

# African Newsletter

ON OCCUPATIONAL HEALTH AND SAFETY

Volume 19, number 2, August 2009

## Planning of occupational health and safety activities



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**Planning of occupational health and safety activities**

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## Planning of occupational safety and health activities



**P**lanning is an action-oriented process by which an organization envisions the future and then develops the necessary goals, strategies and action plans for realizing the vision. The process incorporates the short, medium and long term views to develop a roadmap that directs the future course of an enterprise or organization. Modern thinking focuses on strategic planning for businesses and organizations, and thus involves the development of necessary procedures and operations to achieve the Vision and Mission of the firm or organization. This is done after conducting a comprehensive analysis of the achievements, operating environment and capacity.

The Vision is then broken down into key areas of focus for results, including the strategies and objectives for each area. Finally, the activities necessary for the realization of each strategy are developed. In this formulation stage, the involvement of stakeholders is very crucial both for consultations and to increase ownership of the plan. Implementation of the plan is based on clearly defined roles and responsibilities, and is monitored and evaluated periodically. Information is gathered on the extent of implementation, the effectiveness of the strategies developed earlier are assessed and the lessons learnt are incorporated in later activities of each project and programme. Effective monitoring and evaluation has indeed been noted to be crucial in project implementation, but are often lacking or very weak.

Generally, planning for the prevention of accidents, diseases and ill health at workplaces in developing countries is hardly adequate. Occupational safety and health experts have argued that an important reason for failure to control health and safety risks is largely an inability to apply existing knowledge rather than an absence of appropriate knowledge. A gap in planning may be one of the likely factors for the failure. These days, innovative solutions to issues and challenges in the work environment are encouraged, but can such solutions alone get us far without appropriate planning?

Research done by the ILO indicates that countries with a good safety record perform better economically than those with a poor record. Indeed, many firms and organizations in the industrialized world recognize the importance of occupational safety and health in improving productivity and hence in enhancing profitability and competitiveness. However, a common opinion within the business community in the developing countries is that implementation of safety

and health measures increases the costs of doing business. This kind of mindset presents a serious bottleneck to planning for occupational safety and health, and hence hinders the economic benefits that go with improved workplace safety and health.

In Kenya, most firms and organizations hardly mention occupational safety and health issues in their strategic plans. This suggests that occupational safety and health is relegated to a fire-fighting type of management. Why not mainstream occupational safety and health issues in the planning process? This is a proactive strategy that would prioritize the integration of occupational safety and health issues at the planning stage, which in turn would ensure target-setting, allocation of resources and measurement of performance.

Occupational safety and health planning aims at prevention of occupational accidents, diseases, ill health and damage to property. This ought to be done at enterprise and national level. In terms of planning for occupational safety and health, it is therefore important for each organization to know its current situation, where it intends to go, how it will get there, what needs to be done, by whom and how, what remedial measures need to be taken and how the process will be reviewed. The availability of adequate information on accidents and diseases is essential. Unfortunately, this is not the case in the developing countries. There is therefore a need to improve the collection of data on accidents and diseases by the competent authorities in occupational safety and health, in order to facilitate the proper planning. Better statistics can be best achieved if enterprises honestly report all cases of occupational accidents and diseases to the competent authority.

Lastly, commitment to making a safe and health workplace is the key in the planning process. Commitment should be expressed clearly in both the national and enterprise safety and health policies, and should be communicated by appropriate means to stakeholders.

**Pius W. Makhonge**

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Participants in the Brazzaville meeting in front of the WHO Regional Office for Africa

# Developing national plans for workers' health in Africa

Ivan D. Ivanov  
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On 16 August 2007 Namibia launched its first national occupational health policy. On this occasion, the Minister of Health, Mr Richard Kamwi, declared an urgent need to strengthen occupational health services in the public and private sectors, as it will help reduce the costs associated with accidents and ill health. «Currently many workplaces lack sufficient capacity on their own to meet all occupational health and safety legislative requirements. Support should be provided by national and regional occupational health services with information, advisory and other practical interventions,» the Minister said (1).

In May 2007, the World Health Assembly – an annual meeting of the 193 Member States of the World Health Organization – endorsed the Global Plan of Action on Workers' Health for the period 2008–2017. This decision created a new public health policy framework for concerted action to protect and promote health in the world of work. The Health Assembly urged Member States to devise, in collaboration with workers, employers and their organizations, national policies and plans for workers' health, and to establish appropriate mechanisms and legal frameworks for their implementation, monitoring and evaluation (2).

One of the objectives of the global plan of action is to devise and implement policy instruments on workers' health. Countries are expected to formulate policies or strategies for work-

ers' health based on the WHO's action plan and taking account of the relevant international labour conventions, e.g. the ILO Occupational Safety and Health Convention No. 155 and the Promotional Framework for Occupational Safety and Health Convention No. 187. Such policies or strategies are supposed to cover enactment of legislation, intersectoral coordination, resource mobilization, and institutional framework. This work requires integrating the objectives and actions for workers' health into broader national strategies in the domain of health and labour/employment.

In order to put into practice national policies, countries are expected to elaborate action plans on workers' health. Such plans should be based on the evidence about the current status, main problems and trends in the health

of the working population. The planning process needs to involve relevant ministries, such as health and labour, and other major national stakeholders. In general, the content of a national action plan includes: national profile; priorities for action; objectives and targets; actions; mechanisms for implementation; human and financial resources; monitoring, evaluation and updating; reporting and accountability.

The World Health Assembly also requested the WHO secretariat to promote the implementation of the Global Plan of Action on Workers' Health 2008–2017 at national and international levels with a definite timeline and indicators for the establishment of occupational health services. In particular, WHO is expected to work with Member States to strengthen the capacities of the Ministries of Health to provide leadership for activities related to workers' health, to formulate and implement policies and action plans, and to stimulate intersectoral collaboration.

The African region faces some specific challenges to workers' health that require adequate policy response. Newly emerging employment patterns, the growing informal sector and the spread of communicable and non-communicable diseases through the workplace, including HIV/AIDS and malaria, call for revision of the conventional practices of providing occupational health and safety services and for adopting a public health approach to protecting and promoting the health of workers and their communities. Therefore, the 54<sup>th</sup> session of the WHO Regional Committee for Africa in 2004 urged Member States to integrate occupational health and safety into health policies and national health care strategies, and to develop and implement policies and legislation that promote healthy and safe workplaces in both the formal and informal sectors. The Regional Committee also pointed out the need to generate evidence and information for policy decisions and implementation, to strengthen occupational health and safety institutions and to ensure sustained management, capacity building and research (3).

The WHO intercountry meeting "Workers' Health in Africa: Action in Partnership" 21–23 August 2007, Brazzaville, Republic of Congo examined the progress made on occupational health and safety in the individual countries and at the regional level. The conclusion was that there is a critical level of political commitment for action in partnership on workers' health in Africa as demonstrated by certain high level regional fora, such as the Ouagadougou Presidential Summit, the 54<sup>th</sup> Session of the WHO Regional Committee for Africa, and the 11<sup>th</sup> ILO African Regional Meeting (3,4,5). The deliberations of these

● The Regional Committee also pointed out the need to generate evidence and information for policy decisions and implementation, to strengthen occupational health and safety institutions and to ensure sustained management, capacity building and research.

fora provided for a renewed attention to the health of workers.

Several strategic directions for international and country work on protecting and promoting the health of workers in Africa were identified by the participants at the Brazzaville meeting. The first is the development of national strategies, policies and action plans on workers' health in line with WHA Resolution 60.26 Workers' Health: Global Plan of Action and the ILO Promotional Framework for Occupational Safety and Health Convention No. 187. This requires enhancing the collaboration between ministries of health and ministries of labour, involving workers' and employers' organizations, establishing and sustaining partnerships for workers' health with civil society and private sector and building critical core capacities for implementation of actions to protect and promote workers' health.

The second direction for action is to scale up the development of human resources for workers' health taking into account the specific needs and capacities of the countries. The third strategy entails special country and inter-country projects and programmes supported by WHO and ILO. Some areas where international support is required include occupational health services, priority occupational diseases, preventive culture, management systems, workplace inspection, nation-

al indicators and profiles for workers' health, and informal economy and poverty reduction initiatives (6).

Action in partnership on workers' health in Africa is not possible without full participation of workers, employers and their organizations. Therefore, the Brazzaville meeting invited the International Organization of Employers and African trade unions to take an active part in the future activities to implement action in partnership on workers' health.

International collaboration, such as the WHO/ILO Joint African Effort, the East African Regional Programme on Occupational Health and Safety including the Basic Occupational Health Services supported by the Finnish Institute of Occupational Health and the Finnish Ministry for Foreign Affairs, as well as the Work and Health in Southern Africa Project (WAHSA) provide a number of avenues to build an evidence base and to strengthen political commitment for action on workers' health in Africa. In Brazzaville, all country participants expressed a great deal of appreciation with the African Newsletter on Occupational Health and Safety. They insisted that WHO, ILO and the Finnish Institute of Occupational Health continue supporting this publication which proved to be a useful practical forum for exchanging experience and ideas on protecting and promoting health in the African world of work (6).

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Car repair shop in Maputo, Mozambique.

## WORK AND HEALTH IN SOUTHERN AFRICA – the planning of WAHSA

David Rees

SOUTH AFRICA

Kaj Elgstrand, Christer Hogstedt

SWEDEN

The WAHSA programme was launched in October 2004 and ended on 31 May 2009. We have been asked to describe the planning of this extensive programme, which was designed to last 12 years, and was divided into three 4-year phases. Although this period was agreed upon, it became limited to the first phase due to a change in policy by the new Swedish government. However, much experience was gained and a number of results achieved, even though the first phase was planned as the basis for the following two phases and did not primarily aim at final results. These results will be published at the end of 2009 as a supplement to Occupational Health Southern Africa.

The idea of a capacity-building and action-oriented regional programme in occupational safety and health, (OSH) for Southern Africa was proposed by the Minister of

Labour in Zimbabwe in 1998 at a meeting between the authors of this article, Dr René Loewenson and the Minister. This was in line with the ambition to strengthen the relatively recently formed Southern Africa Development Community (SADC), and fitted well with the extensive experience of work environment improvements in Sweden as well as South Africa. At the same time, a proposal for a regional programme of a similar type was suggested for Central America by ministers in Costa Rica to the Swedish National Institute for Working Life (NIWL). Those two suggestions became an impetus to plan for a comprehensive tri-regional programme. However, the potential donor, the Swedish International Development Cooperation Agency (Sida), preferred two separate programmes between Swedish institutions and institutions in the two regions. The

Central America programme, called Salud y Trabajo (SALTRA), was actually launched a year before WAHSA and will end in December 2009 after only one phase, and an extension of a year, although also planned to last 12 years.

