Executive Summary:

Inadequate safety and health standards and environmental hazards are particularly evident in the case of the informal sector. Informal sector’s workers do not have the necessary awareness, technical means and resources to implement health and safety measures. The protection of the health and welfare of workers in the informal sector is a challenge which should be faced with an integrated approach to health promotion, social protection and employment creation. Innovative means to prevent occupational accidents and diseases and environmental hazards need to be developed through cost-effective and sustainable measures at the work-site level to allow for capacity-building within the informal sector itself. Building-on local institutional support to progressively extend social protection will be critical. Special attention should be paid to the sensitization of policy makers, municipal authorities and labour inspection services to change their traditional role towards a preventive and promotional approach. The extension of occupational health care to workers in the informal sector should be promoted incorporating occupational health into public health care services at district and local levels and establishing a link between first aid and prevention at the work-site’s level.

Introduction:

The need for a healthy environment is a fundamental prerequisite for sustainable development. In Chapter 6 of Agenda 21, UN Conference on Environment and Development UNCED(1992) on the protection and promotion of human health, specific reference is made to the fact that health and development are intimately interconnected. Therefore, as a prerequisite for sustainable development it is necessary to meet basic health needs and protect vulnerable groups such as the very poor.

Pressures from the on-going globalization of the world’s economy, liberalization of trade and rapid technological progress are forcing many countries to change their employment patterns and organization of work in order to stay competitive. This fosters competitiveness based on seeking higher productivity and “quality” of the products at a lower cost, compromising the quality of working conditions. In this context, prevention and protection are not seen as an integral part of quality management, but as a barrier to trade. This situation is resulting in inadequate safety and health standards, environmental degradation and a lack of basic social protection for workers. When the total costs resulting from injury, illness and disability are taken into account in calculating the true costs of production, it is evident that high productivity and quality employment can only be reached when requirements for the prevention of accidents and diseases and the
protection of workers’ health and welfare are integrated in the management of the production process.

Inadequate safety and health standards and environmental hazards are particularly evident in the case of the informal sector. Poor working environment including inadequate premises and often very unsatisfactory welfare facilities, as well as practically non-existent occupational health services are causing large human and material losses, which burden the productivity of national economies, impair health and general well-being as well as the quality of life of informal workers and their families. The protection of the health and welfare of informal sector workers is a challenge which should be faced with an integrated approach to health promotion, social protection and quality employment creation and has, therefore, to be part of a strategy to improve the basic living conditions of the urban poor.

Support to the informal sector should be viewed as part of a long-term strategy aimed at increasing the formal sector jobs and strengthening the conditions and principles which regulate labour relations, working conditions and employment opportunities in order to allow economic integration, social cohesion and democracy. Meanwhile, the organizational efforts of the informal sector’s operators themselves are the principal means whereby informal sector workers will be able to bring about changes in their working and living conditions. While protective approaches cannot significantly change the social situation, they can dramatically reduce its pernicious effects on informal sector workers allowing them to perform safer tasks under healthy and protected conditions. Innovative means to prevent occupational accidents and diseases and environmental hazards need to be developed through cost-effective and sustainable measures at the work-site level.

There have been limited attempts to deal with the informal sector in the area of health promotion and protection, although, never with a comprehensive strategy. However, evidence suggests, that with the appropriate support, informal sector workers can move from a situation of mere survival to a stronger economic position enhancing their contribution to economic growth and social integration, as well as participating in the improvement of their own working and living conditions. In order to raise the productivity of informal sector workers it is necessary to develop measures which effectively combine services to enable micro-enterprises to increase their income and services to assist them in protecting their health and improving their working conditions.

**Identification of problems and needs:**

Contrary to what was thought, the informal sector is here to stay. The informalization of a significant proportion of the workforce in countries with different levels of development give strong reasons to believe that a large and growing proportion of workers will be engaged in the informal sector for many more years to come. In many developing countries facing structural adjustment programmes, micro-enterprises in the urban informal sector make a significant contribution in generating employment and often constitute the main source of income for disadvantaged groups. The development of the informal sector is not a temporary phenomenon,

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which would disappear in the foreseeable future but on the contrary it is likely to continue to expand as it is shown by its steady growth in almost all developing countries with the exception of the newly industrializing countries from East Asia. This sector employs a considerable part of the urban labour force in many developing countries, its employment share being estimated to fluctuate between 30 and 80 per cent. For example, in Asia the informal sector is estimated to absorb between 40 and 50 per cent of the urban labour force, although significant variation can be found between the newly industrializing countries (less that 10 per cent) and countries where the sector’s employment share reaches 65 per cent. In Africa it is estimated that the urban informal sector currently employs about 61 per cent of the urban labour force and will create 93 per cent of all additional jobs in this region during the 1990s. In Latin America informal sector-employment grew at an annual rate of 4.7 percent compared to the 1.1 annual percent growth of formal-sector employment between 1990 and 1994.

