The workshop to strengthen capacity on Health Impact Assessment in South-East Asia was held in Pattaya, Thailand, from 22 to 25 September 2015. The main thrust of the workshop was to strengthen capacity in planning for implementation of and/or design suitable health impact assessments.

The participants shared current country experiences in health and other impact assessments in the SEA Region. Policy briefs and various procedures and models on the health impact assessments were shared and deliberated among the participants. Field visits to industrial estates, affected communities, and provincial health offices in Rayon province enhanced understanding of health impact assessment (HIA) and community health impact assessment (CHIA) in Thailand. Discussions were also held on the current healthy public policies and the way forward for integrating HIA in health action plans. For the SEA Region, HIA is an important tool, toward HiAP in various countries where multisectoral approach to address complex determinants of health figure prominently in national priorities.

A number of recommendations were made including developing the country specific HIA/CHIA/EHIA tools, etc.
Report of Workshop to Strengthen Capacity on Health Impact Assessment in South-East Asia

Pattaya, Thailand, 22–25 September 2015
## Contents

<table>
<thead>
<tr>
<th>1.</th>
<th>Background</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Objectives</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Methodology</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Proceedings</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Recommendations</td>
<td>33</td>
</tr>
<tr>
<td>6.</td>
<td>Closing session</td>
<td>34</td>
</tr>
</tbody>
</table>

### Annexes

<table>
<thead>
<tr>
<th>1.</th>
<th>Agenda</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>List of participants</td>
<td>37</td>
</tr>
</tbody>
</table>
1. **Background**

In 1986, the WHO Ottawa Charter for Health Promotion introduced healthy public policy (HPP) as one of the five key action areas for health promotion. HPP is characterized by an explicit concern for health and equity in all areas of policy, and is also concerned with accountability for health impacts. Subsequently, recommendations from the 1988 Healthy Public Policy Conference in Adelaide, Australia, stressed the need to act on the underlying elements of a healthy society or at the “causes of the causes”, which are highly relevant to health equity and the notion of accountability and governance.

Health impact assessment (HIA) has been an important tool for healthy public policies since the Bangkok Charter on Health Promotion 2005, and was reiterated again in the Rio Political Declaration on Social Determinants of Health 2011 as well as in the Helsinki Statement 2014, which recognizes HIA as an important tool to promote health in all policies.

In June 2012, the result of an expert consultation on health impact and health equity assessment in the WHO Regional Office for South-East Asia (SEARO) recommended that comprehensive training should be provided to Member States because the practice of HIA in South-East Asia has not been of much influence on the policy-making process or the planning of mega-projects. Only Thailand had the most systematic processes and institutionalized health impact assessments at all levels – from the policy-making process to community participatory actions.

The global review on existing health impact assessment and multisectoral actions was made together with the WHO Kobe Centre; and contributions were made by regional consultations and at expert meetings between 2012 and 2014. According to recent literature, there are at least 142 types of impact assessments, including health, environment, social, economic and gender, etc. There are currently around 51 screening tools and 80 different methodological tools of HIA. WHO has also analysed the advantages and disadvantages of environmental impact assessment, health
impact assessment and integrated impact assessment, especially on collaboration across sectors. Updated guidance has been made available to promote HIA as a tool for multisectoral actions on health, including the media, civil society groups and the private sector.

In the WHO South-East Asia (SEA) Region, SEARO had supported two fellowships for HIA for India and Thailand since 2005. Thailand has been one of the leading countries that institutionalized health impact assessment at all levels of the governance structure to ensure healthy public policies. Recently, the network of HIA expanded to ASEAN countries and strengthened community health impact assessment, which became one-of-a-kind in conducting health impact assessment. HIA in India had been fragmented, with no strong political support. The HIA unit was established in 2014 in the Ministry of Health and Family Welfare, under the National Health Systems Resource Centre. The unit is in the process of strengthening capacity. A number of countries in the South-East Asia Region realized the need for capacity-building and/or strengthening in the area of health impact assessment in response to the multisectoral action for policy change and as a tool to support health in all policies.

Practical guidance on community health impact assessment would be extremely useful for lower- and middle-income countries that need community empowerment and multisectoral actions for health at the grassroots level. The workshop would be a way to support countries to contextualize health impact assessment within the Region.

There has been quite a number of demands from countries in several health promotion and other meetings to have technical support/training on health impact assessment. A workshop to share a range of experiences on applications of health impact assessment and discuss how multisectoral actions took place using health impact assessment is now timely. The workshop will also bring relevant sectors to discuss how to address health and socioeconomic gaps, particularly on “human health”, in existing impact assessments (demographical impact, ecological impact, fiscal impact, etc.). HIA is crucial for countries to ensure sustainable development. Healthy public policies have been a long-term influence on prevention and control of both communicable and noncommunicable diseases.
2. **Objectives**

General objective:

To strengthen capacity in planning for implementation and/or design of suitable health impact assessment.

Specific objectives:

The specific objective of the workshop were to:

1. Present current approaches and options on different types of health impact assessment.
2. Share experiences on using health impact assessment as a means for multisectoral actions for health and participatory public policy development.
3. Develop plans and strategies to implement health impact assessments.
4. Strengthen capacity to draw linkages between promoting health using HIA and developing healthy public policies across sectors.

In her address at the workshop, the Regional Director, Dr Poonam Khetrapal Singh pointed out the importance of health impact assessment to meet the different levels of current challenges in achieving health outcomes, particularly the complex interplay of globalization, industrialization and urbanization that influences the environmental and social conditions where people live, work and grow up in. Policy-makers need impact assessment to help them identify potential, intended and unintended effects of their decisions. HIA findings hold the potential to promote evidence-based responses to minimize potential negative outcomes, maximize positive effects and reduce any impact on health inequalities. Using qualitative, quantitative and participatory techniques, HIA could produce recommendations that will help decision-makers and other stakeholders to make the right choices. HIA is also a collective learning and empowering process for any society.

The opening remarks from the Regional Director also emphasized that the South-East Asia Region has been facing natural and manmade disasters
and difficult situations. However, health impact assessment has not been widely used in the Region to understand the impact after numbers of incidents are sporadically applied for few countries in the Region for assessment of potential negative impacts from mega-projects. Strengthening capacity for our Member States is crucial to support healthy public policies across sectors in the Region.

Dr Wiput Phoolcharoen, Senior Adviser, Ministry of Public Health, Thailand, Dr Sarath Amunugama, Deputy Director-General (Public Health Sector), Ministry of Health, Nutrition and Indigenous Medicines, Sri Lanka, and Dr Suvajee Good, Programme Coordinator, WHO-SEARO, attended at the inauguration of the workshop.

Dr Good read the objectives and background of the workshop and introduced the participants to all.

3. **Methodology**

**Opening session**

Dr Thaksaphon Thamarangsi, Director, Department of Non-Communicable Diseases and Environmental Health (NDE), delivered the inauguration speech on behalf of the Regional Director, Dr Poonam Khetrapal Singh. He pointed out the importance of health impact assessment to address the current multilayer challenges to achieve health outcomes, particularly the complex interplay of globalization, industrialization and urbanization that influences environmental and social conditions where people live, work and grow up in. Policy-makers need impact assessment to help them identify the potential, and intended and unintended effects of their decisions. HIA findings can promote evidence-based responses to minimize potential negative outcomes, maximize positive effects and reduce any impact on health inequalities. Using qualitative, quantitative and participatory techniques, HIA could produce recommendations that will help decision-makers and other stakeholders to make the right choices. HIA is also a collective learning and empowering process for any society.

