

**REPORT ON THE HEALTH IMPACT ASSESSMENT TRAINING HELD FROM 23RD
AUGUST TO 25TH 2022 AT THE MENSVIC GRAND HOTEL, ACCRA**

Table of Contents

EXECUTIVE SUMMARY	3
1. INTRODUCTION	4
Objectives of the training	4
Facilitation approach	4
2. DAY ONE (1).....	5
Facilitators:	5
Activities, Lessons and Insights.....	5
Discussions.....	6
3. DAY TWO (2).....	7
Facilitators.....	7
Activities, Lessons and Insights.....	7
Discussions.....	8
4. DAY THREE (3).....	8
Facilitators.....	8
Activities, Lessons and Insights.....	8
Discussions.....	9
5. CONCLUSION	10
6. FUTURE DIRECTIONS AND RECOMMENDATIONS.....	11
REFERENCES.....	11

EXECUTIVE SUMMARY

In communities affected by large-scale projects such as natural resource extraction and construction works, there can be several adverse effects on the environment and people's health. Conventional impact assessments mainly focus on the negative consequences of large projects on the environment but with a lesser extension to the potential health effects, especially in sub-Saharan Africa. While several countries have instituted environmental impact assessment as a legal prerequisite for the implementation of large-scale projects, there is low capacity for health impact assessment (HIA) practice. However, health for all is an integral component of the sustainable development goals (SDG), and hence HIA should be promoted to safeguard project-affected communities.

By definition, HIA a systematic approach to examine the potential and sometimes unintended health effects of a project or program in order to provide evidence to support project-related decision making. The focus of HIA is to reduce possible risks that a project and maximise health opportunities. As part of capacity building efforts in sub-Saharan Africa, a three-day training was conducted to introduce the foundational and practical concepts of HIA in Ghana. Individuals with backgrounds in the mining sector, construction, environmental and health agencies, policy development and academia were invited to undergo this training. A participant-centered approach was used in order to enhance skill acquisition at the end of the training. This approach comprised a balanced mix of lectures, discussions, exercises, practical group assignments and presentations. At the end of the training, participants gained foundational understanding of HIA concepts and processes. They also acquired readily usable skills to conduct or support project-related HIA. The participatory approach used enhanced inclusivity and resulted in an altogether positive experience. The training was facilitated by Prof Mirko Winkler of the Swiss Tropical and Public Health Institute, Prof Philip Adongo of the University of Ghana, and Dr Martin Ayanore from the University of Health and Allied Sciences.

The overarching objective of the Health Impact Assessment for Sustainable Development Project (HIA4SD) is to conduct research that informs and facilitates a policy dialogue, and ultimately policy change, for strengthening the application of impact assessment as a regulatory mechanism in Africa. The Project is co-funded by the Swiss Agency for Development and Cooperation and the Swiss National Science Foundation under the Research for Development programme.

1. INTRODUCTION

The undertaking of large-scale infrastructural or extractive projects has several attendant effects.^{1,2} These effects may be seen on the environment, people's physical, mental and social health and wellbeing, and even behaviours depending on the nature of the project.^{1,3} Traditionally, impact assessment seeks to minimise the negative consequences of large projects on the environment, society and public health while aiming at the promotion of sustainable development.⁴ Many countries have instituted environmental impact assessment as a legal requirement prior to the implementation of large-scale projects. Oftentimes, emphasis is placed on the environmental effects without a clear focus on the health effects.^{2,3,5} With health as a central part of sustainable development goals (SDG), Health Impact Assessment (HIA) should be a matter of concern to policy actors, project developers and other stakeholders.

