

# Improving working conditions in small enterprises in developing countries

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## 1. Introduction

Many developing countries, in their programmes of socio-economic development, assign an important role to the small-scale sector, linking the potential of this sector with possibilities for creating low capital-cost employment, developing a pool of skilled and semi-skilled workers to meet the requirements of future industrial expansion, promoting industry in rural areas, preventing unplanned urbanisation and reinforcing links between economically and geographically diversified sectors. In addition, the growth of large enterprises, including those in the public sector, often depends on the small-scale sector to fulfil requirements for a wide range of materials, components and sub-assemblies.

On average, small enterprises<sup>1</sup> constitute more than 90 per cent of manufacturing undertakings in developing countries and may account for over one-half of total employment, with the possibility of being able to employ even more.<sup>2</sup> The small-scale sector in India,<sup>3</sup> for example, accounts for about 40 per cent of total national industrial production and for only 10 per cent of the total fixed industrial capital. More than 2,400 products are now being made in this sector, ranging from sophisticated instruments and equipment, such as television sets, to simple traditional items. It provides 38 per cent of employment in industry.<sup>4</sup>

Among the problems of small enterprises which deserve special attention are those related to working conditions and environment. For a variety of reasons which will be discussed later, it is often in small enterprises that the most arduous or tedious tasks are found, accident rates are highest and conditions of work most unfavourable.

Government agencies in developing countries find it extremely difficult, if not impossible, to improve the situation. The large number of units, their geographical dispersion and their short life span are some of the factors

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which place the small enterprise sector almost out of reach of officials and specialists responsible for the promotion of better working conditions.

The aim of this article is to examine possible ways and means of improving working conditions and environment in small-scale manufacturing enterprises.

People in developing countries—and in some industrialised ones as well—often ask themselves whether it is not a luxury to spend effort and money on the humanisation of work and on improving the working environment when millions of people have no work at all. Is it not, they argue, more reasonable to solve the problem of unemployment first and then start thinking about better working conditions?

Presumably, such questions are based on the assumption that better working conditions benefit only those who are directly affected by them and bring only additional financial burdens and not benefits to the enterprise and to society as a whole. This assumption is, however, of doubtful validity, for the following reasons. Firstly, prevention of industrial accidents pays off. Apart from their social costs,

the direct cost to the undertaking of accidents... is out of all proportion to what it would have spent in preventing them. The indirect cost due to the disorganisation caused by the accident and the resulting loss of time should also be taken into account: the instruction and training of a substitute and sometimes the immobilisation and replacement of equipment.<sup>5</sup>

Although these remarks apply to all industrial undertakings, they are especially true for small ones, which are more vulnerable in this respect. Secondly, many improvements are inexpensive or cost nothing at all. This is true for changes in patterns of work organisation, rescheduling of working time, changes in workplace layout, improved housekeeping and many other innovations. Thirdly, better working conditions may result in higher productivity and quality of work through reduction of physical and mental strain and increased worker motivation. Regular maintenance of machines and proper storage of raw materials in the shop help both to improve general efficiency and to reduce the accident rate. Simple modifications in the working environment, such as readjusting lighting or changing the colour of the walls, help to improve the quality of work and are beneficial for workers.

Last but not least, today's actions are vital for tomorrow. A blind faith in technological determinism and underestimation of the importance of the human factor in industrial development have resulted in widespread recourse to fragmented, repetitive, monotonous jobs which cause deep dissatisfaction among workers and augment the turnover rate and absenteeism while lowering productivity. Billions of dollars are now being spent in industrially advanced countries in redesigning technology to make it "more human". Numerous experiments in "job enrichment", "job enlargement" and "group work" are carried out to restore work values lost in the course of industrialisation. Might it not be more beneficial for small enterprises to put efforts into preserving the richness of job content instead of allowing it to be

destroyed and attempting to restore it later? The ILO's experience with the introduction of new forms of work organisation shows that they can be just as applicable in developing countries as in more advanced ones.<sup>6</sup>

## **2. Sources of the existing problems**

A better understanding of the basic causes of existing problems as regards working conditions in the small-scale sector can help in developing a strategy for promoting improvements.