The informal sector constitutes an employment refuge for workers who fall out from the formal sector in times of economic depression and provides a “safety net” for poor households’ income. The sector is therefore, becoming the realm of employment for the majority of urban dwellers in developing countries who apply their energies in semi-skilled jobs. Other common features of the sector are: labour-intensive technologies, high levels of competition, low-quality of the goods and services produced, limited capital and limited capacity for accumulation, even if they usually own the means of production. The main source of capital originates from self-financing due to restricted access to assets, credits and other services. Entry into the sector more frequently depends on the availability of gainful employment. Family members are often found working together. Women and children are mostly found in unskilled manual jobs.

Apprenticeships in the informal sector constitute one of the major means to gain skills and knowledge. The educational background of the operators is often very low (primary education or less, some of them are illiterate and/or only speak the local language). The production of goods and services is of low quality due to lack of expertise and frequent turnover from one type of occupation to another with restricted access to markets and formal training. Contrary to what is thought there is a rationale in the organizational efforts of the informal sector itself. This allows it to escape form the rigidity of formal economic models. It is capable of a very flexible response to changes in the market through indigenous initiatives in its overall pattern of economic activity. The emergence and disappearance of micro-enterprises and their diversification in production patterns are part of a dynamic phenomenon based on the adaptation to the demands of a flexible but restricted market for goods and services. These characteristics, however, are not universal

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as there are many different “informal sectors” showing different levels of productivity, labour use, remuneration and organization.6

**Definitions:**

The term “informal sector” was first used in the 1970's, particularly in relation with development and employment policies. Despite the great deal of research conducted on the subject since then, its meaning and scope still remains controversial. The definitions of the informal sector and the methodologies employed to measure it vary from region to region and country to country making a comparative analysis difficult. The nature and composition of the informal sector also vary between regions and countries7.

According to the ILO definition and for the purposes of this report, “the urban informal sector can be characterized as a range of economic units in the urban areas, which are mainly owned and operated by individuals either alone or in partnership with members of the same household and which employ one or more employees on a continuous basis in addition to the unpaid family worker and/or casual employee. Typically these units operate on a small-scale, with a low level of organization and little or no division between labour and capital. They are engaged in the production and distribution of goods and services with the main objective of generating employment and a basic income to the persons concerned”.2

**Legal aspects and labour relations:**

The informal sector constitutes a dilemma concerning labour relations, processes and institutions because by definition the informal sector includes employment situations and labour relations which not only differ from those in the formal sector but also often infringe established rules and laws. In many informal sector micro-enterprises, a clear employer/employee relationship is lacking. Labour relations are based on casual employment kinship or personal and social relations rather than contractual arrangements with formal guarantees. This situation may facilitate or hamper the informal sector workers’ capacity of mobilization and organization as a group and highlight the differences between the associations of operators in the informal sector and the traditional trade unions and employers’ organizations of the formal sector. The role of the State and of both trade unions and employers’ organizations in main-streaming the informal sector into the formal economy development process is still under debate.

There are a number of institutional, economic and policy constraints which determine the differences between informal sector operators and formal sector’s workers, in terms of

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productivity, observance of fiscal and labour regulations, employment status, social protection, their specific needs and the strategies required to meet them. This sector involves mainly non-waged and unorganized workers engaged in precarious work processes and labour arrangements in business, which in many cases are largely un-regulated and un-registered, falling outside of state regulations and control. In most cases they lack institutional support and advocacy, as they have poor channels of communication with the relevant institutions.

Most of the micro-enterprises from the informal sector operate on open land or locations not legally recognized for the purpose and with no right of ownership. Thus, municipal regulatory standards are not applicable to them. Therefore, as they do not own the land, they cannot have access to sanitary facilities, permanent and suitable working environments, access to potable water or electricity as these services are provided only to lawful owners of land. Existing occupational safety and health (OSH) regulations do not cover these workers.

Available data:

The magnitude and rate of growth of the informal sector are difficult to establish. Most informal activities are un-recorded in official statistics and therefore the measurement of informal production and labour force is difficult. Available data are scattered and not up-to-date. Given the size of the labour force, the diversity of operations and various social demographic characteristics of the informal sector operators, substantial efforts are necessary in order to obtain adequate background information on the OSH problems of the informal sector workers.