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4. **Proceedings**

**Keynote address**

The keynote address was made by Dr Wiput Phoolcharoen on health and development agendas: the importance of health impact assessment on sustainable development. Dr Phoolcharoen shared the historical development of health impact assessment and development agendas, providing critical thinking and visions. The participants were introduced to the Sustainable Development Goals that have a visionary development paradigm with guiding principles for all sectors to improve their performance keeping social equity and environmental protection in mind. He emphasized that health is an outcome of all major aspects of social and economic development, as well as of environmental conditions. For sustainable development, society needs to be equitable socially and economically, and a viable economy must understand the importance of an environment that is bearable for people to live in harmony. Impact assessment is one of the key actions that can ensure the achievement of the Sustainable Development Goals. Impact assessments provide formal, evidence-based procedures that assess the economic, social and environmental effects of public policy, programmes or projects.

Dr Wiput Phoolcharoen explained that there are several types of impact assessments – EIA (environmental impact assessment), SIA (social impact assessment), BIA (biodiversity impact assessment), SEA (strategic environment assessment), etc. However, health impact assessment is the most crucial tool to disentangle the determinants of health – that is, individual, social and environmental, and institutional factors that are
directly, indirectly or cumulatively affected by a proposed project. HIA has a more comprehensive approach to socioeconomic, cultural and environmental conditions that affect human health, as guided by the WHO Commission on Social Determinants of Health. HIA can be conducted as a desktop or limited process, or a comprehensive assessment to identify different types of impacts. He mentioned that the range of health impact assessments that addressed different levels of potential health impacts (from stakeholder concerns to healthy systems and infrastructure, to endemic disease profiles, to relocation, and to hazardous material exposure) depended on the level of assessments of the project footprints (from available information, physical area and people impacted, timescale of impacts, precedence and complexity of projects). Thus, HIA may factor in different types of social sensitivities from stakeholder concerns to political factors, from indigenous people and vulnerable communities to human rights issues, from resettlement and conflict, as well as to the socioeconomic situation of the country.

Nevertheless, HIA is an important tool to narrowing the gap between evidence and the policy-making process for health in all sectors, especially when it uses the participatory and inclusive process. Health in all policies can be made possible through the HIA process where all sectors are involved in bringing solutions for common health concerns, addressing determinants of health. It is possible for HIA to be a tool to reduce health inequality, improve health protection, and bring justice and equity for better sustainable development.

**Introducing WHO health impact assessment (HIA)**

Dr Suvajee Good made a presentation on WHO guidance on HIA health promotion and determinants of health from the Ottawa Charter for Health Promotion to the current commitments on health in all policies, emphasizing healthy public policies across sectors. Understanding broader contexts of social determinants of health, physical social environments greatly affected human health. She emphasized that HIA provided a systematic process through which health hazards, risks and opportunities can be identified, and addressed upstream causes in the development planning process to avoid the transfer of hidden costs, and promote multisectoral responsibility. HIA also offers a way to help all sectors
contribute to improving health and ensures that all public policies are fair, sustainable and people-centred, she said.

Dr Good gave concrete examples and mentioned questions embedded in health impact assessment to enhance understanding on how development policies or projects can affect people’s health negatively or positively. Different levels of determinants of health were explained. She also related HIA implementation to policy analysis to review strengths and gaps in providing adequate mitigation measures to adverse health implications.

In Dr Good’s presentation, HIA procedure and principles guided by WHO was demonstrated, including how HIA can be implemented during different phases of policy or programme development and implementation and later. An analysis of different types of HIA and screening tools was presented with how they are suitable for different purposes. Dr Good reiterated WHO’s commitments to support Member States to appropriately use HIA as a tool for Health in All Policies (HiAP) implementation and ensure healthy public policies and sustainable development for health and well-being.

Comments and questions around these presentations were as follows: (a) whether all the impact assessments could come under one umbrella for uniformity; (b) what would be the health implication of construction of an ASEAN highway proposed among Member States stretching from Thailand via Myanmar and up to India possibly; and (c) how could it be anticipated to have successful/unsuccessful HIA.

Dr Detcharut Sukkumnoed, Faculty of Economics, Kasetsart University, and WHO Fellow for HIA from Thailand, made a presentation on HIA: theories to practices, along with Dr Hari Bisht, WHO Fellow for HIA from India, sharing practices in the Thai and Indian contexts.

Dr Detcharut Sukkumnoed presented practices of HIA in Thailand with concrete and visible evidence. He explained the evolution of HIA practices in Thailand and how it institutionalized in 2007. The turning point for health impact assessment in Thailand was the two legislative approaches, driven by people’s participation in drafting of the constitutional process from 2005–2007. The 2007 Constitution endorsed legal requirements for all potentially harmful projects to have HIA prior to
approval. The National Health Act 2007 was another wing that provided infrastructure and a system whereby people can request and participate in the HIA process as part of the right of the people/community. Thailand had built on this process to create a social learning space for academics, responsible agencies and communities to share their evidence, and created a negating space to optimize the desirable outcomes/solutions. The negating space is where multistakeholders can meet and deliberate on the issues and concerns to come to a common understanding and then find solutions or outcomes that satisfy all partners.

Dr Detcharut presented cases of community-based HIA, showing evidence how academics and local people could be working together as an HIA research team. In this way, people can fully participate in sharing their past and present experiences, health and livelihood concerns, which is influenced by industry or projects. Health risks, causes of risks and supportive determinants (for example, local resources/culture) were identified and mapped by community members and academia. Case studies were presented on cases of health risks associated with a fishing community, illegal waste dumping and The Immortal Industrial Estate (Amata Nakorn Industrial Estate).

Community-level risk-mapping and local evidence generation involving community members for applying scientific tools to mitigate health impacts evolved to be the process/method of Community Health Impact Assessment (CHIA). CHIA also facilitated effective public communication and built local networks to raise the public voice to control adverse health implications in collaboration with communities. Stronger government regulations and health governance are keys to promote HIA and CHIA.
Figure 1: Relevance of HIA and HiAP

HIA & HiAP: Buddy for Healthier World

Source: Dr Decharut Sukkumnoed, Kasetsart University (specially developed for this meeting)

Dr Detcharut demonstrated how HIA and HiAP are highly relevant and support healthy public policies (as shown in Figure 1). The following were highlighted as traits of HIA:

- Social learning process
- Analysis of health determinants
- Assess of health outcomes
- Process of gathering multiple evidence
- Process to lead to decision-making for health, environment and development
Report of Workshop to Strengthen Capacity on Health Impact Assessment in South-East Asia

- Process of promoting population health and assessing health equity
- Process of searching for alternatives in proposals to minimize health risks
- Process of bringing healthier solutions that are sustainable.

HiAP and HIA have a common approach for the social learning process that can change power relationships within the policy process by having comprehensive information, raising public awareness, empowering people, initiating deliberative policy processes and making healthy public decisions.

Dr Hari Bisht’s presentation echoed the importance of the above analysis from Thailand’s experiences. He added the scope of HIA to assess both equity and equality. It was added that human security and social capital will be key social determinants of health to be considered for HIA. It was highlighted that developing capacity, outlining clear-cut processes and identifying health determinants are vital to conduct successful HIAs. How the EIA process in India is framed and its features and indicators were also discussed. However, in India, there are many more complexities to be dealt with to institutionalize HIA, which is not usually practised.

Sharing the regional situation and current country experiences in health and other impact assessments

Country presentations were made on the regional situation. Experiences in impact assessment (IA) were shared by participants from Bangladesh, Bhutan, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and a country representative from the African region, of Botswana, who joined the meeting to learn from SEA Region country experiences.

Country presentations from participating countries were made as follows.

