



HL 5/12

High-Level Officials Meeting  
on Environment and Health  
in South-East and East Asian Countries  
14 July 2010, Jeju, Republic of Korea

English Only

## MEETING REPORT

### I. INTRODUCTION

1. The Fifth High-Level Officials' Meeting on Environment and Health in Southeast and East Asian countries was jointly organized by the United Nations Environment Programme (UNEP) Regional Office for Asia and the Pacific and the World Health Organization (WHO) Regional Offices for the Western Pacific and South-East Asia, and hosted by the Government of the Republic of Korea on 14 July 2010 in Jeju, Republic of Korea. The meeting was attended by high-level officials of health and environment agencies from Cambodia, China, Indonesia, Japan, the Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam as well as representatives from a number of international and regional partners. The meeting was co-chaired by Mr Jong-Keuk Oh, Director-General, Ministry of Environment and Dr Duck-hyung Lee, Ministry of Health and Welfare, Republic of Korea. The list of participants appears in Annex 1.

### II. OPENING SESSION (Agenda Item 1)

2. The opening session was addressed by Dr Young-Woo Park, Regional Director, UNEP Regional Office for Asia and the Pacific, Dr Abdul Sattar Yoosuf, Assistant Regional Director, WHO Regional Office for South-East Asia, Mr Yoon Jong Soo, Deputy Minister of the Ministry of Environment, Republic of Korea, and Dr Lee, Jong-Koo, the Director/Deputy Minister, of Korea Centres for Disease Control & Prevention, Ministry of Health and Welfare, Republic of Korea.
3. Dr Young-Woo Park, Regional Director and Representative of UNEP Regional Office for Asia and the Pacific conveyed sincere thanks and acknowledgement to the Ministry of Environment, Ministry of Health and Welfare of the Republic of Korea, and the City of Jeju, for hosting the Second Ministerial Regional Forum on Health and Environment. He provided a background on environmental health challenges, reiterated how the world's population and economy are growing, and how demands are outgrowing the capacity of the natural resource base. He cited UNEP activities, where year 2010 marks the international year of Biodiversity, a celebration of life on Earth and of the value of biodiversity for our lives, and UNEP itself has recognized its part and has been contributing to environment and health, through activities on capacity building for national policy, planning and implementation through the mobilization of existing expertise, knowledge and technologies and awareness raising to member countries. UNEP has also recently implemented several interim activities under the UNEP Global Mercury Partnerships, aimed at reducing mercury pollution, as well as working to highlight the complex inter-linkages between climate change and health through playing a role in linking health to the environment. He showed optimism that the meeting will consider the following points: responsibility for health and environmental protection, significant progress of the Regional Forum made through the development of national Environment and health Action plans (NEHAPs), participation in regional forum, capacity building efforts

through the scientific conferences, as well as through the work of the various Thematic Working Groups. He emphasized that communication and cooperation has been established in the national level at both environment and health agencies and at regional level of the six priorities in Southeast and East Asian countries, and that this needs further collaboration. He encouraged the meeting to consider the Jeju Statement aiming to support the implementation of the Charter of the Regional Forum on Environment and Health. He thanked WHO for facilitating this regional initiative as joint secretariat together with UNEP.

4. Dr Yoosuf greeted the participants of the fifth High-Level Officials Meeting on behalf of both the WHO Regional Directors for South-East Asia and the Western Pacific. He reaffirmed WHO's commitment to the Regional Forum on Environment and Health in South-East and East Asian Countries as an effort to count the Forum within the broader framework of the global environmental health agenda. Dr Sattar praised the collaboration of the Ministers of Environment and Health over the past three years, calling it testimony to the commitment that the Ministers have made to protect human health from environmental degradation.
5. Dr Lee, Jong-Koo, the Director/ Deputy Minister, of Korea Centres for Disease Control and Prevention expressed his appreciation to WHO and UNEP in the facilitation of the High-Level Officials Meeting. He highlighted the importance of strengthening cooperation between member countries to tackle new environmental health issues like climate change, vector borne diseases, natural disasters, in addition to traditional issues concerning water, sanitation and air. He added that the Korean government will do its best to tackle these issues, along with the member countries and other UN agencies.
6. Mr Yoon Jong Soo, Deputy Minister of Ministry of Environment, Republic of Korea conveyed his appreciation to WHO and UNEP as joint secretariat in facilitating the meeting. Against the backdrop of rising population and economic growth in Asia, he affirms that environment remains an important issue for health and would like to see the High-Level Officials Meeting culminating in the endorsement of the environmental health agenda at the Ministerial Meeting. Mr Yoon also shared that the Environmental Health Law in Korea was established since 2009 and is in line with the low carbon green growth policy that concurrently preserves environment and promotes economic development, estimated to be about 2% of GDP for coming 5 years.

### **III. ELECTION OF OFFICERS (Agenda Item 2)**

7. Following the established practice of the Regional Forum on Environment and Health in South-East and East Asian Countries, the Republic of Korea as host country for the Second Ministerial Regional Forum assumed the role as Chair of the meeting. There being no host country confirmed for the Third Ministerial Regional Forum, the Republic of Korea also assumed the role of Vice Chair. The Republic of Korea's Ministry of Environment served as Chair, and its Ministry of Health as Vice Chair. Mr Jong-Keuk Oh assumed the functions of the Chair during the morning's proceedings and Dr Lee, Jong-Koo assumed the functions of Vice Chair. The agenda proposed by the Secretariat was adopted by the meeting. The agenda of the meeting, as adopted, appears in Annex 2.

During the afternoon sessions, Dr Duck-hyung Lee assumed the functions of the Chair and Mr Jong Keuk Oh assumed the functions of Vice Chair.

**IV. REVIEW OF REGIONAL LEVEL ACTIVITIES (Agenda Item 3)**

8. The Secretariat, UNEP and WHO, made a presentation on regional level activities since the First Ministerial Meeting and Fourth High-Level Officials' Meeting. The presentation and ensuing discussion included the development of a concept note on the proposed formation of a task force to review institutional issues affecting the Forum. The task force would make recommendations through the Advisory Board for improving the governance and impact of the Forum and strengthening partnerships with relevant regional and international bodies and cooperation mechanisms. The meeting endorsed the establishment of the task force, requesting the Advisory Board to define the task force's membership and modalities of work.
9. The meeting endorsed the new regional priorities for 2010-2013 which includes the continuation of the 6 current priorities and an additional priority, namely, health impact assessment. The meeting agreed to submit to the Second Ministerial Meeting for formal endorsement, an addendum to the Regional Charter on the Forum's new priorities for 2010-2013.
10. The meeting noted a need for more integrated planning and action among Thematic Working Groups (TWGs) and strengthening linkages between the Secretariat partners, UNEP and WHO. The meeting also agreed in principle to establish a practice of rotating Chairs of TWGs to allow for better sharing of responsibilities by the members. Plans for implementing this practice shall be further discussed at the Fourth Advisory Board meeting.
11. The meeting expressed strong concern over the Forum's urgent need for sustainable financial support.

**V. REVIEW OF NATIONAL LEVEL ACTIVITIES (Agenda Item 4)**

12. All member countries present (Cambodia, China, Indonesia, Japan, the Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam) reported on progress made in their countries since the First Ministerial Meeting and the Fourth High-Level Officials' Meeting, with focus on the development and implementation of national environmental health programmes, including National Environmental Health Action Plans (NEHAPs) or equivalent plans.
13. The meeting noted the progress made at the national level by the countries in strengthening their national environmental health programmes. Some countries have developed NEHAPs or equivalent plans, but some countries would need to finalize formal endorsement of the plans. Countries have also made good progress in strengthening coordination between the health and environment sectors. However, it noted that challenges remained in many countries. It was suggested that the Regional Forum Secretariat should carry on an analysis report to identify ways to address those challenges, to be reviewed and adopted by all member countries.

**VI. POLICY BRIEFS AND WORK PLANS OF THEMATIC WORKING GROUPS (Agenda Item 5)**

14. Since the approval of six Thematic Working Groups' 3-year work plans in the First Regional Ministerial Forum on Environment and Health in South-East and East Asian Countries (9 August 2007, Bangkok), the TWGs had implemented those work plans and had developed policy briefs on priority environmental health issues based on their experiences.
15. The Chair institutions of the respective TWG's made presentations on the implementation of their 2007-2010 work plans, their resulting policy briefs, and proposals for 2010-2013 work plans. All the 2010-2013 TWG work plans are given in Annex 3 and their presentations in Annex 4.

**VII. REPORT ON CLIMATE CHANGE ADAPTATION AND GREEN GROWTH (Agenda Item 6)**

16. Professor Jeong Dai Yeon, Jeju National University, Korea, presented the host country's programme on green growth with low carbon emissions as a response to climate change, and introduced a proposal for a cooperative network for climate change education in Jeju. Mr Konrad Otto-Zimmermann, Secretary General of the International Council for Local Environmental Initiatives (ICLEI) spoke on local government initiatives to support sustainable development and stressed the importance of local actions for climate change mitigation, adaptation and advocacy. Mr Peter Neil on behalf of the International Union for Conservation of Nature (IUCN) addressed the importance of nature-based solutions on adaptation and mitigation of climate change and welcomed cooperation with Jeju city on climate change education and training programs.

**VIII. DISCUSSION ON SECOND MINISTERIAL REGIONAL FORUM AGENDA AND JEJU DECLARATION (Agenda Item 7)**

17. The meeting discussed the documentation and expected outcomes of the Second Ministerial Regional Forum, and agreed in principle that the Ministerial Meeting would produce a declaration, known as "Jeju Declaration on Environment and Health."

The meeting then reviewed the draft Jeju Declaration on Environment and Health which had been prepared by the Secretariat. The meeting made some changes to the draft and endorsed it with appropriate amendments by the Secretariat for submission to the Ministerial Meeting.

**IX. CLOSING OF THE MEETING**

18. Dr Duck-hyung Lee, in his capacity of Chair of the High-Level Officials Meeting, expressed his appreciation to all the participants for their active participation in completing all the agenda successfully. He also thanked UNEP and WHO, Secretariat of the meeting for their support during the meeting. Dr Duck-hyung Lee then officially closed the Fifth High-Level Officials Meeting.

**HIGH-LEVEL OFFICIALS MEETING ON ENVIRONMENT AND HEALTH  
IN SOUTH-EAST AND EAST ASIAN COUNTRIES**

14 July 2010, Jeju, Republic of Korea

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## ANNEX 2

**HIGH-LEVEL OFFICIALS MEETING ON ENVIRONMENT AND HEALTH  
IN SOUTH-EAST AND EAST ASIAN COUNTRIES**

**14 July 2010, Jeju, Republic of Korea**

**PROGRAMME**

14 JULY 2010, WEDNESDAY		
0800 - 0900	Registration	
	<i>Opening Session</i>	
0900 - 0940	Opening statements and welcome address	Representatives from the Republic of Korea, UNEP and WHO
0940 – 1000	Group photograph and tea/coffee break	
	<i>High-level Meeting</i>	
1000 - 1010	Adoption of Agenda Selection of Vice Chair of the Regional Forum	Chair: Republic of Korea Vice-Chair: To be decided
1010 - 1050	Report on the regional level activities since the First Ministerial Meeting and the Fourth High-Level Meeting - Discussion on Task Force concept note for reviewing and recommendation for regional issues	Secretariat (WHO, UNEP)
1050 - 1200	Report on development and implementation of national programme of environment and health since the First Ministerial Meeting and the Fourth High-Level Meeting (alphabetical order)	Presented by Countries 10 min per countries Facilitated by Chair
1200 - 1330	Lunch break	
1330 - 1440	Report on development and implementation of national programme of environment and health since the First Ministerial Meeting and the Fourth High-Level Meeting (alphabetical order)	Presented by Countries (10 min per countries) Facilitated by Chair
1440 - 1500	Discussion on countries reports	Facilitated by Chair
1500 – 1530	Tea/coffee break	

1530 - 1640	Report of Policy briefs of the 6 thematic working groups (TWGs)& future work plans of the 7 thematic working groups (TWGs)\	Presented by TWGs (7 TWGs ×10 min) Facilitated by Chair
1640 - 1700	Discussion on TWGs reports	Facilitated by Chair
1700 - 1730	Special report on Climate Change adaptation and Green growth programme	Jeju Government
1730 – 1810	Discussion on 2 <sup>nd</sup> MM agenda and Jeju Declaration	Chair
1810 – 1820	Summary of Discussion	Chair
1820 - 1830	Closing of the meeting	Chair
	Closing remarks by host government	

**REPORTS OF THE THEMATIC WORKING GROUPS**

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**THE REGIONAL FORUM ON ENVIRONMENT AND HEALTH  
IN SOUTHEAST AND EAST ASIAN COUNTRIES:  
THEMATIC WORKING GROUP ON AIR QUALITY****WORK PLANS 2010-2012****1 BACKGROUND**

The 2007-2009 workplan for Thematic Working Group (TWG) on Air Quality was adopted at the Ministerial Regional Forum on environment and health in Southeast and East Asian countries in August, 2007. Since then, every 3 years, the ministerial forum review progress, development and approve the regional TWG workplan under the Charter of the Regional Forum on Environment and Health in Southeast and East Asian Countries. In implementing the workplan, co-chair institution take the lead role in coordinating implementation and the members are engaged in the activities under the workplan. The TWG has regularly discussed the progress and implementation of the workplan for coordination among the member institute to advocate actions based on the recommendations of the Regional Forum. The TWG workplan has become a tool driver and a system for monitoring health risk related to air quality throughout the region. There are wide variations in the proportion of knowledge management, technical support, coordination and advocacy in the regional workplan. The status of activities on environment and health is prioritizing according to the 3 sub-groups categorized in TWG namely; urban, indoor and transboundary air pollution.

