



Road Map on Chemical Accident Prevention and Preparedness Programme in Cambodia

Task Force on Chemical Accident Prevention Programme in
Cambodia

Funded by: United Nations Environment Programme

Ministry of Environment
Kingdom of Cambodia

March 2010

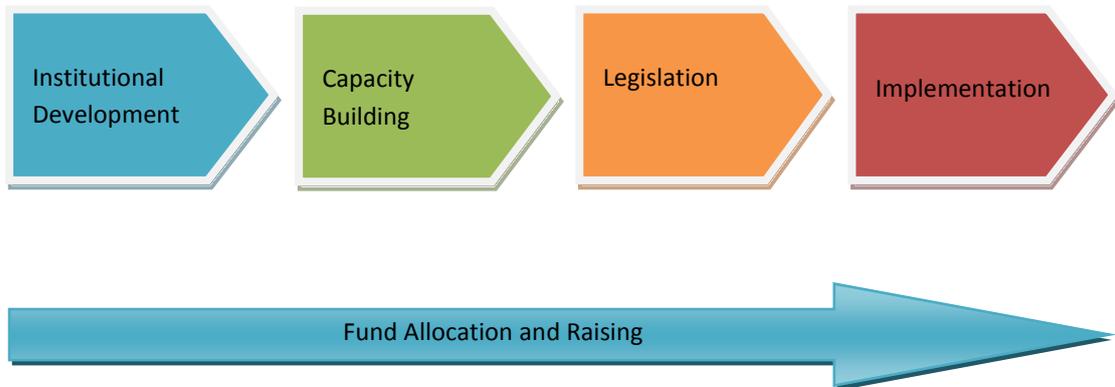
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EXECUTIVE SUMMARY

Establishing a Chemical Accident Prevention Program in Cambodia is both a challenge and an opportunity, so much so that the government is in the initial stage in dealing with chemical accident prevention coupled with different gaps in the legislation as well as lack of funding and technical expertise.

The Road Map for chemical accident prevention and preparedness serves a blue print for the government to pursue for the future in order to ensure safety of the industries and exposed people, properties and environment. Based on the Country Situation Report and Needs Assessment, there are several stages that needs to be develop for a chemical accident programme in Cambodia institutional development, capacity building, legislation and finally implementation along side with fund allocation.



Chapter 1: Introduction gives an overview of the roadmap on chemical accident prevention and preparedness in Cambodia.

Chapter 2: Milestones on the Flexible Framework on CAPP in Cambodia, shows the achievement of the CAPP project in Cambodia.

Chapter 3: The Road Map for Chemical Accident Prevention and Preparedness Programme in Cambodia. This Chapter shows the overall needs of a chemical accident prevention and preparedness programme in the country.

Chapter 4: Priority Actions. It summarizes the overall activities cascaded into 3 phases with the aim to develop legislation on chemical accident prevention and preparedness.

Chapter 5: The taskforce have identified high priority areas with relevance on the different stages which are:

- Institutional arrangements and commitments on chemical accident prevention and preparedness.

- Capacity building through trainings on some of the elements of chemical accident prevention and preparedness for both government and private sectors is very crucial.
- Information management
- Enforcement of labeling sub-decree to other chemicals other than fertilizers and pesticides

CHAPTER 1: INTRODUCTION

The Chemical Accident Prevention and Preparedness (CAPP) project builds on the work started by UNEP in 2007, when UNEP established an expert working group for the development of a Flexible Framework for addressing Chemical Accidents Prevention and Preparedness aimed at developing countries. The expert working group was coordinated by UNEP, and had representatives of ILO, UNIDO, WHO, UNECE Convention on Transboundary Effects of Industrial Accidents, the European Commission, the Major Accident Hazards Bureau, the OECD, and the Asian Disaster Preparedness Center, amongst others, and was part of UNEP's work pursuant to the Strategic Approach to International Chemicals Management (SAICM).

The CAPP project responds to the needs identified in the Global Plan of the Strategic Approach to International Chemicals Management (SAICM) under the Risk Reduction topic. Cambodia and the Philippines were selected for the project considering a number of criteria, which includes: i) the presence of a well-positioned and functioning SAICM focal point within a relevant institution for project implementation; ii) inclusion of this topic in their development plan and UNDAF; iii) countries that are priority countries of UNEP Resource Efficiency and SCP activities in the region; iv) interest from the country; v) level and type of industrialization and need for reinforcement of a system for chemical accident prevention related activity.