## Developing the proposal

The proposal for WAHSA was the product of intensive collaboration between stakeholders in the SADC region and Swedish partners, and the planning was supported by a Sida grant of about EUR 100 000 plus major inputs from employees at the NIWL and the National Institute for Occupational Health in South Africa. Some of the actions were:

- The NIWL and SADC agreed to consider the feasibility of a long-term OSH Programme in early 2000, and in October–November 2000 a feasibility study by Urban Svedberg was conducted, during which 26 organizations in South Africa, Zambia, Zimbabwe and Tanzania were visited.
- In April 2001, a three-day workshop was organized in Stockholm. Twenty-two persons from Southern Africa, Central America and Sweden participated, and reached principal agreements on the objectives of the Programme.
- A meeting was held in Lilongwe, Malawi, in September 2001, which was attended by representatives of the SADC sectors involved in OSH, employer and employee representatives, OSH practitioners and representatives from NIWL and the National Institute for Public Health (NIPH). The participants agreed on the major components of the Programme and the agenda for compiling background material and other necessary information for the application to Sida, to be made by the Director of NIOH, David Rees, during the last part of 2001. A team was formed to draft a proposal.
- The proposal was accepted by the regional stakeholders and officially accepted by SADC for formal application to Sida in mid-2002.
- The proposal was accepted, to be financed by Sida for four years, in the first half of 2004.
- The Programme was officially launched in October 2004 in Gaborone, Botswana. The SADC Ex-

ecutive Secretary, Sweden's Ambassador, the Director-General of the NIWL, and representatives of employers, employees and participating institutions and agencies in Sweden and Southern Africa attended the launch.

The Programme proposal represented an integrated effort with existing programmes on Occupational Safety and Health in the SADC Sectors of Employment and Labour; Health; Food, Agriculture and Natural Resources; Human Resource Development; Environment and Land Management and Mining; as well as with other international efforts in the SADC region. The Programme also aimed at promoting north-south co-operation in the work life field between Southern Africa and Sweden/Scandinavia. In time, south-south collaboration with similar initiatives in Central America would be pursued. The NIWL and NIPH were the partners on the Swedish side of the Programme. When NIWL was closed by the government in 2007, NIPH continued, and collaborated with the Swedish Royal Institute of Technology where some WAHSA participants moved.

## The aims, goals, objectives, and anticipated results

In planning the Programme, it was necessary to take account of the priorities and goals of both SADC and Sida. 1) A SADC strategic priority was to prioritize activities, with the aim of achieving sustainable growth and development to impact on poverty reduction; and 2) Sida's overall goal at the time of initiating WAHSA was to improve the quality of life of poor people (expressed more recently to contribute to making it possible for poor people to improve their living conditions). Consequently, the overall purpose of the Programme was formulated to contribute to poverty reduction, promotion of human rights and the empowerment of workers, by social and economic development in the SADC region through improvements in occupational safety and health. Boxes 1 and 2 describe how the aims and expected results of the occupational safety and health programme were planned to promote the poverty reduction goals of SADC and Sida.

Planning the content of the Pro-

Box 1. WAHSA Programme proposal description of its contribution to SADC and Sida goals

1. Improving economic performance. Occupational health promotes productivity and the competitiveness of enterprises, and reduces the poverty of injured workers and their families. "Health is wealth" is clearly understandable in this context.
2. The stabilization of society is enhanced by reducing the pool of marginalised and disaffected injured and diseased workers; by promoting fairness and equity in society; and by giving effect to provisions of national constitutions and statutes.
3. Improving general health which is promoted by integrating health promoting activities into occupational health services. An accessible population is available, for example, for smoking reduction and HIV prevention actions.
4. Reducing environmental damage through better management of workplace pollutants, waste products and agricultural chemicals.
5. Enhancing capacity to affect change which is strengthened through advocacy and the improved knowledge and skills of the social partners.

Box 2. With the assistance of the WAHSA Programme, the following kind of achievements and results were anticipated by the end of the Programme in 2016

- Increased awareness of the essential role of healthy work, i.e. safe and supportive workplaces for poverty reduction, equality and empowerment, sustainable, high productivity and good product quality.
- Common and valid knowledge in the region about the size and character of occupational accidents and diseases in different sectors of work life.
- Enhanced commitment and abilities of occupational health and safety experts and social partners to plan, carry out and evaluate preventive actions for eliminating or reducing occupational safety and health risks.
- Improved communication between the employee and employer organizations and government, on issues related to occupational health and safety.
- Establishment of many arenas - at local, national, regional and international levels - for the interchange of experiences and knowledge between experts of occupational safety and health, production experts, managers, policy-makers and workers' organizations.
- Increased capacity for applied research and scientific evaluations for strategic local, national and regional actions.
- Practically oriented post-graduate courses in occupational safety and health, stimulating the application of theories and basic knowledge into actions for improvements at workplaces.
- The inclusion of practical applications of occupational safety and health in basic education (in primary and secondary schools) and at technical and medical faculties, and in public health education and training.
- Well-functioning co-operation between national, regional and international actors in the fields of occupational and public health.

Box 3. Contents of initial Programme plan

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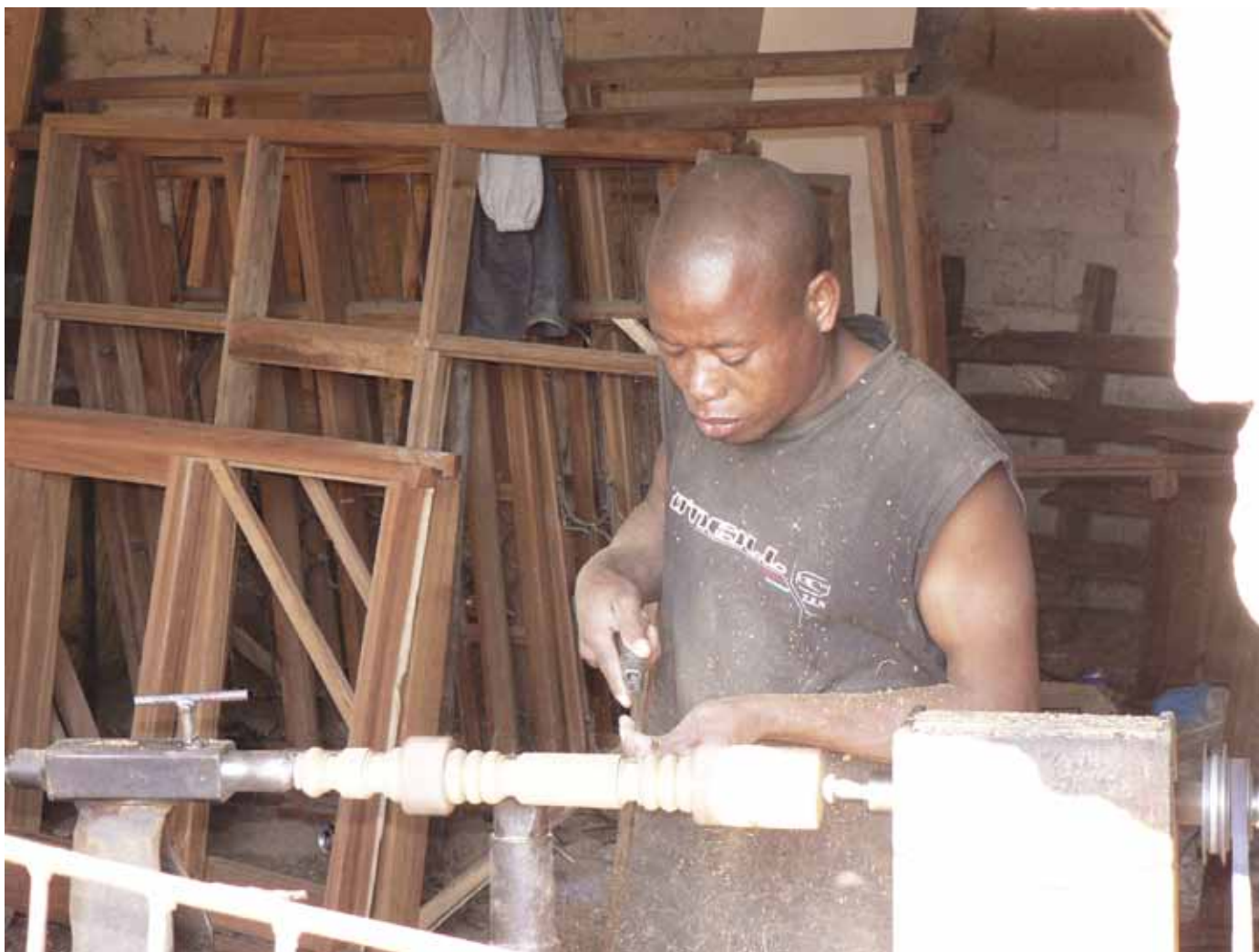
gramme could not be based on a pre-determined set of agreed regional priorities for occupational health, since these did not exist. The content was thus informed in three ways: 1) the Swedish experience that programmes should be designed to be action-oriented and to improve working conditions; 2) the collaboration among stakeholders described above, during which the need for information and advocacy was stressed; and 3) the identification of occupational health issues of importance to the whole region for which there was existing capacity to build interventions. The feasibility study and collection of background material by Urban Svedberg and David Rees provided some of the information to identify these issues, which concerned silica, silicosis and associated tuberculosis; pesticides; and the informal sector.

### The application content

There was a long procedure for developing the application and Programme to make sure that they were realistic and that all involved had a chance to influence the concrete projects. As the aim was to carry out a 12-year programme, based on our experiences in international collaboration, and a substantial budget, it was essential to carefully work out an application. The list of content and the number of pages might give an idea of the comprehensiveness of the application – see Box 3. An important feature of the programme was the twinning between a university department in one of the universities in South Africa and a relevant organization in another SADC country, in order to carry out the action projects. The position of regional programme director with administrative support, an Executive Group and a Steering Committee with representatives from African, as well as Swedish participating institutions, headed by SADC, were important features of the proposed governance.

Phase I was organized into ten projects as shown in Box 3. Projects. The first project was designed to establish institutional infrastructure and the capacity to undertake some activities of the Programme. The next three (i.e. projects 2–4) aimed to collect large amounts of data on occupational health and safety in the re-





gion, as well as some of the factors that influence the provision of occupational health services. Project 5 was to strengthen access to occupational health information from the regional service based at NIOH, and Project 6 was to increase awareness of the essential role of healthy work. Seven to nine were action-oriented projects to reduce the negative impact of exposure to silica and pesticides, and to reduce work-related health risks in the informal sector.

Each project was separately described, and for each one a Logical Framework Approach (LFA) was presented at the end of the application.

