International Labour Review, Vol. 129, 1990, No. 6

New directions for training: An agenda for action

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Introduction

Education and training and the advantages they bring – productivity growth, wealth and employment creation, job satisfaction, maximisation of capital investment, to mention only a few – have long been recognised as crucial to the development process.

More recently, however, new demands have been placed on training systems. Rapidly changing technologies, mounting demographic pressures, increasing regional and global interdependence, rising international indebtedness, and stagnating or only modest growth in many regions of the world have combined to exert strong pressure on most countries to adjust their economies accordingly. This confronts training with three basic challenges. Firstly, how can it effectively assist structural adjustment measures? Secondly, what kind of infrastructural reforms of the training system are needed to improve its effectiveness? Thirdly, as employment opportunities become ever more limited in the modern sector, what supportive measures can the training system take to help the unemployed who drift into the informal sector or who attempt to strike out on their own? These problems are reviewed in turn below, following which we propose an agenda for necessary action by the various parties concerned and conclude by discussing a number of unresolved issues in the training field.

1. Adjustment and the training system

The economic and social systems of many countries are today feeling the impact of rapid structural change. As regards human resources, there have been changes both in the supply of manpower and in the patterns of demand for skilled labour. Such changes are gathering momentum, rendering the process of matching supply with demand more difficult. High levels of unemployment, coupled with labour shortages in certain occupations, are on the increase in many countries. The training system therefore needs to adopt

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new approaches to meet the training needs of the potential workforce and to adapt to the rapidly changing profiles of occupational needs. It has to make constant adjustments and find new tools to match the output of the training system with these changing needs.

A. The changing nature of supply

As regards future labour supply, three demographic trends have had a significant impact: firstly, the doubling of the world population over the past 40 years, the increase occurring almost exclusively in developing countries; secondly, a stabilisation and, in some instances, a regression of birth rates in developed countries resulting in a gradual ageing of the population; and thirdly, a greater awareness of issues relating to the role of women, and increased efforts to expand women's participation in the labour force. Each of these trends has implications for training.

Population explosion in the developing countries

The sheer size of the new generation of jobseekers in need of training is staggering. Their arrival on the labour market is already outstripping the capacity of existing training institutions in many countries, and governments are finding it financially prohibitive to continue building new institutions to handle the increased numbers of the economically active. The temptation in these circumstances is to organise training for its own sake without much regard to the actual needs of the labour market and so perpetuate the same profile of trainees, irrespective of the changing patterns of demand for skills. Furthermore, there is a risk of the emphasis being placed almost exclusively on initial training to help trainees obtain a first job – with problems of upgrading and retraining for mobility left either to the enterprise, or to individuals to resolve for themselves later on – whereas today retraining, upgrading and life-long education needs are all increasingly important as a result of restructuring and changing technology.

Several approaches are called for. In the first instance, training institutions need to increase their own productivity as well as to follow a balanced approach in training. Modern developments in training technology enable these centres to invest in a whole array of new and often more cost-effective programmes, such as self-development methods, modular programmes, mass media and computer-assisted education. These programmes offer the advantage of reaching a wider audience, and while they could still be supported by traditional training institutions, they do not necessarily need to be provided inside those institutions. Secondly, in most developing countries training centres were built in the heyday of industrialisation and have continued to cater for occupations for which there is now less demand, leaving other areas virtually uncovered. Thus in many of these countries there are hardly any sustained activities directed to training

managers in the construction or transport sectors, whereas ordinary vocational training for these sectors may be adequately covered; there may also be little training for the services sector.

In other countries training may be restricted to specific target groups. In Egypt, for example, until recently government-supported management development centres catered exclusively for the needs of the public sector, although the private sector carries on close to 30 per cent of the total economic activity of the country. A balanced approach to training also means that retraining, whether institution- or enterprise-based, needs to figure prominently on the agenda of policy-makers, alongside provision for initial training.

Most of the jobseekers in developing countries are young people seeking their first employment. The active partnership of enterprises with governments in developing viable youth employment and training schemes is therefore well worth pursuing. Many industrialised countries, particularly in Europe, have acquired extensive experience in operating such schemes, under which young people can obtain hands-on training experience with governments and employers sharing the cost. This can take the form of apprenticeships, on-the-job training or variants of the "dual system", whereby young people acquire their skills by alternating between institutional and enterprise-based training. Training for self-employment is another means of relieving the pressure of supply. This is reviewed in section 3 below.

Demographic contraction in developed countries

Rising life expectancy in industrialised countries coupled with stable and, in several countries, declining birth rates have resulted in an ageing of the population. In the former Federal Republic of Germany, for example, the proportion of the population aged 55 years or over will reach 31 per cent in ten years' time. It can therefore be safely assumed that in these countries labour shortages will increasingly be met by older workers who are today opting for retirement. Fortunately, older workers are nowadays generally in better intellectual and physical condition than was the case in earlier times, and they display an increasing readiness to rejoin the economically active population. Training or retraining them will therefore become a priority in these countries. To some extent, existing facilities and schemes may be adequate to meet this new demand, but in countries such as the United States special job-search, counselling and placement systems have been devised as a result of the growing interest in employing experienced older workers. Furthermore, there is a range of occupations in which older workers can make an especially useful contribution, such as those associated with leisure activities and services (including insurance, community services and language training), and for these suitable retraining is needed.