Urban air pollution, especially fine particulate matter, causes significant health problems throughout the region. Relevant data and information have become significantly more available and accessible over the last decade. It is report that PM<sub>10</sub> exacerbates asthma symptoms and recent studies indicate that it can also contribute to the incidence of cardiovascular and respiratory diseases. In many under-developed and developing countries, health impacts of indoor air pollution from household energy rank as the fourth leading health risk. It is important to optimize the potential linkages between health efforts to reduce local and regional urban air quality problems as well as transboundary air pollution.

**2 OBJECTIVES**

The scope of Regional Workplan on Air Quality aids the formulation and implementation of air quality management (AQM) policies which are health driven through the following objectives:

- 2.1 Reducing health burden imposed by deteriorating air quality linked with population growth, urbanization, motorization and increased energy use by reducing the emissions of air pollutants from indoor, local, national and regional levels;

- 2.2 Strengthening the cooperation by providing a mechanism for sharing knowledge and experiences, improving policy and regulatory frameworks at the national and regional levels, and promoting the implementation of integrated environmental health strategies and action plans;
- 2.3 Capacity building of researchers and scientists by promoting cooperative research and development in the region focusing on air quality and health effects.
- 2.4 Strengthening the public participation and public relations by promoting the activities and outputs of the related technical forums, and expand the networks of the charter.

### 3 ACTIVITIES

To achieve the overall objectives, the following set of activities and timelines of three-years are proposed based on the major issues and the necessity of this region. The proposed activities include knowledge management and technical support, progress reporting to the Regional Forum, coordination and advocacy and resource mobilization. The proposed activities play more attention in public participation, risk communication, environmental education and children health. Climate change is an emerging issue and an area of co-benefits on health by air quality management and climate change mitigation. Therefore, co-work with climate change TWG is expected to be organized during the 2010-2012 workplan.

#### 3.1 WORKPLAN ACTIVITIES FOR SUB-GROUP ON URBAN AIR QUALITY

##### 3.1.1 Reducing health burden imposed by deteriorating air quality

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Dissemination of updated WHO guideline	→		
	2. Scenario development on revision of standards for different AQ contexts		→	→
	3. Introduce knowledge management (KM) systems to AQM	→	→	→
	4. Environmental education and public awareness raising	→	→	→
	5. Organizing the risk communication workshop	→	→	→
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→



<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

### 3.1.2 Strengthening the cooperation

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Sharing information and knowledge related to health impact and air quality	→	→	→
	2. Documentation, analysis and exchange information and knowledge on existing monitoring of air toxics and heavy metals	→	→	→
	3. Formulate recommendations on standards/guideline and monitoring protocols for air toxics and heavy metal		→	→
	4. Establishing regional network on AQM	→	→	
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

### 3.1.3 Capacity building

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Strengthening capacity of researchers on air pollution and health impact	→	→	→
	2. Promoting Local/Regional Training Center		→	→
	3. Increasing collaboration Regional Training Activities		→	→

<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

### 3.2 WORKPLAN ACTIVITIES FOR SUB-GROUP ON INDOOR AIR QUALITY

#### 3.2.1 Reducing health burden imposed by deteriorating air quality

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Dissemination of updated WHO guideline and national standards	→		
	2. Evaluation of building materials and Heating Ventilation and Air Conditioning (HVOC) system operation		→	→
	3. Environmental education for children and public awareness	→	→	→
	4. Providing guidance on integrating quality of life (QOL) in the design and implementation of air quality management policies of Asian and East Asia countries	→	→	→
	5. Documented methodology on studying the linkages between QOL, health and indoor air quality	→	→	→
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	3. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	4. Presentations in regional and national level workshops		→	→

### 3.2.2 Strengthening the cooperation

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Overview and analysis of health impact studies on hazardous indoor air pollutants	→	→	
	2. Document existing health impact studies: for example, Sickness Building Syndrome(SBS), and Second Hand Smoke(SHS)	→	→	→
	3. Formulate recommendations on standards and monitoring protocols for hazardous indoor air pollutants		→	→
	4. Establishing regional network on AQM	→	→	
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

### 3.2.3 Capacity building

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Provision of education program and training instructors related to IAQs	→	→	→
	2. Education and training of scientists related to IAQ	→	→	→
	3. Pool preparation of Asia-experts related to IAQ	→	→	→
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→

<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Communication by hot-line between IAQM board and working group members	→	→	→

### 3.3 WORKPLAN ACTIVITIES FOR SUB-GROUP ON TRANSBOUNDARY AIR QUALITY

#### 3.3.1 Reducing health burden imposed by deteriorating air quality

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Conduct health impact assessment of Dust and Sandstrom (DSS)	→	→	→
	2. Study health impact assessment of Transboundary Haze	→	→	→
	3. Develop a knowledge base on air pollution and human health in collaboration with other relevant sub-working groups	→	→	→
	4. Review of all studies, including epidemiological surveys, related to the impacts of regional air pollutants on health	→	→	
	5. Data and information on the composition and characteristics of regional air pollution affecting the Northeast and Southeast Asian region	→	→	
	6. Assessment report on the impacts of PM and ozone on the health of people living in the northeast and southeast Asian region	→	→	→
	7.			
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops		→	→

### 3.3.2 Strengthening the cooperation

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Training workshop on transboundary pollutants	→	→	
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

### 3.3.3 Capacity building

Categories	Activities	Timelines		
		2010	2011	2012
<b>Knowledge management and technical support</b>	1. Conduct training programme and case studies on health impact of PM and Ozone in rural areas	→	→	→
	2. Conduct training workshop on monitoring and health impact assessments of transboundary air pollution	→	→	→
		→	→	→
<b>Progress reporting to the Regional Forum</b>	1. Prepare and submit progress report to the High level meeting and Regional Ministerial Forum		→	→
<b>Coordination and advocacy</b>	1. Working group meeting will be jointly organized by 3 sub-working groups	→	→	→
	2. Presentations in regional and national level workshops	→	→	→

#### **4. MONITORING AND REPORTING**

The annual report to the High level meeting and Regional Forum will give an overview of:

- Activities implemented over the last year based on activities and outputs listed above
- Activities planned for the coming year

## **THEMATIC WORKING GROUP ON WATER SUPPLY, HYGIENE AND SANITATION:**

### **2010-2013 WORK PLAN**

*Approval of the present work plan by the 2<sup>nd</sup> Ministerial Forum on Environment and Health in South-East and East Asian Countries, will constitute approval for the change of the name of this Thematic Working Group,*

*from*

*Thematic Working Group on Water Supply, Hygiene and Sanitation*

*to*

*Thematic Working Group on Water, Sanitation and Hygiene.*

*In its meeting in Luang Prabang, Lao PDR, 26-28 May 2010, the Group endorsed China CDC Institute of Environmental Health and Related Product Safety to continue as Chair for the period 2010-2013, while the Philippines Department of Health would assist the Chair in the capacity of Vice Chair.*

#### **1. Background**

Almost 500 million additional people in South-East and East Asian countries received access to an improved sanitation facility between 1990 and 2008. Despite this major improvement, almost 300 million people still need to share an improved type of sanitation facility with other households, whereas nearly 400 million use precarious unimproved facilities and over 100 million simply defecate in the open. The rural population without access to sanitation services in East Asia is almost half a billion people, which is over 60% more than the 300 million urban dwellers unserved.

The Region is not on track to achieve the MDG sanitation target. It will fall short by 6% of the MDG sanitation regional target of 74% by 2015.

Not surprisingly, diarrhoeal diseases are a major killer in this Region. They are largely preventable by good sanitation and hygiene and a sufficient and safe water supply. Improved sanitation alone reduces diarrhoea death rates by a third (UNICEF, WHO, 2009). In South-East and East Asian countries, there are 450 million cases of diarrhoea every year and the number of deaths reaches nearly 150 000 a year (WHO, 2008a). Estimates suggest that the overall incidence of diarrhoeal diseases has remained relatively

stable over the past two decades whereas the death rate has decreased consistently. This indicates that while case management approaches and practises improve over time, the preventive aspects (good sanitation, hygiene, safe drinking-water, food safety) are not progressing as effectively.

One of the major drawbacks in the Region is a lack of good information about sanitation and water systems that could provide sound analyses for national policy-making, planning and programming.

There is emerging awareness in the Region that a shift in sanitation financing is required from financing “subsidies and grants for sanitation facilities” to the poor to funding “sanitation promotion and leveraging resources”. Most countries reported well-structure initiatives to generate sanitation demand through social marketing using different methodologies.

Responsibilities for sanitation, especially rural sanitation, are not clearly defined in most East Asian countries and are somehow an afterthought in different national or local agencies. Responsibilities for sanitation and communication and coordination mechanisms among agencies appear to be blurred in most countries and in some cases simply do not exist. A crucial recommendation is the urgent need to establish a clear national institutional framework for sanitation, including the definition of roles and responsibilities of different national and subnational stakeholders.

## **2. Objectives**

The objectives of this work plan are the following:

- (1) To identify the functions and strengthen the capacities of health, environment and other authorities in relation to water supply, sanitation and hygiene;
- (2) To promote safe and sustainable management of water supplies from catchments to consumers;
- (3) To facilitate cooperation among East Asian countries towards the improvement of sanitation and hygiene, to collaborate with the countries of the East Asia Sanitation (EASAN) process in planning and organizing EASAN3 conference, and to support EASAN2 follow-up activities.

## **3. Activities and timelines**

**Objective 1: To identify the functions and strengthen the capacities of health, environment and other authorities in relation to water supply, sanitation and hygiene.**



Activity	Timing				Lead member	Notes
	2010	2011	2012	2013		
1.1 Review health authorities' functions in relation to WSH in at least 4 TWG WHS countries, taking TWG WHS discussion paper as point of reference. Disseminate findings.		X	X		WHO	

**Objective 2: To promote sustainable management of safe water supplies and sanitation.**

Activity	Timing				Lead member	Notes
	2010	2011	2012	2013		
2.1 Review water source protection issues and best practices in at least 4 TWG WHS countries and disseminate report.	X	X	X		Korea	Activity carried over from 2007-2010 work plan.
2.2 Develop technical guidance documents and training materials on rural Water Safety Plans and disseminate to TWG WHS countries.	X	X	X		Malaysia	Activity carried over from 2007-2010 work plan.
2.3 Conduct regional assessment of operations and maintenance. Develop and disseminate guidance for	X	X	X		Japan	

strengthening operations and maintenance of water supply and sanitation facilities.						
2.4 Build capacity for drinking water quality surveillance at household and community level.		X	X		Thailand	

**Objective 3: To facilitate cooperation among East Asian countries towards the improvement of sanitation and hygiene, to collaborate with the countries of the East Asia Sanitation (EASAN) process in planning and organizing EASAN3 conference, and to support EASAN2 follow-up activities.**

Activity	Timing				Lead member	Notes
	2010	2011	2012	2013		
3.1 Prepare a compendium of sanitation financing best practices (urban and rural); and identify appropriate financing schemes for various types of sanitation interventions.	X	X	X		Malaysia	
3.2 Promote the development of national water supply, sanitation and hygiene sector assessments, plans and policies.	X	X	X		Philippines	
3.3 Develop a regional water supply and sanitation sector monitoring system consistent with the	X	X	X	X	WHO	

WHO/Unicef Joint Monitoring Programme.						
3.4 Conduct inter-country workshop on sanitation in cold climates.		X			Mongolia	IWA will support this activity.
3.5 Develop guidelines on emergency sanitation, advocate for preparedness, and build capacity for implementation.	X	X			Philippines	IWA will support this activity.
3.6 Support the planning and implementation of EASAN3, including preparation of pre-conference regional sanitation report.	X	X	X		Indonesia	

#### 4. Outputs

(1) Improved knowledge base on functions of health, environment and other authorities in relation to WSH in TWG WHS countries.