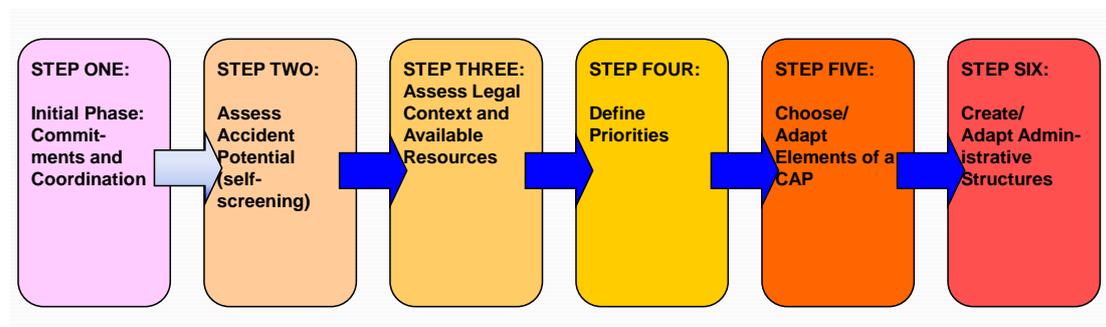
In the Kingdom of Cambodia, the project on Chemical Accident Prevention and Preparedness (CAPP) is being implemented by the Ministry of Environment through the auspices of United Nation Environment Program (UNEP) while Asian Disaster Preparedness Center (ADPC) serves as the regional technical partner. The project objective is to enable Cambodia to revise and/or to develop transparent, efficient and effective systems aimed at chemical accidents prevention and preparedness. The project will identify the situation of the chemical accident prevention and preparedness in Cambodia and defining needs and priorities. This will pave the ground for a future phase that will be based on developing a system for the control of major chemical accidents. By doing so, Cambodia will build its capacity to review/update and/or develop programmes for controlling major chemical accidents based on their own experience, through the Flexible Framework Guidance for prevention of Major chemical accidents which was developed by UNEP or to review/adapt and/or build their own systems for the control of major chemical accidents.

During the project implementation, It was agreed that a multi-stakeholder task force will be established to drive the process, allowing the public and private sector to work together to develop a sustainable system for chemical accident prevention and preparedness and it was done so. The existing inter-ministerial technical working group on mainstreaming Chemical Safety into Development established under a parallel project of the Ministry of Environment was adopted and added some other ministries which have something to do with the chemical accident prevention. The taskforce is expected to develop and periodically review

their country's profile, needs assessment, and a roadmap using the UNEP guidance material for the development of Chemical Accident Prevention and Preparedness Programme (CAPP). The Roadmap on Chemical Accident Prevention and Preparedness gives an overview of the steps that the government should take in order to develop their programmes and policies regarding chemical accident prevention. The roadmap is also a response to the needs sought from the needs assessment conducted by the taskforce. Hence, in doing so, the government can sort out the needs that are at hand to implement a National Programme on Chemical Accident Prevention and Preparedness.

CHAPTER 2: MILESTONES ON THE FLEXIBLE FRAMEWORK ON CAPP PROJECT IN CAMBODIA

The Flexible Framework on Chemical Accident Prevention and Preparedness Program project implementation follows the 6 Step approach below:



It starts with the Initial Phase: Commitment and Coordination, which is basically covered in the Inception workshop and the 1st Taskforce meeting described in detail below. Followed by, assessing the accident potential, legal context and available resources of the country which constitute the Country Situation Report. Step four covers the needs assessment report which contains the defined priorities for a chemical accident prevention and preparedness programme. Thereafter, the taskforce can choose/adapt the elements of a Chemical Accident Prevention Programme which will be included in the Road Map on Chemical Accident Prevention Program in the Kingdom of Cambodia. The specific outputs of the Programme are the following:

- Capacity is built in Cambodia on the topic of Chemical Accident Prevention.
- Chemical Accidents Prevention Programme Multi-Stakeholder Task force is formed.
- Workplan is developed.
- Guidance on chemical accident prevention (Flexible Framework) is translated.
- Country Situation report and Needs assessment report are developed for Cambodia.
- Training material is developed and capacity building activities are undertaken.
- Study with a roadmap for country implementation of Chemical Accident Prevention Programme (CAPP), including training needs and institutional needs is completed.

Step One: Initial Phase: Commitments and Coordination

The Initial Phase: Commitments and Coordination includes the Preparation phase and the National Inception Workshop.

Activity 1. Preparation Phase

The preparation phase mainly geared towards the establishment of partnership for the project implementation between United Nations Environment Programme (UNEP) and Ministry of Environment (MoE) and Asian Disaster Preparedness Center (ADPC).