**Bangladesh:** Bangladesh representatives Md Saidu Rahman Khan, Ministry of Health and Family Welfare, Shaikh Mohammed Tauhidul Islam, Ministry of Environment and Forests, and Ms Sadia Afroz, Ministry of Planning, observed that in Bangladesh there is no institutional arrangement for impact assessment; no legislative and legal issues need clearance for
performing HIA; policies and regulations from different sectors have no clear linkage to health (clear linkage being necessary to set up the reviewing of social protection and health, housing and health, education and health). However, the atmosphere for further work on HIA/EIA is supportive. In 2015, the Health Economic Unit, MoHFW, conducted health in all policy assessments, reviewing 20 policies related to health and its determinants; however, it has not been completed. Impact assessment has not been introduced to the programme or projects. Mr Saidu Rahman Khan also reiterated that health impact assessment has not been performed in the country. The representatives called for WHO (country and regional offices) to provide in-country support to help familiarize HIA needs and increase HIA implementation. Challenges for Bangladesh included lack of intersectoral collaboration, human and financial resources, and supportive legislative framework for impact assessments. However, health is a priority for the current government and there are well-established research institutes. Thus, now is a good opportunity to implement HIA in the country.

**Discussion:** Maternal and child health are a real need for Bangladesh, and could be an entry point for HIA and HiAP.

**Bhutan:** The country was represented by Mr Dorji Phub, Ministry of Health, Ms Tandin Lhamo, Gross National Happiness Commission, Ms Dorji Dema, National Environment Commission, and Mr Tshering Wangdi, Ministry of Health. Mr Dorji Phub observed that only EIA was formalized in Bhutan, which began in 2000 under the Environmental Assessment Act 2000, and aimed to be a decision-making tool to ensure mitigation or prevention of potential negative impacts and identify alternatives for sustainable development. The EIA process in Bhutan was quite well established for the construction of mega-projects such as hydropower, retention walls, etc.

Several opportunities for HIA implementation in Bhutan were highlighted. Under the National Health Policy 2011, impact assessment of mega-projects needs to be conducted prior to their establishment to screen the risk and impact on human health. The National Health Promotion Strategic Plan (NHPSP) 2013–2025 was endorsed by the Cabinet on 14 April 2015. The Cabinet gave instructions that health promotion needs to advocate for the introduction of HIA as an integral part of all development projects, and that the Ministry of Health (MoH) shall develop an HIA tool.
by the end of February 2016. The Prime Minister of Bhutan viewed this as an important step to strengthen traditional multisectoral and intersectoral committees. HIA will assist decision-makers to make better choices regarding alternatives to promote people’s health and prevent negative impacts.

The Gross National Happiness Commission (GNHC) has a mechanism to review public policies in all sectors using a screening tool that can use an integrated approach to HIA and other impact assessments. Despite all these opportunities, some challenges included:

- HIA as a new concept needs increasing awareness and advocacy;
- Resistance from profit-oriented industries or people;
- Human and financial resource constraints remain a challenge to implementation.

The Health Promotion Division is a leading coordination body to advocate for and support implementation of health impact assessment in the country. HIA is considered to be important evidence of Bhutan’s best investment on health.

**Botswana:** Ms Sinah Gulubane, Health Promotion Officer, Health Promotion Division, Department of Public Health, MoH, Botswana, attended the meeting as part of cross-regional learning and sharing under WHO SEARO and AFRO (Regional Office for Africa) collaboration. In Botswana, environmental assessment is considered a planning tool for sustainable development. In 1990, Parliament adopted the policy on natural resources conservation and developed the National Conservation Strategy (NCS). Earlier, EIA was imposed by lead donors to evaluate new development projects that started in 1985. However, the NCS in 1990 gave way to have more EIA on major projects. Later on, sectoral legislations, such as the Mineral Act in 1999 and the Town and Country Planning Act demanded for EIA. Sometimes EIA is made during ministerial decisions. In 2005, the country came up with a law that gave general framework and statutory orders for impact assessment through the Ministry of Environment. Other key players are central or local authorities, local communities, NGOs, consultants, research institutions, developers, donors and the general public.
The current Act focuses on awareness, training and the engineering process of EIA. Challenges are inadequate institutional capacity to facilitate EIA, inadequate regulation for certified consultants and conflict of interest on the part of the government. Measures against these challenges have been started. In terms of having a conducive environment to conduct HIA in Botswana, Ms Gulubane stated that baseline data are available, integration of social determinants in all public policies is plausible where review of government policies and regulatory frameworks are needed, and an understanding of health consequences of development projects and the legal requirements of EIA are in place. HiAP is the right approach for Botswana. The National Health Plan of 2011 has highlighted the need for leadership and governance, effective stakeholder involvement, and strategic actions for health promotion and healthy public policies (which is highly recommended for HIA). Learning from the Thailand experience, community health impact assessments are at the core of sustainable development.

**India:** Dr Raghuram Rao and Dr Meera Dhuria, from the Directorate-General of Health Services, Ministry of Health and Family Welfare, Government of India, in their presentation said that India had taken the first step towards impact assessment in 1978–1979 for selected river valley projects. Subsequently, EIA expanded to cover other developmental sectors such as industries, thermal power projects, mining schemes, etc. Implementation of impact assessment is done mainly by the Central and state government departments. EIA has been made mandatory under the Environment Protection Act 1986 for 29 categories of development activities involving investments of Indian rupee 500 million and above. Expert committees have been constituted for the following projects: mining, industrial, thermal power projects, river valley, multipurpose irrigation, infrastructure development and nuclear power project.

The Government of India formulated a clear environmental appraisal procedure involving application for these projects. The Environmental Appraisal Committee evaluated the impact of the project based on the data furnished by the project authorities, site visits or on-the-spot assessment of various environmental aspects. There is also a monitoring procedure to follow up on after projects are authorized.

Other initiatives such as the Coastal Regulation Zone Notification 1991, the Island Development Authority (IDA), and others are focused on
environmental impact assessments rather than on human health. Challenges to carrying out impact assessments in India include inadequate capacity and the high demand for impact assessment. Multidisciplinary and multi-institutional approaches have been adopted for conducting these assessments; however, implementation is a challenge and to get an agreement from all sectors is a matter of negotiation and power.

**Indonesia:** Ms Irmawati Pasaribu, SE, M Si, Head, Subdivision of Programme and Evaluation, Centre for Health Promotion, Secretariat General; Mr Adhy Prasetyo Widodo, Environmental Health Directorate; and Ms Muhani, SKM, M Kes, Head of Finance Subdivision, Centre for Health Promotion; Ministry of Health, representing Indonesia, in their presentations said that Indonesia had several types of impact assessments and that these had been started in 1982. There are several policies and legislative frameworks to enforce or regulate environmental impact assessment (EIA). Most of the impact assessments are inclusive of environment, health, social and integrated impacts. Indonesia conducts several impact assessments on national policies such as strategic environmental assessment; project levels such as EIA; rapid assessments such as environmental health risk assessment; and monitoring and evaluation of health programme implementation. Impact assessment practice in Indonesia is a part of the project approval mechanism.

The government and the law demand that impact assessment be carried out, and as a routine process at the project level. However, there is no impact assessment on policies. An example of results of impact assessment of the extension of the airport in Soekarno Hatta, Jakarta, was presented. The results showed a) negative and positive impacts on social and economic conditions; b) alternative solutions for mitigating health impacts of population/communities; c) alternative solutions for approval of development projects; d) people engagement in making decisions; e) multisectoral collaboration; and f) predication of impacts that need to be monitored.

At the current stage, Indonesia has a supportive atmosphere/window of opportunity on HIA, which includes institutional set-up, and the National Environmental Commission that endorses EHIA and clears national policies and guidelines for impact assessment. Indonesia needs to scale up actions on improving capacity of human resources to conduct quality impact assessment, raise awareness and commitment at different levels,
update/upgrade public health and environmental health policies and regulations to adequately address HIA needs, and enhance community participation and empowerment in the HIA process.