(2) Tools and information disseminate to improve source water protection, promote safety of drinking water, and improve operations and maintenance of water supply and sanitation systems.

(3) Access to improved sanitation and better hygiene practices promoted.

#### 5. Monitoring and reporting

Outputs	Indicators
1. Improved knowledge base on functions of health authorities and environment authorities in relation to WSH in TWG WHS countries.	(1) Functions of health authorities reviewed in at least 4 countries.
2. Tools and information disseminate to improve source water protection, promote	(1) Report disseminated on source water protection in at least 4 countries.

safety of drinking water, and improve operations and maintenance of water supply and sanitation systems.	(2) Tools for promoting water safety in rural systems developed and disseminated. (3) Regional assessment of operations and maintenance developed and disseminated.
3. Access to improved sanitation and better hygiene practices promoted.	(1) Knowledge products developed and disseminated on sanitation financing, sector monitoring and assessment, sanitation in cold climates, and emergency sanitation. (2) Regional sanitation report issued as EASAN3 pre-conference publication.

The TWG WHS will perform an annual review of the work plan in preparation for its annual meeting and will submit an annual report to the Secretariat. The work plan will be revised as needed based on consensus among the members at the annual meeting.

Progress reports will also be presented to the 6<sup>th</sup> High Level Meeting on Environment and Health (2011) and to the 3<sup>rd</sup> Ministerial Forum on Environment and Health (2013).

## 6. Resources

Implementation of all planned activities will depend on the availability of resources.

## **Workplan: Thematic Working Group on Solid and hazardous waste**

### **1. Background**

Asia's economic growth and population is now increasing in a fast rate. The rate of economic growth is now 7.4% (2005, ESCAP) and the population is increasing by 1.1% (2006-2010, United Nations Population Fund, "State of World Population 2006"). While Asia has been experiencing a rapid increase of population and economic development, waste problem has been becoming common to all countries in Asia.

Except some advanced countries, increase of volume and variety of solid waste are common challenges to countries in Asia. Increase of volume gives pressure to waste disposal site and enhance illegal dumping. Hazardous waste causes a large number of environment and health problems for people. These are threatening to the environment and our health.

Based on the highlighted above issues in Asia, the Regional Forum on Environment and Health in Asia and the Pacific launched in 2007 selected solid and hazardous waste as prioritized issues in the first three year plan of the forum. In line with the Charter of the Regional Forum, Thematic Working Group on solid and hazardous waste (Waste TWG) was established and started its activities based on the first three year programme. The member countries of Waste TWG include: Brunei Darussalam, Cambodia, China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.

In this context, the Waste TWG deals with municipal waste and medical waste which are common issues to the member countries.

### **2. Progress based on the first three years workplan**

The first three year workplan (2007-2009) of Waste TWG has three objectives: (1) to ensure environmentally sound management of solid and hazardous waste; (2) to prioritize issues by analyzing status-quo of municipal waste and medical waste management in the member countries; and (3) to provide useful information.

The first Waste TWG meeting was held on 28-29 February, 2008 in Singapore where the meeting agreed that:

- i. Member countries will develop their own national inter-ministry/agency steering committees;
- ii. Member countries will identify national contact points;
- iii. Each country is allowed to have up to 2 focal points for contact and they have to work closely;
- iv. Membership will depend on the main topics to be discussed, where relevant or appointed person can participate.

The Second meeting of Waste TWG was held in City Angkor Hotel, Siem Reap, Cambodia on 1-3 December 2008, back to back with the Second Workshop of 3R Knowledge Hub (3RKH). The meeting i) reviewed the reports of status-quo and issues of municipal and medical waste management; ii) shared good practices and lessons learnt on municipal and medical waste management; and iii) discussed and identify appropriate recommendations drawn from the status-quo and issues of waste management. The participants of the Second meeting also agreed with action points (please refer to the progress report of the Regional Forum on Environment and Health).

As the result of the first three years activities, TWG provided the following major output successfully.

TWG establishment	Work plan, including a meeting schedule, reporting schedule and budget
Municipal Waste	Report on status-quo and issues of municipal waste management in the member countries *Output was provided to 3R Knowledge hub and Environment and Health
	Recommendation on necessary actions
Medical Waste	Report on status-quo and issues of medical waste management in the member countries *Output was provided to 3R Knowledge hub and Environment and Health
	Recommendation on necessary actions

Recommendations from Municipal Waste Management Report and Medical Waste Management Report are summarized in Annex.

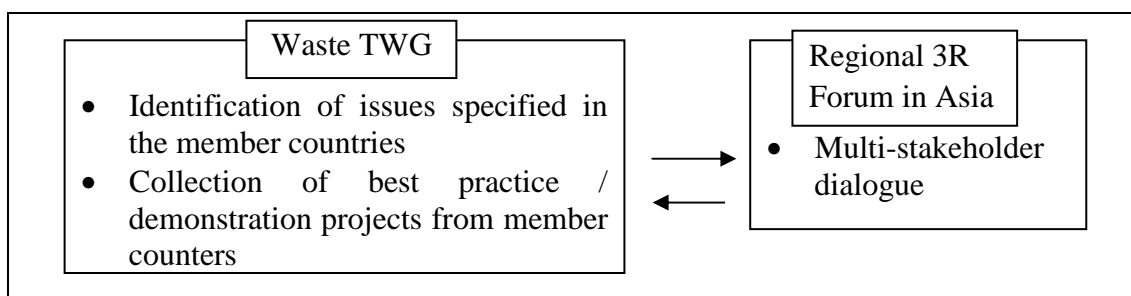
### 3. Objective

As mentioned in the previous section, thanks to member countries' contribution and a fruitful discussion in Waste TWG of the first phase, Waste TWG made essential recommendations to tackle with issues of municipal waste management as well as medical waste management in member countries.

In this context, Waste TWG of the second phase will explore an efficient implementation mechanism in municipal waste management including medical waste management.

According to the outcome from the first three year activities and the other initiatives relevant to waste management issues in Southeast and East Asian countries, it has become clear that due to crucial obstacles in waste management such as lack of finance, inappropriate technology, and so on, most of the public sectors in the region does not seem to have enough capacity to develop and implement entire waste management systems, and private and informal sector could have key roles to improve waste management in the region.

With regard to public private partnership in waste management, Regional 3R Forum in Asia which was launched in 2009 with aiming to promote 3Rs in the region through dialogue, information sharing, and developing cooperation among multi-stake holders will deal with public private partnership in waste management as a major topic. It would be appropriate for Waste TWG to collaborate and contribute to Regional 3R Forum in Asia in order to make the outcome from both Waste TWG and Regional 3R Forum more effective and attractive.



Based on this consideration, the objectives of the second phase (2010-2013) of Waste TWG are:

(1) To identify actual implementation scheme/procedure to realize the recommendation made in the 1<sup>st</sup> phase

(e.g. utilization of public private partnership in waste management and proper integration of informal sector etc.)

(2) To hold workshops to promote activities relevant to the recommendation utilizing the status-quo reports compiled in the 1<sup>st</sup> phase

(3) To enhance capacity building of policy makers to identify and address waste and health problems by sharing knowledge including best practices in the region .

To achieve objectives, it is encouraged to invite the experts in public private partnership and informal sector, and private sectors to Waste TWG.

#### **4. Activities**

Provision on the activities proposed workplan for 2010-2013 are shown in Table 1.

Three Waste TWG meetings will be conducted for the period 2010-2013 to report the progress of the adopted TWG workplan 2010-2013 subject to available resources.

**Table 1. Draft Workplan of the Thematic Working Group on Solid and Hazardous Waste Management**

Activities	Time line	Responsible Organization	Output	Indicator
<b>To identify actual implementation scheme/procedure to realize the recommendation made in the 1st phase</b>				
Survey on potential of private sector for active participation in municipal and medical waste management - Key for success - Required legislative measure - Market potential for private sector - Collaboration between private sectors between developed countries and developing countries Etc.	Q3/2010-Q1/2012	Research institutes / Experts in the region	Report	Published report
Survey on role and method to improve situation of informal sectors in the region	Q3/2010-Q1/2012	Research institutes / Experts in the region	Report	Published report
International Dialogue between policy maker and experts (Discuss outcome from Asia Resource Circulation Policy Research with policy makers)	Q2/2012-Q1/2013	All member countries	Presentation material, etc.	Provision of Presentation material, etc.
Recommend necessary actions to address the issues in the compiled list	Q3/2012-Q4/2012	All member countries	Recommendation	
<b>To hold workshops to promote activities relevant to the recommendation utilizing the status-quo reports compiled in the 1st phase</b>				
Training workshop for private sectors (hospital, etc.) on medical waste management - Training workshop Site visit of good practice	Q2/2011-Q1/2012	To be decided	Workshop proceeding	Workshop proceeding
Resource Mobilization for developing countries to promote project on formalization and active engagement of informal sectors	Q3/2010-Q3/2012	Member countries supported by AIT/UNEP RRC.AP	New budget resource	The amount of newly mobilized resource
Collaboration with UNEP "Converting Waste Plastics / agricultural biomass into fuel" project	Q4/2010-	UNEP DTIE IETC	Report and Implementation of pilot demonstration project	Implementation of pilot demonstration project



Activities	Time line	Responsible Organization	Output	Indicator
<b>To enhance capacity building of policy makers to identify and address waste and health problems by sharing knowledge including best practices in the region</b>				
Compile activities in member countries (e.g. demonstration project) and submit it to existing initiative.	Q3/2010-Q4/2011	AIT/UNEP RRC.AP	Report, Presentation material, etc.	Provision of Report. Presentation material, etc.
Provision of relative information to Regional 3R Forum in Asia - Issues to be discussed - Outcome of existing activities etc.	Q3/2010-Q1/2013	Members of Waste TWG	Presentation material, etc.	Provision of Presentation material, etc.
Provide information on development of Medical Waste Management guidelines and manuals in member countries	Q3/2010-Q3/2012	AIT	Guideline and Manual	Published Guideline and Manual
Collect good practice information for medical waste management	Q3/2010-Q3/2012	AIT	Report	Published report
Provide the above mentioned information to the 3R Knowledge Hub	Q3/2010-Q3/2012	AIT/UNEP RRC.AP , AIT	Additional input into 3RKH	The acquired level of additional data and information
Organize Waste TWG meetings	Q3/2010-Q4/2013	AIT/UNEP RRC.AP	Meeting proceedings	-
Update membership and maintain mailing list	Q3/2010-Q4/2013	AIT/UNEP RRC.AP	Updated member list	-

## 5. Resources

Activities	Cost	Available/proposed resource
<b>To identify actual implementation scheme/procedure to realize the recommendation made in the 1st phase</b>		
Survey on potential of private sector for active participation in municipal and medical waste management - Key for success - Required legislative measure - Market potential for private sector - Collaboration between private sectors between developed countries and developing countries Etc.	Personnel cost for Secretariat Meeting cost : preparation, venue, travel, accommodation, etc.	
Survey on role and method to improve situation of informal sectors in the region	To be decided	
International Dialogue between policy maker and experts (Discuss outcome from Asia Resource Circulation Policy Research with policy makers)	To be decided	
Recommend necessary actions to address the issues in the compiled list	Personnel cost	
<b>To hold workshops to promote activities relevant to the recommendation utilizing the status-quo reports compiled in the 1st phase</b>		
Training workshop for private sectors (hospital, etc.) on medical waste management - Training workshop Site visit of good practice	Personnel cost for Secretariat Workshop cost : preparation, venue, travel, accommodation, etc.	
Resource Mobilization for developing countries to promote project on formalization and active engagement of informal sectors	Personnel cost	AIT/UNEP RRC.AP , AIT
Collaboration with UNEP “Converting Waste Plastics / agricultural biomass into fuel” project	-	Member countries
<b>To enhance capacity building of policy makers to identify and address waste and health problems by sharing knowledge including best practices in the region</b>		
Compile activities in member countries (e.g. demonstration project) and submit it to existing initiative.	Personnel cost, cost for report, presentation material, etc.	AIT/UNEP RRC.AP
Provision of relative information to Regional 3R Forum in Asia - Issues to be discussed - Outcome of existing activities etc.	Personnel cost, cost for report, presentation material, etc.	Members of Waste TWG
Provide information on development of Medical Waste Management guidelines and manuals in member countries	Personnel cost, cost for printing etc,	AIT (ADB)

Activities	Cost	Available/proposed resource
Collect good practice information for medical waste management	Personnel cost, cost for printing etc,	AIT (ADB)
Provide the abovementioned information to the 3R Knowledge Hub	Personnel cost, maintenance cost etc,	AIT (ADB)
Organize Waste TWG meetings	Personnel Cost for Secretariat Meeting cost : preparation, venue, travel, accommodation, etc.	
Update membership and maintain mailing list	Personnel Cost for Secretariat	

### 6. Monitoring and reporting

The monitoring and reporting of the progress of implementing the work plan will be carried out by contacting the TWG members on-line and through TWG meetings subject to availability of resources.