As this sector is not covered by national recording, notification and compensation systems, there is scarce information on occupational accidents and diseases arising from hazardous working conditions which could be used for the identification of priority areas of prevention. Therefore, to obtain such information it would be necessary to carry out ad-hoc surveys or to include OSH modules in national household and similar surveys. This would contribute to cover gaps, validate existing data, enlighten earlier unmapped areas and produce more reliable estimates, in order to propose preventive and control measures against accidents and diseases in the informal sector.

The limitations of existing occupational safety and health standards to cover the informal sector should be discussed. Do actual national safety and health laws which cover all workers and all workplaces also apply to the informal sector workers rights and benefits? Taking into account the lack of staff and resources of labour inspectorates in developing countries, would the local authorities have the capacity for enforcement and would this have an impact on loss of employment within the informal sector? What alternative mechanisms can be developed to guarantee the protection of informal sector workers?

The characteristics of small-scale and micro-enterprises in the informal sector which affect the ability of an employer to meet certain entitlements and obligations and at the same time grant an income should be taken into account. For example, the systems and organization of work, the informality of supervision and production expectations, the low level of capitalization and technology, the low productivity and irregular employment relationship. What can be done to extend the coverage of safety and health legislation and enforcement without endangering employment generation in the sector?
Working Conditions:

The majority of urban informal sector workers live in poor areas, lack basic health and welfare services and social protection and work in an unhealthy and unsafe working environment. For many informal sector operators their home and workplace are one and the same place. Vulnerability to diseases and poor health result from a combination of undesirable living and working conditions. The conditions under which most informal workers operate are precarious and unsafe. Many of the micro-enterprises in which they operate have ramshackle structures, lack sanitary facilities or potable water and have poor waste disposals.

In the informal sector, the distinction between working and living conditions often becomes blurred and both are related to broader problems of poverty and underdevelopment. The interaction between occupational hazards and poor living conditions can exacerbate the health problems of informal sector workers, as in micro-enterprises from the informal sector, poor working practices and poor working conditions are interrelated. According to some ad-hoc surveys carried out by the ILO in the Philippines, Nigeria, Senegal and Tanzania, while hazards varied according to occupation, some of the most prevalent problems were: poor lighting, lack of ventilation, excessive heat, poor housekeeping, inadequate work space and working tools, lack of protective equipment, exposure to hazardous chemicals and dusts and long hours of work. The most prevalent health impairments were musculo-skeletal disorders and low back pain; allergic reactions and other respiratory disorders; physical strain, fatigue and stress. Injuries with tools were also frequent.³

Due to high production demands and poor work organization, the tools and facilities used for lifting and transporting materials are often inadequate. This, linked to repetitive working movements, carrying of heavy loads and awkward postures, provokes a physical workload which may reach unacceptable levels causing unnecessary strain on the workers and fatigue, contributing towards injuries.

Hazardous working conditions not only harm informal sector workers’ health but also decrease the enterprise’s productivity and therefore income due to poor health and the inability to work effectively. Awareness both of the adverse long-term effects of poor and hazardous working conditions as well as of how to improve workers' protection and business practices in order to increase productivity are very low among the micro-entrepreneurs.

ILO Action in this field:

Interdepartmental Project for the Informal Sector (1994-96)

Background

The ILO launched in 1994 an Interdepartmental Project on the Informal Sector. In order to design

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³ Series of ILO internal surveys carried for the Interdepartmental Project on the Urban Informal Sector (unpublished).
a comprehensive approach to bring about the gradual application of the protective measures provided for in national legislation and international labour standards to the urban informal sector, as well as to develop strategies in order to progressively extend social protection and improve working conditions of informal sector workers. As a first step to extend the ILO’s knowledge, three case studies on occupational safety and health and working conditions in the informal sector of cities in developing countries were carried out. (Bogota, Colombia, Manila, Philippines and Dar es Salaam, Tanzania). The lessons learnt were expected to provide the basis for a strategy to extend social protection to the urban informal sector through innovative approaches and to replicate them in other countries. The project concentrated on a) the development of basic forms of access to health care through mutual funds; b) the improvement of safety and health standards through the introduction of measures for the improvement of informal sector operators’ working and living conditions and the reduction of accidents and diseases; c) management skills development and d) capacity building. In this paper we will concentrate on the safety and health aspects of the project.