The owners/managers of small enterprises usually ascribe poor working conditions to a number of factors. Foremost among these is a lack of financial resources, leading to a shortage of funds for purchasing necessary machines and equipment. Many also refer to a shortage of working capital and difficulties in obtaining loans on favourable terms. Under such circumstances they are reluctant to allocate funds for measures to improve working conditions and environment. Another problem has to do with inadequacies in the supply and quality of raw materials and in the infrastructure. Shortages of raw materials often force managers to accept poor-quality materials or substitutes, some of which may cause health hazards and industrial accidents. Cuts or rationing of electricity affect ventilation, lighting and temperature control. This also inhibits the use of electrical machines, thus increasing physical strain. Small entrepreneurs also complain of lack of encouragement and technical support, claiming that extension officers in small enterprise development institutions are unaware of working conditions problems or do not pay enough attention to them. Finally, managers tend to blame workers for the high rate of accidents in small enterprises on account of their low level of skills, poor work attitudes, and unwillingness to provide proper maintenance for machines and equipment. They say that workers often refuse to use safety devices or wear protective clothing.

Experts and specialists engaged in promoting better working conditions in developing countries put special emphasis on different factors. Many managers, they say, have been trained on the job in similar small enterprises and are not always fully aware of the need for safety and a proper working environment since they tend to compare the current situation with the one they themselves were exposed to as workers. As a rule, there is insufficient knowledge concerning working conditions within enterprises because the latter are too small to hire specialists and managers are too busy to undertake training on this subject. Information on safety and the working environment rarely reaches small firms. Another defect remarked on by specialists is the low level of technology and facilities. The shortage of resources often leads owners to look for cheap, second-hand machines or even to restore them from scrap. "Choice of technology" is often a hollow concept, especially from the ergonomic point of view. To reduce costs, some buyers will sacrifice not only ergonomic machine design, but also such elementary safety devices as guards, blocking systems, and so on. Worn-out equipment and machinery

are often used at speeds exceeding permissible levels, resulting in high accident rates. Work premises of small enterprises are seldom designed for the production process used, but instead are often converted dwellings, old warehouses or even the covered gap between two garages. In such cases it is not surprising if little care is taken to secure a proper working environment. Certain national customs, such as the wearing of long clothing or the habit of going barefoot, are another cause of industrial accidents. Moreover, the usual work pace of rural inhabitants can conflict with the need for high-speed running of machine tools. Customs concerning the distinctive work roles of men and women can sometimes complicate the division of work.

Besides the above-mentioned points, the vital importance of such seldom-stated factors as unwillingness on the part of many owners to take steps to promote improvements should also be stressed. Caused partly by lack of awareness and partly by preoccupation with other matters, this unwillingness may also be linked with an urge to obtain short-term benefits by exploiting an uneducated and unorganised workforce—a process made easier by the excess of workers on the labour market.

Improvements in working conditions cannot be generated exclusively by increasing the awareness of managers. Pressure and motivation from outside as well as inside the enterprise are also required. Although government institutions possess numerous channels for exerting such pressure, their action can fail if it is not reinforced by the workers themselves inside the firms. For the time being, however, trade union influence in small companies is much weaker than in larger ones, and working conditions issues are not often the subject of labour-management negotiations.

### **3. Potential for improvements**

Taking into account the financial constraints, the low level of technology and the orientation of managers of small enterprises towards short-term profit, priority should be given to improvements that are cheap and easy to implement. It is very desirable that they should also result in higher efficiency and/or quality of work.