Sida's contribution to Phase I was SEK 20 million (roughly 2 million Euros) for the first four-year phase of which four million were allocated to the Swedish partners and 16 million to Southern African partners.

## Experiences

It took a long time to plan the WAHSA programme; six years from the birth of the idea to its launch in October 2004, including feasibility studies and repeated workshops with stakeholders in the region. There were of course delays due to overcommitments among most

people involved in the planning procedures, and having to wait for funding of the planning steps. The initial attempts to organize a tri-regional programme also delayed the finalizing of the application.

We paid special attention to the LFAs in order to make sure that all involved were in agreement of what should be achieved, and the objectives and indicators to be met. In spite of this, we often overestimated the capacity in some organizations and underestimated political and economical problems.

As we only experienced the first phase we do not know how the rest would have worked. But during this first phase we were able to very closely follow what had been planned and can conclude that most of the objectives for this phase were fulfilled. A separate article in this issue describes the evaluation procedures and results.

Would we plan another programme of this kind in the same way? Probably. We would, however, investigate more closely the mandated scope of work and capacity of potential major collaborating centres or organizations. Some wanted more than WAHSA could produce or offer, which caused frustrations. Having more than one dominant funder may lead to greater success in surviving a change in policy.

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## The successes and shortcomings of a regional programme in occupational health: an evaluation of Work and Health in Southern Africa (WAHSA)

Amanda Ryan and Rajen N. Naidoo  
SOUTH AFRICA  
Nils F Petersson  
SWEDEN

### Introduction

Over the last few decades there have been numerous occupational health capacity development programmes in developing countries, partnered by agencies and institutions from industrialized countries. Many of these have had success in the beneficiary countries; some long-term, some with limited short-term impacts. There have been few “regional” programmes in occupational health either in developing or industrialized countries. The

multi-country nature of regional programmes provides a dynamics that is substantially different from single country development. These dynamics have both positive and negative impacts on the programme itself, and its long-term effects. Two recent regional programmes funded by the Swedish International Development Agency (Sida) were implemented in Central America (SALTRA – Salud y Trabajo) and Southern Africa (WAHSA – Work and Health in Southern Africa). The planning and implementation of the latter programme is reported in this issue of the African Newsletter.

WAHSA, together with SALTRA, was the first programme of its kind, with several projects, action oriented and conducted on a regional basis. The ten projects included in WAHSA were planned much in detail, and by using the Logical Framework Approach

(1), the objectives and related indicators were well defined.

WAHSA was subjected to a systematic internal and external evaluation. In this report, we evaluate the successes and limitations of this important regional programme, based on the evaluations conducted, as well as the impressions of the Programme Directors.

### Overall evaluation of the programme

The internal evaluation was carried out by the project leaders and the regional programme directors. For the external evaluation Mr Nils Öström, from Sweden, was chosen, who had evaluated WAHSA’s sister programme SALT-RA, a year earlier. He accepted, and conducted the evaluation together with a regionally based

person. Dr René Loewenson was approached and she accepted the task.

Nils Öström is the former director of the health department at Sida, and has assisted Sida with the evaluation of several projects, including not only WAHSA but also the ten international occupational safety and health (OSH) & Development courses managed by the Swedish National Institute of Working Life (NIWL). Dr Loewenson is a Zimbabwean OSH and Public Health Expert.

The external evaluation started in mid-February and the report was delivered at the end of March 2008 (2). The evaluators visited Mozambique, South Africa, Zambia and Tanzania. In Mozambique, the evaluators took part in a Planning Workshop for WAHSA (13–15/2), with participation of the main stakeholders in the Programme representing South Africa, Mozambique, Tanzania, Zambia, Zimbabwe, Lesotho, Botswana, SADC, the Southern African Trade Union Co-ordinating Council (SATUCC) and institutions in Sweden. Representatives from the US-financed training programme on OSH and environment from Fogarty/ University of Michigan also took part in the workshop. Stakeholders and project managers in the countries were interviewed, as well as the Swedish representatives from the former NIWL and the Swedish National Institute of Public Health (SNIPH). Efforts were also made to get comments from ILO and WHO on the Programme. The final draft of the report was presented to SNIPH, Royal Institute of Technology (KTH) and the Regional Programme Director (RPD) for comments in order to ensure factual correctness. The feedback received from the WAHSA team members has been considered while also noting the independence of the evaluation and the opinions expressed.

Both evaluations examined WAHSA's planning and implementation; programme management and efficiency, relevance, effectiveness, sustainability and impact.

## WAHSA's outputs and achievements

The direct outputs and achievements of WAHSA's ten projects are summarized in Table 1. In addition to this, WAHSA achieved the creation of a sizeable network of southern African OHS professionals as well as ties with Swedish and Central American colleagues. The attention of the SADC stakeholders was drawn to OSH priorities in the region, and, although it seems certain that WAHSA's work has ended, SADC has reinstated a Technical Sub-Committee on Social Protection, responsible for occupational health and safety, which can take forward many of these issues, as well as WAHSA's interventions. WAHSA has had a great

impact in Southern Africa, but its successes have been tempered with limitations, some imposed by regional constraints.

## Programme planning and implementation

This is presented in greater detail by the report accompanying this issue. The funding proposal was planned over a number of years, in consultation with many regional role-players, with overall objectives, specific projects, participating institutions and programme management being repeatedly revised to ensure regionally suitability. While there was extensive consultation with the regional macro-government body – the Southern African Development Community (SADC) – during the planning of the programme, there was less consultation with potential partner organizations outside South Africa. Thus, partner organizations responsible for the implementation of project activities had had little input in identifying project objectives and developing action plans. The lack of understanding of local conditions, including limitations of resources and infrastructure meant that beneficiaries and regional programme directors sometimes had to remodel the specific projects within these constraints, and it was often difficult to motivate partners, who were not involved in project planning, and had competing responsibilities, to finalize tasks and fulfil their obligations.

The importance of engagement of partners at a stage that permits their involvement in planning, and ensures that projects are consistent with organizational mandates and individual career paths, is an important lesson.

## Programme management and efficiency

It was determined from the outset that programme management structure would consist of a board of directors, later called a "Steering Committee" (SC), and an executive committee including the Swedish and Regional Programme Directors. The SC was to consist of a representative from: the South African National Institute of Occupational Health, the Swedish National Institute for Working Life, the Swedish National Institute of Public Health, regional trade unions, and the SADC (who would chair the Committee). A regional employer representative was invited, but failed to take up the appointment. At the commencement of the programme, it was decided that regional co-direction was a useful approach given the breadth of the projects, with both Co-Directors based at the University of KwaZulu-Natal, South Africa. Financial management of eight of the ten projects resided within the region at the Wits Health Consortium.

Table 1. Some WAHSA project outputs

### Project 1: Establishment of Resource Complexes

- Establishment of 3 resource complexes
- Report on international programmes

### Project 2: Profiling OSH

- 13 country profiles
- 2 community profiles
- Addition of questions to Zambian LFS

### Project 3: Basis for future interventions

- Inventories of high risk enterprises, export-processing zones, agricultural areas, small-scale mining and construction sites with potential for future intervention
- Training intervention in Tanzanian construction sector

### Project 4: Education and training

- Collection of data on available training for OSH professionals
- Development of strategic principles for OSH professional development in SADC

### Project 5: Access to information

- Review and development of NIOH/ SADC Clearing House

### Project 6: Advocacy and awareness

- Production of booklet, newsletters, website, pamphlets, poster and policy briefs
- Stakeholder seminar

### Project 7: Silica, silicosis and tuberculosis

- Training of inspectors and others in dust measurement and control
- Quarry assessments and pilot interventions
- Silicosis training materials and handbooks
- Guidelines on Isoniazid Preventive Therapy

### Project 8: Pesticide toxicity

- Community surveillance in Tanzania
- Training – rural farmers, pesticide regulators, health practitioners, researchers
- List servers, newsletter, comics

### Project 9: OHS in the informal sector

- Characterization of the informal sector in Tanzania and Mozambique
- Trained informal sector workers
- Developed and implemented interventions
- Developed training manual, DVD.



Photo Nils F. Petersson

tified regional occupational health problem. In WAHSA, 'action oriented' projects were developed around: 1) silica exposure, silicosis and tuberculosis; 2) pesticide toxicity, and 3) increasing informal economy work and preventing associated hazards.

## Programme effectiveness

The various stakeholders were less consistent in their responses about the extent to which the programme outputs and outcomes met the proposed objectives. The programme produced substantial outputs, much in keeping with its stated objectives and as summarized in Table 1. Some stakeholders felt that the programme did not successfully achieve all the Phase I objectives and that the objectives themselves were too ambitious and did not take into consideration the constraints posed by local conditions. While the programme developers had a keen sense of the occupational health problems in Southern Africa, earlier participation of partner organizations with an understanding of local experiences, may have resulted in a less over-ambitious programme.

Obstacles that had to be overcome in project implementation included a lack of human resources, competing responsibilities and projects in partner organizations, and institutional bureaucracy. Although all stakeholders, without exception, accepted that the goals and objectives of WAHSA were critical to the regional development of work life, participation in the WAHSA projects generally meant added responsibilities for the few appropriately skilled persons in the partner organizations. The very few skilled OHS professionals in the region are generally located in senior positions in key institutions, often without adequately trained junior staff to implement the projects. Although committed to developing occupational health and willing to assume the additional responsibilities, WAHSA projects were sometimes competing for attention with their other responsibilities and commitments. In instances where full-time individuals were employed, outputs tended to be higher. Projects would perhaps have been less onerous had they been targeted, and incorporated the training and development of junior and mid-level personnel in each partner organization.

## Sustainability and impact

WAHSA was planned, developed and implemented as the first phase in a 12-year programme, with the understanding that, provided the expectations of the funders (Sida) were met, non-competitive renewal was expected at the end of year 4 and year 8. Action projects centred on interventions that were to

Stonecrusher in Dar es Salaam. The WAHSA team designed work tools to reduce accident risks and heat exposure.

This approach to Programme Management had clear advantages. Given the multiplicity of projects in a variety of countries, a centralized management structure was highly efficient – both in decision-making and programme implementation. Projects being implemented within different countries could be quickly and “externally” assessed on an ongoing basis by the regional directors. The Steering Committee, consisting of regional and international experts, proved to be incisive in decision-making. Their experience both in occupational health generally, and in international programmes specifically, strengthened the quality of the programme across the region.

Drawbacks to the structure included the lack of non-South Africans in programme direction, as day-to-day decisions on project activities had to be taken by the Programme Directors in South Africa, who sometimes did not have a complete understanding of local circumstances, which meant that much explanation was required. This resulted in some delay and inefficiency, when specific aspects of the projects that needed to be changed required the agreement of the Regional Director, and in some instances, the Steering Committee.