Annex:

Recommendations from Municipal Waste Management Report and Medical Waste Management Report

(1) Recommendations from Municipal Waste Management Report

Recommendations from Municipal Waste Management Report include:

Implementing an effective and efficient municipal waste management relative to 3Rs can be achieved with the following recommendations to the Waste TWG:

- Establish data and information management systems for municipal waste management at the National/local level with consideration to a bottom-up approach in reporting e.g. Information and data from LA to MoE.
- Develop guidelines and/or policies at national/local level addressing municipal waste management and governing Sound Material Cycle Society through 3R principles, therefore looking into the effects of public health and impact on the environment
- Strengthen capacity building and technical support activities to enhance partnerships among municipal waste and other concerned stakeholders
- Promote dialogue, consultation and consensus building among municipal waste management stakeholders
- Disseminate information on the importance of and good practices in municipal waste management with 3R
- Establish a network for capacity-building for urban waste management governing 3R
- Mobilize funding and resources from institutions and/or donor agencies for the implementation of effective Municipal Waste Management practices at the national/local level
- Form an effective network or organization from among the informal sector in order to provide information and tangible support in terms of occupational safety and health (i.g. proper equipments like carts and masks may be given along with information on waste handling for waste pickers)
- Recognize the role and importance of the informal sector and provide long-term support in the form of health insurance or other forms of savings, with which the informal sector can access

## (2) Recommendations from Medical Waste Management Report

### Recommendation from Medical Waste Management Report

A synthesis of information from all the 12 countries evidently illustrates three key areas for immediate action and is presented in the Figure, in the order of importance.

#### 1<sup>st</sup> Priority

##### **POLICIES & LEGISLATIONS**

National Government - Formulate healthcare waste policy and legislations considering other countries' experiences and local needs; Assign clear responsibilities and create dedicated departments for monitoring and overseeing healthcare waste management.

##### Healthcare facility

Healthcare waste management should not be contingent upon law or regulation; it should come out of duty of care; A healthcare facility-level policy on HCWM should be the correct start Cooperate with national government through proactive, rather than hindering, inputs clear assignment of waste management responsibilities to personnel

#### 2<sup>nd</sup> Priority

##### **BUDGET**

##### National Government

Fiscal incentives for performing hospitals are best ways to encourage HCWM with low cost; Encourage centralized treatment facilities under Build, Operate, Transfer / Build, Own, Operate, Transfer, Adopt clustering of healthcare facilities to share costs

##### Healthcare facility

Choose a low-cost waste management plan and implement it Institutionalize a recycling system and use the proceeds to recursively fund the overall healthcare waste management system

#### 3<sup>rd</sup> Priorities

##### **TECHNOLOGY & KNOWLEDGE MANAGEMENT**

##### National Government

Build capacity of relevant department staff on:

- technical and management topics for HCWM
- implementation of HCWM plans
- monitoring of HCWM plans
- safe and sustainable HCWM technology selection
- management of HCWM technologies

##### Healthcare facility

Raise awareness of staff in handling, safety and exposure to HCW;  
Conduct periodic induction trainings for new staff and updates for existing staff;  
Monitor and evaluate waste management activities and their impact; and  
Track the progress of HCWM and report the successes and reward staff

**Work Plan  
of Thematic Working  
Group on  
Toxic Chemicals and  
Hazardous Substances  
for 2010 – 2013  
(TWG 4)**

## (TWG 4)

### 1. Background: Regional Issues and Challenges

The South-east and East Asian Region has many rapidly industrializing countries, where an increasing number and volume of chemicals are used in mining, forestry, fishery, manufacturing, energy and construction industries, as well as in shops, offices and households. Several economies are agriculture-based, and the improper management of agro-chemicals, particularly pesticides, is a major health hazard.

There are over 100 000 existing chemicals, a third of which are used in industry, agriculture and households. While most are beneficial to economic development, their inadequate management sometimes results in adverse impacts on human health and ecosystems.

Unnecessary and unexpected exposure to toxic chemicals can cause disease, disability and death. Children who work from an early age in cottage and gold mining industries such as bangle or fireworks production or washing activities are often exposed to toxic and hazardous chemicals. Chronic exposure is linked to damage to the nervous and immune systems and to ill effects on reproductive function and development. Evidence of the multiple adverse health impacts derived from chemicals used in agriculture, industry, commerce and in households calls for urgent action to improve the quality of their management.

Legislative and regulatory control of chemicals may include the registration and inventory of chemicals, risk assessment and notification, labelling and information on chemicals, tracking systems, treatment and disposal of chemical waste, and occupational health and safety requirements for production, use, storage, transport, sale disposal and treatment. Many developing countries in the region lack adequate legislative and institutional infrastructure and the capacity to manage chemicals effectively.

This Thematic Working Group is divided into three subgroups on: (1) prevention and reduction of pesticide poisoning; (2) reduction of exposure to heavy metals (e.g. mercury, manganese, lead, cadmium, arsenic) and other hazardous substances (e.g. cyanide, asbestos, chemicals in toys); and (3) food contamination (food preservatives, antibiotics, hormones, etc.)

### 2. Objectives

The following objectives are generic and apply to all the subgroups:

- (1) To share information and data on the chemicals and their health and environmental impacts (e.g. cases of poisoning) and good practices including infrastructure model (e.g. legislative model) and innovative approach to reduce the health and environmental impacts from toxic chemicals and hazardous substances in member countries;
- (2) To improve the technical knowledge and skill among personnel of member countries on risk assessment and risk management of the chemicals; and
- (3) To strengthen regional institutions networking and collaboration on toxic chemicals management.

### 3. Activities

Activities	Target date	Recommended Lead country
<p><b>Objective 1:</b> To share information and data on the chemicals and their health and environmental impacts (e.g. cases of poisoning) and good practices including infrastructure model (e.g. legislative model) and innovative approach to reduce the health and environmental impacts among member countries.</p> <p>1.1 Compile the data from member countries on ;</p> <ul style="list-style-type: none"> <li>- the high priority (refer to national chemical profiles) chemicals and their health and environmental impacts, especially the information on adverse health effects from toxic chemicals and health impact assessment (HIA) from researches and case studies.</li> <li>- the information on good practices, BAT Best Available Techniques BEP Best Environmental Practice.</li> <li>- the information on approach to reduce the health and environmental impacts.</li> </ul> <p>1.2 Develop an inventory of institutions and experts specializing in the risk assessment and risk management other aspects of the chemicals at regional and national levels.</p> <ul style="list-style-type: none"> <li>- Each country should identify inventory of institutions and experts specializing and provide the information to the TWG to update the information.</li> </ul> <p>1.3 Update (every 6 months), inform and continue web-site for regional cooperation for toxic chemicals and hazardous substances and report to regional secretariat.</p> <ul style="list-style-type: none"> <li>- The web-site would be used to exchange information and guide member countries in addressing the safety and management of the chemicals.</li> <li>- The information would include but not limited to the data on the chemicals and their health and environmental impacts, good practices and innovative approaches for toxic chemicals management an inventory of specialized institutions and experts of member countries.</li> <li>- The web-site will be linked to other sites deemed necessary e.g. WHO, UNEP, FAO.</li> <li>- Member countries will be required to provide necessary information to update the centralized web-page. Each country may develop its own website. Certain theme will be addressed on the main webpage. (We have to consider language, format, accessibility and others.)</li> </ul>	<p>Q3/2010 - Q2/2013</p> <p>Q3/2010 – Q2/2013</p> <p>Q3/2010 – Q3/2011</p>	<p>Korea/ Japan</p>



<p><b>Objective 2:</b> To improve the technical knowledge and skill among personnel of member countries on risk assessment and risk management of the chemicals.</p> <p>2.1 Provide training and capacity building on risk assessment and risk management of the chemicals to member countries.</p> <p>2.1.1 Assess training and capacity building needs</p> <p>2.1.2 Develop training and capacity building programs/modules</p> <p>2.1.3 Conduct training and capacity building</p> <p>2.1.4 Revise training and capacity building module and lesson Learned</p> <p>2.2 Conduct regional (annual/specific theme) meetings on the risk assessment and management of the chemicals. Member countries will be encouraged to participate in such events.</p> <p>2.3 Study visits to strengthen capacity building.</p> <p>2.4 Collaboration with other TWG's on the related issues.</p>	<p>Q3/2010-Q2/2013</p> <p>Q3/2010-Q2/2013</p> <p>Q3/2011-Q2/2013</p> <p>Q3/2010-Q2/2013</p>	<p>Thailand/ Vietnam/Korea/ Japan</p>
<p><b>Objective 3:</b> To strengthen regional institutions networking and collaboration on toxic chemicals</p> <p>3.1 Creating collaborative mechanism.</p> <ul style="list-style-type: none"> <li>- Establish / organize the annual meeting of the forum and rotate the country organizer among member countries.</li> <li>- Each country should provide the annual report to the forum.</li> <li>- To update information on contact person to the annual forum.</li> </ul> <p>3.2 Organizing workshop on creating mechanism.</p> <ul style="list-style-type: none"> <li>- Back to back Workshop on technical issues after the forum meeting.</li> </ul> <p>3.3 Collaborating among existing TWGs (air, water and others).</p> <ul style="list-style-type: none"> <li>- Collaborate and invite other existing TWG to participate in the annual forum.</li> </ul> <p>3.4 Conduct annual meeting among the member countries to update the progress, back-to-back to 2.2</p>	<p>Q3/2010-Q2/2013</p>	<p>Philippines/ Malaysia/ Vietnam/ China/ Indonesia</p>

#### 4. Outputs

- (1) A regional knowledge management network established,
- (2) Technical knowledge and skill of key personnel in member countries provided; and
- (3) Regional institutions networking and collaboration mechanism on toxic chemicals established.

## 5. Monitoring and reporting

Outputs	Indicators
1. A regional knowledge management network established	(1) Compilation of the data and information on the chemicals, health impacts and good practices (Yes/No); and Number of member countries providing the information/data. (2) Establishment of a web-page for regional knowledge management (Yes/No)
2. Technical knowledge and skill of key personnel in member states provided.	(1) Number of training opportunities provided through the TWG; and Number of key personnel undertaking the training (2) Number of regional technical meetings organized
3. Regional institutions networking and collaboration mechanism on toxic chemical management established.	(1) Collaborating among existing programs on toxic chemicals (Yes/No)

The monitoring and reporting of the progress of implementing the work plan will be carried out in the following ways:

- (1) Conduct of regular on-line conference – Semi-annual on-line conference will be held among TWG members to discuss latest issues or development on environmental health emergencies, including extent of implementation of the work plan.
- (2) Perform annually an evaluation of the work plan, and submit an annual report to the Secretariat.
- (3) Post the summaries of TWG meetings and evaluation reports on the web-site.