Dar Es Salaam, Tanzania:

Under the ILO Interdepartmental project on the Urban Informal Sector, an integrated approach to productivity, employment creation, health promotion and social protection for the informal sector was tested. Health promotion and social protection activities were covered jointly by the Occupational Safety and Health Branch (SEC HYG) and the Social Security Department (SEC SOC). The purpose was to develop a possible model-approach to provide health protection to workers from the informal sector which combines preventive (SEC HYG) and curative services (SEC SOC). A safety and health programme and a health insurance scheme for workers in the informal sector were established in a district of Dar Es Salaam. Due to their success, these activities were extended through technical cooperation after the end of the INTERDEP in 1996 until may 1999.

It has to be mentioned that the approach is quite innovative. There have been no previous attempts to deal with the informal sector in the area of health promotion and protection with a comprehensive strategy. The model of health-care delivery is based on the local capacity of the informal sector operators to undertake low-cost improvements at the micro-enterprise level, prevent injuries and diseases and enhance access to health-care through the introduction of a self-sustainable health insurance scheme and a referral system for the extension of occupational health services using the existing public health structure and a community health approach.

During the first phase, the activities under the safety and health pilot project concerned raising awareness of occupational safety and health hazards in the micro-enterprises of a number of selected clusters in the informal sector and the provision of occupational health and preventive services within the existing primary health care structure. The project covered 10 business clusters and promoted the creation and training of safety and health committees (health promotion committees) within the micro-enterprises in each cluster, including the training of one member of each committee as a first aider. A total of 10 committees was created and 61 operator members of the health promotion committees were trained. On-the-spot guidance was provided to the safety committees on a continuous basis by a safety engineer. Basic assessment/awareness tools for the operators’ use were also produced such as: check-lists and posters (in Swahili).
Awareness raising was also carried out through the display of the results of monitoring in public places in the clusters. Up until the beginning of 1997, the clusters’ committees have continued to receive on-the-spot guidance by a national expert (a safety engineer) who provided technical advice on a weekly basis.

**Training programme**

Training modules were produced to show the link between productivity and improvement of working conditions. The training programme focussed on a package which dealt with: physical, chemical and biological hazards in the working environment; the provision of first-aid, basic sanitation, waste management and other public health concerns. The objectives of the training programme included:

- a) the development of the operators’ ability to recognize and control occupational hazards in the clusters;
- b) walk-through visits;
- c) the evaluation of changes made after a few weeks;
- d) the listing of lessons learnt for feedback.

Taking into consideration operators’ limited availability of time, the training has been carried out by means of participatory learning techniques at the work-site and formal classroom training was kept to a minimum. The learning modules were implemented for small groups by occupation (cluster). The modules were discussed at intervals over a period of weeks, enabling operators to use the lessons learnt immediately integrating learning with practice. Low-cost corrective measures were introduced (such as the rearrangement of the shop-floor and house-keeping, the modification of table and stool heights to improve ergonomics, the change in work practices and the promotion of appropriate use of tools, as well as basic safety measures). The training package was further tested and improved both in Tanzania and Nigeria. The package will be published this year.4

The health promotion activities for the extension of occupational health to the informal sector were carried out through established health care facilities at the municipal and district level in collaboration with the City Council of Dar Es Salaam. Twenty-eight health care workers from the City Council were trained on occupational health and their services extended to the clusters, creating a referral system involving the first-aiders in each cluster. Ten first-aiders were trained in collaboration with the Red Cross to provide first-aid services, maintain a basic record-keeping system and undertake health promotion activities within the clusters. Up until the beginning of 1997, the nurses visited the clusters on a continuous basis (weekly) for the health promotion activities, including basic sanitation, immunization campaigns and contact with the first-aiders. Five of the 10 clusters were also covered by the health insurance scheme UMASIDA developed by the ILO (SECSOC).

The link between prevention and health protection was highlighted by the informal sector operators themselves in one of the first workshops carried out in 1996 in Dar Es Salaam where the pilot

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4 A preliminary version will be available in the ILO WebSite soon
implementation was discussed. On that occasion they suggested that the fund for the health insurance should also cover the purchase of fist-aid material and protective equipment.

The project faced a number of constraints in the health care delivery due to existing limitations in the public health structure, including the availability of both human and financial resources and the commitment of certain authorities to participate. In order to find an alternative, the safety engineer in charge of following up the safety and health programme collaborated closely with the expert in charge of the UMASIDA health insurance scheme to also involve the private healers in the preventive and health promotion activities in the clusters. In this context, the advantages of the UMASIDA health insurance scheme established with the involvement of private healers by the ILO, proved to be a more self-sustainable alternative in some cases, and in others a complementary way of providing access to health care to informal sector workers.

