

## **Principles and Practice of Health Impact Assessment: Screening Procedures and Tools**



This one-day pre-Conference training course is submitted by the World Health Organization (WHO) together with its Collaborating Centre DBL – Institute for Health Research and Development (Denmark) and with support from the Health Section of IAIA, in the context of the existing Memorandum of Understanding between IAIA and WHO. While its objectives and learning outcomes are of stand-alone value, this course on health impact assessment is envisaged to be the first in a series of annual courses, highlighting different aspects of HIA in response to demand from the impact assessment community and the needs of WHO Member States.

### ***Structure and content***

#### ***Section 1. Basic information***

(a) Course title: *Principles and practice of health impact assessment: screening procedures and tools*

It is envisaged that this be the first in a series of WHO/IAIA courses focusing on specific components and decision-making moments in the HIA process. The content and educational approach will be taken from the problem-based learning material WHO, DBL – Institute for Health Research and Development and the Liverpool School for Tropical Medicine developed and tested in different parts of the world. The hard copy submission of the proposal will be accompanied by CD ROMs of the intersectoral course and of an HIA workshop held in Lao PDR.

(b) Level: *intermediate*

The course is intended for participants with basic knowledge of impact assessment methods and tools who want to strengthen their specific competencies in HIA screening and expand their insights into the preparations, requirements and approaches to perform an adequate health impact assessment.

(c) Pre-requisites for participants: *impact assessment practitioners*

While this and subsequent courses will cater primarily for those impact assessment practitioners who already have responsibilities for health impact assessment or who want to develop their capacity in this area in order to take up such responsibilities, it will also be of value to those who want to generally broaden the scope of their knowledge on impact assessment issues. Practical experience in impact assessment is an asset for attendance.

(d) Language of delivery: *English*

Presentations and materials provided will be in English; the working language for task work in groups will also be English.

(e) Duration: *one day*

The course programme is divided into four parts: two morning sessions (introduction, one session of presentations and one session of group work), and two afternoon sessions (idem), with a 30 minute wrap-up and reflection session at the end.

(f) Minimum and maximum number of participants: *minimum ten participants, maximum 21 participants*

The task work in groups is the determining factor setting the limits on minimum and maximum numbers. For meaningful group work at least two groups of five participants will be required. With an optimal group size of seven participants, a maximum number of participants of 21 (i.e. three groups of seven participants) can be accommodated – with more than three groups, reporting back at the end of the task work will take a disproportionate amount of time.

(g) Trainers:

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## Section 2. *Course description*

(a) Summary of the purpose, content and anticipated learning outcomes of the course.

*Purpose:*

The course is organized in response to the increasing demand for adequate health impact assessments. It aims to contribute to capacity building for the competent performance of HIA.

Specifically, the proposed course aims to provide participants with the knowledge, experiences and opportunities for dialogue on the objectives, procedures, tools and expected outputs of the screening and scoping process in the initial phases of an HIA, and to place screening and scoping in the broader HIA and general impact assessment framework.

*Content:*

The course will systematically address the key issues related to HIA screening and scoping. The assessment of health implications of policies, programmes and projects must take account of the **environmental and social determinants of health**. New **health hazards** and changes in existing health hazards and health promoters must be translated into **health risk** predictions and assessment of opportunities for health. It must consider health in a comprehensive way, focusing on **vulnerable groups** and the particular health risks they will be exposed to. It should lead to a public health action plan that promotes **health safeguards** and **mitigating measures** within the project design and operation first, backed up by an adjustment of health sector interventions. It should operate in an **institutional framework** where the Ministry of Health is the ultimate authority in public health and where other public sectors, to a greater or lesser extent, are engaged in activities for the protection and promotion of health.

*Anticipated learning outcomes:*

At the end of the course, participants will have

- updated their knowledge of the general principles and practices of HIA;
- acquired specific knowledge and know-how about the screening phase of HIA
- gained a better understanding of the technical, procedural and institutional aspects of HIA screening
- shared experiences from different global settings
- learned how to perform essential HIA screening tasks in a realistic context

(b) Detailed description of the course structure and content

*Structure*

The course will be structured around two modules of three presentations, each followed by a brief Q&A and plenary discussions and two modules of group work on specific tasks, focusing on the process and the tools for screening and scoping. A brief introduction will clarify the objectives, procedures and expected outcomes of the course, and a half-hour wrap up and reflection session at the end will offer an opportunity for participants to provide feed back to the organizers and identify areas of perceived capacity building needs in HIA.