## 6. Resources

Outputs	Resources required and Proposed Budget
1. A regional knowledge management network established. (Korea/Japan)	(1) Experts to design a database for compilation of data and information on the chemicals, health impacts and good practices and compile the data/information into the database (US\$40,000)
	(2) Experts to develop a roster of specialized institutions and experts (US\$30,000)
	(3) Institution and their personnel to host and maintain the website (US\$80,000)
2. Technical knowledge and skill of key personnel in member states improved. (Thailand, Mongolia and Vietnam)	(1) Cost of training programs (US\$200,000)
	(2) Cost of regional technical meetings (US\$200,000)

Outputs	Resources required and Proposed Budget
3. Regional institutions networking and collaboration mechanism on toxic chemicals improved. (Malaysia, Philippines)	(1) Cost of organizing workshop on creating mechanism (US\$50,000)

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## **Work Plan – Thematic Working Group (TWG) on Contingency Planning, Preparedness and Response in Environmental Health Emergencies 2010-2013**

### **1. Background:**

The Environmental Health Country Profiles of the South-east and East Asian countries revealed that many are continuously experiencing health threats from deteriorating environment. They share common problems such as water pollution from domestic and industrial sources, urban air pollution, solid waste management, climate change and chemicals in the environment that have resulted to an estimated one million deaths every year in the region.

According to the Annual Statistical Review 2008 made by the Centre for Research on the Epidemiology of Disasters, China (29) and the Philippines (20) were most often hit by natural disasters in 2008. These two countries, together with Indonesia, Vietnam and Thailand have occupied the top ranking countries with the highest number of disaster occurrence during the last three years. In 2008, two “mega-disasters” occurred, cyclone Nargis in Myanmar and the Sichuan Earthquake in China.

While there are efforts being made within the countries to minimize the environmental hazards and their associated health risks, the populations are also becoming more exposed to increasing occurrences of disasters in the region. These include recent disasters from natural hazards (e.g., typhoons, floods, earthquakes, tsunamis and volcanic eruptions) and health emergencies like SARS – Severe Acute Respiratory Syndrome, and Avian Influenza, and H1N1 which brought significant morbidity and mortality among people. The Asian Tsunami left hundreds of thousands of people without access to safe water and sanitation. The outbreaks of SARS and Avian Influenza which occur through the transmission of pathogens initially from food, animals to humans and later from humans to humans were partly attributed to inadequate environmental sanitation and personal hygiene. In addition, with rapid industrial development, the number of technological emergencies, involving chemicals and radiation, is increasing. All these emergencies threaten human life and public health. Likewise, a transboundary event such as haze/smoke induced by forest fires in Sumatra and Kalimantan, Indonesia in 1997 blanketed Brunei, Darussalam, Indonesia, Malaysia, Singapore and the southern parts of the Philippines and Thailand. One common fact is that disasters may strike any time anywhere.

In order to address these problems and challenges, the Regional Forum on Environmental and Health in Southeast and East Asian Countries was established. The Charter of the Regional Forum, created a Thematic Working Group on Contingency Planning, Preparedness and Response in Environmental Health Emergencies to address environmental issues related to emergencies and disasters. This Thematic Working Group will be divided into two subgroups namely: (1) disasters from natural hazards and associated environmental health issues, such as water, sanitation, waste management, food safety, vector control, etc.; and (2) industrial or technological emergencies involving hazardous substances, such as toxic chemicals, flammable and explosive materials, radioactive materials, etc.

### **2. Objectives**

The following objectives are generic and apply to both the subgroups:

- (1) To share information and data on contingency planning, preparedness and response in environmental health emergencies among member countries;

(2) To improve the technical knowledge and skill among personnel of member countries on environmental health emergencies; and

(3) To strengthen intercountry/regional cooperation in responding to environmental health emergencies.

### 3. Activities

<b>Activity</b>	<b>Target date</b>	<b>Lead Country</b>
<b>Objective 1:</b> To share information and data on contingency planning, preparedness and response in environmental health emergencies among member countries		
1.1 Develop a database (logistics, human resources, information) for the region	Q4/2010 – Q4/2011	Philippines & NPC, Malaysia
1.2 Sharing of information using existing website of the regional forum. The information would include but not limited to e.g. available logistical supports from each member countries, lists of experts, available facilities, antidote stocking, etc.	Q4/2010 – Q4/2013	Philippines & NPC, Malaysia
1.3 Share risk communication messages on environmental health emergencies that has been used by TWG member countries through the website	Q4/2010-Q4/2013	Philippines, NPC, Malaysia & China
1.4 Conduct regional technical symposium and update on environmental health emergencies. Regional forums will be done at least once every two years for updates including sharing of best practices related to environmental health emergencies. Member countries will be encouraged to participate in these forums. Experts are also expected to be part of the forums.	Q2/2011 and Q4/ 2013	Vietnam & Philippines
<b>Objective 2:</b> To improve the technical knowledge and skill among personnel of member countries on environmental health emergencies		
2.1 Conduct Trainings on Environmental Emergencies including Environmental Health Risk Assessment Training	Q2/2011, Q3/2012	Vietnam & China
2.2 Updating of training programmes/modules	Q2/2012-Q4/2012	Philippines and WHO
2.3 Monitor and Evaluate training programmes	Q2/2013	Mongolia and Philippines
<b>Objective 3:</b> To strengthen intercountry/regional cooperation in responding to environmental health emergencies		
3.1 Develop formal agreements on possible points of integration, cooperation and collaboration in building regional emergency response network among member countries	Q2/2012	Philippines
3.2 Develop risk communication messages for environmental health emergencies	Q1/2011-Q3/2011	Thailand and Cambodia

#### 4. Outputs

- (1) A regional information network established; and
- (2) Technical knowledge and skill of key personnel in member countries improved.
- (3) Intercountry/regional cooperation mechanisms on regional emergency response improved.

#### 5. Monitoring and reporting

Outputs	Indicators
1. A regional information network established	(1) Development of a database for the region (Yes/No) and the number of member countries with access and using the database (2) Risk communication messages published in the website (Yes/No)  (3) Conducted Regional Technical Symposium (Yes/No) and the number of Regional Symposia/Meetings conducted
2. Technical knowledge and skill of key personnel in member states improved	(1) Number of trainings/study tours/attachments organized, and number of key personnel undertaking the training/study tours/attachments  (2) Training Programmes/Modules updated (Yes/No and Number)
3. Intercountry/regional cooperation mechanisms on regional emergency response improved.	(1) Formal agreements on possible points of integration, cooperation and collaboration signed (Yes/No)  (2) Risk communication messages developed and shared (Yes/No)

The monitoring and reporting of the progress of implementing the work plan will be carried out in the following ways:

- (1) Conduct of regular on-line conference -Annual on-line conference will be held among TWG members to discuss latest issues or development on environmental health emergencies including extent of implementation of the work plan.
- (2) Perform annually an evaluation of the work plan, and submit an annual report to the Secretariat.
- (3) Post the summaries of TWG meetings and evaluation reports on the web-site.

## 6. Resources

Outputs	Required Resources	Proposed Budget
1. A regional information network established	(1) Compilation or inventory of existing information within the region	USD 15,000
	(2) Experts to develop a database system	USD 50,000
	(3) Conference facilities, resource persons, transportation, accommodation, meals honoraria	USD 80,000
2. Technical knowledge and skill of key personnel in member states improved	(1) Conference facilities, resource persons, transportation	USD 150,000
	(2) Experts in the field	USD 15,000
	(3) Consultants (Training module development)	USD 20,000
	(4) Consultants (Monitoring and Evaluation)	USD 5,000
3. Intercountry/ regional cooperation mechanisms on regional emergency response improved.	(1) Consultants to facilitate the development of agreements	USD 20,000
	(2) Consultants to develop health/risk communication messages, IEC materials, media releases and campaign materials	USD 35,000

## PRESENTATIONS OF THE THEMATIC WORKING GROUPS

**Policy Brief and Regional Workplan  
Air Quality Thematic Working Group**



The Second Ministerial Forum on  
Environment and Health in South-East and East Asian Countries

14-16 July 2010  
Jeju, Republic of Korea

**Thematic Working Group on Air Quality****Co-chairs:**

- Professor Yun-Chul Hong, College of Medicine, Seoul National University, Republic of Korea
- Dr. Wijarn Simachaya, Deputy Director General, Pollution Control Department, Thailand

**Objectives:**

- Reducing health burden imposed by deteriorating air quality;
- Strengthening the cooperation at national and regional levels;
- Building capacity of researchers and scientists focusing on air quality and health effects;
- Promoting public participation and public relations;

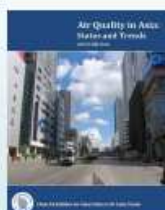
**Common issues in the region:**

- Urban air pollution
- Indoor air pollution
- Transboundary air pollution

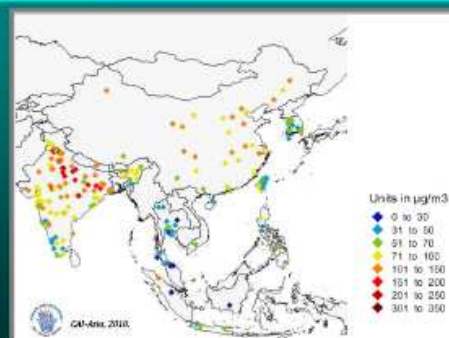
**Policy Brief**

**Summary of key activities/outputs**

- Overview of air quality standards
- Recommendations on air quality standards and monitoring protocols
- Policy guidance on integrating poverty in the design
- Implementation of air quality management policies
- Researches on air pollution and impacts to human health
- Documented methodology on studying the linkages between poverty, health, air quality and green house gases (GHGs) reduction;
- Training and courses for air quality professionals
- Developing guidelines and methodologies for monitoring air pollutants, especially PM & ozone.

**Urban Air Pollution:  
Highlight Activities**

- Air Quality in Asia: Status and Trends 2010  
Edition by CAI-Asia;
- Publication of the New Result for Public Health and Air Pollution in Asia (PAPA) Program;
- Final Report "Project on the Air Pollution, Poverty and Health Effects in Ho Chi Minh City (APPH)"  
by Health Effects Institute

**Annual average PM10 levels in 230 Asian Cities (2008)**



## Indoor Air Pollution: Highlight Activities

- updating guidelines and standards for indoor air quality (IAQ)
- preparing of guidelines and monitoring protocols for asbestos management;
- monitoring of Indoor air in Asian countries by Asia Center for Indoor Environment and Health (ACIEH), 2009;
- Two education programs for IAQ professionals in 2008;

Clean Air for Healthy Life

## Transboundary Air Pollution: Highlight Activities

- Assessment Report on the Impact of Atmospheric Brown Clouds (ABC) on Human Health by *UNEP*;
- Thailand hosted the regional training workshop on Transboundary Haze Pollution control in 2009.
- Assessment Report on the Impact of Dust and Sandstorm on Human Health by *National Institute of Environmental Research (NIER), Korea*;



## Regional Workplan

### Objectives and Activities

- ✦ The proposed activities include knowledge management and technical support, progress reporting to the Regional Forum, coordination and advocacy and resource mobilization.
- ✦ The proposed activities give more attention in public participation, risk communication, environmental education and children health.
- ✦ Climate change is an emerging issue and an area of co-benefits on health by air quality management and climate change mitigation. Therefore, co-work with climate change TWG is expected to be organized during 2010-2012.

