and solicit contributions if they perceive that the proposed solution will not remedy the problems they regularly experience from flood.

The mitigation solutions developed generally focused on water control structures necessary for livelihood (repairing dams and dikes, cleaning out irrigation ditches, culverts and water gates) or access (raising road levels or constructing small bridges). According to the CBFMP evaluation report (August 2001), there

was a high average percentage of agreement (80 per cent) on the mitigation solutions identified for implementation.

### DMCs and RCVs help build the workforce and funds

DMC members and RCVs led the organization of a workforce for implementation of the mitigation solutions. The support of CRC proved crucial: In the case of Kang Meas District in Kampong Cham, the active involvement of the Provincial Red Cross Development Officer and the District Red Cross Officer ensured that contributions promised by the communities were given. Following announcements for contributions at village meetings, follow-ups (often more than once) were made door-to-door, requesting for donations of materials and cash (if possible) and for one family representative to contribute labor to implement the preferred mitigation solution.

Designated laborers from families worked on a rotating basis in groups of 15 to 20 people until the project was completed. People generally contributed their own tools or provided soil for elevating roads. Cash donations were solicited according to people's means. Often, the DMC did not ask for any set amount of money. Donations ranged from Riel 800 (USD0.21) to Riel 1,000 (USD0.26) for a cartload of dirt to as much as Riel 10,000 (USD2.60). The average was between Riel 1,000 (USD0.26) to Riel 2,000 (USD0.52) per family. In some instances, several families pooled their cash donations in order to pay for a truckload of dirt.

Resource mobilization was not a smooth process. Material and financial resources were scarce as most villagers were poor. A large portion of financial support had to come from outside the community. Most of the communities had not previously received any form of financial aid for any community-based initiative so fundraising was a new experience for them.

### Communities develop proposals

PACT assisted the communities in developing proposals for donor funding of their projects. PACT was able to generate funds through international donor agencies and NGOs including AusAid, the American Red Cross, Oxfam, Church World Service and INNER Change (House of Hope).

Concern over proposal rejection sometimes resulted in underestimation of project costs. In other instances, projects were quite grandiose because RCVs thought donors did not want to consider small projects and would respond, "in that case, you can do it by yourself". In the latter situation, some villagers may be reluctant to contribute money because they perceive donors as having sufficient funds to cover the mitigation solutions.

Funds obtained by PACT were disbursed to the village DMCs in two installments – first, after training on basic financial



**Communities work together to construct a bridge in Bang Kha Ek Village, Prey Veng. Technical assistance is provided from outside.**



**Ang Kounh and Don Teav Villages, Kampot, collaborate to raise roads using soils from the adjacent paddy fields.**

management was imparted to DMC members comprising of the Committee Chair, Treasurer, Secretary and Member(s), some of whom are also RCVs. The second installment was disbursed after review of receipts and work were completed. All expenditures for the mitigation solutions were subject to approval of the Chair. Likewise, financial statements and supporting documents (such as receipts, vouchers, and others) had the Chair's signature of approval. Project progress reports were submitted to CRC, IFRC and PACT on a monthly basis.

### Villagers unable to keep promises

Timing and sensitivity to the seasonal calendar is important in the community.

As project proposals went into implementation, some villagers found themselves unable to deliver their promised contributions of labor and materials because of bad timing. If people were busy with their harvest, this took priority over the community project. This was most evident in Boeng Psauth Village of Prey Veng where the DMC revealed that although 75 per cent of the community members agreed to participate in the implementation of the project during an organized community meeting, only 10 per cent of the villagers

Kampong Cham  
Kang Meas District  
Prek Kabao Commune  
Prek Andong Village

Prek Andong is a village located in commune of Prek Krabao, Kang Meas district of Kampong Cham province. Every year the village is always facing with annual flooding which caused severe damage of property, livestock, and even loss of human lives. According to the geography of the village is low land, flood is considered to be the major disaster strike in this village.

In preparation to manage annual flooding the community had hold a meeting with the village chief, commune chief, ordinary villagers, Red Cross Volunteers and Community leaderships. The meeting found the solution to rebuild and repair the old route in Prek Andong, which has 780m long, height 0.5m, top 0.5m and bottom 1m. The community completed 106 meters with its resources. To be able to carry out and complete this activity the community requires donor contribution to support this activity in Prek Andong as the following items:

Community by Village	Contribution	
	Community	Donors
Prek Andong		
Project: Repair Old Road		
Community		
Hoes 50 x \$1.80	\$90.00	
Open Bucket 40 x 800 tiels	16.40	
Excavated Soils (186 carts x 600R)	\$28.61	
Donor		
Excavated Soils (1179 carts x 600R)		181.00
Total	\$ 135.01	\$ 181.00

**An example of a community proposal from Prek Andong Village of Kampong Cham:**

**In the proposal, the communities identified the community contribution in labor, materials and/or cash and provided a budget for additional funding required.**

could contribute their labor and only one third of the funds required for the project was raised.