Discussions on the Indonesia experience revolved around the duration needed for integrated impact assessment. The EIA Commission in Indonesia recommended 1 – 2 years to perform a full EIA, but it also depended on the size of the selected project.

**Maldives:** The representation from Maldives comprised Ms Aminath Shaina Abdulla, Assistant Director, MoH, Mr Aman Khaleel, Assistant Planning Officer, Ministry of Finance and Treasury, and Mr Rifath Naeem, Senior Environment Analyst, Environmental Protection Agency. They narrated their country experience guided by the Environmental Protection and Prevention Act 4/93 and the Environmental Regulation 2007. In 2012, the new EIA Regulation was reviewed and amended to include ESIA – Early Screening Inventory Assessment, EMP – Environmental Management Protocol and IEA – Integrated Environmental Assessment. The country has not had experience in HIA and it is not very clear which government authority is responsible for HIA. Standards and indicators are all for environmental needs, not for health needs. The EIA process was mentioned in detail. Challenges for HIA are lack of policy and legal tools but the opportunity exists for HIA in the EIA scoping process, quality-standard settings and monitoring, and in the recently formed HPA (Health Protection Agency). Other challenges include prioritizing HIA at the local level, financial constraints for conducting assessments, policy or legislation review and updates, and capacity-building for HIA.

Discussion on the Maldives experience were around whether to scope guidelines to support EHIA, and whether there were measures to regulate fair EIA with certified consultants.

**Myanmar:** Mr Htay Win, Deputy Director, Occupational Health Department, Ms Ni Ni Lwin, Deputy Director, Planning Department, Ministry of Health, and Mr Sa Aung Thu Assistant Director, Environmental Conservation Department, Ministry of Health, presented impact assessments in Myanmar. The entry point for Myanmar impact assessment came under the National Environmental Policy 1994, which aimed to achieve harmony and balance between socioeconomic natural resources and the environment through integration of environmental consideration
into the development process enhancing the quality of the life of all its citizens. Environmental protection is to be the primary objective in seeking development. Environmental protection included conservation of forests and biodiversity, reduced air and water pollution, control of industrial waste, use of renewable energy, and mobilizing participation of people and social organization. The Environmental Conservation Laws and Regulations 2012 under the Ministry of Environmental Conservation and Forestry (MoECF) advised that EIA procedures needed to be drafted (currently it is in the Sixth Draft). Similarly, the environmental quality guideline (EQG) is to be prepared with technical assistance from the Asian Development Bank (ADB), Japan International Cooperation Agency (JICA) and related ministries. The MoECF is responsible for provision of a system of EIA and social impact assessment (SIA). In 2016, EIA procedure will be notified by law. The team for EIA review in Myanmar comprises 39 members from government agencies across sectors.

The Myanmar Investment Commission (MIC) and other ministries have produced approximately 130 reports on EIA, SIA, ESIA, IEE, and EMP since 2012. Most of the reports are related to the energy sector (12), food and beverages manufacturing (10), tourism and hospitality (7), jetty and fuel tank construction (6), onshore and offshore oil and gas seismic survey (6), garment and textile industries (3), mining (3), and expressways and highways (3), etc. HIA is partially included in some of the EIA or ESIA, namely Lapadaung Copper Mining projects, and the refinery project in Launglon township of Tanintharyi region. A representative from Myanmar identified challenges for implementation/practice HIA in the country as follows: (a) lack of government transparency, accountability and policy guidelines for HIA; (b) lack of political commitment and integration among stakeholders; (c) low political concerns and experiences on HIA; (d) lack of awareness for HIA in all multistakeholders; and (e) lack of responsible parties for HIA.

**Nepal:** Mr Rajeev Pokharel, Undersecretary, Ministry of Health and Population, Mr Radhakrishna Pradhan, Programme Director of Health Population and Nutrition Section, National Planning Commission, and Mr Surendra Raj Pant, Ecologist from Ministry of Science, Technology and Environment, attended the meeting. The representatives from Nepal stated that EIA/IEE had been done mostly at the project level, and a few SEAs (strategic environmental assessments) were conducted. Occasionally, rapid environmental assessment was used. The environmental impact study
project (EISP) was first formulated in 1982 under the Ministry of Forest and Soil Conservation. The national EIA guideline was adopted in 1993, making EIA/IEE mandatory for the government project. The Environment Protection Act and Environment Protection Rules enforced in 1997 extended mandates to the private sector with specific screening criteria. However, no separate HIA has ever been performed in the country, but a guideline was developed in 2002 by WHO and the NHRC. There is partially a supportive environment for the promotion of HIA in the country, particularly interministerial awareness on the need of HIA. Capacity strengthening for both government and nongovernment agencies is essential to practice HIA in the country. Nepal needs to institutionalize HIA, perhaps by including it in the National Health Act, or by integrating and strengthening it through environmental health under the Ministry of Health and Population (MoHP), or promoting the use of HIA in the decentralized governance in the country.

**Sri Lanka:** Dr Sarath Amunugama, Deputy Director-General of Public Health Services, Ministry of Health, Nutrition and Indigenous Medicines, stated that EIA was first introduced in Sri Lanka by the Coast Conservation (Amendment) Act No. 57, in 1981. This EIA was applied to projects under the Coast Conservation Department. In 1988, EIA appeared in the National Environmental Act, under the Central Environmental Authority to make EIA a requirement for all “prescribed” (or largescale) development projects. In 1993, the Fauna and Flora (Amendment) Act No. 49 also stated that any construction within one mile from the boundary of any national reserve is required to have EIA. HIA appeared in some aspects of EIA and were somewhat included in the Occupational Policy and Labour Ordinance, Ministry of Labour. The government is responsible for EIA and the private sector or NGO will ask or request for EIA as one of the requirements for the planned programme or activity. For HIA, there is no legislative framework or law enforcement. Evaluation and monitoring of EIA is often done but not on a regular basis. Advocacy and political commitment together with authority is necessary to scale up EIA. Local-level empowerment, use of social media and presidential commitment for EIA are vital for its strength. Challenges of implementing HIA or strengthening EIA in Sri Lanka include negotiation between economic and social development, capacity of evaluator or academics to conduct assessment, legislative framework, and people participation in collecting evidence from communities.
Thailand: Mrs Indhira Euamonlachat, Environmental Expert, Ministry of Natural Resources and Environment, Ms Wassana Loonsamrong, Public Health Technical Officer, Health Impact Assessment Division, Department of Health, Ms Pimchanok Bunnak, Policy and Plan Analyst, Office of Social Development Strategy and Planning, were the representatives from Thailand.

They stated that the EIA is a legal requirement since 1975, and HIA is in existence since 2000; 10 different types of projects were studied for impacts in 1981; HIA is supported by the national health Act of 2007. This Act has recognized HIA/EIA and has developed guidelines for HIA; capacity-building for HIA is in place; HIA is in use for policy, activity or project reviews. EHIA appeared for the first time in 2009, and HIA criteria have been included in public policy in 2015 as a normative procedure. SIA is also in existence, but is used mainly to assess quality of life. Challenges are as follows: increase monitoring stations to support the adequate mitigation measures; insufficient database to support evidence; HIA policy needs to be strengthened; role of the health agency needs to be expanded for effective and efficient HIA or EHIA; and health surveillance needs to be related with HIA for mitigations as indicated also by EIA, HIA or EHIA studies.