Follow-up

After the approach was tested by these pilot experiences undertaken jointly in Dar Es Salaam during the Informal Sector INTERDEPARTMENTAL Project (1994-95), both SEC SOC and SEC HYG have continued to collaborate, extending their pilot activities in Dar Es Salaam. In doing so, they sought to ensure that the safety and health measures and the health insurance scheme complemented each other. Both approaches have also been tested separately in other places by SEC SOC and SEC HYG. In particular, since the end of INTERDEP, follow-up technical cooperation activities have been carried out by SEC HYG to test the methodology for the improvement of safety, health and working conditions in Tanzania, Senegal and Nigeria last biennium (1996-97). (RBTC/technical cooperation funds and UNDP/TSS funds).

In October of 1998, the UNDP Programme on Poverty Alleviation approved a one year project on Urban Employment Promotion based on the impact of the ILO’s previous work and building on the work carried out during the INTERDEP in Tanzania. A project document for an integrated employment promotion programme was jointly prepared by the relevant ILO Units (ENTERPRISE, SEC SOC, SEC HYG and COOP). The objective of this project was to develop an integrated approach to productivity, employment creation, health promotion and social protection for workers in the informal sector’s micro-enterprises. Health promotion and social protection activities were covered jointly by SEC HYG and SEC SOC.

As one of the first steps of the new project, an evaluation of the activities carried out since 1995, concerning both the safety and health programme and the health insurance scheme was undertaken in January 1998, in order to assess the impact of the activities and the sustainability of the measures implemented up until then. On those basis, the project extended these activities to the micro-enterprises of 12 more clusters in the Tameke District of Dar Es Salaam, Tanzania. The project ended in May 1999. The results of this project are not discussed here, as a report on the overall assessment of the pilot experience (1995-1999) is in preparation. The lessons learnt will be used to develop national action plans in other countries of the world.

The Philippines

Four action programmes aimed at improving working conditions in the informal sector were
carried out by NGOs in collaboration with the ILO during the INTERDEP on the Informal Sector, namely:

**C** The Philippine Enterprise Development Foundation implemented a project aimed at enhancing the competence of self-help groups and NGOs to manage micro enterprise projects linking working conditions to productivity, credit and other services. The economic advantages of a preventive approach were demonstrated through a simple cost-analysis of working conditions and health (e.g. the average expenses which a micro-entrepreneur would incur for initial and subsequent medical consultations, for medication and possible hospital confinement which are much higher than the average earnings of a micro-entrepreneur).

**C** Community health-care workers constitute one of the pillars of primary health care in the Philippines and when properly trained and organized they render satisfactory basic health services specially in marginal communities. A Save the Children’s project aimed at enabling Community Volunteers Health Care Workers to act as an effective front-line in addressing occupational health problems in urban poor communities providing advice and basic occupational health services.

**C** The Social Development Index studied and developed alternative forms of child care arrangements for women in the informal sector by fostering collective actions among local governmental units and community-based organizations.

**C** Telefunken Semiconductors Inc. Trade Union’s project aimed at developing a model for trade union’s assistance to ex-fellow workers in the informal sector providing skills training to displaced workers and community residents. The training programme included information on occupational safety and health and the improvement of working conditions.

Based on the experience of these action programmes on safety and health, a Regional Programme on Micro and Small-scale Enterprise Development and Workers’ Protection (multi bilateral funding) has been launched in 1996-97. The programme was jointly backstopped by the Senior Adviser on Working Conditions and the Senior Adviser on Enterprise Development from the ILO’s South East Asia Multidisciplinary Team, based in Manila. The programme combines the approaches developed under the ENTERPRISE Department methodology on Improve your Business (IYB) and TRAVAIL’s methodology on Working Improvements in Small-scale Enterprises (WISE). The countries involved are: The Philippines, Nepal and Malaysia.

**Considerations concerning the design of occupational safety and health strategies for the informal urban sector:**

The protection of the health and safety of workers in the informal sector is a challenge which the ILO should face having an integrated approach to health promotion, social protection, productivity, employment creation and the protection of the environment, seeking to achieve sustainable and equitable development. Interventions aimed at raising the health status and productivity of workers in informal sector’s micro-enterprises should be developed through the promotion of health and
safety at work and the establishment of self-sustainable health insurance schemes. The development of measures which effectively combine services to enable micro-enterprises to increase their income and services to assist them in improving their working conditions and health would also contribute to increased productivity and enterprise growth and to allow for capacity-building within the informal sector itself.