By definition, HIA encompasses a systematic process of judging the likely effects of a project, program, policy or strategy on the health of a population.³ This proffers comprehensive evidence for reducing the possible (and unintended) risks that a project may present while capitalising on opportunities to promote health. As part of efforts to build capacity in sub-Saharan Africa, a three-day training was conducted to introduce the foundational and practical concepts of HIA to participants with diverse backgrounds. The overarching objective of the Health Impact Assessment for Sustainable Development Project (HIA4SD) is to conduct research that informs and facilitates a policy dialogue, and ultimately policy change, for strengthening the application of impact assessment as a regulatory mechanism in Africa. The Project is co-funded by the Swiss Agency for Development and Cooperation and the Swiss National Science Foundation under the Research for Development programme.

Objectives of the training

1. To make clear how large infrastructure developments can impact on health
2. To introduce the HIA and provide an overview of the practical steps involved in it
3. To discuss how HIA can be promoted in Ghana

Facilitation approach

A participant-centered approach was used in order to enhance skill acquisition at the end of the training. This approach comprised a balanced mix of lectures, discussions, exercises, practical group assignments and presentations.

2. DAY ONE (1)

Facilitators:

Prof Mirko Winkler

Prof Philip Adongo

Dr Martin Ayanore

Activities, Lessons and Insights

On the first day of the training, there was a formal introduction by the facilitators and participants. Participants stated their educational backgrounds and current roles. Participants also shared their expectations of what they hoped to gain at the end of the course. To set stage and atmosphere for the training, Dr Ayanore and Prof Adongo gave the opening remarks and highlighted the content of the training. They also indicated what was expected of participants and urged them to be fully engaged in the training in order to have the best experience. Prof Mirko Winkler was then introduced as the lead facilitator for the training.

In the first presentation, Prof Winkler gave an overview of the broad subject of HIA beginning from its roots in Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA). HIA was then defined and linked to its importance in large scale infrastructure or extractive projects. Next, he gave a brief overview of the HIA process. Prof Winkler further expanded on Barton and Grant's concept of the determinants of health as the basis for HIA. A hands-on group work was then given which involved the categorisation of items into health determinants and health outcomes. This helped develop participants' intuition of the conceptual model of the determinants of health and health outcomes.

Other important issues based on community perspectives were also presented as follows:

- Project-induced influx, Workplace health vs Community health and Large-scale resettlement: Prof Winkler
- Gender-based violence: Prof Adongo
- Remote communities, ethnic groups – Dr Ayanore

The focus of HIA, i.e. mitigating potential risks and maximising opportunities was reiterated. Prof Mirko then introduced the first step in the HIA process—Screening. This first step in the HIA process helps ascertain whether HIA is needed or the issues may be well suited under other types of impact assessment. Participants were divided into four groups, each with a unique case scenario of a large-scale project. These were in the areas of mining, hydroelectric dam construction, roads, and agriculture.

Discussions

Discussions largely centered on the consequences of large projects. These include rapid influx of workforce that can overwhelm the local health care system or lead to housing-related issues. Changes in sanitation practices may also contribute to vector-related diseases such as malaria and dengue fever. An example was cited regarding how construction projects easily speed up the creation of breeding sites for important vectors such as the female *Anopheles* mosquito which cause malaria. The influx of workforce also has the potential to increase the demand for transactional sex and other unhealthy sex behaviours. This favours the spread of sexually transmitted infections (STIs) such as HIV/AIDS, gonorrhoea, syphilis, herpes etc. Another risk that it poses is the likelihood of increased incidence of unwanted pregnancies, especially among adolescent girls and young women. There is also heightened competition for limited food. This shoots up food prices, thereby shifting the risk of food insecurity to the socioeconomically deprived.

The issue of gender-based violence was also discussed. Labour and working conditions were highlighted as key reasons why workplace sexual harassment and advances, violence and discrimination persist. Prof Adongo shared key strategies to prevent gender-based violence including the identification of special needs of vulnerable populations, education, review of employment options and policy, and establishing robust frameworks and punitive measures to deal with gender-based violence.