Sharing policy briefs on HIA

Dr Wiput Phoolcharoen shared how the ASEAN community had made HIA a collaborative effort among various countries to promote healthy public policies and healthy societies across sectors. Dr Wiput Phoolcharoen made a presentation on the movement of HIA in the ASEAN community. The road of HIA in ASEAN countries has been very long. However, exchange of knowledge, experience and opinions among senior officers from ministries of health in ASEAN Member States to endorse the HIA in 2009 materialized into the Asia-Pacific HIA Conference. The outcome of the conference was the “Chiang Mai Declaration on HIA for Development of Healthy Societies in Asia-Pacific Region”. Subsequently, ASEAN members developed a recommended paper entitled “Health Impact Assessment (HIA): A Foundation for the Well-being of the ASEAN Community”, presented to the Fifth Senior Officials Meeting on Health Development (SOMHD) 2009. Thailand leads the initiative and implemented HIA and developed the TOR and Framework for HIA; ASEAN presented to the Sixth SOMHD in 2011 an
agreement from all ASEAN members that Thailand would lead the capacity-building workshop. Thus, in 2012, the ASEAN workshop on HIA began the process to build capacity of ASEAN members. The progress has been steady and thus led to the conference titled: First ASEAN Conference on Impact Assessment: towards ASEAN engagement and sustainable development in 2015.

Dr Wiput Phoolcharoen briefed participants on the importance of HIA in policy matters. Collaboration among academic institutes, government, business and all sectors are needed to apply IAs and HIA in the future of sustainable development. The way forward for countries is to empower and build capacity of all sectors, integrate HIA into university curriculums for future generations to generate a population with a wide understanding of health impacts before they engaged in the business sector, community, civil society, or government sectors. Dr Wiput concluded that it is important for all countries to have a human resource development plan for HIA, move towards health in all policies by empowering community, and develop action plans for HIA.

Dr Suvajee Good, Programme Coordinator, Health Promotion and Social Determinants of Health, WHO-SEARO, shared with participants a series of WHO guidance and policy briefs on (a) working across sectors for health using impact assessment for decision-making, (b) smart business choices for healthier societies using impact assessments for decision-making, (c) media’s role in ensuring accountability for health promoting the use of impact assessments for decision-making, and d) achieving health benefits through public policies using impact assessments for decision-making. The four publications were disseminated in the workshop. Since the last expert meeting in WHO-SEARO in 2012, WHO has been recommended to advocate for high-level adoptions of HIA as a tool/procedure/mechanism to ensure healthy public policies and generate public accountability and political commitment. At the same time, experts also recommended for WHO to generate awareness of the link between HIA and evidence-based policies, profiling community capacities and their roles in health impact assessments, as well as to evaluate different models of impact assessment in countries to identify good practices and what works for different situations.

Dr Suvajee Good also explained health and its determinants of health from a policy dimension or the structural determinants of health, and the
links between individual determinants of health and social structure and system. Participants learnt about public policies and how the public policies across sectors can influence health, and how public policies themselves are formulated and influenced by political, economic, social and cultural conditions within the context and timeframe. Dr Good provided brief examples with illustrations on how policy is formulated, factors that influence the policy-making process, whose voice is heard, and how evidence was used, partially considered, framed, or neglected. These factors depend on the governance structures within a given society or country. Health professions are working at the downstream to mitigate, rescue, eliminate and cure people with diseases that could have been prevented and addressed at the upstream level.

Recognizing this complexity of determinants of health, WHO thus is working towards health in all policies to address the issues at the policy level. HIA became an important tool for HiAP implementation because HIA (a) improves decision-making in public policies, (b) encourages public participation in public policy, (c) creates healthy public policies/projects, social and economic development, (d) advocates for health and for disadvantaged groups, (e) builds multisectoral partnerships; (f) mitigates social and environmental justice, and (g) promotes equity, sustainability and health in an unequal and unhealthy world.

**Sharing procedures and models on health and other impact assessments**

Regional experiences on impact assessment (IA) were presented by Ms Lesley Onyon, Regional Adviser, Occupational Health. Ms Onyon gave an overview of the environmental impact assessment (EIA), rational for EIA in strengthening HIA and considerations for health in EIA. Key features of EIA were mentioned as support from legislations, stakeholder engagement, quantitative and qualitative methods. She mentioned that scope for sociocultural and health effects in EIA could be considered. Mutual strengthening of EIA and EHIA is essential. Ms Onyon emphasized that EIA is a key entry point for HIA because it can help avert unnecessary health burden and related costs for workers and communities around establishments, and there is a potential for an upstream institutional process. EIA and HIA have their own strengths and weaknesses in their approaches for impact assessments. Some challenges to integrate health in EIA were described, particularly the focus on environmental determinants
of health, but health is often not well articulated. However, there are enabling factors to integrate health in EIA such as regulation or policy requirement, operational procedures that can engage health authorities in the process, and political frameworks and agreements with donor agencies and development partners. WHO has also developed a new technical guidance note for regulatory authorities in ministries of environmental health and ministries of public health, which will be published between 2015 and 2016 with a training course. In the context of Minamata, there will also be guidance for development of a public health strategy using impact assessment. Other regions of WHO have also developed a number of different guides for projects or programmes on environmental health impact assessments.

After the presentation, participants raised questions about the opportunities for strategic environmental assessment (SEA) to be integrated with HIA as it has more of a link to policy change than to EIA. Participants also raised a point of concern that EIA is often headed by other ministries, where the health Minister has no authority or capacity to counter the results when there are potential impacts on health of the population. The political power of ministries is different. It was also observed that decision-making at the ministerial level does not consider the capacity or commitment of the local government.

Ms Somporn Pengkam made a presentation on community health impact assessment (CHIA) lessons learnt from Thailand and Myanmar. First, she explained the implementation of impact assessments in Thailand, chronologically dating since 1975. She demonstrated how different impact assessments played a role in different national, social and economic development plans and national capacities in carrying out HIA, before the initiative of CHIA. As for Thailand’s long experience from 1975 to 1992, a number of IAs was in the hands of experts/authorities, which emphasized data collection and interpretation from experts’ scientific knowledge. IA network was set up to cope with a number of development projects that sprang up during the economic transition of 1993–2007. The network saw the importance of public participation to not only provide inputs for the experts, but also advocacy for policy change, because Thailand realized the links between environmental impacts and natural resources for people’s livelihood and social cohesion. People were displaced and physically, socially and economically affected as a result of development projects despite these being passed by the EIA. Social and health dimensions are key indicators for negative effects on the population.
In 2008–2014, communities played important roles in development in Thailand. Communities were empowered and became aware of the effects of development on their well-being and livelihood. The People’s Movement on Community Rights was escalated after many years of experience and engagement during the past decade of the Thai health system reform, where people voiced their concerns in subnational and national health assemblies. They could exchange and learn from communities across countries, thus speaking of similar problems and emulating methodologies and approaches from each other to mitigate their issues from the negative impacts of projects, programmes, or government policies. The change in the Thai Constitution has also changed the scenario of public participation in policy development. People are now able to request for HIA in their locality, or areas of concern across countries. The National Institute for Health Impact Assessment was set up in the Ministry of Public Health to support people’s requests for screening, scoping and full implementation of HIA.

The community health impact assessment was initiated in Thailand as an important inclusive and comprehensive process for community-driven health impact assessment, which is not limited in scale of impact at the local community. Thailand has characterized CHIA as a social tool for community development with a focus on enabling the community to determine its own future, whereby the community may design suitable tools to assess impacts of projects, programmes, or policies on economic, social, cultural, natural resources, health and well-being of their community or larger groups of communities. CHIA in Thailand adopted a social view of health and health equity approach that is characterized by respecting the community’s core values, regarding health with a holistic approach, integrating health impacts in every dimension and applying different tools in assessing impacts (see Figure 2).