The sensitization of policy makers, municipal authorities and labour inspection services will be critical in building-on local institutional support to progressively extend social protection. Awareness-raising and promotional activities would be necessary in order to modify attitudes and prejudices against the sector and to change the traditional role of labour inspection services towards a preventive and promotional approach providing information, advice and training. The extension of occupational health care to workers in the informal sector can be promoted incorporating occupational health into public health care services at district and local levels and establishing a link between first aid and prevention at the micro-enterprise level.

An occupational safety and health promotion programme for the informal sector micro-enterprises should focus on two major aspects:

1. Raising awareness on occupational safety and health hazards in the clusters through the development of human resources for the improvement of working conditions; and

2. Seeking institutional support for the provision of occupational health and preventive services for workers in the urban informal sector within the existing primary health care structure.

Raising awareness on occupational safety and health hazards in the clusters

The informal sector’s workers do not have the necessary awareness, technical means and resources to implement health and safety measures. Preventive programmes should effectively combine health promotion and social protection. Innovative and simple means to prevent occupational accidents and diseases and environmental hazards can be implemented with the introduction of simple and low-cost improvements in working practices, equipment and tools and providing them with adequate basic training on first aid and on the identification and control of occupational and work-related hazards.

The intervention should consist of the application of simple low-cost measures to prevent accidents and protect health through the introduction of ergonomic measures and improvements in work practices and working conditions, the creation of safety and health committees and training on first-aid.

The specific hazards related to the working and living conditions of informal sector workers should be identified through pilot surveys in a number of selected clusters. The project should promote the creation and training of safety and health committees in each of the clusters, including the training of one of the members of each committee as a first-aider.
Ad-hoc training modules based on ILO’s training package should be produced drawing the link between productivity and improvement of working conditions based on the ILO/WISE approach. The training programme should focus on the most important physical, chemical and biological hazards in the working environment, the provision of first-aid, basic sanitation, waste management and other public health concerns.

As a first step, walk-through surveys and interviews of workers should be carried out. Immediate corrective action should be possible during such surveys, (eg: to correct grossly unsafe acts, such as using improper tools, extremely hazardous operations such as exposure to toxic substances or arduous tasks such as lifting and carrying very heavy loads). The protection of workers’ health should be undertaken through the application of collective measures by modifying the working environment in order to prevent and control occupational hazards. However, in certain cases personal protective equipment (PPE) may in addition be necessary.

Any measure introduced, should be based on the local capacity of the informal sector operators to undertake such low-cost improvements at the workplace level. The measures proposed for the implementation of changes at the work-site need to be cost-effective and sustainable to allow the capacity-building within the informal sector itself. Past experiences have shown that any initiative coming from the outside fails as soon as external resources are finished. Impact assessment is one of the main components of a pilot experience in order to adapt it to the real needs of the community making it affordable and applicable.

Providing occupational health and preventive services within the existing primary health care structure.

The health promotion activities for the extension of occupational health should be carried out in collaboration with established public health-care facilities at the municipal and district level, from health care facilities in the vicinity of the informal sector’s clusters. Training on occupational health should be provided to health care personnel (medical, paramedical and nurses). In order to extend their services to the informal sector’s clusters, a referral-system involving the first-aiders in each cluster needs to be created. The first-aiders should be trained in collaboration with

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5 The ILO/WISE method on Working Improvements in Small Enterprises has been successfully tested since 1992 in a number of African countries (Kenya, Tanzania, Zimbabwe and Swaziland). The method is designed to encourage and help small-scale enterprises to undertake low-cost measures to improve productivity, quality and working conditions. The approach focuses on shop-floor action, planning and practical implementation. It links working conditions with other management goals, focuses on achievements, builds on local practice, uses a learn-by-doing method, encourages the exchange of experiences and promotes workers’ involvement. As a result of the training, the trainees are able to identify potential improvements in working conditions and productivity, prepare realistic plans for improvement and develop low-cost solutions based on their own experiences. Based on this approach, pilot projects specifically designed for the informal sector micro-enterprises were carried out in Tanzania and Nigeria.