### • Reducing health burden imposed by deteriorating air quality

Urban	Indoor	Transboundary
<ul style="list-style-type: none"> <li>• Dissemination of updated WHO guideline and standard;</li> <li>• Scenario development on revision of standards for different AQ contexts;</li> <li>• Knowledge management (KM) systems to AQM;</li> <li>• Environmental education and public awareness raising;</li> <li>• Risk communication;</li> </ul>	<ul style="list-style-type: none"> <li>• Dissemination of updated WHO guideline and standard;</li> <li>• Evaluation of building material and HC/AC system;</li> <li>• Guidance on integrating quality of life;</li> <li>• Linkages of quality of life, health and indoor air quality;</li> </ul>	<ul style="list-style-type: none"> <li>• Health impact assessment of Dust and Sandstrom;</li> <li>• Health impact assessment of Transboundary haze;</li> <li>• Air pollution and human health knowledge based;</li> <li>• Review of health related studies;</li> <li>• Characterization of regional air pollution;</li> <li>• Health impacts of PM and Ozone</li> </ul>

### • Strengthening the cooperation and Capacity building

Urban	Indoor	Transboundary
<ul style="list-style-type: none"> <li>• Sharing information and knowledge;</li> <li>• information and knowledge on air toxic monitoring;</li> <li>• Recommendations on standards and monitoring protocols;</li> <li>• Establishing regional network on AQM;</li> </ul>	<ul style="list-style-type: none"> <li>• Overview of health impact studies on hazardous indoor air pollutants;</li> <li>• Document existing health impact studies;</li> <li>• Formulate standards and monitoring protocols;</li> <li>• Establishing regional network on AQM;</li> </ul>	<ul style="list-style-type: none"> <li>• Training workshop on transboundary pollutants;</li> </ul>
<ul style="list-style-type: none"> <li>• Capacity of researchers on air pollution and health impact;</li> <li>• Promoting Local/Regional Training Center</li> <li>• Increasing collaboration Regional Training Activities</li> <li>• Integrate air quality management and climate change mitigation</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of education program and training instructors;</li> <li>• Education and training of scientist;</li> <li>• Pool preparation of Asia-experts;</li> </ul>	<ul style="list-style-type: none"> <li>• Training programme and case studies on health impact of PM and Ozone;</li> <li>• Training workshop on monitoring and health impact assessment of Transboundary air pollution;</li> </ul>

## Conclusion & Recommendations

- Enhancing governmental efforts in addressing air pollution problems;
- Integrating health and environmental strategies at the local, national and regional levels;
- Adapting specific strategies and actions for local conditions and specific needs,
- Strengthening and promoting public participation, public relations;
- Encouraging support for appropriate measures and controls;

**BETTER AIR QUALITY 2008**  
12-14 NOVEMBER  
BANGKOK THAILAND

**Pre-event of Better Air Quality (BAQ) 2008**  
November 11, 2008  
Bangkok, Thailand

Organized by Co-Chairs Air Quality Thematic Working Group



- Member of Air Quality TWG exchanged knowledge and skills in the area of air quality and health in Asia;
- Professional resources and researcher discussed on research and management activities;

## Up-coming event:

**Symposium on Air Quality and Health in South-East and East Asia**  
August 30, 2010 in ISES-ISEE2010,  
Seoul, Republic of Korea

Organized by Co-Chairs Air Quality Thematic Working Group

- Introduction of Regional Air Quality Workplan;
- Opportunity for professional resources and researcher to exchange idea and discuss on current research and future needed academia activities;



## 2nd 3-year Work Plan TWG on water supply, hygiene and sanitation

Jin Yinlong

Director General  
National Institute for Environmental  
Health and Related Product Safety,  
China CDC

 Institute for Environmental Health and Related Product Safety, China CDC



## 2nd 3-year Workplan I. Objectives, Activities and Timeline


**Objective 1: To identify the functions and strengthen the capacities of health, environment and other authorities in relation to water supply, sanitation and hygiene.**

Activity	Timing				Lead member
	2010	2011	2012	2013	
Review health authorities' functions in relation to WSH in at least 4 TWG WHS countries, taking TWG WHS discussion paper as point of reference. Disseminate findings.		X	X		WHO

 Institute for Environmental Health and Related Product Safety, China CDC

**Objective 2: To promote sustainable management of safe water supplies and sanitation.**

Activity	Timing				Lead member
	2010	2011	2012	2013	
2.1 Review water source protection issues and best practices in at least 4 TWG WHS countries and disseminate report.	X	X	X		Korea


 Institute for Environmental Health and Related Product Safety, China CDC

Activity	Timing				Lead member
	2010	2011	2012	2013	
2.2 Develop technical guidance documents and training materials on rural Water Safety Plans and disseminate to TWG WHS countries.	X	X	X		Malaysia


 Institute for Environmental Health and Related Product Safety, China CDC

Activity	Timing				Lead member
	2010	2011	2012	2013	
2.3 Conduct regional assessment of operations and maintenance. Develop and disseminate guidance for strengthening operations and maintenance of water supply and sanitation facilities.	X	X	X		Japan

 Institute for Environmental Health and Related Product Safety, China CDC



Activity	Timing				Lead member
	2010	2011	2012	2013	
2.4 build capacity for drinking water quality surveillance at household and community level.		X	X		Thailand

 Institute for Environmental Health and Related Product Safety , China CDC

**Objective 3: To facilitate cooperation among East Asian countries towards the improvement of sanitation and hygiene, to collaborate with the countries of the East Asia Sanitation (EASAN) process in planning and organizing EASAN3 conference, and to support EASAN2 follow-up activities.**


Activity	Timing				Lead member
	2010	2011	2012	2013	
3.1 Prepare a compendium of sanitation financing best practices (urban and rural), and identify appropriate financing schemes for various types of sanitation interventions.	X	X	X		Malaysia

 Institute for Environmental Health and Related Product Safety , China CDC





Activity	Timing				Lead member
	2010	2011	2012	2013	
3.2 Promote the development of national water supply, sanitation and hygiene sector assessments, plans and policies.	X	X	X		Philippines

 Institute for Environmental Health and Related Product Safety , China CDC





Activity	Timing				Lead member
	2010	2011	2012	2013	
3.3 Develop a regional water supply and sanitation sector monitoring system consistent with the WHO/Unicef Joint Monitoring Programme.	X	X	X	X	WHO

 Institute for Environmental Health and Related Product Safety , China CDC




Activity	Timing				Lead member
	2010	2011	2012	2013	
3.4 Conduct inter-country workshop on sanitation in cold climates.		X			Mongolia

 Institute for Environmental Health and Related Product Safety , China CDC




Activity	Timing				Lead member
	2010	2011	2012	2013	
3.5 Develop guidelines on emergency sanitation, advocate for preparedness, and build capacity for implementation.	X	X			Philippines

 Institute for Environmental Health and Related Product Safety , China CDC




Activity	Timing				Lead member
	2010	2011	2012	2013	
3.6 Support the planning and implementation of EASAN3, including preparation of pre-conference regional sanitation report.	X	X	X		Indonesia


 Institute for Environmental Health and Related Product Safety, China CDC

## II. Outputs, Monitoring and Reporting


Outputs	Indicators
1. Improved knowledge base on functions of health authorities and environment authorities in relation to Water Sanitation and Hygiene in TWG WHS countries.	Functions of health authorities reviewed in at least 4 countries.

 Institute for Environmental Health and Related Product Safety, China CDC

Outputs	Indicators
2. Tools and information disseminate to improve source water protection, promote safety of drinking water, and improve operations and maintenance of water supply and sanitation systems.	<ol style="list-style-type: none"> <li>1. Report disseminated on source water protection in at least 4 countries.</li> <li>2. Tools for promoting water safety in rural systems developed and disseminated.</li> <li>3. Regional assessment of operations and maintenance developed and disseminated.</li> </ol>

 Institute for Environmental Health and Related Product Safety, China CDC

Outputs	Indicators
3. Access to improved sanitation and better hygiene practices promoted.	<ol style="list-style-type: none"> <li>1. Knowledge products developed and disseminated on sanitation financing, sector monitoring and assessment, sanitation in cold climates, and emergency sanitation.</li> <li>2. Regional sanitation report issued as EASAN3 pre-conference publication.</li> </ol>




 Institute for Environmental Health and Related Product Safety, China CDC



# Policy Brief and Workplan of the Thematic Working Group on Solid and Hazardous Waste

5<sup>th</sup> High-Level Officials' Meeting on Environment and Health  
14 July 2010  
Jeju, Republic of Korea

Mr. Hiroyasu Tokuda,  
Chairperson of Thematic Working Group on Solid and Hazardous Waste (Waste TWG)  
Ministry of the Environment, Japan

## Waste TWG



**Objectives**

- 1) To ensure environmentally sound management of solid and hazardous waste, in particular municipal waste and medical waste, and promote the 3Rs (Reduce, Reuse and Recycle) in Southeast and East Asian Countries.
- 2) To prioritise issues by analyzing status-quo of municipal waste and medical management in the member countries
- 3) To provide useful information to raise policymakers' awareness on the importance of, to increase investment addressing to, and to mobilize the bilateral and multilateral assistance for the importance of linkages between waste and health.

**Chair**  
Ministry of the Environment (Chair person is Mr. Hiroyasu Tokuda, Director of Waste Management Division, Waste Management and Recycling Department, Ministry of the Environment, Japan)

## Results

Established under the Regional Forum on Environment and Health in Southeast and East Asian countries

Developed & finalized WRM & HWH Guidelines

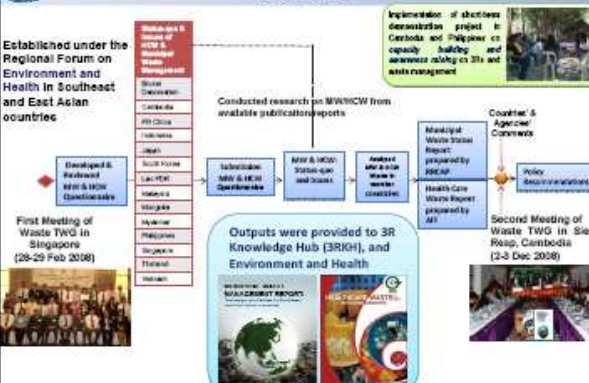
First Meeting of Waste TWG in Singapore (28-29 Feb 2008)

Conducted research on WRM/HWH from available publications reports

Implementation of short-term decentralization project in Cambodia and Philippines on capacity building and awareness raising on 3Rs and waste management

Outputs were provided to 3R Knowledge Hub (3RKH), and Environment and Health

Second Meeting of Waste TWG in Siem Reap, Cambodia (2-3 Dec 2008)



## Conclusion

- Population growth, urbanization and rapid economic growth contribute to the increase in municipal solid waste generation and to changes in waste composition.
- Marked differences between developed member countries and developing member countries.
- Decentralized management of municipal wastes
- Private and informal sector play increasing role in municipal waste management
- Municipal waste management problems
- Lack of initiatives and actions toward healthcare waste segregation in developing country cities
- Notable waste management practices in Member countries employ 3R principles

## Recommendations

- Need of the Waste TWG and member countries to recognize the relevance of establishing data and information management systems
- Need to develop and implement awareness-raising and capacity building programs for municipal waste management.
- Need to establish and enhance various stakeholders (e.g., private and informal sector), dialogues, partnerships and cooperation for effective implementation of the 3Rs.
- Need to continuously share good practice information and knowledge.
- Essential to consider the composition and source of municipal as well as medical wastes
- Need of Governments to enhance their efforts toward addressing solid waste management problems.
- Need to increase awareness of new technological developments and good management practices using the 3Rs


## Workplan 2010 – 2013

**Objectives**


- (1) To **identify actual implementation scheme/procedure** to realize the recommendation made in the 1<sup>st</sup> phase (e.g. utilization of public private partnership in waste management and proper integration of informal sector etc.)
- (2) To **hold workshops** to promote activities relevant to the recommendation utilizing the status-quo reports compiled in the 1<sup>st</sup> phase
- (3) To **enhance capacity building** of policy makers to identify and address waste and health problems by sharing knowledge including best practices in the region.



To achieve objectives, it is encouraged to invite the experts in public private partnership and informal sector, and private sectors to Waste TWG.