It was quickly realized that the disbursement of funds directly to South Africa from Sweden for further distribution to other Southern African countries was both costly and inefficient, and funds for those projects with clearly defined activities in specified

countries were subsequently disbursed directly from Sweden to the respective countries. However, funds for the projects that were being co-ordinated centrally had to be disbursed via South Africa, causing delays in project implementation. Financial reporting, involving two mechanisms for disbursement and multiple foreign exchange conversions, was equally complicated. While a communication and co-ordination network was quickly established for those involved in programme work, a similar network of financial administrators was not established and would, in hindsight, have been useful.

## Programme relevance

Despite the comments above concerning the limited involvement of partner organizations in planning, beneficiaries, participants, key stakeholders and project leaders during the internal and external evaluation of the programme fully supported the overall goal and objectives, as well as the aims of the specific sub-projects, confirming that programme planners were intimately familiar with the broad occupational health needs in Southern Africa. The beneficiaries, participants and project leaders were particularly supportive of the “action-orientation” and intervention approach of the programme. This approach differed from other single country or regional development programmes in that the objective was not just capacity development as an end in itself, but also a means to improving an iden-

be piloted in Phase I, with broader implementation in subsequent phases or extensions of the projects to other countries. Other Phase I projects focused on data collection in preparation for Phase II activities and interventions. In several cases, participation by organizations was driven by this expectation of a Phase II, particularly with the possibility for greater participation and establishment of Resource Complexes in countries that were excluded in Phase I. The decision of Sida to withdraw funding for another phase meant that *all* the activities of Phase I unexpectedly became ends in themselves, and with no possibility of further expansion, had to be evaluated for impact on their own merits. This substantially reduced the long-term impact of WAHSA.

A central aspect of WAHSA was its regional nature. The establishment of a network of occupational health stakeholders within the programme, with a common vision, and commitment to occupational health, was an important strength and a key driver for success. Although other programmes had brought together in-country stakeholders previously, this had not been done in the sustained and systematic manner as achieved by WAHSA. These in-country leaders were able to interact meaningfully with each other, and to appreciate the programmes in different countries, the strengths, weaknesses and opportunities for collaboration within these programmes. This network is likely to continue to exist on an informal basis, providing some sustainability to the ideas and goals of WAHSA and the efforts of the SADC Technical Subcommittee on Occupational Health and Safety.

Capacity was developed at different levels within the Programme. While training of workers, inspectors, hygienists and researchers was conducted in different courses and institutions, programme sustainability was intended to be achieved mainly through the concept of "Resource Complexes" – a twinning concept, coupling strong South African institutions with potential regional 'centres of excellence' in other Southern African countries. Over the 12-year period, the "junior" partners in the first phase were expected to become strengthened and better resourced, and become the lead twin partner for other Southern African institutions. This concept was strongly developed in Phase I, and although it has, with the ending of the Programme, become an end in itself, it has had modest success with some agencies, particularly in Tanzania. These institutions have grown in confidence, and have become regional resources in their own right.

Because of the anticipated 12-year duration of the programme, issues related to sustainability of leadership were not key priorities in Phase I. There were, however, limited initiatives that will develop and sustain leadership in occupa-

tional health in the region. Through its interaction with the other regional programme in Southern Africa, the University of Michigan / Fogarty International Center: Southern Africa Program in Environmental & Occupational Health, four WAHSA project leaders received advanced academic training in occupational medicine and hygiene. It is conceivable that this training will strongly place these individuals for senior leadership positions in various leading institutions in the region.

## Conclusions

Both external and internal evaluations concluded that the Programme had to a reasonable extent achieved the main objective of its first phase, and that its intervention approach was highly relevant in relation to existing problems in the area of occupational health and as a possible future contribution to the reduction of poverty in the region. Capacity and networking had been strengthened, especially among the resource centres involved. A substantial amount of information had been collected, which needed to be systematized and utilized in order to be able to raise awareness. Interventions were started, but were not likely to produce an impact in the form of improved working conditions and health because of their early termination. Although some specific objectives for the first phase had not been fully achieved, this seemed to be mainly due to overambitious objectives for the first phase in relation to existing capacities and the time needed to reach these objectives. National OSH capacities, although known to be weak, had been overestimated, and financial matters had been complicated and time-consuming.

## Recommendations for future regional programmes

The experiences from the WAHSA programme, over a very short time period, provide a useful basis for planning future programmes of this nature, particularly within developing countries, partnered by strong northern institutions and funded by major development agencies. Recommendations which were proposed following the internal and external evaluations were:

- a. The formulation of more realistic and achievable objectives and outcomes with earlier input from regional partner organizations.
- b. Deliberate attention to strengthening capacities for the implementation and communication of the work performed, including increased ownership and involvement of the institutions responsible for the interventions.

- c. The consolidation of regional networking across countries and links with SADC, as well as with national policies and structures, including the active involvement of labour market organizations.
- d. Revised organizational structure and procedures for the Programme, building sustainable institutional capacity to implement national interventions and to lead a multi-country intervention programme.
- e. Less complicated financial structures to make money transfer more efficient, with an easier accounting system developed in conjunction with partners.

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*Note: All three authors served as Programme Directors of WAHSA – Dr Nils F. Petersson was the Swedish Director, while Dr Amanda Ryan and Dr Rajen N. Naidoo were the Regional Co-Directors. Dr Naidoo resigned in February 2008, a year before the completion of the Programme in April 2009.*

### Acknowledgements

The authors would like to thank those who spent many years planning the WAHSA Programme; the funders, Sida, the Swedish National Institutes of Working Life and Public Health (NIWL), and the many, many participants of WAHSA throughout Southern Africa; from project leaders, institutional heads, fieldworkers and factory inspectors, to workers in the region.

# Considerations on research strategy for occupational safety and health (OSH) authorities in East Africa

Kari Kurppa  
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Research is needed if information is too general, unavailable, or in some other way inappropriate for providing an answer to a question or problem that needs to be solved. Thus research is involved in almost all short-term and long-term planning and development.

Recent high-level meetings have stressed the need to strengthen national policies, governance and coordination of health research in African countries and regional economic communities (Abuja summit 2006, Algiers Declaration 2008, Accra ministerial meeting 2008, Bamako Ministerial Forum 2008) (1). National OSH authorities can respond to such high-level recommendations by establishing explicit research strategies. A research strategy is a broad plan that sets a long-term direction indicating how a national authority will make use of research in order to achieve its mission and objectives.



Photo Suvi Lehtinen

Table 1. Simplified features of different mindsets for scientific versus development research.

	Scientific research	Development research
<b>Purpose</b>	Novel knowledge, abstract-general	Local improvement, immediate usability, usually policy-driven
<b>Problem</b>	Lack of knowledge	Practical difficulty that needs to be evaluated and solved
<b>Theory</b>	Theoretical, verification, refutation	Contextual understanding, description
<b>Method</b>	Crystallized methods, strict rules, testing, validity, accuracy, quantitative facts are appreciated	Purpose-oriented, flexible, rapid assessment procedures, qualitative description is often more useful than quantitative
<b>Context</b>	Internal discussion within scientific communities, scientific publications	'Real life', local culture and settings, everyday context, now

## What is research?

The term *research* is not restricted to scientific inquiries or academic studies only. In its generic meaning, *research* is a systematic process of inquiry carried out to discover facts about a particular subject. This broad characterization of research is useful when a national OSH authority is considering a research strategy.

## Scientific versus development research

There are important differences between scientific research that is conducted by universities and development research that is much more relevant to national OSH authorities. Some characteristics of these differences are described in Table 1.

A university typically conducts scientific research that has abstract objectives of general nature. An example of a scientific research question is: *Does exposure to electromagnetic fields cause brain cancer?* Scientific research has to follow very strict rules and has high demands for validity and precision of measurement. The high quality requirements of scientific studies often make them time-consuming, expensive, and narrowly focused.

Research that is feasible and useful to most national OSH authorities falls under the category of development research. In contrast to scientific research, development research has very practical goals. The results are used to identify gaps that need to be corrected in order to improve working conditions and OSH processes. Development research is usually policy-driven and therefore immediately applicable to practice.

Typical information needs of OSH authorities are related to situational assessment, problem solving, or strengthening of OSH processes. These tasks are mostly contextual and particularistic. Examples of development research tasks are *determination of how many workers in the country are at risk of contracting silicosis* (description of several aspects related to such a question) or *a description of the OSH situation in the flower industry* (many aspects must be described). Such research is policy-driven and therefore the results are immediately applicable to practice.

## Particular research needs of a national OSH authority

The research strategy of a national authority needs to be rather different from that of the science-driven research strategy of a university. This difference between the goals of universities and national authorities has obvious

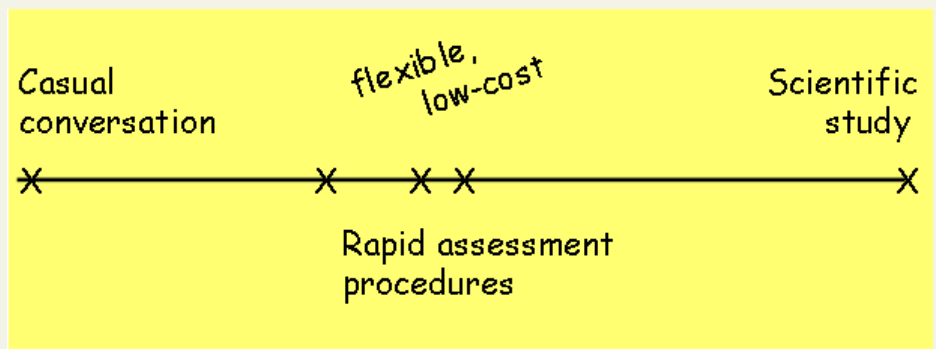


Figure 1. Rapid assessment procedures (RAP) fall in the continuum of casual conversations and academic methods, such as epidemiological surveys.

practical implications to conducting research. The research done by a national authority normally aims at the improved understanding of practical issues that is needed to strengthen enforcement and prevention.

A national OSH authority requires an overall understanding of the OSH situation in the country, and knowledge of focal areas where the hazards are the most prevalent and most intense. The limited research resources have to be used rationally in order to cover a broad range of issues. Therefore, collection of unnecessarily detailed information should be avoided. Results received by flexible rapid assessment techniques are cost-effective and often provide a reasonable evidential foundation for decision-making. Rapid assessment is an action-oriented approach for gaining a reasonable understanding of a situation.

Research is put into practice through experimental development which is directed to producing better processes, systems and services. Experimental development draws on knowledge gained from research and practical experience.

## Rapid assessment procedures (RAP)

Rapid assessment procedures (RAP) are flexible common-sense techniques that have been used effectively by many international development programmes. They offer a practical, low-cost means for collecting information that provides a general overview of a particular situation or problem.