Activity 2. Undertake National Inception Workshop

In March, an inception workshop was conducted in the Kingdom of Cambodia which was participated by several relevant industries in Cambodia with the aim to present why chemical accidents are important and should be prevented and how other countries have dealt with the issue specifically from EU/US and other Asian Countries. The objectives of the inception workshop were:

- To have a common understanding with on the issue of chemical accident prevention
- To establish an agreement/commitment on the development a chemical accident programme in Cambodia
- To establish an action plan with the key participants and
- To identify what are the key strengths and challenges that should be included in a Chemical Accident Prevention Program.

Activity 3. Commitment and Identification of Stakeholders

During the inception workshop initial commitment has been made on the composition of the taskforce which results to adapting the existing institutionalized committee and expanding their terms of reference encompassing the chemical accident prevention programme. The composition of the taskforce is available in the Terms of Reference of the Taskforce.

Activity 4. Establishment and meetings of a Multi-Stakeholder Chemical Accidents Prevention Task Force

1st Taskforce Meeting on CAPP

In 2009 the first taskforce meeting was held at the Ministry of Environment which was participated by the taskforce members with the specific output:

- They approved the draft country situation report template Ministry of Environment was ask to complete the report together with the Asian Disaster Preparedness Center;
- A review the needs assessment template;
- The terms of reference of the task force, its participants and institutional status was agreed upon.

Step Two and Three: Assessing the accident potential, legal context and available resources of the country

Activity 5. Country Situation Report and Needs Assessment

Before the 2nd Taskforce Meeting the Country Situation Report was made available to the members of the taskforce for review. The Needs Assessment Report is however, made available before the 3rd taskforce meeting.

2nd Taskforce Meeting on CAPP

In July 2009, the 2nd taskforce meeting was held where review the draft country situation report was done and the ministries responsible for the needs assessment report was decided upon as well as review the draft training programmes.

Activity 6. Capacity building

The stakeholders had given two training workshops intended to build their capacity to address and level off most of the principles and elements of a Chemical Accident Prevention Program. The training workshop aims and objectives are given in detail below:

1st Training Workshop on CAPP

The aim of the training is for government officials (members of the National Taskforce including also the private sector, academia, inspectors, etc.) to have a common understanding on potential elements of a policy on Chemical Accident Prevention to be able to gradually, in the next years, work towards the goal of having a CAP programme anchored in policy and in building institutional capacity.

The initial training is an opportunity to share experiences from other countries that have adapted Flexible Framework Guidance or similar regulatory frameworks for chemical accident prevention and preparedness. Specific objectives of the training are:

- To enhance knowledge on hazardous chemicals and on existing Chemical Accident Prevention and Preparedness regulatory systems, laws and frameworks in various regions in the world
- To familiarize participants with the elements of the Flexible Framework for Chemical Accident Prevention and Preparedness.
- To enhance the knowledge and exchange experiences on development and implementation of chemical accident prevention and preparedness program in the region

2nd Training Workshop on CAPP

The aim of the second training for Cambodian stakeholders of CAPP (members of the National Taskforce including also the private sector, academia, inspectors, etc.) is to strengthen the knowledge on Chemical Accident Prevention & preparedness gained from the first training and build capacity and knowledge on requirement of industries and role of competent authorities to be able to gradually, in the next years, work towards the goal of having a CAP programme anchored in policy and in built institutional capacity.

The second training is an opportunity to strengthen and build the capacities of stakeholders those who have been trained under 1st training. Specific objectives of the training are:

- To enhance knowledge on role of competent authorities and requirement of industries in CAPP
- To familiarize participants with real world experience by visiting industrial sites
- To enhance the knowledge and exchange experiences on CAPP

3rd Taskforce Meeting on CAPP

The main highlight of the 3rd Taskforce Meeting is to present the final draft of the Country Situation Report as well as the Needs Assessment Report which are essential in crafting the Roadmap on Chemical Accident Prevention Program in Cambodia. A detailed discussion on the template of the Roadmap of Chemical Accident Prevention Program in Cambodia was also discussed.