## Safer Cities

**Safer Cities** is a series of case studies that illustrate how people, communities, cities, governments and businesses have been able to make cities safer before disasters strike. The series presents strategies and approaches to urban disaster mitigation derived from analyses of real-life experiences, good practices and lessons learned in Asia and the Pacific. This user-friendly resource is designed to provide decision-makers, planners, city and community leaders and trainers with an array of proven ideas, tools, policy options and strategies for urban disaster mitigation. The key principles emphasized throughout Safer Cities are broad-based participation, partnerships, sustainability and replication of success stories.

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- ↳ Work with existing community groups.
- ↳ Make activities credible.
- ↳ Gain the support of local authorities and respected individuals within and beyond the community.
- ↳ Use community festivals and other events to promote activities.
- ↳ Do not let money drive proposals.
- ↳ Focus on linking mitigation solutions with the needs and priorities of the majority of community members.
- ↳ Ensure transparency in fund management.
- ↳ Consider timing of project implementation.

## Implementation of mitigation solutions

*Villages approach implementation differently*



Mitigation solutions identified were often those that reduce the communities' vulnerability to flood as well as improve their livelihood, often in terms of enhanced safety, ease of access and economic benefits. For example, the construction of an emergency evacuation route enhanced the safety of villagers and their livestock. Raising of roads and construction of bridges provided a reliable transportation route and increased accessibility, allowing students to travel to school and traders to transport their agricultural produce to local markets. New, enlarged or rebuilt culverts increased the community's control over the water flow, enabling them to increase their rice crop yield, and for some communities, even harvest a second rice crop.

**While the role of NGOs, private sector and government is important, the primary requirement for grassroots development is local leadership and local responsibility.**

The ownership of these projects is fundamental because it affects people's motivation to use and sustain these projects in the long term. Two examples are presented here to provide a more detailed perspective of the implementation of the community flood mitigation projects. The first example of Prek Ta Keo Village of Kandal demonstrates the problem of not actively involving community members in the implementation of the project. Here, based on a funding agreement between the NGO and Prek Ta Keo Village, a subcontractor was hired to implement the project. The second example of Boeng Psauth Village of Prey Veng provides a case of a community learning from problems experienced in implementing a bridge-building project. The problems faced largely implied a lack of community participation in the decision-making process.

### 'Outsiders' manage Prek Ta Keo road project

Prek Ta Keo Village is situated less than two kilometers from the Mekong River in the Kien Svay District of Kandal Province

and comprises 667 families. The three RCVs (two men, one woman) joined with nine other villagers to form a DMC of 12 members. Besides the three RCVs, there were four members of the local *wat* committee and two other village leaders among the committee members.

Consensus was reached in the community to raise 425 meters of road as its flood mitigation priority. This would serve as the main access road for the village, and thus, is a critical route to transport produce and to aid evacuation in an emergency situation.

The total cost of the project was USD2,672, of which USD116 was contributed by the community. Oxfam Great Britain funded the remaining cost and appointed Church World Service (CWS) to implement and monitor the project. This funding arrangement meant that PACT Cambodia's normal operating procedure for administering project funds was not followed.

CWS hired a subcontractor to do the work with the local villagers who provided their

labor in elevating the road. CWS managed the funds and as a result, the village DMC had little control over the implementation process – when the work was to take place, how it was done and what materials were used.

Consequently, conflicts arose owing to differing needs and expectations of the donor, subcontractor and community. The subcontractor used soil from nearby rice fields for the road elevation and apparently caused a great amount of damage to them, raising fury among landowners. Large trucks were used to transport materials, blocking the route for long periods causing traffic congestion for communities in villages along this route. Because of these problems, the subcontractor completed only 400 meters of the 425 meters proposed road.

Since most villagers regarded this project as top priority, resources were mobilized to complete the road elevation and after the floods of 2000 and 2001, community members contributed to the repair of this road. In the end, this experience with the NGOs and subcontractor reduced the community's level of trust in outsiders. Above all, the DMC members did not receive the practical organizational and



Raised road of Prek Ta Keo Village



Soil from paddy fields used to raise the road

financial management skills that could have been achieved through the project.