The discussion on remote communities and ethnic groups focused on the fact that indigenous populations and ethnic groups may have different understanding of health. Dr Ayanore explained how remote communities and ethnic groups may have specific health needs and also have limited access to health care services. HIA in this context should therefore be conducted with in-depth understanding of the beliefs, understanding and practices of ethnic groups and remote communities in order to generate context-specific evidence to support decision-making. An important concept that was shared by Dr Ayanore was Rural proofing—a mechanism that helps boost rural revitalisation by ensuring all relevant policies beyond rural development are aligned with rural needs and realities.

Regarding the presentation on large-scale resettlement, the benefits and downsides were discussed. Opportunities following large-scale resettlement include engineering although poor engineering may lead to unfavourable outcomes. Good engineering however may actually improve vector control efforts and thereby reduce vector-borne diseases, improve housing, water and sanitation. Large-scale resettlement was also noted to have attendant adverse

psychosocial and mental effects such as anxiety and stress as well as a disruption of social cohesion. Much every way, participants were made to understand that in conducting HIA, there is the need to critically examine the broad range of opportunities and risks that may result from the project.

3. DAY TWO (2)

Facilitators

Prof Mirko Winkler

Prof Philip Adongo

Dr Martin Ayanore

Activities, Lessons and Insights

Prof Winkler gave a lecture on scoping; a step in the HIA process which involves a review of available evidence. Participants were made to understand the importance of scoping as part of the initial steps in HIA. Specifically, participants learned that scoping served the purpose of:

- Establishing a detailed understanding of the planned project
- Identifying potential health impacts
- Defining spatial and temporal boundaries, approaches and tools

Following this lesson, a group exercise on scoping was given. The assignment was based on case scenarios and a determination of whether HIA was indicated or required. Prof Winkler gave another presentation which involved an appreciation of routine and non-routine circumstances in the course of planning an HIA. Emphasis was also placed on stakeholder participation as part of the scoping step. This helped to obtain collective understanding of the potential risks and benefits of the project. The various groups then presented on the scoping exercise given. Subsequent presentations touched on some other preliminary issues in the preparatory phase of the HIA process such as baseline definitions, terms of reference, scale of assessment and intersectoral negotiations.

Discussions

In scoping, participants learned and discussed about potential health opportunities and health concerns that could emerge in project-affected communities. Through these discussions, participants were able to judge whether HIA was indeed needed or otherwise as per the scenarios provided. Additionally, they assessed potential sources of data for establishing baseline evidence, as well as their quality and availability. Participants also brainstormed how opportunities could be maximised while minimising risks based on an understanding of the previous day's training. One major takeaway of this session was the principle of equity in the course implementing a project. Equity ensure a fair distribution of resources and opportunities and eliminates undue advantage of one group over another.

4. DAY THREE (3)

Facilitators

Prof Mirko Winkler

Prof Philip Adongo

Activities, Lessons and Insights

On the last day of the training, Prof Winkler led participants into practical (skill-based) assessment of risk—a cardinal component of the HIA. The motivating lecture began with illustrative scenarios of how a project can affect various aspects of the environment as well as population health. Next, the role of HIA was emphasised, showing how it could have reduced the risks posed by the example project and thereby reduce unfavourable health outcomes.

Prof Winkler explained how an Impact Assessment was to be conducted taking into consideration the direction of change, magnitude, nature of the impacts and the distribution. He further described the different categories of risk assessment methodologies namely: quantitative, qualitative and semi-quantitative. Next, participants were taken through the four-step IA which involves an appraisal of the consequences, impact severity, likelihood, and significance rating. Prof Winkler demonstrated how the semi-quantitative risk assessment tool is used to assess and score (rate) the magnitude and likelihood of risks identified using a case of measles in Ghana and Switzerland as motivating examples. This was a key competency that all participants were expected to acquire at the end of the training.

Health impact mitigation strategies which revolved around health engineering, behaviour change, medical care and compensation were also presented. Prof Winkler then delved into the latter aspects of the HIA process including how to report findings, how to use HIA as a decision support tool, how to conduct implementation and monitoring, evaluation and auditing. He specifically touched on principles of good practice in HIA as well as the need to have the HIA reviewed internally or externally. Moreover, it was made clear that after an HIA, decision making is not done by the impact assessor but rather the stakeholders or owners of the project. The HIA only serves as evidence to inform what decisions need to be made regarding the project.