#### **Material working conditions**

As regards the workplace environment, one of the most obvious but most often neglected areas for obtaining immediate results is better housekeeping. Thorough, regular cleaning of the work area and machines, and proper storage of raw materials and finished products, can considerably reduce the danger of accidents while upgrading the efficiency of work. Lighting can in many cases be improved without increasing the number of light sources, simply by regularly cleaning windows and lamps, readjusting the height of light sources and installing reflectors. There are also simple, effective methods for reducing noise and dust, for example by moving certain

work under cover outdoors, where ventilation is better. Job content and work organisation can also be improved. Changes in the distribution of tasks between workers, in the work cycle of individual operations and in the allocation of workposts can positively affect workers' attitudes towards work as well as productivity. In some cases, the job content of operators is quite "rich", as, for example, in small electronics factories where the working cycle can be as long as 15-20 minutes. In this case the aim is to find ways of increasing productivity without sharply reducing the cycle length and without increasing work stress. Modern work design theory suggests ways of achieving such improvements.<sup>7</sup> On the other hand, when the work cycle is very short—less than half a minute—a high rate of absenteeism and low quality may be the outcome. There are usually possibilities for enlarging such jobs by assigning additional tasks to the workers. Appropriate choices concerning division of labour and the layout of workposts may enhance contact between workers, providing them with possibilities to learn from each other and encouraging a spirit of productivity. Differences in climate, physical work capacities and speed of reactions make the indiscriminate transfer of working time patterns from industrialised countries inappropriate in many instances. The introduction of frequent short rest breaks during the day is usually beneficial. A long lunch-break during the hottest hours of the day can be another solution. Long-term productivity gains can be assured if arrangements of the working week and year reflect the workers' needs as dictated by their rhythm of life, traditions and customs. Workplace ergonomics is another potential area for improvement. Although this is often associated with modern industry, one can argue that there is an even greater need for its application in developing countries than in industrialised ones. Among the numerous reasons for this are the need to adjust imported technology to the local worker, the lack of ready-made workpost arrangements appropriate for local workers, and the need to design efficient tools for traditional crafts.

There is much scope for improvement in other areas of working conditions and environment. At the same time, one should not be over-optimistic about the possibilities for achieving them at low cost. Some basic measures, such as introducing dust exhaust systems or providing better welfare facilities and social services, require substantial capital investments.

### **Technology, organisation and management**

In considering the potential for the promotion of improvements in working conditions and environment, it is useful to take into account the major technological, organisational and managerial particularities of small enterprises. Some of these are examined below from the point of view of their influence on the process of change.

The short processing times, simple, multifunctional machine tools and low degree of division of work which are common among small units are beneficial factors from the point of view of introducing changes in working

conditions. Moreover, the simple organisational structure of small enterprises, seldom exceeding two or three hierarchical levels and involving only a small number of people, lends itself well to direct contacts between managers and workers and for simple decision-making procedures. Concentration of all functions of management in the hands of one or a few persons and the absence of formalities also count as positive factors for the rapid promotion of improvements. Depending on circumstances, however, the same factors can reinforce the position of the owner and negatively affect the workers' power to bargain for better working conditions. Decision-making may be greatly affected by the manager's qualities, his cultural and educational background, attitudes and values. Where the top manager has a good professional background, it is usual to see a more rational organisation, a better choice of technology and decent working conditions.

#### **4. The choice of strategy**

It should be admitted in the first place that laws and regulations relating to working conditions are less effectively applied in small enterprises than in large ones. Moreover, some labour regulations are not obligatory for small enterprises. Even ILO Conventions concerning general conditions of work sometimes contain provisions making it possible to exclude small enterprises from national regulations.

The ineffectiveness of legislation is also related to the inadequacy of the enforcement machinery. It can be estimated that small companies in developing countries can expect a visit by a labour inspector not more than once every five to seven years. Under such conditions the threat of penalties for contravening legislation is almost meaningless.

Another reason for the limited effectiveness of labour legislation is that trade unions, which could reinforce it, usually do not exist or are quite weak in small enterprises. Another weakness of existing regulations is that they do not provide for the reduction of psychological and social strain.

Further improvement of legislation and regulations and related enforcement machinery is thus very important for securing progress in the working conditions field.

For the time being, the efforts of training and research institutes dealing with working conditions problems are almost exclusively directed at large and medium-sized enterprises which, on average, have better working conditions and more expertise in this area than small ones. One does not see many representatives of the small-scale sector at training courses organised by labour institutes. The reason for this is not that such institutions are unwilling to cater for small firms but the fact that the proper methods for working with this sector have not yet been developed. Possible approaches include working with groups instead of individual enterprises and developing close contacts with the industrial estates which group together numerous small units. It would be better not to wait for small companies to come to the

institutes for help, but for the institutes to go to them. Special short-term courses can be arranged with emphasis on low-cost improvements, and films and blueprints specially produced for small enterprises can help to promote awareness among them. The setting-up of special departments to deal exclusively with this sector can do much to secure an effective approach.