This case shows that failure to involve people in the decision-making process can lead to negative impacts on people's livelihood. In community-based disaster management, the community is not only the main actor but should also be the beneficiary in the risk reduction and development process. While the role of NGOs, private sector and government is important, the primary requirement for grassroots development is local leadership and local responsibility.

### Boeng Psauth Village learns from bridge building

The people of Boeng Psauth Village in Peam Ro District, Prey Veng, proposed to build a new bridge as their flood mitigation project. This village of 267 families is located on the east bank of the Mekong River and its experience with seasonal flood had caused the previous wooden bridge to regularly fall into disrepair and become dangerous to traverse. The DMC is comprised of seven villagers, including two RCVs, the village chief, two *wat* committee members and the chief of the Women's Association.

At a village meeting that decided on the flood mitigation project, the DMC received agreement from 75 per cent of those in attendance to renovate an existing wooden bridge over 20 meters in length. However, after the bridge proposal was submitted, floodwaters in 1999 washed away the remaining wooden frame of the bridge. A local ferry company agreed to replace the

bridge with a new one and as a result, the DMC itself decided to build a cement bridge in another location instead of their originally proposed wooden bridge.

The combination of inexperience in proposal preparation and a rush to submit the project proposal without thorough consultation with other community members resulted in the DMC's unrealistic cost estimates that were 30 per cent less than the actual. Total costs for the bridge came to USD1,655 (not including the value of villager's labor that was contributed), of which only four per cent could be covered by the villager's donations. AusAid contributed 73 per cent of the project cost leaving a 23 per cent shortage that was eventually covered by CRC.

The DMC members asked villagers to contribute according to their abilities both financially and with respect to labor and materials. However, when work on the bridge was finally started other problems were experienced. Firstly, the cost of transporting materials was not taken into account in the proposal. Secondly, the project started at the height of the harvest season. As explained above, the busy schedule of the villagers during harvest made it difficult to mobilize people and secure a commitment causing delays in the completion of the project.

Furthermore, the lack of technical skills among the villagers led to the added expense of hiring a knowledgeable and skilled person.

However, once the project was completed, the DMC members felt confident enough to build a bridge on their own having

**“I think we have acquired enough skills to build another bridge on our own. We understand about 80 per cent of the technical aspects of bridge construction,” claims Mr. Long Lak, a 36-year-old villager**



**Wooden Bridge in Boeng Psauth Village**



**Cement Bridge in Boeng Psauth Village**

understood most of the technical aspects. In terms of project planning and implementation, they recognized their weaknesses and suggested that they be provided with more training in these aspects and in flood mitigation concepts in general.

The case shows that the participatory process mostly included high-ranking village leaders, the educated and the relatively affluent within the DMC. The focus to develop proposals on their own meant that various factors were omitted including the transportation costs, the timing of the project implementation and the capacity of the community members.

## Problems encountered in implementing flood mitigation solutions and ways to alleviate the problems

Lessons learned

### Limited resources – human, financial and material

⚠️ Introduce fundraising activities and seek donor support.

### Conflicting needs of funding agencies and communities

⚠️ For the benefit of the communities, involve them in decision-making and handover project as soon as possible.

### Misinformed decisions resulting in unsatisfactory project output

⚠️ Ensure broad-based participation of people in the community for advice and assistance.

### Poor timing of project implementation leading to lack of commitment

⚠️ Ensure sensitivity to work patterns, religious rites and festivals in communities.

## Replications of flood mitigation solutions

The CBFMP approach extends to other communities



### Communities and agencies follow the road to success

Despite the complications above, there were also a number of success stories. Examples of replication of mitigation solutions in the communities were apparent one year after the completion of CBFMP. After their first bridge construction under CBFMP, villagers in Peam Mean Chhey Commune, Prey Veng, built two more bridges using charity and community-generated funds.

Replications of the CBFMP approach can also be seen beyond the targeted communities. Koh Ta Ngor II in Kampong Cham had raised 300 meters of road under CBFMP. At the end of the project, the neighboring Angkor Ban Village, whose road continues from the one Koh Ta Ngor II raised, became interested in this initiative. With advice and encouragement from Koh Ta Ngor II DMC, Angkor Ban Village had also followed the CBFMP approach in

mobilizing human and financial resources to raise their part of the road.