**Figure 2: Core Principle of Community Health Impact Assessment (CHIA)**

<table>
<thead>
<tr>
<th>Community</th>
<th>Health</th>
<th>Impact</th>
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<tr>
<td>Core Value:</td>
<td>Holistic:</td>
<td>Integration:</td>
<td>Apply:</td>
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<tr>
<td>Place importance on community’s core values</td>
<td>Regard health with a holistic approach</td>
<td>Understand the connection of health impacts in every dimension</td>
<td>Apply different and diverse tools in assessing impacts</td>
</tr>
</tbody>
</table>
Ms Somporn Pengkam explained the process of CHIA, which involves: (a) understanding the community, (b) understanding the project, (c) understanding law and procedures, (d) impact assessment and data verification, (e) influencing policy decision-making, and (f) monitoring. She explained the outcomes of the CHIA process, which is beneficial for communities, for projects, and for policies because the recommendations were developed together with all parties. Recommendations from CHIA are often on the suitable development direction for community core values and for sustainable development. She also provided concrete examples from the fields in Thailand and Myanmar. Since 2008, Thailand had numbers of CHIA success stories that were directed to different types of projects and engaged with different partners. Lessons learnt from conducting CHIA in Thailand include: (a) recognizing CHIA as an effective tool for a win-win approach for public policies development directed towards the health of the population, (b) generating participatory democracy process, (c) creating mutual learning platform for all sectors through practices, and (d) enabling community empowerment. Ms Pengkam shared her direct experiences in leading CHIA in Myanmar, which became CDHIA – community driven health impact assessment, with the PATH process or people assessing their health process. Learning from experience in Myanmar, CDHIA can be further advanced and potentially influence multisectoral agreement with mutual understanding.

A brief introduction of the area for the field visit on the following day – Day 3 of the meeting – was provided by Ms Penchom Saetang and Ms Somporn to participants. Ms Saetang, Secretariat of Buranawes Foundation, explained the Eastern Seaboard development areas: Laem Chabang and Map Ta Phut (MTP). The site visit for this workshop would be at the Map Ta Phut Industrial Area, which is the largest heavy industrial zone in Thailand, which produced materials from petroleum, petrochemical, plastic, iron and steel, chemicals and power plants. The participants received a briefing showing the scale of the Industrial Estate and evolution of the environmental and health impacts from the industry. The foundation has been collecting accumulative data of volatile organic compounds detected from the air in the areas since 2004. There were a total of 55 compounds affecting human health. They also found heavy metal contamination in the well waters over 25 communities in the Map Ta Phut Municipality between 2006 and 2007. Toxic waste was documented before the impact assessment had been regulated in Thailand. A number of studies by
academics and NGOs confirm the health and environmental damages related to MTP industrial pollution, but no national policy or corporate took action to mitigate the problem and compensate the people with losses. A pollutant control zone was initiated only after a lawsuit by the local community in 2009.

In May 2012, a chemical explosion occurred and the worst chemical incident broke out in the whole area, which brought the attention to the Pollution Control Department to investigate groundwater contamination and expand monitoring areas. The PRTR – the pollutant release and transfer registration system – was established to obtain emission data for policy-making to ensure people’s rights to information and to promote voluntary reduction by industries. Though the area showed some improvement, the impact on people’s health remains because of the number of environmental conditions affected by pollutants emitted from the industries. The presentation provided useful information showing gaps in conducting environmental impact assessment and other assessments when there was the absence of people participation.

Field visit: Map Ta Phut community, and Map Ta Phut Hospital

WHO SEARO coordinated with the local government, Map Ta Phut Municipality and Industrial Estate, and the affected community near Map Ta Phut Industrial Estates and the Rayong Provincial Hospital to share the real-life experiences of the result of EIA, HIA and responses from the field. Prior to the field visit, participants were given key questions to explore in depth the impacts of industrial estates, how different sectors were involved in HIA or EIA, and what were the interventions from different sectors, especially the health system.

At Map Ta Phut

Participants were greeted by the Deputy Governor of the Industrial Estate Authority of Thailand (IEAT), Ms Somchint Pilouk, who made a presentation apprising participants about IEAT’s role in the health impact assessment process and their experiences on health and environmental management of the Map Ta Phut Complex. She also gave an overview of 58 industrial estates in Thailand in 18 provinces. The IEAT has a strategic vision to create an eco-industrial town towards equilibrium and sustainable development
with the understanding of environmental issues and safety for workers and people living in and around the complex.

Environmental impact assessment had been performed since 1981 and made progress until 2007 when the Thai Constitution mandated health impact assessment as an important measure for all mega-projects/programmes. The IEAT had received clearance from EIA results for 14 projects in the complex. From 2010 to 2015, the environmental health impact assessment (EHIA) was used to review 11 types of projects in the complex and thus classified different types of projects or activities in the industrial complex that may have seriously affected community with respect to quality of environment, natural resources and health. Coordination between the Ministry of Natural Resources and Environment and Ministry of Industry had been on approval of the projects inside Map Ta Phut. After approval of each project, IEAT conducted a public hearing announcement on the website, the local newsletter, and billboard.

The IEAT experienced a process of environmental and safety management. Participants were shown the Environmental Monitoring and Control Centre (EMCC), which has sophisticated technologies. The Deputy Governor also explained the whole mechanism of environmental good governance that all factories/projects/companies within the IEAT complied with and evaluated along with the local community. An award system had been established to maintain good governance and participation to make the IEAT an eco-industrial town. Participants were impressed by the whole system and observed a well-structured/organized eco-friendly atmosphere in the estate.

Community visit

Participants visited a community near Map Ta Phut Industrial Estate and met with groups of people who have lived in the area before the IEAT was established. Participants learnt from residents about the cumulative impacts that they have experienced over 30 years of living near the IEAT. They all participated in a series of impact assessments and public hearings. Some suggestions to reduce negative impacts and negotiations between communities and the estate have been made. There had been triumphs to reduce the impacts regardless of the number of environmental impact assessments that had been conducted. From people’s perspectives and
evidence from their lifetime of experiences, communities continued to suffer from environmental degradation, water contamination, loss of livelihood where no fruits and vegetables are edible due to the heavy metal content in the air and water, loss of income from agriculture, and inability to work in the industry as they required different skills and labour, and a breakdown of family and social networks. All families experienced death in families due to cancers, one kind or another, and leukemia in young children, as reported by people who have met with participants. Participants witnessed the degradation of physical environment and were shown some reports by residents of the effects on their health.

Participants had been informed about community-led health impact assessments that bring more substantive evidence on health and its determinants in given circumstances from communities beyond those that had already been affected. People recommended that health impact assessment should have been done at an earlier stage and designed to be integrated in the approval process from the beginning. Lessons could be learnt from communities that have been affected and preventive measures can be created for other communities to be well informed on the health impacts from industries that have high potential to damage the physical environment and socioeconomic, culture, livelihood and health of communities.

Participants recognized the potential gaps in the impact assessments that had been made as explained by the IEAT after speaking with the community living near the complex.

**Visit to the Map Ta Phut Hospital**

Participants visited the Map Ta Phut Hospital (MTPH) to learn about the role of the health profession in assessing health impacts of populations in affected areas as well as in building evidence for health impact assessment. The meeting was jointly presented by the Occupational Medicine Department of the MTPH and the Rayong Provincial Hospital. Dr Supphachai Lamkulworapong, occupational medical doctor, presented that the MTPH has been collecting epidemiological survey in the Map Ta Put municipality, witnessing the expansion of industrial zones into communities. It is noticeable because of the lack of a buffer zone between the industrial complex and communities; thus the health impacts are
directed to people living near the complex. Effects from petrochemicals are the result of the natural gas pipe from the Gulf of Thailand, refinery plants, power plants, metal boiling factory, landfill for industrial hazardous waste, etc.