Workplan 2010 – 2013				
Activities	Year/Year	Responsible Organization	Output	Indicator
<b>Activity 1: Monitor actual implementation of policies/processes for tobacco</b> Develop and conduct a pilot survey to assess the current status of tobacco control policies in the region Develop and conduct a pilot survey to assess the current status of tobacco control policies in the region Develop and conduct a pilot survey to assess the current status of tobacco control policies in the region Develop and conduct a pilot survey to assess the current status of tobacco control policies in the region Develop and conduct a pilot survey to assess the current status of tobacco control policies in the region	01/2010-01/2011 02/2010-02/2011 03/2010-03/2011 04/2010-04/2011	WHO/UNAIDS UNAIDS UNAIDS UNAIDS	Report Report Report Report	Number of reports Number of reports Number of reports Number of reports
<b>Activity 2: Conduct workshops to promote tobacco control policies</b> Conduct workshops to promote tobacco control policies in the region Conduct workshops to promote tobacco control policies in the region Conduct workshops to promote tobacco control policies in the region Conduct workshops to promote tobacco control policies in the region Conduct workshops to promote tobacco control policies in the region	01/2010-01/2011 02/2010-02/2011 03/2010-03/2011 04/2010-04/2011	UNAIDS UNAIDS UNAIDS UNAIDS	Workshop materials Workshop materials Workshop materials Workshop materials	Number of workshops Number of workshops Number of workshops Number of workshops
<b>Activity 3: Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge</b> Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge Enhance capacity building of policy makers to identify and address severe and health problems by sharing knowledge	01/2010-01/2011 02/2010-02/2011 03/2010-03/2011 04/2010-04/2011	UNAIDS UNAIDS UNAIDS UNAIDS	Report Report Report Report	Number of reports Number of reports Number of reports Number of reports



# Thank you for your attention!

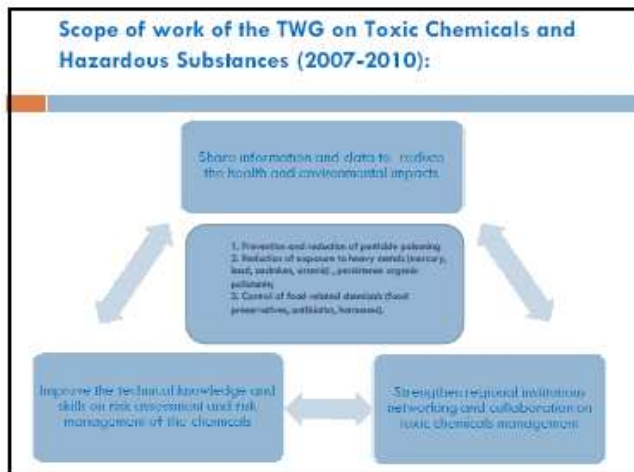
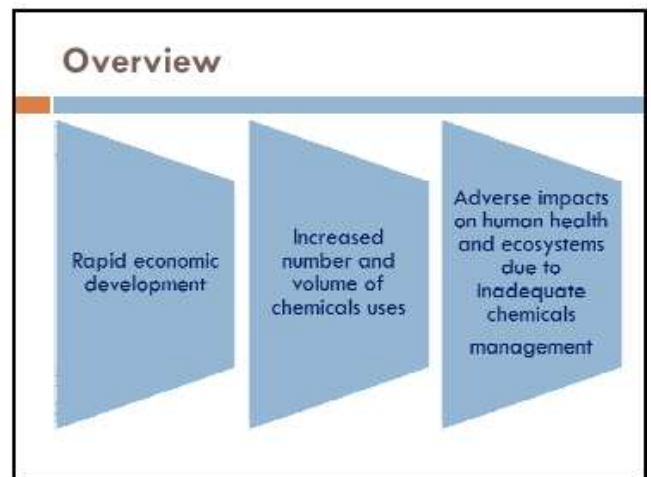


## POLICY BRIEF AND WORK PLAN (2010-2013)

: TOXIC CHEMICALS AND HAZARDOUS SUBSTANCES

5<sup>th</sup> High Levels Meeting  
Regional Forum on Environment and Health for Southeast and East Asian Countries



- ## Results:
- Limited financial support to fully implement the regional work plan
  - **Integration with existing regional activities**
    - POP's Information Warehouse / Korea
    - International Training on chemical risk assessment and management / CRI
    - International Conference and Training on Health Impact Assessment / Thailand
  - **Applied for SAICM QSP TF**
    - Distance Learning Module on chemical risk assessment and management / CRI
  - **Financial support from Regional UNEP and WPRO**
    - Technical Conference and Regional Planning Workshop

- ## Recommendations for future Actions
- Establish **databases and information system** on the hazardous chemicals which populations are exposed, and effective interventions on chemicals management of major public health concern
  - **Capacity building at all levels** to recognize, monitor and mitigate the impacts of chemicals on human health and environment.
  - Development or strengthening expertise to **share information and experience, and networking.**
  - **More active involvement of Health Sectors in SAICM process** at all levels to Enhance activities in the sound management of chemicals .
  - **Establish funding mechanism** to support the execution of the regional action plan.

- ## Work Plan (2010-2013)
- ### Major activities:
1. Development of databases :
    - Situation and trend (Chemicals & Impacts)
    - Good practices / Work Models
    - Expertise
  2. Capacity building focuses :
    - Environmental and Health Risk Assessment and Management Training
      - Chemical Disaster Management Training
  3. Networking and Collaboration:
    - Creating Collaborative Mechanism
    - Sharing Information and Experiences (Annual Report)
    - Annual TWG Meeting
  4. Pilot Projects:
    - Elimination of Mercury in Health Care Facilities
    - Elimination of Lead in Paints



## Resources for Regional Work Plan Execution :


- Existing funding mechanism such as SAICM QSP Trust Fund
- Sharing resources with Regional Forum (Back to Back Meeting/ Regional Forum Website)
- Integration with existing regional/ national activities and programs related to chemical management (SAICM regional activities, CRI International Training Programs, WHO/UNEP regional activities)
- Other funding bodies.

## SUMMARY



Thank You  
for Your Kind Attention





## Report of The Thematic Working Group on Climate Change, Ozone Depletion and Ecosystem Changes

Jeju Island, Republic of Korea  
14-16 July 2010

## Overview

- Global warming causes climate change and increases the frequency and intensity of extreme weather events.
- The Inter-governmental Panel on Climate Change (IPCC) concludes that global warming could cause significant change to biological and physical systems, such as:
  - an increase in tropical cyclone intensity,
  - changes in precipitation pattern
  - salinity of the sea
  - wind pattern
  - the reproductive period of animals and plants
  - species distribution and population
- influence various ecosystems in high latitude locations (including the Arctic and Antarctic) as well as coastal ecosystems.
- Asia region with its geographical characteristic and high population number become one of the most vulnerable area to climate change impacts.

## The Climate Change, Ozone Depletion and Ecosystem Changes Working Group

The member of TWG on Climate Change, Ozone Depletion, and Ecosystem Changes are representing:

Brunei Darussalam, Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongol, Myanmar, Philippine, Republic of Korea, Singapore, Thailand, Vietnam

The working group also involved participation of regional and international partners including ILEC, EANET, ADORC, University of Auckland, Australian National University, WHO, and UNEP.

## General objective of the TWG's activities

- To enhance regional knowledge management and technical support for emerging and re-emerging infectious and non-infectious associated with climate, ozone depletion and ecosystem changes through information sharing and regional cooperation
- To promote research and development in understanding the complex inter-relationship between climate, ozone depletion, ecosystem changes and human health particularly infectious and non-infectious diseases
- To promote effective management of the environment for the benefit of human health at the region
- To establish a regional information centre from which the member countries may access available sources of data related to human health effects of the climate change, ozone depletion and environmental changes

## Activities and work progress

Proposed activities	Description	Planned Timeframe	Temporary result
TWG meeting to develop policy-science network	Member of the TWG set up cooperation framework and prepare detail work plan of policy-science community	July 2009	No funding available
Developing Compendium of researches and scientists	Inventory of researches and scientists	Until November 2009	No adequate data available
Virtual Networking of scientists and researchers	Establishment of virtual networking through e-mail communication and website	Until February 2010	Not occurred
Developing Training manual for young scientists	Develop training manual for young scientists through the virtual network of scientists and researchers	Until November 2009	Not occurred
Capacity building for young scientists	Based on the manual, a train for young scientists will be conducted by expert from regional/ international organisation and the virtual network	February 2010	Not occurred A proposal to APN to provide funding for this activity has been declined.
Developing final report		Until March 2010	Indonesia has sent request to the group member to submit a compendium of activities that has been taken by each member country. However, only Cambodia responded to the request.

## Activities taken by Cambodia on Climate Change and Ozone Depletion

- V&A assessment report
- NAPA report
- National communications
- Inventory of research institutions and facilities
- Inventory of experts
- Training for young scientist on climate change issue and ozone layer depletion issue

## Activities taken by Indonesia on Climate Change and Ozone Depletion

- National Action Plan on Climate Change NAP-CC
- Indonesia Climate Change Sectoral Roadmap/ICCSR
- Second National Communication (on the final stage)
- National Action Plan on GHG Emission
- National GHG Inventory
- National Inventory of Experts on Climate Change and Ozone Depletion
- Study on Vulnerability and Adaptation
- Study on the ozone layer condition and its adverse impact to the human health, particularly to eye cataract.
- Youth Program on climate change issues

## Declaration Children's Climate Forum Declaration

Climate change threatens our lives, our families and our future. We, the youth delegates from 44 countries attending the Children's Climate Forum 2009, will not sit back and watch. We already face the effects of climate change. Our communities are deprived of clean drinking water, denied access to education and vulnerable to disease every time it floods. Our plates are empty due to drought. Our future is at risk, and we demand that something be done. The youth in the world are ready to take action, and we request the same of governments worldwide. The time for talk is over. Now, we hold you accountable for your commitments.

The challenges may appear insurmountable, yet as stakeholders, our generation is ready to collaborate in this cause.

*We commit to personal lifestyle changes that place the common good above our individual desires and current way of life.*

*We commit to educate and empower ourselves and our communities to adapt to and mitigate the changing climate.*

*We commit to engage and actively cooperate with all generations and governments in combating climate change.*



## Activities to be planned

Proposed activities	Description	Timeframe	Newly proposed timeframe
Convening of TWG Meeting	To review the inventory of research and scientist and the training manual for young scientist	2 <sup>nd</sup> Quarter 2009	4 <sup>th</sup> Quarter of 2010
Young scientist competition	To promote research on climate change, ozone depletion and environmental changes	3 <sup>rd</sup> Quarter 2010	4 <sup>th</sup> Quarter of 2010
Compilation of database of Experts	To compile the list of experts on Environment and Health	--	1 <sup>st</sup> Quarter of 2011
Clearing house on Environment and Health	To compile the data on all activities related to environment and health	--	1 <sup>st</sup> Quarter of 2011

## Conclusions

- There are numerous actions related to climate change, ozone depletion and ecosystem changes that must be taken.
- The work of the TWG on Climate Change, Ozone Depletion and Ecosystem Changes could not run properly since there were lack of communication, political will, funding, and capacity building.
- There is urgent need to improve and enhance cooperation among TWG members and inter-TWGs, in order to take further action on these issues

## Recommendations

- Need to have further discussion on how to move forward especially on fund allocation to support the works of each TWG.
- Encourage implementation of joint research involving expert from relevant topics at national and regional level.
- Strengthen regional cooperation in the area of research and development on climate change, ozone depletion and its impact on human health.
- Enhance exchange of information among member countries in order to better understand the impact of climate change and ozone depletion on human health.
- Mobilize resources to support activities of the TWG.



THANK YOU

**Liana Bratasida**

Chair of Thematic Working Group on  
Climate Change, Ozone Depletion and Ecosystem Changes

# TWG on Contingency Planning, Preparedness and Response in Environmental Health Emergencies

**CARMENCITA A. BANATIN, MD, MHA**  
 Department of Health-Philippines  
 TWG Chair

# Policy Brief

*" Be Prepared When Disaster Strikes"*

## Policy Brief

### Overview :

1. Threats from deteriorating environment are continuously being experienced in the region
2. The population are more exposed to increasing occurrence of disasters which resulted to significant morbidity and mortality

Top Ten Countries by Number of Reported Events in 2008



## TWG MEMBERS

MEMBER COUNTRY	INSTITUTION
1. Brunei Darussalam	Ministry of Development Ministry of Health
2. Cambodia	Ministry of Health
3. China	Society for Environmental Science Center for Disease Control & Prevention
4. Indonesia	Ministry of Health
5. Lao PDR	Ministry of Labour & Social Welfare
6. Malaysia	Ministry of Health
7. Mongolia	Environment & Natural Resources Department
8. Myanmar	National Commission for Environmental Affairs
9. Philippines	Department of Health
10. Republic of Korea	Nat'l Institute of Environmental Research
11. Thailand	Ministry of Public Health
12. Vietnam	Ministry of Health

## TWG MEMBERS

### REGIONAL & INTERNATIONAL PARTNERS

1. New Zealand National Poisons Centre
2. National Poison Management & Control Center, Philippines
3. National Poison Centre of Malaysia
4. Pacific Basic Consortium for Environment & Health Sciences, Hawaii
5. World Health Organization
6. United Nations Environment Programme
7. UNEP Regional Office for Asia and Pacific

## Policy Brief

### The TWG

The TWG on Contingency Planning, Preparedness and Response in EH Emergencies with two subgroups:

1. Disaster from natural hazards and associated environmental health issues such as water, sanitation, waste management, food safety, vector control, etc.
2. Industrial or technological emergencies involving hazardous substances such as toxic chemicals, flammable and explosive materials, radioactive materials, etc.