A similar example can be seen after Bang Sang Lech Village, Kampong Cham raised their road and constructed a berm to protect the road during the monsoon season. The elderly people in both the Bang Sang Lech and Khdey *wat* committees encouraged villagers of Khdey to organize themselves to construct a berm in their part of the village along the same road.

Other organizations such as Action Against Hunger, CARE Cambodia and Oxfam GB have also adopted the CBFMP approach together with CRC in reducing communities' vulnerability to flood disasters.

### Outside help arrives

From the experience of CBFMP, it was learned that community-based initiatives should not only focus on involving

stakeholders within the communities but also look beyond the commune, district, provincial and even national levels for resources and political support. In Prek Andong Village of Kampong Cham, the success of the road elevation project led to many other projects. The Provincial Deputy Governor was impressed with the community's contributions and has plans to further improve this road.

Donor funding for the commune and village level has been increasing since 2000. The German-funded Tertiary Road Improvement Program is improving the roads of many villages. The European Union has a well construction program of which Prek Andong Village is a beneficiary of three wells. Moreover, communities themselves have increasing opportunities to seek funding themselves. AusAid has funds allocated for community-based initiatives and the World Bank maintains a Social Fund – a loan program for communities.



Students help in the construction of a berm.



Raised road and berm (on the right) protect the road during the monsoon season.

### Replicating success

lessons learned

Replication of a community's success is a powerful factor in continuing local initiatives.

To do so, it is important to:

- ↳ Involve and convince people.
- ↳ Work together with local authority.
- ↳ Use appropriate technology.
- ↳ Show immediate results.

## Preparedness planning

Communities prepare for flood in various ways



### Flood preparedness enhances mitigation

RCVs were not only trained in facilitating mitigation projects but also in flood preparedness. However, one of the weaknesses of the CBFMP is the lack of emphasis on preparedness planning. Nonetheless, in the context of experiencing major floods in two consecutive years (2000 and 2001) and the community's prediction of more severe floods in the future, the CBFMP process of implementing mitigation solutions

started people thinking about minimizing the impact of flood in the targeted communities.

This raised awareness on the importance of flood preparedness, supported by CRC's plan to provide further training on disaster preparedness and action planning to RCVs and DMC members is a step towards increased preparedness planning in Cambodian communities. In Kang Meas District of Kampong Cham, an active District Red Cross Officer, Mr. Kong, plans to link community preparedness plans

with those of the commune and district levels.

### Community responses reflect preparedness

Although no physical preparedness plans existed in the communities, this did not mean that there was no preparedness planning involved during CBFMP. Preparedness activities were evident in many CBFMP-targeted communities. For example, RCVs not only used community events to mobilize resources for

implementation of mitigation solutions but also provided advice to people on specific disaster preparedness actions they needed to consider. In one example, discussion in such a meeting led to community and RCVs assistance in the dismantling and relocation of ten houses along the Mekong River in Koh Ta Ngor I Village in Kampong Cham.

Another example is the mobilization of communities to fill sandbags and place them along roads or riverbanks in preparation for the 2001 flood. This was a major activity beyond the CBFMP-targeted communities in Kampong Cham and Kandal provinces. Villagers were willing to participate in the preparedness activity largely because of the success of other projects such as road elevation.

Announcements through loudspeakers across the villages and door-to-door visits were also made to inform villagers of possible dangerous situations. While most villagers resorted to the usual coping mechanisms upon which they relied upon year after year, the CBFMP initiative had led them to recognize the capacity of community members, especially the RCVs and DMC members, and the positive impact of working together in implementing mitigation solutions.

As a result, hints of community collaboration can be seen in the evacuation and rehabilitation phases of the 2000 and 2001 floods. For example, in Prek Andong, most people helped themselves during times of flood. Only families with relatives and friends in other communities inland were able to move temporarily. However, the 2001 flood was met with a more concerted effort in this community, led by the DMC and RCVs to evacuate families in 15 small houses to a nearby community of Andong Ong. With the help

**Mr. Som Piseth of Koh Ta Ngor II, Kampong Cham, said “My family starts preparing for flood when I see flood in China on television.”**



**Monks, villagers, RCVs, district Red Cross officer of Kang Meas District, Kampong Cham, fill sandbags in preparation for the 2001 flood.**



**Embankments are raised with sandbags to protect the communities of Kang Meas District, Kampong Cham, against flood.**

of the Village Chief of Andong Ong, these families moved to stay with those who had stronger houses for more than a month. Should a flood of similar magnitude affect the same village, the DMC and RCVs would be prepared to carry out a similar evacuation process.