Most of the information gathered using RAP techniques is usually qualitative and can be gathered by observation, by interviewing knowledgeable persons (managers, workers, professionals, etc.), by perusing documents, and so forth. Quantitative information naturally is used as well, if available. RAP techniques may provide a reasonably correct and comprehensive picture of a simple situation,

but they cannot replace more systematic and methodologically more demanding research where needed.

Rapid assessments help make decisions about the actions that are required. Interventions may be inappropriate unless developed on the basis of a proper assessment of the situation. Rapid assessment should therefore often be an explicit aspect of the planning and development of interventions. Rapid assessments collect information that allows informed decisions to be made on a particular problem. See: Stimson et al. (2)

OSH profiles by sector of industry are examples of practical outcomes from low-cost rapid assessment exercises. A sectoral OSH profile can offer an approximate situational summary that shows the gaps between policy objectives (what ought to be) and the actual situation at worksites (what is).

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Photo Markku Linnainmaa

- (i) Human factors engineering (engineering psychology), which is concerned with:
  - Information processing at workplace
  - Designing displays such as warnings, buzzers, signs and instructions
  - Controls to minimize accidents at workplace.
- (ii) Anthropometry, which is concerned with:
  - Measurements and statistical characterization of body size
  - Anthropometric data used for clothing, furniture, machines, tools, etc.
- (iii) Occupational biomechanics, which deals with:
  - Mechanical properties of human tissues (i.e. the response of tissues to mechanical stress)
  - Prevention of overexertion disorders of the upper extremities and low back.
- (iv) Work physiology, which is concerned with:
  - Responses of the cardiovascular system to work demands
  - Pulmonary system and work
  - Skeletal muscles and the metabolic demands of work. Work physiology is thus a discipline that deals mainly with the prevention of whole body and localized fatigue (2).

### Innovative technology

Although the growing global industrialization and innovative technologies have their advantages, the other side of the coin is that they bring inherent ergonomic hazards at workplaces (3). For instance, more than 60 million personal computers (PCs) adorn desks and are in use virtually every day. Although they increase efficiency, they have the potential to cause painful and sometimes debilitating injuries known as work-related musculoskeletal syndrome disorders (WRMSSDs). Some of these disorders include:

- Carpal tunnel syndrome
- Vibration-induced white finger syndrome
- Tendonitis
- Tenosynovitis and others.

### Neglected aspects of occupational hazards

Unfortunately, WRMSSDs are becoming increasingly common in developing countries because of technological changes. Workers in developing countries are more at risk because such countries pay less attention to occupational-related hazards (5, 6). Given the complexity of ergonomics-related hazards and particularly WRMSSDs, there is a need to plan research activities, especially in developing countries.

# Planning of ergonomics research at workplaces

Mutuku A. Mwanthi  
KENYA

## Introduction

Occupational health hazards are generally classified as biological, chemical, physical, psychosocial, mechanical and ergonomic (biomechanical) hazards. These hazards are illustrated in Figure 1.

## Ergonomic (Biomechanical) hazards

The term 'ergonomics' is derived from a Greek, in which 'ergos' means 'work' while 'nomos'

means 'laws'. A number of phrases define the term ergonomics. Keyserling and Armstrong (1992) define ergonomics as the study of humans at work, evaluation of the stresses that occur in work and the ability of people to cope with these stresses (1). Ergonomics can also be described as a process concerned with matching work and job design to fit the worker's capability by adapting the product to suit the user rather than vice versa (2).

Ergonomics is a multidisciplinary science consisting of four areas of specialization. These areas include the following:



## Stages applicable in planning ergonomics research at workplaces

The idea to plan and carry out research at workplaces is good and should be encouraged. Figure 2 proposes the stages applicable in planning ergonomics research at workplaces.

The research will endeavour to:

- (i) Establish which of the four areas of specialization – human factors engineering, anthropometry, biomechanics or work physiology – have high rates of risks or accidents
- (ii) Determine whether human behaviour or the equipment, machines, tools etc. are factors contributing to the risks or accidents
- (iii) Investigate whether the guidelines stipulated by the Occupational Health and Safety Act are observed
- (iv) Analyse the data on illnesses, health conditions and injuries
- (v) Determine trends of accidents, injuries and morbidity in relation to ergonomic hazards
- (vi) Find groups or segments of the work population vulnerable to ergonomics-related problems at the workplace.

## Conclusion

A well-planned and well-executed study yields useful results. Such results need to be disseminated to the stakeholders, including the scientific community. Furthermore, the results obtained form the basis for intervention programmes. The intervention programmes produce results aiming to meet workers' needs

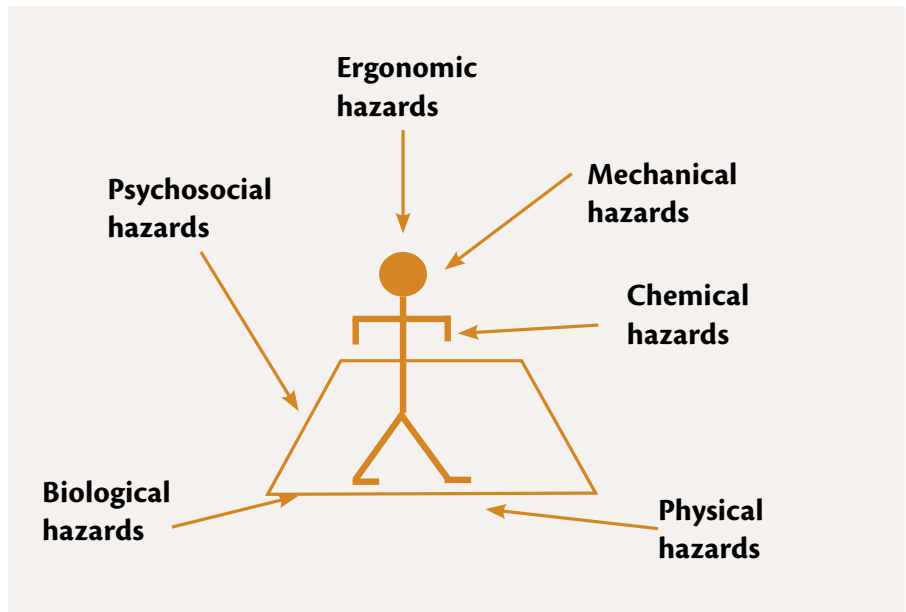


Figure 1. Common hazards at various workplaces

and ultimately will contribute to the economic development of the country.

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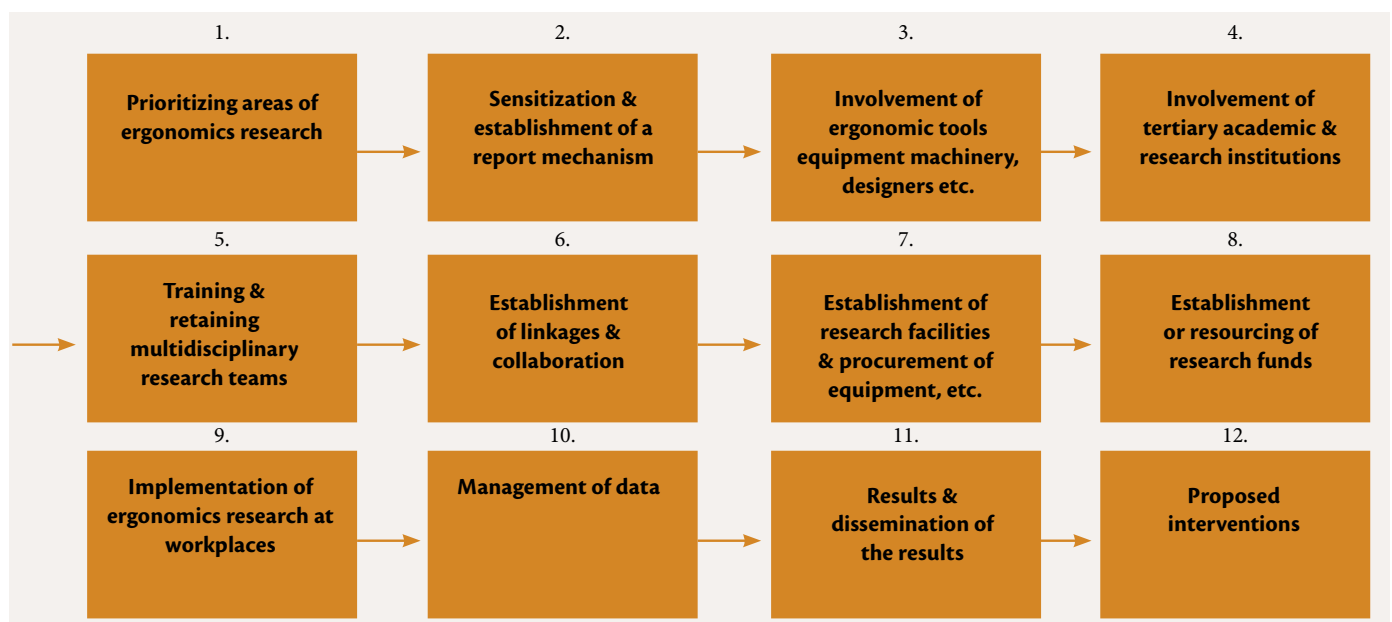
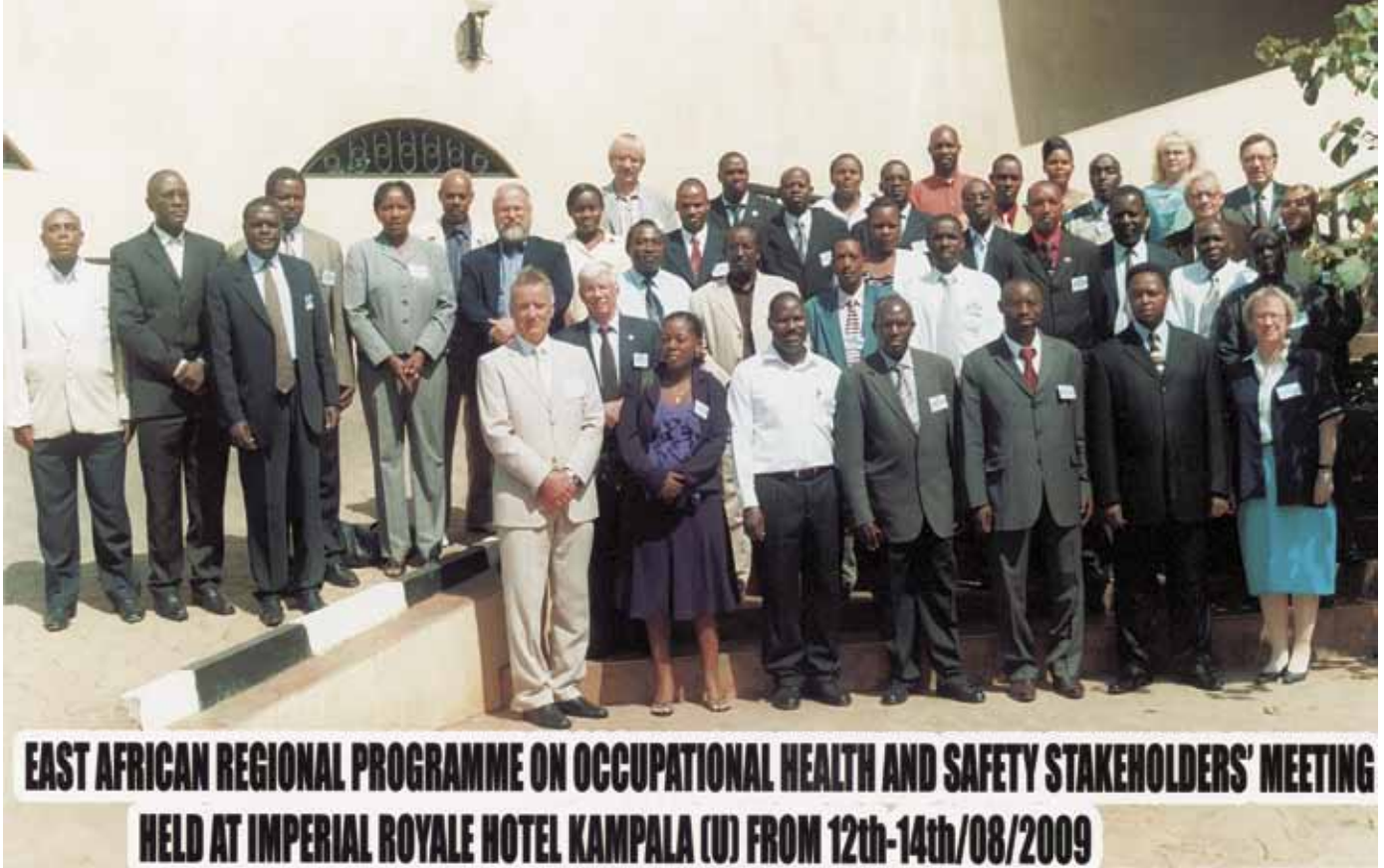