The efforts of labour institutes can be considerably reinforced by involving institutes established for the promotion of the small-scale industrial sector. The training of the latter's staff in working conditions improvements is essential in order to provide them with the common language needed for joint work with labour institutes. Merging the expertise available in these two types of institute permits the preparation of the most appropriate training programmes and materials. The big advantage of small-scale industry development institutes is that they can use readily available channels for the promotion of better working conditions. Because they assist small enterprises in making technological choices, they can ensure that conditions of work are taken into account at the production facility design stage. They can also assist in equipping machinery with guards and providing workers with protective gear, and can advise on the best way to run the machines and set up schemes for preventive maintenance.

About half the small industrial firms typically act as ancillaries to large public or state-owned enterprises. These links can be utilised for improving working conditions, with larger enterprises advising on different matters of work organisation or providing equipment and machines properly equipped for safe work. They can also organise short-term courses for managers of small enterprises and arrange visits to factories for them to study the different problems of work organisation and the working environment.

Different government-sponsored organisations can stimulate improvements in small enterprises by providing special grants or loans for improving working conditions, by granting exemption from tax or import duties, or by supplying raw materials on favourable terms.

Financial institutions can contribute to promoting better working conditions by providing small units with special loans at low rates of interest or by agreeing to allocate certain loans provided that they are used in part for improving working conditions.

In addition to the above-mentioned bodies, there are many others which are engaged in this work. Among them are ministries of health, safety councils, productivity centres, employers' organisations and management institutions, trade union institutions, universities and research centres. It would seem more practical to support the efforts of these institutions to improve working conditions than to set up a special body to deal with the problem. What is needed is co-ordination of their activities so as to avoid duplication of effort and ensure that each institution clearly understands its role in relation to the others. Ministries of labour and labour institutes seem to be the most appropriate choice for assuming the role of co-ordinator of these collective efforts.

It is unrealistic to expect the existing network of institutions to have enough capacity to provide assistance to each individual unit. There is a need for new methods of providing low-cost assistance to a large number of firms. One such method, based on models for the design of the most typical work stations, has been developed and successfully employed in USSR industry.<sup>8</sup> Such models are likely to include specifications concerning the equipment and tools used at the work station and the type of work to be performed there; a description of the instruments and technical documents attached to the station; arrangement of the workplace; information on the servicing of equipment; recommended working time arrangements; working environment specifications; and safety measures. In addition to a considerable improvement in working conditions and environment, the introduction of work organisation models usually results in a labour productivity growth of 10-15 per cent. More than 3,500 such models have been developed in the USSR and applied to some 6 million work stations.<sup>9</sup>

The shortage of financial resources makes it impossible for most small units to set up their own welfare facilities. This problem can be overcome by the development of joint welfare facilities for a group of firms, as has been done in some developing countries, where industrial estates equipped with joint facilities have been set up. The aim is to develop the range of such facilities further so as to include medical services, co-operative food stores, canteens, rest rooms, training facilities, transport, and recreation grounds. Groups of small enterprises can share the expenses involved in using the services of occupational physicians and management consultants. Such developments are a promising way of benefiting both workers and enterprises.

## **5. The role of training and consultancy**

There is no substitute for knowledge. Unless all the groups involved clearly understand the nature of working conditions and how and why improvements should be promoted, there is not much hope for progress. The actual amount and type of knowledge needed depends on the role played by given organisations or individuals in promoting improvements. For example, policy makers responsible for developing small-scale industry may merely need to learn about the major aspects of working conditions and environment and their potential impact on socio-economic development. An understanding of the role of different organisations in promoting improvements is also useful. Such knowledge can be gained from meetings, seminars or special publications. Those who provide financial and other assistance to small enterprises will require more detailed knowledge to enable them to make judgments about the feasibility of loans and grants and to evaluate results.