Similarly in Prek Kmeng Village of Kandal Province, a school was identified as the evacuation center during the 2001 flood with the RCVs and DMC members coordinating the evacuation process. In subsequent years, when necessary, this system will be followed by the villagers.

**Flood warning system needs improvement**

Early warning and people’s participation in disseminating early warning messages is of particular importance in the overall preparedness plan of communities.

However, in the 2000 flood, the official announcements on flood situation were too general with no mention of specific flood-affected areas.

To date, early warning remains an individual activity. Communities often listen to flood warning on radio and television broadcasts.

Individuals also measure the floodwater level by placing a marked bamboo stick in the river. Comparison of the level of floodwater level between villagers is a popular topic in any conversation.

Nonetheless, it is important to build people’s capacities to take the responsibility in monitoring hazards and issuing warning to save lives. The Royal Government of Cambodia, in partnership with the Mekong River Commission, is working to make timely and relevant flood information accessible. This public access to information on local patterns of risk is empowering and facilitates community participation in decision-making, thus strengthening opportunities for responsible governance.



**Village school used as evacuation center in Prek Pmeng Village, Kandal**

**Conclusions**

**Mitigation solutions improve trust and quality of life**

In each target community, the successful completion of the flood mitigation solutions and their immediate benefits led to increased trust among community members, possibilities of other community projects and increased organized activities in flood preparedness and response.

In many cases, CBFMP not only minimized the impact of flood but also improved the quality of life of poor people. The community-based approach should contribute to people’s empowerment – to possess physical safety; to have more access to and control over resources; to participate in decision-making which affect their lives; and to enjoy the benefits of an improved environment.

**Community-based approach increases development capacity**

The primary purpose of a community-based approach should revolve around addressing vulnerable conditions and the main strategy is to increase the community’s capacity, their resources and coping strategies. CBFMP had shown that community’s increased managerial and technical capacities often led to further development initiatives within and beyond their own community.





## Further references

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 IFRC, 2001, World Disaster Report: Focus on Recovery, International Federation of Red Cross and Red Crescent Societies

### Other relevant Safer Cities case studies

ADPC Safer Cities 1: Community-Based Initiatives in Kathmandu Valley  
 ADPC Safer Cities 2: Coping with Flood in Cambodian Communities  
 ADPC Safer Cities 5: Community-Based Initiatives in Sri Lanka

### On community-based disaster management initiatives in Cambodia

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## CBFMP

*The Cambodia Community-Based Flood Mitigation and Preparedness Project (CBFMP) was launched in September 1998 under the Asian Urban Disaster Mitigation Program (AUDMP) of the Asian Disaster Preparedness Center (ADPC). CBFMP aims to reduce the vulnerability of highly flood-prone communities in Kampong Cham, Kandal and Prey Veng Provinces, which border the Mekong River and the northwestern area around Tonle Sap. The project brings together a variety of humanitarian organizations to address the susceptibility of the general population and its critical facilities, infrastructure, livelihoods and shelter. Together, they focus on training volunteers and facilitating implementation of mitigation solutions for flood risk reduction in communities.*

### Project Partners

#### Implementation:

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## AUDMP

*The Asian Urban Disaster Mitigation Program (AUDMP) is the first of six regional programs implemented by ADPC. The AUDMP started in 1995 with core funding from USAID's Office of Foreign Disaster Assistance (OFDA) until 2003. The program was developed with the recognition of increased disaster vulnerability of urban populations, infrastructure, critical facilities and shelter in Asian cities. In an environment where good governance and decentralization are high in most countries' political agenda, AUDMP aims to demonstrate the importance of and strategic approaches to urban disaster mitigation as part of the urban development planning process in targeted cities of Asia.*



*AUDMP supports this demonstration by building the capacity of local authorities, national governments, non-government organizations, businesses and others responsible for establishing public and private sector mechanisms for urban disaster mitigation as part of city management. AUDMP also facilitates knowledge sharing and dialogue between the key stakeholders to promote replication of the AUDMP approaches to other cities and countries worldwide. Currently, the AUDMP approaches have been introduced and sustained by national partner institutions in targeted cities of Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, Philippines, Sri Lanka, Thailand and Vietnam.*

## ADPC

*The Asian Disaster Preparedness Center (ADPC) is a regional resource center dedicated to safer communities and sustainable development through disaster reduction in Asia and the Pacific. Established in 1986 in Bangkok, Thailand, ADPC is recognized as an important focal point for promoting disaster awareness and developing capabilities to foster institutionalized disaster management and mitigation policies.*

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