6 Nevertheless, it has to be kept in mind that the use of inappropriate equipment may be more harmful than helpful and that the use of more sophisticated personal protective equipment, such as respiratory masks for dusts, should be the last line of defense when no other collective technical measures to avoid or minimize the risk could be implemented.
the Red Cross to provide services, maintain a basic record-keeping system and undertake health promotion activities in the clusters. The health care personnel should visit the clusters on a continuous basis (weekly) for the health promotion activities, including basic sanitation, immunization campaigns and contact with the first-aiders. To face the basic needs of informal sector workers health care should be based on a primary health care approach and include first-aid, basic health care, health promotion programmes, early detection of occupational health impairments and a preventive approach.

Systematic medical examinations of workers or monitoring of the working environment as in the formal sector, would not be realistic or practical. Due to the close inter-personal relationships which exist in the informal sector, questioning workers would give a fairly good idea of the prevalence of accidents and diseases which occur over a period of time. It is also unrealistic to propose new occupational health infrastructures for the informal sector. However, the channels through which an occupational health practice could be extended to the informal sector should be identified. The provision of occupational health services should be implemented through the existing health delivery system. Occupational health practice should be extended through community health programmes, public health services, to integrate occupational health action into primary health care programmes for the development of an occupational health unit within dispensaries at district level, in order to prevent and control both endemic and occupational diseases and occupational injuries, allowing referral to a higher level of health care when necessary. Strengthening groups of occupational health practitioners and primary health care staff could be done, for example, by incorporating an occupational health component to the public health services in local markets, municipal health centres and hospitals, or involving Red Cross or other humanitarian non-governmental organizations, local dispensaries, district health centres, cooperatives and pre-cooperative movements, artisans’ organizations, informal groups of producers, women’s organizations, etc.

Access to health care in the informal sector, needs to be organized at district and municipal levels. Adequate channels need to be identified and net-working arrangements at the community and district levels need to be developed, in order to create self-sufficient structures capable of facing their basic needs and demands. The extension of occupational health care and social protection for informal sector workers should be done involving local authorities in:

- a) the provision of basic sanitation, waste disposal, access to potable water and basic infrastructure through grass-root level organizations and community services
- b) extending the health coverage through the Public Health Care System dealing with both occupational and general health care at district and local levels, and
- c) establishing a link between first aid and prevention at the work-site’s level.

Some pilot experiences have shown that a self-sustainable health insurance scheme can be effective in complementing access to health care when public structures are insufficient. In order to succeed in the extension of occupational health services to this working population, adequate channels need to be identified and net-working arrangements at the community and district levels need to be developed, with the purpose of creating self-sufficient structures capable of facing the informal sector’s basic needs and demands.
Contribution to employment creation:

Consideration should be given to encourage the local production of PPE of a sufficient quality and at a low-cost, within the informal sector itself (e.g.: working clothes, protective shoes or gloves, simple dust masks, helmets, etc). This type of initiative will contribute both to access and use of PPE by informal sector operators and at the same time to employment-creation which should be one of the aims of any activity in the informal sector.

Emphasis should also be placed on the creation of employment for occupational safety and health promoters rather than on training qualified staff who are already overburdened with curative activities. The idea would be to create jobs in the field of preventive care among members of the informal sector itself. The persons engaged in such activities could be trained at the level of "sanitarians", "extension workers", "bare foot doctors" or "occupational safety and health promoters". A specialized unit or physician on occupational medicine could act as a referral system in local hospitals.

For example, selected primary health care centres could appoint an occupational health physical working with a team of informal sector’s promoters/sanitarian who would:

(i) enquire about any relationships between the injuries and ailments of those who come for treatment and their occupation. Special attention should be given in a primary health care centre when they receive the same kind of injury or burn several times, as well as when persons from a given place or with a given occupation come particularly frequently for first aid assistance in the primary health care centre; (such information could be collected in a standardized form so that it could be used for preventive purposes on OSH matters).

(ii) provide information (awareness creation) about the relationship between work and injury or poisoning to those who suffer from an injury or ailment which are suspected to be work-related;

(iii) insist on the preventable character of occupational accidents and diseases. Accidents do not happen but are caused, they can and should be prevented;

(iv) provide information on basic safety appropriate to each case (pesticide poisoning, burns, falls, turn over of machinery, washing hands with solvents, etc.);

(v) be in charge of visiting the workplaces where accidents have happened in order to identify hazardous processes, equipment and agents and propose remedial action to prevent the reoccurrence of similar accidents and ailments;

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7 Arrangements could be made through technical cooperation activities, with certain industries in industrialized countries to wave some patents and encourage local production of personal protective equipment at a low-cost by the informal sector with an appropriate level of quality, on the understanding that this will be done for local use and not for exportation.
Information and training in the informal sector