Major chemical disasters experienced in the areas included choline gas leakage in 2010 after a storage tank of sodium hypochlorite collapsed leading to a reaction with hydrochloric acid and the Bangkok Synthetic Elastomers Co., Ltd. (BSTE) explosion in 2012 that injured 27 and killed 3 workers. The municipality had to evacuate people out of the areas because of the wind direction that blew chemicals onto large areas occupied by communities. The Map Ta Phut and Rayong Provincial Hospitals responded to the disasters on the spot and supported the community for further treatment.

Dr Suppachai also explained that the air quality tests (Volatile Organic Compounds – VOCs) reported in this area included 1,2-Dichloroethane, 1,3-Butadiene and benzene. The public health department conducted periodic health check-ups and health surveillance in the pollution control area (as declared by the National Environmental Committee in 2009). The MTPH also expanded hospital services, increased human resources, trained nurses and established occupational and environmental health medical centres in the district hospital in Map Ta Phut to respond to health impacts from industries. It is clear that the health system was affected by the establishment of the industrial estate by increasing the cost of curative care, health system and disease management to reduce the morbidity and prevalence of acute respiratory infections, cancers, leukemia and related illnesses from the high level of pollution in the area. The hospital also conducted evaluation of carcinogenic risks in the area, using the population-based and hospital-based cancer registry from 1999 to present. The cancer death rate in the province has been increasing at an alarming rate since 2001 (60% mortality) to 2011 (85% mortality).

Ms Chanthip Intawong, occupational health nurse from the Rayon Provincial Hospital, also presented to participants the roles of the provincial hospital. They have been active in integrating their services and support to the area with occupational medicine services, environmental medicine service and the services of the chemical treatment centre. In the occupational medicine services, nurses play crucial roles in disease surveillance and investigation, health promotion, treatment and
rehabilitation of workers. In environmental medicine service, there is a set of nurses who conduct environmental health risk assessment, health monitoring, prevention, risk communication and HIA suggestion. The two departments work as a team when dealing with impact assessment in the area. They also have an AQI and VOC monitoring station in Map Ta Phut, which has shown different results from the industrial estate. The AQI in communities around the industrial estate showed higher levels than the normal standard for benzene, 1-3 Butadiene, vinyl chloride, dichloromethane, chloroform, and 1,2 dichlorethane.

The provincial public health office, Rayong Provincial Hospital and 8 district hospitals collaboratively conducted risk assessments and mapped the risk with high, moderate, and low-risk areas. They also did the passive surveillance from chronic patients to active surveillance with a mobile check-up for residents around the industrial zone. They provide health education, VOC health effect and prevention, check-up on benzene exposure, and prepare community and volunteers to improve the quality of life of residents near the industrial estate. The team engaged with the community to conduct health impact assessment, map the sources of contaminations and health problems, and provide suggestions for mitigating risks to the estate. Risk communication has been provided to students, health volunteers and people around the industrial complex. This presentation showed the significance of the roles of health professions in bringing all the evidences for mitigation of health impacts and in providing health education, risk communication, and empowering the community to enhance their quality of life.

Participants had a brief discussion with health professionals to learn more about how to address the issues at the source, which required considerable political effort to tackle economic-driven development. It was clear that even in an effective health system in Thailand, the health sector has yet to move further to address health impacts at the policy level.

Group work: Develop plans and strategic actions for implementation of health impact assessment

Before the participants began their group work, Dr Suvajee Good presented the determinants of health from policy dimensions to link HIA with policy implications. Structure determinants are key to address the causes of ill
health and inequities. People participation in impact assessments is one element that has taken human and community rights into account. The process of impact assessment itself needs to consider health and social inequality – whether there is inequality in the screening process or selection criteria, whether vulnerable groups are identified in profiling and policy analysis, whether distributional impacts are identified fairly, most importantly whether recommendations are taken into account in the case of impacts on inequalities in society. Health equity in impact assessments include choices of paradigm use (expertise or participatory), public involvement in steering groups, lay people as stakeholders and key informants, equitable valuation of lay evidence, exclusive or inclusive recommendations. Dr Good explained that the contribution of HIA to health in all policies would be on promoting equity, sustainability in health, improving decision-making in public policy, emphasizing social and environmental justice and enabling greater participation in public policy-making.

Dr Good presented the WHO Commission on Social Determinants of health recommendation that health equity impact assessment of all policy-making and market regulation should be institutionalized nationally and internationally. National and local governments should build capacity to use health equity impact assessment as a standard protocol in all major public policies. Roles of national and local government as well as participation of stakeholders in implementing HIA are keys to effective implementation of HIA.

Participants continued discussion in groups to:

- identify roles of the national government in implementing HIA in their respective countries;
- identify specific opportunities and challenges in implementing HIA and analyse key elements in existing mechanisms to support implementation; and
- identify strategic actions and ways forward to implement HIA in respective countries as well as for the Region.

Group work was conducted with participants from two or three countries working together to share in-depth experiences from their countries and deliberate on the subjects needed for implementation of
HIA. Participants also discussed the feasibility of adaptation of existing impact assessments with HIA. Each group then presented the results to other participants.

**Group 1: Thailand and Indonesia**

The group presented the discussions and identified key strategic actions and the way forward.

Thailand and Indonesia have many projects lined up to explore natural resources, which implied: chances of more pollution, new emerging diseases, disasters, psychological effects and social/economy inequality. Thailand had key institutions/legislative frameworks such as the National Health Commission, and the National Health Assembly, where HIA can be raised and reported. In Indonesia, the Ministry of Coordination and Health Commission in Parliament plays an important role.

Local governments for both countries have insufficient knowledge and experience in HIA as well as limited personnel. Stakeholders in implanting HIA in the two countries are often related to issues around natural resources. Communication with all stakeholders is needed. Monitoring and managing health impact assessment requires strong mechanisms.

The group recommended that strategic actions for implementation of HIA in their country context include having a National Action Plan on HIA, addressing HIA in the next National Development Plan, and evaluating and revising HIA policies, regulations and implementation. The way forward and recommendations were presented, whereby countries were to review the regulation and its implementation, build capacity, develop an intervention model for health promotion based on HIA, and conduct a national workshop to strengthen capacity on HIA. WHO was recommended to support capacity-building, a pilot project on impact assessment, provide technical assistance, develop a regional website on HIA, develop reference and guidelines in local languages, strengthen monitoring and evaluation, generate a database, address the importance of HIA and give priority to policy development, build regional networks, collaborate among agencies, and support community-to-community learning of HIA.
Group 2: Bhutan and Maldives

Group 2 discussed their country situations and emphasized on a focus on the role of stakeholders; the MoH being one of the stakeholders that needs to be aware of the importance of HIA. MoH has to be the one which advocates for HIA and builds capacity at all levels across sectors, including local government, policy-makers, and other stakeholders as it is reflected in the Bhutan National Health Promotion Strategic Plan. For both countries, it seems feasible to integrate HIA with existing EIA. However, an appropriate tool for EHIA is needed to be developed. Both countries also see the importance of having a legal framework or requirement to implement HIA such as the Public Health Safety Act, Health Protection Policy, etc.

Participants from both countries suggested that there should be in-country consultations with stakeholders and ministries across sectors. In Bhutan, a plan for consultation from November 2015 to 2016 was initiated. In Maldives, formulating regulation and quality standards under the Public Health Safety Act needs to be in place prior to implementation. Both countries recommended that public health needs to streamline health in all sectors and increase awareness at all levels for public policy development as well as technical support for implementation. WHO was recommended to provide all the necessary support for countries to implement the HIA effectively.