Trade unions will be primarily concerned with the adverse effects of poor working environments and about legislative provisions and possibilities for the



promotion of low-cost improvements. It is worth considering enlarging vocational training programmes by introducing such subjects as workpost ergonomics, the arrangement of working time and work organisation.

The natural and effective way of promoting better working conditions in small enterprises is to link them with other improvements. To do this, extension officers specialising in providing assistance to small firms should possess a thorough knowledge of the effects of different changes in organisation, technology and methods of work on workers' lives and health. Special short-term training programmes for extension officers may cover subjects such as the working premises (even if they consist of a dwelling or an extension of living quarters) and the importance of lighting, ventilation, existence of pollutants, adequacy of space, etc.; the workplace layout (working posture, work movements, tool positions, equipment layout, work flow, repetitive work, etc.); choice of technology in relation to the socio-economic environment, the cultural traditions of the community, the infrastructure, etc.; choice of particular tools and equipment in regard to safety features, and choice of raw materials; and motivational training to convince owners and managers themselves of the need for safe working conditions.<sup>10</sup>

For day-to-day work, extension officers need manuals with checklists for assessing the level of working conditions and environment and information on practical low-cost improvements.

While all these groups influence the promotion of improvements in one degree or another, it is the managers and technical personnel of small enterprises who finally decide on their implementation. There is no way of imposing changes from outside without providing assistance and knowledge to the personnel of these enterprises, leading to a change in attitudes and eventually to the desired action.

If internal or external influences can result in motivating managers of small enterprises to pay attention to the problem of working conditions, training and consultancy assistance are needed to bring about change. However, one of the basic problems with which the promoter of better working conditions is often faced is that managers of small enterprises are reluctant or unable to take part in formal courses, especially ones dealing with matters of no direct interest to the manager. In a survey of more than 50 small enterprises conducted by the author in India, managers were asked whether they would be interested in taking a short course on the techniques of improving working conditions. Only two responded positively and, apparently, their companies already had the best working conditions. Direct contact with managers, and joint consideration of existing problems and the potential for improvements, are needed to persuade them to participate in training programmes. Extension services are a natural way of establishing such contacts. To be effective, training courses should be based on a thorough knowledge of the local situation and of the precise problems of participating companies. Such information cannot be

gained from quick surveys, as the roots of a problem may differ from its symptoms. Extension services are also needed to monitor the process of implementation.

An important advantage of training over consultancy is the possibility of providing simultaneous inputs for a considerable number of firms ; another is establishing direct contacts among the participants, thus providing opportunities for learning by sharing problems and experiences. Discussing problems collectively often creates a synergetic effect by providing people with ideas which may not occur to them on their own. Joint work in training sessions can develop a spirit of co-operation which assists them in accepting such ideas as setting up joint welfare facilities.

A recent ILO experimental workshop on the promotion of the quality of working life in small and medium-sized enterprises, organised for managers of such enterprises in co-operation with the Central Labour Institute and the Small Industry Extension Training Institute in India, provided an opportunity for testing the above-mentioned approach. It was based on the following methodological assumptions :

- the main focus should be on improvements beneficial to both workers and the enterprise ;
- in order to ensure the good will of participants and to overcome resistance, attention should be paid to company achievements and positive developments ;
- the interference of outside trainers should be minimal as managers learn best from their colleagues by discussing real problems ;
- training should be interspersed with practical application of the knowledge acquired.

Over a period of three weeks, a group of consultants conducted a number of short action-oriented research studies and consultancy assignments for 16 participating industrial enterprises. The findings and results of the assignments were used as the basic material for discussions at three seminars organised for managers of the participating companies. At the end of the programme, each company prepared an action plan including improvements in work organisation, working environment, safety, technology and welfare facilities. The programme had a considerable motivational impact, one indication of which was the fact that many changes had been implemented by participating companies even before it was over.

## **6. The special case of very small enterprises**

What has been said above is related mostly to enterprises employing 10 to 150 workers. However, there are many thousands of very small enterprises employing fewer than five workers. Usually the owners of such companies undertake managerial functions as well as production work, which is shared with family members and employed labour, often children. The

owner makes all the decisions and the worker has very little to say; he either accepts the conditions or leaves the firm. Technology and production processes are simple and often primitive.