In order to reach the informal sector workers both where they live and work and to respond to their basic needs, information and training should be provided through non-formal education programmes. It is necessary to define the characteristics and needs at local level (worksite, cluster, community, etc) in order to create a flexible and dynamic programme of non-formal education. It must be kept in mind, that there will be different levels of beneficiaries and, therefore, different levels of information and training.\(^8\)

The local production of posters, newspapers and of pamphlets on occupational safety and health (largely illustrated, such as "comics") distributed at no cost to worksites, to children at schools, in dispensaries or in public markets, should be explored. The objective would be both to develop occupational safety and health awareness and to create new jobs in this field rather than to use external and costly expertise. It would represent a very cost-effective investment for the UN Agencies\(^9\) which could sponsor this kind of project. Such publications could cover the field of both occupational and environmental health.

To guarantee capacity-building, implemented measures should be affordable and applicable. The involvement of NGOs and self-help groups in any type of initiative from the beginning has demonstrated to be cost-effective and sustainable. The training programmes must be oriented towards concrete outcomes and measurable goals and should promote personal and community development. Therefore:

(i) the training methods must be based on assuring the active participation of those who will receive the training and resource persons must be appropriately trained to avoid the limitations of traditional methods of teaching (such as in primary school);

(ii) the programmes should be oriented to different target groups (women, children, adults with low level of literacy, etc);

(iii) the training staff should come from the same cultural origin or from the community itself so as to allow affinity, respect to traditional values and to avoid provoking feelings of cultural alienation;

(iv) mechanisms of consultation and cooperation need to be developed defining roles and responsibilities of those concerned and securing human and financial resources in order to face expectations.

It is also important to remember that in a non-formal training programme the subject matter should

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\(^8\) Some pilot experiences in Philippines and South Africa have been carried out through an adaptation of ILO/WISE methodology on "Higher productivity and a better place to work" incorporating an improved OSH component and combining it with ILO/IYB methodology on "Improve your business".

\(^9\) possibly ILO, WHO, UNEP, UNESCO, FAO, UNICEF.
be appropriate to the level of literacy of the target group, the simplest possible vocabulary and terminology on occupational safety and health which is compatible with mastery of essential knowledge or skills looked for has to be used. Alternative or combined methods for adult/children education and a modular programme structure needs to be foreseen to be flexible to the sector needs.

The methodology should be suitable to the environment of the target group, concentration on issues arising from the workplace and practical instruction should be linked to productive work; in many cases it will be necessary to incorporate as part of the training the acquisition of language and mathematical skills, consolidating literacy as well as other topics relevant to the group.

The involvement of local groups of artisans in organizing and instructing, to take advantage of traditional technologies and traditional methods of training, as for example, through apprenticeships would guarantee credibility and the suitability of training.

In order to improve the methodology and to adapt it to real needs and expectations of the community, an evaluation of the outcomes through built-in assessment procedures and emphasis on self-assessment would be necessary. It should also be also foreseen to integrate follow-up activities in the training programme to pursue sustainability.

Sophisticated equipment does not automatically increase the effectiveness of instruction. The production of low-cost training material should be encouraged. Audiovisual techniques may be of a very simple nature: drawings, models, photographs clipped from magazines or newspapers, (such as the attached examples), objects available in the environment eg: a sewing machine or a hand tool, a camera to take photographs of the workplace, could be excellent teaching resources.

To avoid the limitations of traditional education, in non-formal education, the techniques of distance education (including radio and TV) could be advantageous, but its effectiveness will be determined by the guidance of specially trained instructors and advisers. Training programmes need to be systematically and carefully prepared in order to be consistent and sustainable. They must have very clear, specific and limited aims and be capable of being fully explained, applied, evaluated and replicated.

**Future Work**

In line with the new ILO’s Infocus Programme SafeWork (Occupational Safety, Health and the Environment), the ILO will contribute to the improvement of working and living conditions of workers in the informal sector, through the development of innovative means to prevent occupational accidents and diseases and environmental hazards through cost-effective and sustainable measures at the micro-enterprise level allowing for capacity-building within the informal sector itself. Through SafeWork, the ILO aims at increasing the capacities of member States to formulate and implement effective strategies for the protection of the safety, health and welfare of informal sector workers, their families and the environment. Ad-hoc national preventive programmes need to be designed to take basic steps towards a higher level of social protection for informal sector workers and more sustainable and equitable development.
NOTE: the purpose of this document is to launch some ideas on a flexible approach to deal with the problem, it is a document for discussion. Your feedback on the matter is most welcomed.

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