Group 3: Myanmar and Botswana

The discussion among participants focused on the Myanmar situation where a number of donor agencies have a number of development projects that potentially have negative impacts on the health of a population. Government officials attended the meeting on the capacity of the government to tackle issues that will arise and that are perhaps damaging for people as they’ve experienced from other countries, particularly Thailand. The group identified key roles of the national government, particularly the Ministry of Health and the Ministry of Environmental Conservation and Forestry, to advocate for implementation of HIA with key stakeholders, to create awareness about health impacts and to facilitate intersectoral actions/collaboration. The local government such as the state/regional public health department and district health management team should be implementing the HIA. Civil society groups play important
roles in organizing communities and to support communities to conduct their community health impact assessment (CHIA).

For Myanmar, key elements for healthy public policies include: (a) accountability for health, which is integrally the outcome of all policies; (b) whole of governance emphasized in the national health policy; (c) universal health coverage; (d) sustainability; (e) promoting equity; and (d) transparency.

Strategic actions needed for implementation of HIA in country contexts are community empowerment, facilitating community health impact assessment (CHIA), dialogue with different sectors, establishing law and regulations, and strengthening policy analysis. Myanmar also would like to strengthen communication and participation at the community level and develop research activities for scaling up CHIA that had been initiated. The group also recommended that WHO develop an operational manual for CHIA and facilitate institutional capacity-building in the country.

**Group 4: Nepal and Bangladesh**

Similar to other groups, the two countries also emphasized the need for capacity-building and increasing awareness of HIA at the highest level of government. The Ministry of Health plays an important role to advocate for health impact. Environmental impact assessment is a good entry point; however, how to integrate them effectively is a challenge. The way forward for countries is to review the existing mechanisms and increase awareness for impact assessment to all ministries.

**Group 5: India and Sri Lanka**

Participants from India and Sri Lanka considered the importance of having ministries understand the determinants of health whereby the MoH should be advocating for health across sectors. India proposed to systematize HIA and EIA and put mandatory regulations on projects and programmes endorsed by the government. SEA should also be considered. It will be important to have legislations to support the process. It is believed that a number of academic institutes in India or Sri Lanka have the capacity to conduct HIA or EIA; however, they may need advocacy to support implementation. The two countries requested advocacy with the highest
government officials, especially in showing evidence that HIA brings better public policies and harmonizes development while offering health benefits to a larger population.

**Conclusion and remarks**

The meeting ended by sharing conclusions and action points and ways forward from all participants. Mr Dorji Phub, Chief of Health Promotion Division, Ministry of Health from Bhutan, summarized the conclusions from the meeting participants and the recommendations.

**5. Recommendations:**

The following were the recommendations made by the workshop:

**For Member States**

- Organize national consultation on implementation of HIA with multisectoral organizations such as environmental, agriculture, industrial, commerce, etc.
- Build country capacity at national and subnational levels to understand different approaches to conduct HIA or other IAs.
- Develop a country-specific HIA/EHIA tool.
- Integrate HIA in the national environmental health action plans, and in “health in all policies” country action frameworks.
- Facilitate the process to make community health impact assessment possible at the community level.
- Conduct dialogue with different sectors to support health and understand the impacts of their programmes, projects, and policies on health.
- Establish laws and/or regulations to make HIA essential components of development.
- Evaluate and revise the current IA methodologies, relevant policies, regulations, and implementation.
Develop a national action plan for HIA to be implemented in the country along with other intervention models for health promotion and healthy public policies.

Strengthen policy analysis and have HIA training for policy-makers, particularly the body that approved programmes, projects, or policies of other sectors that have potential negative impacts on the health of the population.

Integrate HIA and cross-sectoral surveys, and/or with other kinds of surveillance, when it is feasible.

For WHO-SEARO

Establish high-level support by initiating a Health Minister’s Declaration on HIA.

Provide necessary technical and financial support.

Support in-country training, capacity-building on HIA.

Facilitate institutional capacity-building in all countries.

Pilot implementation on HIA in countries.

Develop operational manual for CHIA.

Facilitate having experts in the country (for example nominate experts for WHO Fellowships).

Establish transboundary cooperation/collaboration to conduct HIA across borders.

Provide references and guidelines in local languages.

Provide relevant information and updates on WHO-SEARO website.

6. Closing session

Dr Thaksaphon Thamarangsi, Director, Non-Communicable Diseases and Environmental Health, made the closing remarks and formally concluded the meeting. The Director emphasized that there should be harmonization of impact assessments and not competition between EIA and HIA. It is important that all are working towards improving the health of the
population, and understanding health determinants from broad perspectives. WHO can provide technical support to Member States, enter in South-South cooperation, and strengthen triangular coordination between universities of higher-income countries and middle- and lower-income countries with officials. It is also important for participants to continue to think on how to normalize HIA in all sectors.

Dr Thaksaphon suggested a model to cultivate impact assessment culture using the power of authorities, technical capacity, and people’s awareness. In terms of building capacity, we may think of the **INNE model** learning from the UNDP capacity-building module, which includes having: a) strong **I**ndividual(s), b) strong **N**ode or group of focal points (MoH, MoE, National Development authorities, etc.), c) good **N**etwork, both intra- and interorganizational/country networks, and d) supportive **E**nvironment or an atmosphere for impact assessment. HIA has the potential to be a learning process for the future of a healthy society, which is also a new paradigm towards a learning society whereby we all are contributing to the process. Participation from multistakeholders will enrich the evidence to formulate better policies.

The Director also suggested that Member States select relevant fields to implement what is “doable” for HIA, find the right road and support continuity of the process. The steps that he sees as concrete ways forward are to have reports of case studies that HPE has started, support countries to participate and learn from the upcoming meeting of ASEAN Impact Assessment Conference, develop modules and curriculums for training in the future, and developed guidelines for SEA Region countries to implement HIA. He also suggested participants to advocate, engage and be the ambassador for health. He encouraged all participants to report and consult with WHO in their respective countries to coordinate the needs for WHO support to implement HIA.

WHO SEARO certainly has roles to play in developing tools and guidance along with advocacy for HIA, coordinating advisory group meetings and visits to generate South-South cooperation, training and sensitizing policy-makers, and, when possible to support countries, to encourage WHO Fellows and develop country operational plans.

Dr Thaksaphon Thamarangsi wished participants safe travel back to their country and declared the meeting closed.
Annex 1

Agenda

(1) Opening session
(2) Introducing WHO Health Impact Assessment
(3) Sharing regional situation and current country experiences in health and other impact assessments
(4) Sharing policy briefs on health impact assessments
(5) Sharing procedures and models on health and other impact assessments
(6) Field visit: Community Health Impact Assessment models
(7) Current healthy public policies
(8) Group work: Develop plans and strategic actions for implementation of health impact assessment
(9) Recommendations
(10) Closing session
Annex 2

List of participants

**Country participants**

**Bangladesh**

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**Workshop Report to Strengthen Capacity on Health Impact Assessment in South-East Asia**

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The workshop to strengthen capacity on Health Impact Assessment in South-East Asia was held in Pattaya, Thailand, from 22 to 25 September 2015. The main thrust of the workshop was to strengthen capacity in planning for implementation of and/or design suitable health impact assessments.

The participants shared current country experiences in health and other impact assessments in the SEA Region. Policy briefs and various procedures and models on the health impact assessments were shared and deliberated among the participants. Field visits to industrial estates, affected communities, and provincial health offices in Rayong province enhanced understanding of health impact assessment (HIA) and community health impact assessment (CHIA) in Thailand. Discussions were also held on the current healthy public policies and the way forward for integrating HIA in health action plans. For the SEA Region, HIA is an important tool, toward HiAP in various countries where multisectoral approach to address complex determinants of health figure prominently in national priorities.

A number of recommendations were made including developing the country specific HIA/CHIA/EHIA tools, etc.