Figure 2. Proposed stages in planning ergonomics research at workplaces



# Planning the East African Regional Programme on Occupational Health and Safety

Suvi Lehtinen  
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## Introduction

The Finnish Institute of Occupational Health (FIOH) has worked together with its East African sister institutions for over three decades. During this time, different collaborative efforts have been made and various joint activities carried out. We are currently approaching the end of our 12-month planning period, which aimed at producing a programme for the next four years. The launch meeting of the Regional Programme was held on 25–26 September 2008 in Arusha, Tanzania, and the Stakeholders' Meeting on 12–14 August 2009 in Kampala, Uganda.

## Working together with the East African Community (EAC)

The role of the EAC has been critical in facilitating and guiding the planning of the four-year programme. The Draft East African Re-

gional Programme on Occupational Health and Safety is highly topical in view of the current stage of the socio-economic development of the Region. The draft programme simultaneously supports the Partner States' efforts to implement the ILO Global Strategy on Occupational Health and Safety and the WHO Global Plan of Action for Workers' Health. It also supports the achievement of the EAC objectives of a harmonized labour market and social dimension in work life as the Region prepares for the establishment of the EAC Common Market.

## Two technical meetings

During the planning period it was deemed appropriate to organize two technical meetings to facilitate the preparation of the Programme Plan. The countries have shown interest in the planning meetings, and have contributed to the preparation of the Programme through several brief situation analyses.

The First Technical Meeting for planning the programme was held in Nairobi at the beginning of February 2009, and the Second Technical Meeting in Kampala at the beginning

of April 2009. The technical meetings prioritized the programme elements for each country.

## Stakeholders' Meeting

The Stakeholders' Meeting was organized on 12–14 August 2009 in Kampala, Uganda. The participants expressed their appreciation to the Government of Uganda for hosting the meeting. In addition to the EAC Secretariat, the ILO and FIOH, all the five Partner States of the EAC, namely Burundi, Kenya, Rwanda, Tanzania and Uganda participated in the meeting. The meeting gathered a total of 42 experts from the Region. At the end of the three days, a consensus report on how to move forward with the planning was available and was endorsed by the participants.

## Development of occupational safety and health a key issue

Mr. Jean-Claude Nsengiyumwa, Deputy Secretary General, welcomed all participants to the meeting on behalf of the Secretary General of the East African Community. He said that changes in the world of work give rise to new risks, and change the way occupation-

al health and safety needs are managed. It is therefore important to review OSH policies and address these new challenges. He reiterated that the EAC will strive to mainstream OSH into its programmes and appreciated the support provided by the Government of Finland for developing the regional programme.

Ms. Heli Sirve, Ambassador of Finland to Kenya, sent a message to address the Meeting. She stated that the Government of Finland actively supports good governance and human rights in East Africa, and views occupational health, and decent and safe working conditions as human rights issues in addition to being more directly social and health issues. She expressed her warm thanks to the ILO and WHO for their long-term and most valuable collaboration in contributing to the improvement of working conditions and occupational health and safety specifically in Africa.

Professor Harri Vainio, Director General of the Finnish Institute of Occupational Health, expressed his appreciation of being able to attend and contribute to the Stakeholders' Meeting. In the tightening world of economic crisis every country faces huge problems, but these problems can also be viewed as opportunities for closer collaboration. This Regional Programme is a good example of this kind of fruitful collaboration.

## Focus on the realities of the workplaces

When planning occupational safety and health programmes it is important to look at the realities of workplaces. Therefore, visits to the Informal Sector activities were organized after the Stakeholders' Meeting. Testing of a recently published Basic Occupational Health Services (BOHS) guide on *Surveillance of the Workplace* was carried out in connection with the visit. It is obvious that many of the hazards in the Informal Sector workplaces could be corrected by one-time action at low cost. It was also learnt during the visit that the Government of Uganda had organized an Industrial Park, to which the Informal Sector workplaces of Kampala will move. This will provide an opportunity to work for the improvement of the worksites.

## The way forward

The Finnish Ministry for Foreign Affairs funded this planning phase of the Programme. Discussions are now underway with the Ministry in order to explore the possibilities of continuing funding for the longer-term regional programme.

**Suvi Lehtinen**

Finnish Institute of Occupational Health

Photo Suvi Lehtinen



The work plan of Burundi under preparation.

Photo Suvi Lehtinen



Uganda completes its work plan.

Photo Suvi Lehtinen



Rwanda discusses the elements in its own plan.

Photo Markku Linnainmaa



The Kenyan delegation fine-tunes and polishes the country plan.

Photo Suvi Lehtinen



Tanzania in the process of making wordings to its programme plan..



The feasibility of a BOHS guide was tested when walking through several informal sector workplaces in Kampala. The visit was arranged by Ms Gladys Rykehya, Mr Ssekanjako Ssentongo, Mr Bbira Bbossa and Mr David Mugisa.

# Occupational health services for the informal sector

Jorma Rantanen  
FINLAND

## The informal sector; an alien in its own country

The informal sector (IS) is a poorly defined concept, which varies greatly between different contexts and different users. However, the very nature of the informal sector determines the whole life, operations, economic and social relations, as well as occupational health and safety, of the sector.

The most widely used definition is given by the ILO:

*The informal sector is broadly characterised as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organisation, with little or*

*no division between labour and capital as factors of production and on a small scale. Labour relations – where they exist – are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.*

The ambiguity of the concept has long been unfavourable for the development of the sector and for the provision of necessary policy and legal instruments. In recent years, the IS has attracted more political interest in both International Organizations and national policies. This is associated with the growing role of IS in the developing world in particular, but also in the industrialized world. While, for example, the ILO started the discussion of IS already in the 1970s, the first extensive discussion in the highest forum of ILO policy

– the International Labour Conference – did not take place until 2002. These discussions thoroughly covered the need for services in the informal sector, including those of occupational safety and health. Since the meetings, informal sector needs have been a penetrating principle in most ILO policies. Parallel policy actions have also been undertaken by the International Social Security Association (ISSA), covering social protection, pensions, health, and accident insurance in the informal sector.

## Important for employment, but historically not for policies

Due to the very nature of the IS, its size is difficult to measure. The informal sector provides jobs and reduces unemployment and under-

employment. It is a survival strategy for the poorest fraction of society and sustains their families, households and communities. According to the World Bank, in most cases, the jobs are low-paid, and job security, social security, and working conditions are poor. Although the informal sector enhances entrepreneurial activity, it does so to the detriment of state regulation compliance, particularly regarding tax and labour. It helps alleviate absolute poverty, but in many cases the informal sector workers belong to the working poor.

The size of the informal labour market varies from the estimated 40–57% of total employment in Latin America and the Caribbean, to 40–85% in Asia and 60–78% in Africa. (Table 1). The contribution of the informal sector to the national economy varies respectively between 13% and 52% of the GDP in 12 Asian developing countries (average 26%) and between 50% and 80% of GDP in Sub-Saharan African countries.

The World Bank observations speak for the growing size and importance of the informal sector in the national economy during economic downturns and periods of economic adjustment and transition, as during the current process of globalization and global economic crisis (Figure 1).

## The safety and health situation in the informal sector

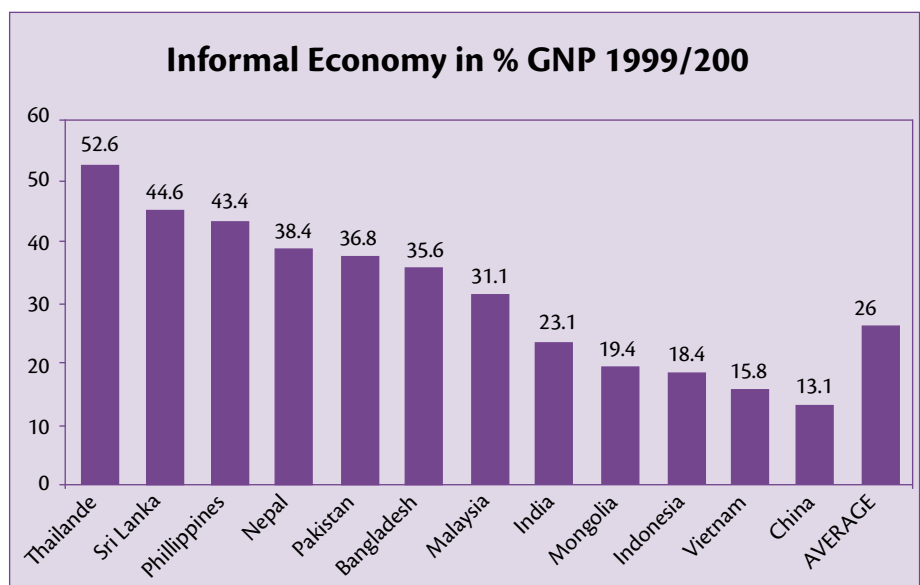
Research reports on occupational health in the informal sector are rare. In general, safety and health risks are found to be more prevalent than in the formal sector, and safety policies and practices often non-existent or very poor. The most advanced countries and highly developed companies have found that a high-quality work environment is conducive to health and safety, work ability and the well-being of workers, but also to productivity and the quality of products and services. Thus they continue to invest in occupational health. There is enormous inequality in the access to occupational health services between countries, sectors of economy, groups of workers and geographical areas. The availability of services is not determined by real needs but several other factors, and where the needs are highest, as in the informal sector, the access to services is most unlikely to occur. Paradoxically, where the risks are the highest and the starting level the least developed, benefits from occupational health are found to be the highest.