Activity 7. Study and roadmap for country implementation of CAPP

In response to the need assessment which was made in the process of the project implementation, the study and roadmap for country implementation on Chemical Accident Prevention Programme is deemed necessary to address the pressing needs of chemical accident prevention in the country. Below is an overview of a roadmap of action that the government of Cambodia can follow:

CHAPTER 3: THE ROAD MAP FOR CHEMICAL ACCIDENT PREVENTION AND PREPAREDNESS PROGRAM IN CAMBODIA

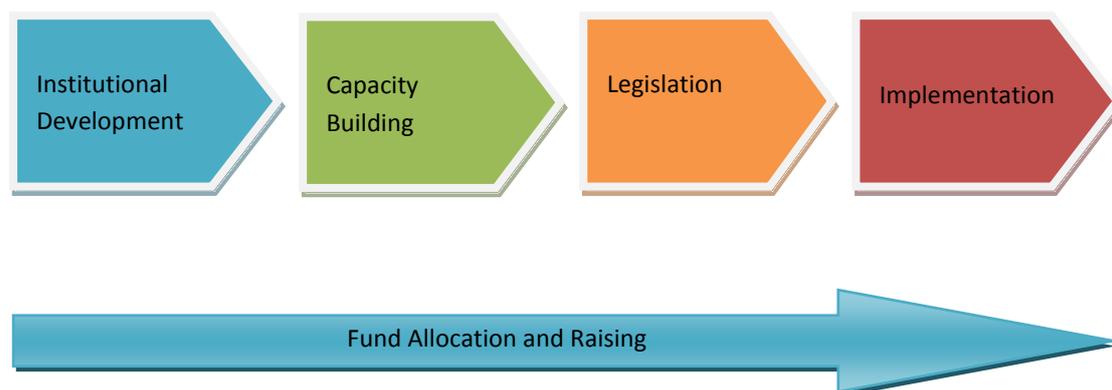
The Roadmap on Chemical Accident Prevention can be divided into four stages of actions which are institutional development, capacity building, legislation and implementation.

The institutional development begins with the commitment of the task force to serve as a long term committee on developing the chemical accident prevention and preparedness program in the country. They will fully be responsible in all walks of improving and developing the capacity of the country to act on chemical hazards and risks.

After the commitment has been done and formalized, continuous capacity building on the member of the committee are envisage to happen since most of the topics during the quick start up programme of the Flexible Framework Chemical Accident Prevention Program serves as an overview for the stakeholders and specific and in depth curriculum should be tackled for the committee to be equipped in drafting legislations and plans for the establishments of a Chemical Accident Prevention Program in the country.

Several legislations are connected to a chemical accident programme and in a country like Cambodia which is still in the development of chemical management legislations; the country is likewise in an initial stage of developing a chemical accident programme. Hence, related legislations are expected from the committee who will carry out the task of developing a chemical accident programme.

Thereafter, it is foreseen that the Chemical Accident prevention Program/Policy will be enforce. These steps should be coupled hand in hand with adequate funding.



With these, in anticipation of general steps of the roadmap on Chemical Accident Prevention Program, there are priority actions that need to be made in order to come up with a good flow of output and information in order to initially establish a chemical accident prevention programme.

CHAPTER 4: PRIORITY ACTIONS

Establishing a Chemical Accident Prevention and Preparedness Program is done gradually but not limited to it. However, it mainly varies on the capacity of the country to adapt and implement such program. Revisiting the gaps identified in the Needs Assessment Report which are as follows:

- Inadequate legislation for chemical accident prevention;
- Lack of capacity to prevent chemical accidents both in the national and local levels;
- Inefficient information management management
- Lack of education and public awareness raising programs
- Lack of financial mobilization mechanism for chemical management
- Absence of a multi-stakeholder mechanism to prevent chemical accidents.

Inadequate legislation for chemical accident prevention;

Proposed Action

- A comprehensive and detailed legal framework for chemical accident prevention should be done and approved.
- Industries should be compelled to submit chemical accident prevention related requirements such as safety reports which includes hazard and risk assessment, material safety data sheets etc.
- Integration of chemical accident prevention policies to sectoral and local and national plans

Lack of capacity to prevent chemical accidents both in the national and local levels

Proposed Action

- Institutional capacity building; including laboratory capacity
- Training and building capacity of enforcement and regulatory authorities such as customs officers, CAMCONTROL officers, laboratory personnel, and concern ministries
- Capacity building in chemical hazard and risk assessment and management
- Training of trainers on chemical safety

Inefficient information management management

Proposed Action

Effective chemicals management is needed to have information on certain chemicals existed in the country that causes serious impacts on man health and the environment. Without this information, there is no way that can manage of chemicals presented in the country. Therefore, research study on certain chemicals caused impacts to human health and the environment should be conducted. Development of chemical information management system:

- establishment, use and maintenance of information system
- collection, analysis, storage and dissemination of chemical data and information about chemical substances, their hazards and also practices for their safe management
- installation and application chemical information exchange network and establishment of documentation center.