Promotion of better conditions and improvement of the working environment in this sector is an extremely complicated task. The informal character of such undertakings makes it almost impossible to use the existing enforcement systems; managers are very reluctant to participate in any training activities; the majority of workers are low-skilled and uneducated.

At the same time, however, such enterprises possess a high flexibility and capacity for change. Simple technological and organisational innovations can be quickly implemented if accepted as profitable by managers. Because there is a great deal of co-operation and sharing-out of work between firms in this sector, most of which have an "open door" policy, a good opportunity is provided for the diffusion of innovations from one firm to another. The task is to generate innovations providing both higher productivity and better and safer working conditions.

As many owners and workers either live on the work premises or near by, it is relatively simple to organise special presentations directly in the area where such enterprises are grouped together.

For such presentations, special films, lectures, mobile exhibitions explaining how to make work more productive, safer and pleasant have to be developed. Developing simple "work organisation models" of the most typical workposts may improve knowledge of work organisation in small enterprises.

Posters showing safe work methods can help a great deal. As with other small enterprises, developing welfare facilities is feasible only on a co-operative basis and with active government assistance.

## **7. Conclusions**

In developing countries improvements in working conditions and environment in small enterprises should be considered a necessity dictated by the interests of socio-economic development.

There is much scope for low-cost improvements in work organisation, arrangement of working time, and working environment, which not only benefit the workers but can also contribute to efficiency. Such improvements cannot, however, be brought about solely by labour and safety organisations; the whole network of institutions engaged in developing the small-scale sector should be involved, as well as the managers and the workers themselves.

The working conditions element should be integrated into the assistance provided to small enterprises on financial, organisational or technological matters.

The provision of welfare facilities can be arranged on a co-operative basis. Government assistance will usually be needed to facilitate this process.

New methods of providing assistance to small enterprises for improving working conditions are needed. Combining consultancy and action-oriented training seems to be the most promising. Preference should be given to ways and means of promoting improvements in working conditions which would reach a large number of small enterprises, among them films, "models of work organisation", mobile exhibitions, group consultancy and action-oriented training.

## Notes

<sup>1</sup> For the purpose of this article "a small enterprise is ... one in which the operational and administrative management lie in the hands of one or two people who are also responsible for making the major decisions of the enterprise". ILO: *Small Enterprise Development Programme* (Geneva, 1982), p. 3.

<sup>2</sup> P. A. Neck (ed.): *Small enterprise development: policies and programmes*, Management Development Series No. 14 (Geneva, ILO, second impression, 1979), p. 10.

<sup>3</sup> Generally, undertakings having investment in machinery and equipment not exceeding 2 million rupees.

<sup>4</sup> Government of India, Small Industries Development Organisation: *Small scale industries in India: some facts and figures* (New Delhi, 1978), p. 2.

<sup>5</sup> ILO: *Making work more human*, Report of the Director-General, International Labour Conference, 60th Session 1975, pp. 23-24.

<sup>6</sup> G. Kanawaty and E. Thorsrud, with contributions from J. P. Semiono and J. P. Singh: "Field experiences with new forms of work organisation", in *International Labour Review*, May-June 1981, pp. 263-277.

<sup>7</sup> L. E. Davis and J. C. Taylor (eds.): *Design of jobs* (Harmondsworth (Middlesex), Penguin Books, 1972).

<sup>8</sup> M. Gliantzev: "Vnedrenie NOT v 1978", in *Sotsialisticheskii Trud* (Moscow), 1978, No. 3, p. 69.

<sup>9</sup> A. Louzine: *Work organisation models in USSR* (Geneva, ILO, 1980), p. 1.

<sup>10</sup> P. K. Das: "Education and training on working conditions and environment in small enterprises", in ILO Asia/Pacific Tripartite Regional Seminar on Education and Training Policies and Programmes in the Field of Working Conditions and Environment: *Proceedings of the Seminar* (Bangkok, ILO, 1980), p. 66.