The generic structure of the course is as follows:

08:00	Registration
08:30-08:45	Introduction of the course, trainers and participants Objectives, scope, procedures and expected outputs
08:45-10:15	First module of presentations
10:15-10:30	Break/refreshments
10:30-12:00	Group work on Task 1
12:00-12:30	Groups report back to the plenary on their findings
12:30-13:30	Lunch
13:30-15:00	Second module of presentations

15:00-15:15	Break/refreshments
15:15-16:45	Group work on Task 2
16:45-17:15	Groups report back to the plenary on their findings
17:15-17:45	Wrap up and reflection
17:45	Closure of the course

The structure of the course will require the availability of one main lecture room with full facilities for presentations (beamer, screen, flip chart etc) and a number of smaller break-out rooms (depending on the number of participants two or three) with flip charts.

### *Content*

#### 1. First module of presentations

##### 1.1 Brief introduction to the principles of HIA

This presentation will describe the place of HIA within the broad impact assessment framework, focusing on its particularities: environmental and social determinants of health, health hazards and risks, the concept of public health, health protection and promotion, the institutional framework for health: health services versus health status.

Robert Bos, WHO  
15 minutes

##### 1.2 Health in development

Sustainability issues, models for driving forces of health, links between HIA and EIA, SIA and SEA. The technical dimensions and economics of sector-confined and of cross-sectoral approaches to health in development.

Peter Furu, DBL  
15 minutes

##### 1.3 HIA procedures

The overall sequence of HIA procedures, with their objectives and outputs. Zoom-in on the screening and scoping phase of HIA: the rationale, the actors, the detailed procedures, the outputs. At what level is screening done? What criteria are used in scoping? What are the policy incentives for screening? What are the pitfalls in screening and scoping procedures?

Peter Furu, DBL  
15 minutes

##### 1.4 The reality of screening

An inventory of different HIA screening mechanisms and procedures will be assembled for this presentation, highlighting different models, how they respond to different settings and what their pro's and con's are.

Robert Bos, WHO  
15 minutes

### 1.5 Introduction to the Mupfure Irrigation Project

The proposed Mupfure Irrigation Project, a small scale water resources development project in Zimbabwe will be introduced as the context for the course task work. The participants will receive background documentation before the course, to familiarize themselves with the project. The Mupfure project documentation will need to be consulted in the morning and afternoon group sessions. As a last point, the participants will be briefed on the nature, methodology and logistics of the task work.

Robert Bos, WHO  
15 minutes

By the end of this session participants will have an understanding of:

the concepts of the driving forces and determinants of health in development, that health and environment encompasses a range of meanings;

the details of HIA screening and scoping, and the strengths, weaknesses, opportunities and constraints linked to the HIA screening process; and

the diversity of screening processes in response to different geographical and socio-economic settings.

- updated their knowledge of the general principles and practices of HIA;
- acquired specific knowledge and know-how about the screening phase of HIA
- gained a better understanding of the technical, procedural and institutional aspects of HIA screening
- shared experiences from different global settings
- learned how to perform essential HIA screening tasks in a realistic context

### 2. Task work in groups

The first task will take participants through the detailed procedures of the screening of a development project for HIA requirements, in the context of the Mupfure Irrigation scheme. To facilitate the group work, task guides will be developed, derived from materials already available from other WHO/DBL training course. The structure of the guides and the methodology they propose are in line with the basic principles of problem-based learning. As participants work through the task, following the instructions of the task guide, they generate information in a systematic way that will allow them to report back to the plenary immediately at the end of the group work session.

By the end of this session participants will:

be able to make informed decisions about the procedures applied for the HIA screening of a specific development project;

will have shared experiences in HIA screening; and

will have discussed the value of applying the various options for screening procedures to specific projects.

### 3. Second module of presentations

#### 3.1 Screening: the desk exercise

The standard procedure for screening is a desk study of proposals, applying standard criteria. The development of such criteria has to respond to local public health issues, the local socio-economic context, and potential new hazards that may be introduced. The limitations of

statistical data as a basis for desk studies will be presented, as well as trade-offs between efficiency and accuracy.