Lack of education and public awareness raising programs

Proposed Action

- While it is indeed beneficial to have those abovementioned programmes, Cambodia still needs to develop a wide range of educational programs regarding the safety use of chemicals and consequences of inappropriate handling, storing, use and disposal of chemicals. These aspects are important to recognize the need of broader education program. Furthermore, educational programs are essential in order to promote public participation and to enable all stakeholders to become cognizant of the importance of protecting their health and the environment from chemicals.
- Educating the general public at all levels, particularly vulnerable groups
- Informing decision and policy makers to encourage political commintement
- Promoting and continuing support for organic fertilizer using program

Lack of financial mobilization mechanism for chemical management

Proposed Action

- Development of public and private partnerships as a tool for resource mobilization
- Development of effective financial resource allocation
- Building government officer for effective fund raising.

Absence of a multi-stakeholder mechanism to prevent chemical accidents.

Proposed Action

- Improve and strengthen inter-ministerial committees' coordination and cooperation as well as for developing legislations on chemical accident prevention
- Establish central coordinating body for exchange information within inter-ministerial committees
- Establish financial management mechanism for facilitating the committees.

Table 1. Proposed Actions that addresses the Elements of CAPP

Elements	Present Status	Proposed Actions
1 Scope of the programme	Not identified	Research on the hazardous facilities (location, capacity and other related information)
2. Role of Competent Authorities		
2.1 Define the Scope	Not identified	Research on the hazardous facilities (location, capacity and other related information. Sub-committee to work on the Scope
2.2 Information Management	There are existing medium such as webpage/s. However, information management for chemical accident prevention are not in place	Data gathering and sharing within the TWG.
2.3 Inspections	Inspectors are available from other ministries. However, they don't cover all the industries especially those who handle the prime commodities as well as the government	Capacity building through training on inspection chemical safety. Coordinated inspection of all responsible agencies. Review existing inspection checklists
2.4 Off-site Preparedness Planning	Not in place	2 pilot location where off-site preparedness planning is implemented
2.5 Siting and land use planning	Chemical accident prevention is not being considered	Revisit EIA system and the provision there in. Consult with Ministry of Land Use Planning C
3. Requirement of Industries		

3.1 General Duty Clause	Not in place	Revisions to existing Factory Legislation
3.2 Notifications	EIA system have the EIS	Develop administrative requirements to industry to report
4 Information dissemination on chemical risks to the public	Not in place	Create linkages with media and NGOs.
5 Accident reporting, Investigation and Follow-up	Not in place	Come up with a format in accident reporting, investigation and follow up Link with existing provisions on accident reporting
6 Response System	Fire: Established Oil Spill: On the process Chemical Accident: No existing plans Contamination of River: Under EIA	Revisit the mandates of Ministry of Interior Fire Services.

CHAPTER 5: PRIORITY ACTIVITY IMPLEMENTATION PHASE II OF THE FLEXIBLE FRAMEWORK ON CAPP PROJECT BASED ON THE ROADMAP

The Flexible Framework on Chemical Accident Prevention and Preparedness implementation on 2010 to 2012 identified priority areas related to the guidance:

High priority actions

a. Formalizing institutional arrangements and commitments on chemical accident prevention and preparedness.

- There is a Technical Working Group (TWG) which was established to tackle issues related to chemical management. There is an initial commitment to expand the membership of the TWG incorporating 4 other relevant institutions. In addition to this, the *TWG can expand their commitments to tackle chemical accident and preparedness.*
- In the absence of a project, the *TWG can meet at least 2-3 times a year to discuss issues regarding chemical accident prevention and preparedness* until such time that a policy recommendation will be made.

b. Capacity building through trainings on some of the elements of chemical accident prevention and preparedness for both government and private sectors is very crucial.

- The Task Force had cited *inspection* as a priority area for training during the 3rd task force meeting and 2nd Training Workshop. 2nd is on *Hazard Identification and Risk Assessment*
- Capacity building through training on inspection chemical safety.
- Coordinated inspection of all responsible agencies.
- Review existing inspection checklists

c. Information management

- Legally binding commitment on information sharing can be done in the TWG meetings can be an initial step towards establishing an information management system.

d. Enforcement of labeling sub-decree to other chemicals other than fertilizers and pesticides

- The Task Force identified the labeling as a priority and needs proper implementation. Labeling of other chemicals aside from pesticides and fertilizers is equally important. Intensifying its enforcement