## OBJECTIVES

1. To share information and data on contingency planning, preparedness and response in environmental health emergencies among member countries.
2. To improve the technical knowledge and skill among personnel of member countries on environmental health emergencies.
3. To strengthen inter-country/regional cooperation in responding to environmental health emergencies

## WORK PLAN ACTIVITIES

1. Develop a database (logistics, human resources, information) for the region, creating a website for sharing of information and risk communication messages on environmental health emergencies, and conduct of regional technical symposium and update on environmental health emergencies
2. Develop training needs assessment and training programmes/modules, conduct of training programmes
3. Assess existing mechanisms on regional emergency response and developing risk communication messages on environmental health emergencies

## Policy Brief

### Results: TWG Accomplishments

1. TWG Meeting was conducted by the Philippines on June 19-20, 2007. First draft TWG Work Plan 2007-2010 was finalized
2. Regional Technical Symposium and Workshop was conducted on December 15-17, 2008 in the Philippines.
3. Training Needs Assessment (TNA) on Environmental Health emergency was conducted by the Philippines with the support of WHO (completed on January 30, 2009)
4. Based on the results of the TNA, training modules/manuals were developed to standardize the training content and delivery of the training on EH Emergency for the member countries
5. Assessment of regional emergency response mechanism on EH disasters was conducted. Ten (10) members countries participated.

## Regional Technical Symposium and Update on EH

Date Conducted : December 15- 17, 2008

Venue : Manila, Philippines

Attendees : Forty Four (44) Participants

- 25 - Participants from twelve (12) members countries
- 7- WHO (WPRO/Country Offices)
- 6- Paper Presenters
- 1- Technical Facilitator
- 1- Session Moderator
- 4- Administrative Staff and Documenter

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## Regional Technical Symposium and Update on EH

### Output :

1. TWG Work Plan was reviewed and updated
2. Each Country Member renewed commitments in supporting the implementation of each activity
3. Issues was discussed and recommendations were made

## Training Needs Assessment on Environmental Health Emergency Response in Southeast and Asian Countries

### Objectives:

1. To assess the training needs of the countries
2. To Identify priority training programmes related to environmental health emergencies for managers and responders

### Four Major Areas:

1. Skill competency
2. Knowledge competency
3. Types of hazards respondent deals
4. Country profile competency

## Training Needs Assessment on Environmental Health Emergency

### Fifty (50) Respondents from 10 Member Countries who participated

- Brunei Darussalam ( 17)
- Cambodia ( 1)
- China (2)
- Lao PDR ( 1)
- Malaysia ( 2)
- Mongolia (1)
- Philippines (8)
- Republic of Korea ( 9)
- Thailand (7)
- Vietnam (2)

## Training Needs Assessment on Environmental Health Emergency Response in Southeast and Asian Countries

### Results:

#### 1. Training Needs

- The strongest need expressed by the respondents is on knowledge competency
- Response Skills
- Managerial Skills

### Results:

#### 2. Priority Training Program focused on:

- Concepts and impact of the global and regional environmental emergencies
- Challenges and roles as leaders, managers, public officials, responders
- Risk management
- Expansion of current policies, plans, protocols to fully integrate the environment in all aspects of disaster management
- Development of response and contingency plans
- Creation of multi-agency/ multi-sectoral teams
- Exercises and drills
- Understanding of technological disasters and emergency responses

## Assessment of Regional Emergency Response Mechanism on EH in Disasters in the South-East and East Asian Countries

### Ten (10) member Countries who participated

- Brunei Darussalam
- Cambodia
- Indonesia
- Lao PDR
- Malaysia
- Mongolia
- Philippines
- Republic of Korea
- Thailand
- Vietnam

## Assessment of Regional Emergency Response Mechanism on EH in Disasters in the South-East and East Asian Countries

### Findings

1. All ten countries claim to possess responders and experts for local assistance as well as for regional and international assistance.
2. All the ten countries have developed common national trainings on health emergency management. Dependent on available trainers, as well as the relevance of these trainings on the context of the individual country.
3. National policies on emergency management exist in most countries at various stages of development. There are national agencies responsible for the formulation of Environmental Health Policies in Disaster
4. Each country has existing coordination arrangements internally on humanitarian assistance with some of them awaiting formalization. They engage their national humanitarian partners in environmental health issues in disasters. Unanimously, the participating countries adhere to the ASEAN Agreement on Disaster Management and Emergency Response (AADMER).
5. It is a common finding among the countries about their willingness to provide timely assistance within 24 hours real time from the time of disaster occurrence

## Conclusions :

1. Issues on Membership
2. Communication Problem
3. Training module developed by the TWG on EH Emergencies should focus on response but should be complimented by technical training c/o other TWGs
4. Regional agreement in the form of AADMER can serve as catalyst for regional coordination arrangements especially in responding to international disasters
5. Regional forum to explore the possible points of integration, cooperation and collaboration in building emergency response network

## Recommendations :

1. Build a higher level of inter-regional command and control system for environmental emergencies or disasters
2. Advocate for a review and update of existing agreements to integrate the EH Emergency concerns
3. Formalize agreements on building emergency response network among countries including development of pool of trainers to mould competent team members
4. Enhance coordination and sharing of resources and technologies among member countries
5. Invest more in disaster risk reduction measures to better protect development gains

# TWG Work Plan 2010-2013

## OBJECTIVES

1. To share information and data on contingency planning, preparedness and response in environmental health emergencies among member countries.
2. To improve the technical knowledge and skill among personnel of member countries on environmental health emergencies.
3. To strengthen inter-country/regional cooperation in responding to environmental health emergencies

## WORK PLAN ACTIVITIES

### Objective 1: Sharing Information and Data

ACTIVITY	DEADLINE	RESPONSIBLE	BUDGET
1.1 Develop a database (logistics, human resources, information) for the region	Q4/ 2010- Q4/2011	Philippines & NPC, Malaysia	USD 50,000
1.2 Sharing of information using existing website of the regional forum.	Q4/ 2010- Q4/2013	NPC, Malaysia & Philippines &	USD 15,000
1.3 Share risk communication messages on EH emergencies that has been used by the TWG member countries through the website	Q4/ 2010- Q4/2013	NPC, Malaysia & Philippines &	
1.4 Conduct of regional technical symposium and update on EH emergencies (Every other year)	Q2/ 2011 & Q4/2013	Philippines & Vietnam	USD 80,000

## WORK PLAN ACTIVITIES

### Objective 2: Improvement of technical knowledge and skill

ACTIVITY	DEADLINE	RESPONSIBLE	BUDGET
1. Conduct training on EH including Health Risk Assessment Training	Q 2/2011, Q3/2012	Vietnam & China	USD 165,000
2. Updating of training programmes/modules	Q2/2012- Q4/2012	Philippines	USD 20,000
3. Monitor and Evaluate training programmes	Q2/2013	Mongolia & Philippines	USD 5,000



## WORK PLAN ACTIVITIES

### Objective 3: Strengthening of Intercountry/ Regional cooperation

ACTIVITY	DEADLINE	RESPONSIBLE	BUDGET
1. Develop formal agreements on possible points of integration, cooperation and collaboration in building regional emergency network	Q2 /2012	Philippines	USD 20,000
2. Develop risk communication messages for environmental health emergencies	Q1/2011 - Q3/ 2011	Thailand and Cambodia	USD 35,000  (Proposal developed looking for funding)

Thank You !!!

## Work Plan – Thematic Working Group on Health Impact Assessment

2<sup>nd</sup> Ministerial Regional Forum  
on Environment and Health in Southeast and East Asian Countries

2010. 7. 14-15

Prepared by Thematic Working Group members on Health  
Impact Assessment

## Contents

- I Background**
- II Objectives**
- III Activities**
- IV Outputs & Resources**

### I . Background

- Many development policies, plans, programs, or projects can affect environment and health
- Health Impact Assessment is a useful tool to protect health
  - by predicting the positive and negative health effects of a policy, a plan, a program, or a project
  - by recommending proper measures to enhance the positive health effects and to minimize the negative health effects
  - by addressing unequal distributions of health effects on people with different socioeconomic backgrounds

- More concerted efforts in the region to develop HIA
  - standardized methodology and tools for HIA
  - development of HIA of policies and incorporating HIA in the government process
  - awareness of HIA in various sectors

### II . Objectives

**Objectives of TWG on HIA**

1. To share information and knowledge on HIA practices, guidelines and tools, evidence on health effects of various projects, programs, plans, and policies
2. To develop and promote HIA as an integral part of the decision making process in countries in the region
3. To enhance the skills and knowledge by building capacity, promoting the dissemination of information and ideas and developing cooperative projects

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### III. Activities

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Objective 1: To share information and knowledge on HIA practices, guidelines and tools, evidence on health effects

Activities	Timelines			Lead Institutions
	2010	2011	2012	
1. Collect - existing documents on HIA activities/practices - guidelines and tools  - evidence - list of experts on HIA	→	→	→	MOH, Cambodia  MOH, Mongolia/ MOH, the Philippines KIHASA, Korea MOH, Thailand/ CHETRE, Australia
2. Share information via regional website and TWG on HIA website	→	→	→	KIHASA, Korea/KEI, Korea/CHETRE, Australia
3. Collaborate with other TWG's in collecting and sharing their information in HIA's in their environmental concerns or context		→	→	KIHASA, Korea/UNEP/WHO/KEI, Korea/CDC, CHINA

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Objective 2: To promote the development of HIA as an integral part of the decision making process

Activities	Timelines			Lead Institutions
	2010	2011	2012	
1. Document legislations and organizational arrangements for HIA in the region	→	→		KEI, Korea /MOH, Laos PDR
2. Make recommendations and guidelines on institutionalization		→	→	KEI, Korea/Khon Kaen Univ., Thailand

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Objective 3: To enhance the skills and knowledge of professional staff and others involved in HIA and related areas

Activities	Timelines			Lead Institutions
	2010	2011	2012	
1. Collect recent training programs and materials and develop a training module, if necessary	→	→	→	MOH, Vietnam/MONRE, Vietnam/MOPH, Thailand/CHETRE, Australia/Univ. of Otago, New Zealand
2. Conduct regional technical workshops	→	→	→	KIHASA, Korea/KEI, Korea/Univ. of Otago, New Zealand
3. Collaborate with other TWG's in planning and conducting joint technical workshops	→	→	→	KIHASA, Korea/KEI, Korea/UNEP/WHO/Curtin Univ., Australia

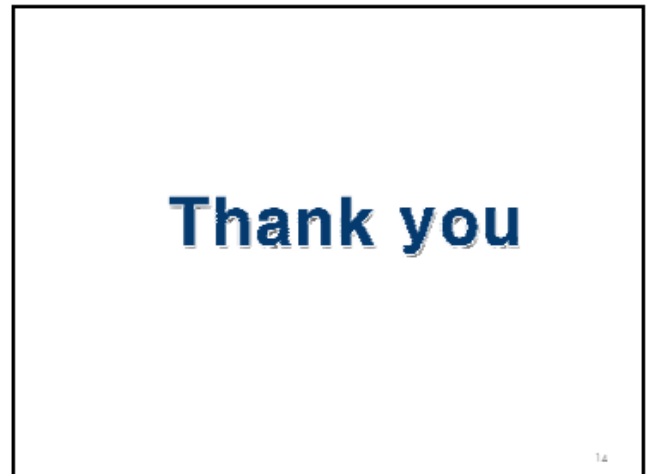
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### IV. Outputs and Resources

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Objective	Outputs	Required Resources
1. To share information and knowledge	1. Compilation of information on HIA practices/guidelines/tools/activities	(1) Existing resources within the member countries and international partners (2) Documents written in English
	2. Website for HIA	(1) Technical knowledge on creating and managing a website (2) Documents written in English (3) Budget (\$100,000/year) (4) Personnel
2. To integrate HIA in the decision making process	3. Compilation of information on legislations and organizational arrangements for HIA institutionalization	(1) Existing resources within the member countries and international partners (2) Documents written in English
	4. Recommendations and guidelines on institutionalization of HIA	(1) Workshops of member countries and international partners (2) Budget (\$30,000*2)
3. To enhance skills and knowledge of people involved	5. Compilation of training programs and materials including modules for HIA	(1) Existing resources within the member countries
	6. Reports of technical workshops	(1) Budget (\$50,000*2)

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