Peter Furu, DBL  
20 minutes

### 3.2 Taking screening to the field

Rapid rural assessment techniques, focus group discussions, general considerations in community consultation and public hearings; use of local resource persons; links to NGOs, religious groups, local politicians.

Robert Bos, WHO  
20 minutes

### 3.3 Reporting on screening and next steps

This presentation will focus on the outcome of a screening process, whom recommendations are directed to, and the next steps: scoping and preparation of Terms of Reference

Robert Bos

By the end of this session participants will be:

- familiar with HIA screening tools and their optimal use;
- capable of deciding which tools to select for specific proposals; and
- manage the tool deployment for HIA screening and scoping towards the formulation of terms of reference for a full HIA.

## 4. Task work in groups

The second task will allow participants to consider the application of available screening tools to a development project and assess their value and constraints, again in the specific context of the Mupfure Irrigation scheme. The methodology followed is exactly the same as for the first task, and again groups will report back to the plenary immediately at the end of the group work session.

By the end of this session participants will be able to:

- better understand the practical implications of applying screening tools and make informed decisions selecting them;
- report on what terms of reference are required linked to the different types of projects.

## (c) Description of materials participants will receive.

Participants will receive the following materials

### *Basic course documents:*

- Programme of the course
- List of participants
- Papers on the presentations
- Project document of the development project providing the context for the tasks
- Task guides for the morning and afternoon tasks

#### *Technical documents*

- Birley, M.H. 1995. The Health Impact of Development Projects, HMSO, London
- The IAIA Special Publication: HIA principles and practices.
- Selected publications on HIA screening procedures and tools.
- List of key references and web sites.

#### *CD ROMs*

WHO Water, Sanitation and Health Library (contains all WSH documents, including those on health impact assessment).

National workshop on Health Impact Assessment in Lao People's Democratic Republic.

#### (d) Provisions of post-conference follow-up.

All participants who have been in attendance for the full day will receive a CD ROM which contains all presentations, a list of course participants and their coordinates, an updated list of literature references and electronic versions of publications referred to in the course.

Those participants who express an interest in organizing national courses on the principles and practice of HIA for Ministry of Health and Ministry of Environment staff will receive a generic course outline, guidance on how to organize such courses and will have access to technical backstopping through the WHO, DBL and the Health Section of IAIA.

Participants will be invited to sign up to the listservers of the WHO Water, Sanitation and Health programme (which includes communications on health impact assessment) and of the Health Section of IAIA.

### Section 3. *Trainers*

#### **Peter Furu**

Peter Furu is employed at DBL – Institute for Health Research and Development as a senior adviser in environmental health and health impact assessment. He is currently heading the WHO Collaborating Centre for Health and Environment in Sustainable Development at DBL. He has a university degree in biology (medical parasitology) supplemented by a public health degree. He has 22 years of experience in research, capacity building and consultancy functions in the area of environmental health, HIA and disease control in a development context. Comprehensive teaching experience on inter-sectoral HIA at university level and at ministerial levels in countries in Africa, Asia, Central America and Europe.

Peter Furu has repeatedly been invited back to the Nordic School of Public Health and a number of Danish universities to conduct HIA training. He has taught more than 25 HIA courses over the past 12 years. In 2004 he completed a one-year Diploma Course on Pedagogy and Didactics.

1996 – present

Guest lecturer: HIA sessions at the Masters level courses at University of Copenhagen, University of Roskilde,

		University of Aarhus, University of Aalborg, University of Southern Denmark
1992 – 2002		Guest lecturer: Annual HIA courses at MPH courses in <i>International Health</i> and <i>Health and the Environment</i> at the Nordic School of Public Health, Gothenburg, Sweden.
2004	Morocco	WHO Temporary Adviser on HIA capacity building
2003	Laos	(presentation at International Water Conference) Workshop and training course on HIA for the newly established inter-sectoral HIA task force of the government.
2002	Zambia	WHO Temporary Adviser on HIA Capacity Building at WHO regional workshop on schistosomiasis control

Together with the World Health Organization (Robert Bos), Liverpool School of Tropical Medicine (Martin Birley) and University of London (Charles Engel) Peter Furu has since 1992 been delivering the inter-sectoral HIA course *Health opportunities in water resources development*. The list below indicates the record of delivery and the list of collaborating institutions.