Occupational health situation has not improved very much in the informal sector over the last 30 years. Several international instruments have been available but they have not been effective. The globalization era, together with the current global economic crisis have even increased inequalities in health and safe-

Table 1. Contribution of informal sector to employment and generation of new jobs.

Sector	Region		
	Latin America and the Caribbean	Africa	Asia
Non-agricultural employment	57%	78%	45-85%
Urban employment	40%	61%	40-60%
Creation of new jobs	83%	93%	NA

Source: Charmes, J. 2000. Background paper for UN Statistical Division, The World's Women 2000: Trends and Statistics



Source: ILO Turin Training Centre 2009. Original source of data: Schneider, F. (2002), "Size and measurement of the informal economy in 110 countries around the world", Rapid Response Unit, The World Bank, Washington, DC.

Figure 1. Weight of informal sector as percentage of GDP in 12 Asian Countries.

ty. New innovative approaches in occupational health are needed to meet the challenges facing the informal sector. As the changes of work life are global, the responses of occupational health also need to be generated on a global scale.

## New policies and actions needed

A number of policy and practical actions for providing services for the informal sector have been initiated in recent years, according to the guidance of the International Organizations, ILO, WHO and ICOH.

The ILO Global Strategy on Occupational Safety and Health (2003) and Framework Convention 187 (2006) include principles for e.g. the provision of services to the informal sector, the WHO Global Plan of Action for Workers' Health calls the member states to provide basic occupational health services

for all, and the ICOH strategic objectives for 2003–2012 contain the development of services and competences for basic occupational health services.

In view of occupational health, the IS shows the following characteristics:

- Possibly urban or rural, units may be either scattered or concentrated in special zones
- Often family ownership of production units, but also co-operatives
- Household or special sites for production units
- Low or non-existent contribution to taxation and social security, with no social protection
- Small-scale of operations in urban and suburban environments may be extremely tight
- Labour-intensive, high workload, low technology
- Low level of education, but also some high manual or other skills

- Unregistered employment
- Uncovered by regulation, inspection and services
- High occurrence of health and safety hazards
- Poor general hygiene and environmental health.

For the organization and provision of occupational health services, the IS sets special challenges, such as the following:

- Poverty and social exclusion from organized society, including the labour market
- Low level of organization of IS people and inability to defend their rights and entitlements
- No employer-employee relationship or if it exists, unregulated
- Scattering of workers into thousands of small units mostly without any co-ordinative organ
- Low awareness in the sector itself of occupational health and safety hazards and need of services
- Need for external support for occupational health
- Often low awareness and interest among the authorities, social partners and service providers towards improvement of conditions of work
- Most of the international and national instruments and mechanisms for occupational health and safety are inappropriate and unfeasible for the informal sector
- There is a greater need for services than for inspection.

## New initiatives by International Organizations

Already in the 1980s, the ILO introduced practical tools for occupational safety and health practices in the informal sector, such as *WISE* for SMEs and *WIND* for agriculture.

Keeping in mind the above challenges, the International Commission on Occupational Health, ICOH, has, together with the ILO and WHO launched a new concept on *Basic Occupational Health Services, BOHS*. The BOHS approach is intended to organize grassroots level occupational health activities so that they are available for all working people. The integration of occupational health services with primary health care services has been proposed as a realistic opportunity to reach the workplaces and workers even in the scattered informal sector. This would also produce more cost-effective services. Such services should be available for every workplace and working individual in the world. Guidelines for the models, infrastructures, practices and work tools are being prepared for this objective through collaboration between the International Organizations.



Photo Markku Linnainmaa

Introducing BOHS to grassroots level in countries requires the following:

- Adopting a primary health care approach, such as a service provision strategy
  - Keeping sound occupational health content as an important principle in service provision
  - Providing BOHS services with simple, low-cost tools for practical service provision by introducing good practice guidelines
  - Adjusting BOHS services to national and local circumstances through pilot experiments, then developing the coverage step-wise
  - Organization of two-step training programmes through the training of trainers and service provider training courses.
- The use of practical guidelines needs active training programmes in all parts of the world. Local resources are often not immediately sufficient for extensive training programmes and therefore international collaboration is needed. In the long term, and with the support of international organizations and national efforts, every country and every workplace should be self-sufficient in occupational health activities.

Many countries start to include the informal sector in the occupational health strategies and some specifically address the informal sector in their legislations. Examples of countries, which in recent years have addressed or are in the process of responding to the occupational health needs of the informal sector either through legislative actions, national programmes, service provision or through BOHS projects are: Brazil, Chile, China, Thailand, Vietnam, East African Community (Burundi, Kenya, Rwanda, Tanzania and Uganda), the Northern Dimension Partnership Countries

(Northern Europe), the South-East European Countries (Albania, Croatia, FYR Macedonia, Montenegro, and Serbia and Kosovo), Turkey, and North-West Russia. There are several reasons to predict that the importance and size of the informal sector will grow in the future. Simultaneously, the need for the formalization of the sector, development of regulations, services and conditions of work, protection of workers' health and safety, and the provision of social security will gain importance on policy agenda throughout the world.

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# OSH for Development – Book review

Jorma Rantanen and  
Suvi Lehtinen

**Elgstrand K, Petersson NF (Eds.).**  
**OSH for Development.**  
ISBN 978-91-633-4798-6, June 2009.

Sweden has a strong tradition in occupational safety and health both nationally and internationally. The book under review has been prepared and published by the Swedish occupational health and safety expert community. It is based on the 20-year long training activities of Swedish colleagues conducted in collaboration with the developing world. Compiling the training course materials taught was deemed an appropriate, although time-consuming endeavour. The result shows that it was worthwhile.

The book comprises 798 pages – a package of 2 kilograms of useful information. The intended readership is wide – OSH experts in developing countries covering the full spectrum of OSH professions and actors. The book widely covers the whole topical spectrum of occupational health and safety. The balance of the content is excellent: history, future perspectives, main risk factors and outcomes, key target groups, OSH system at all levels (workplace, national and global), and finally the generation of change, including project guidelines. In spite of 46 authors the editorial process has kept the structure and content of chapters well standardized, giving the book a very concise structure as a whole.

The compactness of chapters suffers slightly because of the "collection nature" of the texts, which may be related to the use of lecture handouts as a starting point. The same can be said regarding figures and tables, which have not been specially edited for this book, but taken from lecture handouts.

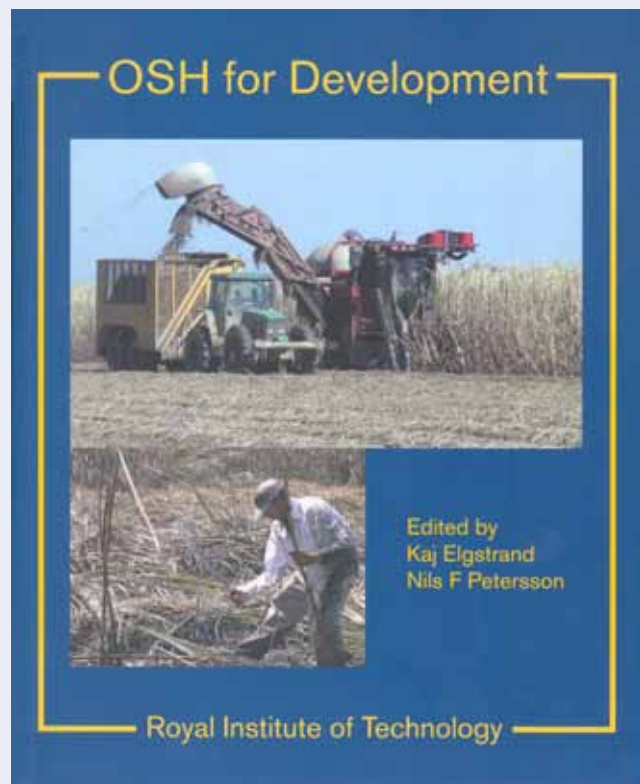
Most of the chapters contain several practical guides and check-lists, which can be directly used in occupational health practices. This is a most valuable contribution of the book for guiding practical actions at the workplace. Sometimes the chapters contain descriptions of both risk factors and consequent health outcomes in the same chapter. Some subchapters deal only with risk factors followed by a separate subchapter on related diseases or injuries. As they are well interlinked, it does not disturb the reader.

In addition, the book has specific chapters on planning occupational health and safety

● The balance of the content is excellent: history, future perspectives, main risk factors and outcomes, key target groups, OSH system at all levels (workplace, national and global), and finally the generation of change, including project guidelines.

activities at the national level, as well as introducing the international activities on the global perspective on OSH.

The history of OSH constitutes a compact but deep analysis on the evolution of OSH. It



once again confirms the claims that: a) the history of humankind is very much the history of work; and b) work life has been in the forefront of general societal development. The most important message for the reader is: the old industry-based safety and health paradigm based on the well-organized enforcement systems and developed industrial relations has decayed, and a new socio-technical paradigm is needed, although it will be extremely challenging to implement it in the world of fragmenting structures, and weakening social cohesion and solidarity.

Chapter 3 covers the basic physiology of manual work, energy metabolism and nutrition, musculoskeletal disorders and workplace design and ergonomics. The texts are based on classical textbooks and scientific references of work physiology and ergonomics, and are thus most reliable. The textbook material leaves out some recent interesting research findings, but this has little impact on the chapters as a whole; the key observations are well-established and widely accepted conclusions of the current state of the art.