The penultimate activity was a plenary session comprising of five participants as panellists. Five key questions (one for each panellist) were posed as follows:

- Should EIA and HIA be separated?
- What should be the policy direction in terms of HIA?
- What can be done to integrate HIA in the field of academia?
- What new things can be added to existing EIA practice?
- How should HIA for different projects be approached?

Having ended the plenary session, facilitators and trainees discussed potential HIA challenges that could arise as well as possible solutions. A post-training evaluation survey was taken by all participants. The aim was to assess whether the course met participants' expectations at the beginning of the training and to suggest areas for improvement in future trainings. Finally, participants were awarded their certificates after which an informal session took place.

Discussions

Discussions revolved around the most preferred risk assessment approach. Among the various approaches to risk assessment, the semi-quantitative, which is practically based on likelihood and impact, is a preferable choice for large-scale infrastructure projects due to its ease of use, interpretability and general understanding among non-technical project reviewers. However, due to the fact that it is not entirely objective in nature, a Delphi technique was recommended

The plenary session saw diverse opinions to the questions posed. It was agreed that EIA and HIA need not be separated. At best, screening the planned project would help to inform the necessary course of action. Moreover, it was advocated that in the future, Impact Assessment should be the umbrella name having the various forms of assessment under it. This would

ensure that future impact assessments are conducted by multidisciplinary teams. Regarding the policy direction, it was recommended that policy development for HIA should consider all sectors. Although HIA is an emerging area, there is the need to establish the right frameworks and institutions to oversee it. Additionally, efforts should be made to train persons who are already experienced in the conduct of other forms of impact assessments.

Interesting issues that came up included the need to integrate HIA into existing IA efforts. It was agreed that this would go a long way to harmonise different IA efforts across the country. Another key take-away was the need to conduct HIA in a rigorous and systematic manner in order to give credence to the evidence generated. This would very well serve as the basis for project and policy decisions, including relevant changes to ongoing projects. Also, one participant highlighted the issue of bureaucracy as a potential challenge to regulate HIA in Ghana. The active role of the Ministry of Health was therefore recommended. Some also suggested that a concept note and road map for HIA should be developed and shared with the relevant actors and stakeholders to further the goal to fully integrate HIA in Ghana.

5. CONCLUSION

HIA is an essential decision support tool that helps ensure that health risks posed by large-scale projects are minimised while potential positive impacts are maximised. Although HIA is a relatively new field in Ghana, discussants agreed on its relevance. Several issues come up when planning a large-scale project and this ranges from environmental to social and public health aspects. It is important that the screening step is conducted to ascertain whether HIA is necessary. The potential benefits as well as risks of the intended project must be critically examined in order to identify the best ways to address them. Moreover, other subtle issues that are often less pronounced, for instance gender-based violence and specific health needs of vulnerable populations or groups, should be considered in the planning phase. It is also important to ensure transparency when conducting HIA. Overall, the training involved a well-balanced mix of teaching and learning methods which altogether yielded excellent understanding of the concepts and processes in conducting HIA.

6. FUTURE DIRECTIONS AND RECOMMENDATIONS

Some recommendations made for the short to medium term include:

1. Given the fact that EIA and SIA are already existent in the Ghanaian context, efforts to harmonise HIA practice should aim at securing the buy-in of higher stakeholders, such as the Government, Ministry of Health, Environmental Protection Agency, Extractive industries among others.
2. The issue of long bureaucracy should be addressed in the process of harmonising HIA practice with already existing forms of impact assessment.
3. In order to strengthen and harmonise HIA efforts in Ghana, there is the need to bring together Regulatory Agencies.
4. It was noted that HIA experts/specialist in Ghana are few. Plans should be made toward introducing HIA as a competency-based course in universities.
5. Research on HIA approaches is needed to establish best practices and build local evidence.

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