<i>Year</i>	<i>Country</i>	<i>In collaboration with ...</i>
1997	India	the Malaria Research Institute, Delhi, the Water and Land Management Institute, Aurangabad and the International Commission on Irrigation and Drainage, Delhi
1996	Honduras	the Pan American Health Organization (PAHO) and the Panamerican School of Agriculture (El Zamorano)
1995	Tanzania	the Tropical Pesticides Research Institute, Arusha and the National Environment Management Council, Dar es Salaam
1994	Ghana	the Ministry of Health and Environmental Protection Council, Accra
1992	Zimbabwe	the Blair Research Institute, Ministry of Health, Harare

### **Robert Bos**

Robert Bos is a public health biologist trained at the University of Amsterdam in Medical Biology and in Basic and Clinical Immunology.

He started work for the World Health Organization in 1981, first on assignment in Costa Rica as associate immunologist, and since 1983 in WHO headquarters in Geneva, Switzerland. The first period in Geneva (1983-1990) he worked in the Division of Vector Biology and Control as a member of the Secretariat of the joint WHO/FAO/UNEP Panel of Experts on Environmental Management for Vector Control (PEEM). Early work with Martin Birley of the Liverpool School of Tropical Medicine dates back to this period, in particular the development of Guidelines for Forecasting of Vector-borne Disease Implications of Water Resources Development Projects. In 1990 he moved to WHO's Environmental Health Programme, taking the PEEM Secretariat with him in his function of PEEM Executive Secretary. With this re-positioning, and particularly following the UNCED in Rio 1992 and WHO's ensuing strategy for health and environment, the profile of HIA in his programme of work was enhanced, mostly so in connection with capacity building activities.

In 1991, WHO/PEEM, DBL and the Liverpool School of Tropical Medicine embarked on an initiative to develop and test a training course that would address the need for capacity building in intersectoral collaboration in support of health impact assessment; they were later joined (for the



didactic and educational aspects) by the Institute for Higher Learning of the University of London. The modular course was first tested in Zimbabwe in 1992, and evolved through trials in Ghana (1994), Tanzania (1995), Central America (1996) and India (1997) into an 18-day task-oriented problem-based learning course, whose modules focus on critical decision-making points in the HIA process. Robert Bos was the anchorman for these courses, facilitating the plenary sessions, managing non-expert tutors and local resource persons and ensuring smooth procedures in the group work.

As a next phase, WHO and DBL developed a comprehensive HIA capacity building package, which consisted of the aforementioned intersectoral training course with, in addition, a workshop *Principles and Practice of HIA*, a national HIA policy seminar (setting in motion national HIA policy development), support for the formulation of national HIA guidelines and technical cooperation in the implementation of HIAs of new development projects. The implementation of this package, together with the German *Internationale Weiterbildung und Entwicklung* (InWEnt – Capacity Building International) started in 2003 in the countries of the Mekong River Basin (Lao PDR, Thailand, Cambodia and Viet Nam). Similar initiatives are in the planning stages for the countries belonging to the Gulf Cooperation Council and for countries of East and southern Africa.

In all these activities, Robert Bos played prominent organizational and teaching roles.

Following are some other capacity building activities in which he has been involved as organizer, lecturer, facilitator and/or resource person.

<i>Year</i>	<i>Country</i>	<i>In collaboration with ...</i>
2002	Uganda	Workshop on setting research priorities on the links between biological diversity and human health
2001	Thailand	Workshop on HIA for malaria prevention in the context of dam projects
1987/1995/ 1997/1999	Kenya, Malawi, Zambia, Ecuador	National seminars on the incorporation of health into water resources policies and strategies
1995/1996	Thailand/ El Salvador	Training workshops on WHO <i>Guidelines for Cost-Effectiveness Analysis of Vector Control Activities</i>
1994	Zimbabwe	Training workshop on WHO <i>Guidelines for the Safe Use of Wastewater in Agriculture</i>
1989	Pakistan	Training course on environmental management for vector control