Chapter 4 describes the concept of risk and presents risk control strategies, accidents and their prevention, noise, and both hand-arm and whole body vibration. The risk chapter introduces generic risk prevention strategies, the tools and roles of various actors,

including insurance. The subchapter on accidents gives an overview of the evolution of accident theories, emphasizes work and work environment as the source of accident risks, and safety management approaches including major hazards, as well as the behavioural aspects of workers, supervisors and managers. Safety policy and safety culture are briefly mentioned as important guiding principles for accident prevention.

The subchapters on noise, vibrations, radiation, electrical safety and fire safety are compact and practice-orientated, providing a good insight into the hazards concerned and their prevention.

Chapter 5 on chemicals is a typical example of the mixed character of the chapters. It starts logically on chemical risk assessment, goes through the most common groups of chemicals, pesticides, solvents and gases, dusts and metals, and then jumps to skin disorders and epidemiological methods.

Chapter 6 on the prevention of biological hazards covers the main sources of biological risks and hazardous biological agents, and the industries and work in which they occur, including the special hazards of health care workers. Numerous guidelines for prevention and control are given, including the prevention of needle stick injuries, the immunization of health care workers against hepatitis B, and post-exposure prophylaxis of HIV exposure. Occupational exposure to malaria, tuberculosis and several bacterial and viral agents are also covered.

The psychological risks at work and their management are discussed in Chapter 7. The main background paradigm is the Karasek control-demand model, emphasizing the work environment and work organization as sources of risks. Consequently the prevention strategies introduced a focus on the improvement of work organization in Chapter 8, which describes the strategies for enterprise survival, new principles of work organization, learning at work and managerial leadership development, as well as management of change and team work. Extensive background literature has been utilized as the source of evidence, for this often a much debated topic.

The special and often seriously underserved target areas, such as child labour, gender issues, women workers and migrants in particular, their oc-

cupational health and safety problems and needs, and their management are extensively discussed, and guidance for management of the challenges and problems have been presented by taking support from the policies and instruments of the International Organizations, ILO, UNICEF and IOM (International Organization for Migration). Including this chapter in the book is particularly important in view of serving the target groups which do not belong to the "core workforce".

A special merit is granted to Chapter 10 on the informal sector and small enterprises; a much discussed, but little researched area, which is a growing sector of employment in both industrialized and developing countries. The gaps between needs for occupational health and safety and the provision of regulations, enforcement, support and services are certainly at their widest in these sectors. The ILO and other available tools for action-orientated projects are introduced, but system-wide solutions still remain to be developed.

Management and participation cultures for occupational health and safety activities are introduced well, and the importance of participatory principles in all OSH activities is emphasized by using the ILO-OSH management guidelines as the background source of information. Interesting examples of preventive interventions are presented. The special subchapter on occupational health services reports on the extremely low coverage of occupational health services in the world, and calls for prevention. Solutions are drawn from the ILO Convention No. 161 and from the WHO/ILO/ICOH guidelines for basic occupational health services.

The systems approach in occupational safety and health needs policies, strategies and programmes, regulations, enforcement, and education and training of all actors, including governmental officers, employers and workers and experts in the OSH field. Chapter 11 covers these issues emphasizing the role of social partners in all phases of occupational health and safety development, from policies and strategies to practical implementation. Special attention is given to training all the above groups of actors.

The globalization of work life in Chapter 12 is well described by using evidence available from several sources, particularly from international or-

ganizations and national examples. The impacts of structural changes and their challenges to occupational health and safety are well described, and the strategies for global governance through policies and actions of International Organizations, both socially and economically orientated, are analysed. The ILO Strategies, UNEP, and WTO activities are described. The WHO Global Strategy on Occupational Health for All is particularly extensively discussed.

The book ends with a Chapter on actions for change, with two important sub-chapters, one on Strategy for change and the other one describing Project guidelines. These are both extremely important reading for anybody carrying out project-type OSH activities with funding from external sources. Chapters such as these are rarely seen, but are very useful for the utilization of all the knowledge presented in the book, making it work in practice.

To sum up, the book is very useful for all trainers and trainees in occupational health and safety, in developing countries in particular, but also in the industrialized world.

## Friendly suggestions for the next edition

The chapters are relatively extensive and some of them contain summary tables or respective concluding items. The book is intended mainly to serve as a textbook for studies of occupational health and safety. The large book benefited from inclusion of the key lessons available at the end of each chapter, which helped crystallize the content into a few important points.

It is understandable that an 800-page book that has been prepared over several years has some parts that are not fully updated. For example, the ILO endorsed the Convention on Promotional Framework on Occupational Safety and Health No. 187 in 2006, which could have been described in detail.

There are some missing references in texts, such as on page 21, in the statement of former UN Secretary General, Mr. Kofi Annan which was first published in the African Newsletter on Occupational Health and Safety 1997;7(3):51. On page 756, the Recommended actions from the Bangkok Occupational Health Research Workshop 2000 refer to the results of the International Conference on Health Research for Development.





# Training as a part of the Regional Programme on Occupational Health and Safety in East Africa

Kristiina Mukala  
FINLAND

The plan for a four-year *Regional Programme on Occupational Health and Safety* is based on the earlier long-term collaboration between the Finnish Institute of Occupational Health and the occupational health and safety (OH&S) institutions of the three East African countries, Kenya, Tanzania and Uganda. On this basis, a 12-month planning project was launched in September 2008 to prepare a more detailed plan for collaboration within the East African Community and its five Partner States: Burundi, Kenya, Rwanda, Tanzania, and Uganda.

The overall goal of the planned Programme is to reduce poverty, create employment through decent work, to ensure better working conditions conducive to health and the safety

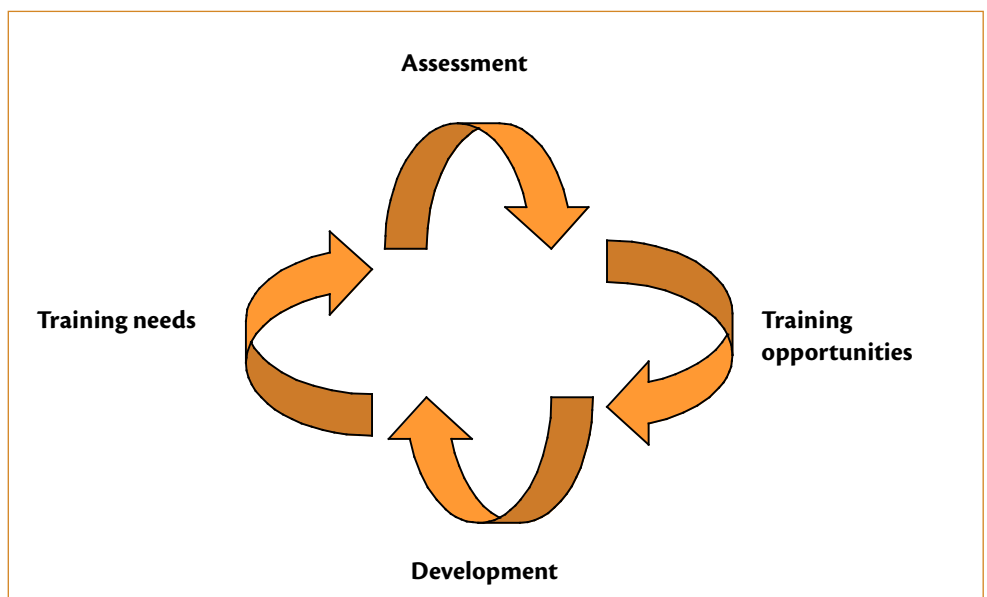


Figure 1. The process of developing training activities

## Training pyramid



Figure 2. Different levels of training activities

and work ability of workers in the East African Region.

For this purpose, the planned Regional Programme supports the preparation of regional policies and programmes on occupational health and safety, together with ILO, WHO and ICOH. Training in good management practices in the planning and carrying out of various activities and projects is included in the Programme Plan with the aim to facilitate the further implementation of OH&S activities.

### Training – a cornerstone for development

Human resources and expertise in occupational health and safety comprise the most crucial element of OH&S activities in any country. A need for training was recognized in the letters of the OSH Authorities, as well as in discussions carried out both within the EAC and with the representatives of OSH Administrations in the five countries. Three types of training are needed: a) basic courses, b) upgrading courses, and c) training of trainers.

In the first phase of the programme, the training situation in all five countries needs to be assessed in order to make a comprehensive implementation plan: the number of trained experts in the country, what training already exists in each country, identifying the organizations providing training on occupational health and safety issues, and their possibilities for co-operation in training, to mention a just few initial tasks. In addition, the profiles and rapid assessments carried out during the

● The objective for the training of trainers is to shift the responsibility for training OH&S experts to the national experts during the programme.

project may reveal new training needs. Basic training, training of the trainers and training in the most recent specialist knowledge can be started in the early stages of the programme.

Basic and upgrading training courses will be organized according to the recognized needs of the countries. These training courses aim at strengthening the expert resources of the Inspectorates and other collaborative organizations. Countries can organize the basic training with the help of their own expert resources. A part of the training will be conducted as development of the knowledge/skills needed for making profiles, preparing rapid assessments and describing qualitative indicators.

### Preparation of the Training Strategy on OH&S

A part of the training will aim at developing a regional training strategy on occupational health and safety, and also national training strategies in occupational health and safety. The strategies will provide sustainability and continuation of expert training on occupational health and safety, and provide expertise for the needs of occupational safety and health administration on both national and regional levels. The objective for the training of trainers is to shift the responsibility for training OH&S experts to the national experts during the programme. This approach will be utilized particularly in the training activities related to the implementation of Basic Occupational Health Services.

Training in occupational health and safety should be based on national OSH legislation, as well as on national policy and national programmes on occupational health and safety. Sectoral and national profiles on OSH help focus the training on the areas most in need. International conventions and recommendations (e.g. ILO, WHO) give a good basic background and help to harmonize training in different countries.

The aim of the training is to bring expertise and skilled persons to the field of OSH, and thus build up the productivity of the country, thus reducing poverty and increasing employment. The awareness of OSH among employers and employees is crucial if we wish to improve the effectiveness of OH&S. One way to increase awareness is training, which should be included in all professional education, starting from elementary and primary school.

### Activities

One of the initial activities at the regional level is to plan and organize a 5-week regional complementary training course in 2010 for occupational health and safety experts in the whole Region. The course consists of modules covering legislation on; Occupational hygiene (chemical and physical hazards, and biological hazards); Occupational safety; Occupational health; and Information. In connection with workplace visits (walk-through) the use of a set of direct-reading instruments, as well as checklists and information sources is taught. The interpretation of measurement results is important for making recommendations.

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### Main themes

- Role of biomonitoring in future chemical safety
- Biomonitoring in occupational exposure
- Risk management
- Use of biomonitoring in epidemiological and population studies
- Recent developments in the biomarkers of effect and susceptibility
- Toxicokinetic and exposure modelling, biomonitoring in the assessment of dermal exposure
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