Increased participation of women

The increased participation of women in economic activities is illustrated by the fact that, in 1980, they represented 38.7 per cent of the total active population in OECD countries compared with 31.4 per cent in 1950. In Asia the female share of the total labour force in 1985 was 33.8 per cent as against 29 per cent in 1950 and in Latin America it increased from 18 to 24.2 per cent during the same period.

However, in many developing countries women's participation has been restricted to a narrow range of sectors and traditional occupations. While in industrialised market and centrally planned economies women are able to accede to higher professional and managerial positions, barriers to such careers persist elsewhere. Such a situation calls for a change in attitudes and a review of policies which can be achieved by sensitising employers and governments to the issue. It also requires management development centres to pursue a determined policy of recruiting women for their initial and upgrading training programmes, to keep track of the trainees at their place of work, and to evaluate their performance by methods such as tracer studies and career development programmes. By following this lead, vocational training institutions could also help to end the segregation of jobs by sex.

Finally, restructuring in some countries is causing a decline in certain sectors where female participation is high, such as the clothing, textiles and food-processing industries, while at the same time expanding other sectors where female participation is equally high, such as the services and information systems sectors. This should incite training centres to establish the counselling and retraining services that are needed to facilitate the transition from declining to expanding sectors.

B. Changing patterns of demand

In a period of rapid change, three major factors have conditioned the quantitative and qualitative needs for trained manpower: growth prospects, industrial restructuring and new technology. Each of them presents the training system with a new set of challenges and requires it to evolve new strategies to meet the changes they provoke.

Prospects for growth

With the exception of East Asian countries, all regions of the world had an average rate of economic growth in the 1980s amounting to roughly half the rate they experienced in the 1960s. Sub-Saharan Africa and Latin America were the regions most affected by economic decline, registering negative rates of growth for the period 1980-86. While most industrialised countries and many Asian countries recovered fairly well from the depression of the early 1980s, the picture was different for the rest of the world, where the prospects for growth were and still are darkened by inflation,

indebtedness, deteriorating terms of trade and shrinking capital formation and investment.

This combination of adverse economic factors has resulted in a reduced demand for manpower in these countries at a time when most of them are facing a population explosion. It has also resulted in austerity measures involving across-the-board cuts in public expenditures, including those devoted to education and training. For example, between 1972 and 1985, central government expenditures on education in low-income countries dropped from an average of 13.2 to 7.6 per cent of the total annual budgets of these countries (excluding India and China).

While comparable figures for training are difficult to come by,[1] the evidence is growing that obligations hitherto assumed by governments are increasingly being shifted to enterprises. This trend towards reduced public financial commitment to education and training is unfortunate since in the long term it can have a negative, sometimes irreversible effect on the productive potential of these countries' economies, and can further widen the gap in know-how between North and South. The point at issue is whether expenditure on training should be reduced whenever demand for manpower stagnates or whether it should be considered a long-term investment that will provide the springboard for recovery, improved productivity and growth, and will also meet people's expectations for the satisfaction of a basic need, learning.

Restructuring

In many countries the pattern of demand for manpower is being influenced significantly by economic restructuring. Two types of restructuring can be identified. Firstly, there is a clearly discernible long-term trend towards the growth of the services sector. Secondly, relative rates of growth of subsector activities are also changing. Thus in many countries there has been a shift in the importance of certain industries within the industrial sector. This is either the result of the globalisation of markets, declining competitiveness and changing consumer preferences, or the response to a concerted economic policy, as in the case of some socialist countries which are shifting productive capacity from heavy to light industry and to the production of food and consumer goods.

The training problems posed by restructuring are formidable. There are imperatives related both to retraining and to geographical mobility. For example, the decline of coalmining and shipbuilding in Europe calls for massive schemes to retrain displaced workers for new occupations. Experience shows that traditional training courses have not performed well. What is needed is a combination of counselling and retraining geared to identifiable job opportunities. In order to give a sense of direction to

[1] In part because training is being increasingly used as an (inseparable) component of employment creation schemes.

retraining efforts, the co-operation of employers and workers' representatives is imperative in initiating appropriate schemes in affected enterprises.

The issue of geographical mobility is closely associated with restructuring problems. West European experience shows that new industry is reluctant to locate in depressed areas. This means that either the retrained workers have to be persuaded to move elsewhere or new industry has to be offered certain inducements. However, labour mobility does not depend merely on material incentives; it is also influenced by cultural factors and regional preferences, as shown by the example of the former Federal Republic of Germany, where mobility incentives have not produced the expected results. There is also a correlation between mobility and age, with younger workers being more mobile. For this reason, many governments have approached this issue by placing more emphasis on incentives to new industries to locate in certain areas, including depressed ones, within a policy of regional development.

Technology

The proliferation of advanced technology has changed the pattern of demand for labour in both industrialised and developing countries. Job profiles are changing in two ways: some occupations are likely to continue in high demand while others will gradually disappear and new types of skills will emerge; the degree of proficiency needed for certain types of skills is also changing.

To prepare for the advanced technology age, both educational and training systems stand in need of reform. In formal education, the curricular content of mathematics, sciences and computer studies needs to be reinforced without detracting from the present culturally rich syllabus. More important, perhaps, is the changing role of training systems. Training for narrow specialisations without the requisite broader conceptual content induces rigidity in the occupational structure. Programmes need to be broader, richer and modular to facilitate adaptation from one technology to another and upgrading from one occupation to others of the same type. Yet, at the same time, training must avoid superficiality and should give students a grasp of the technical details of occupations.

Occupational flexibility needs to be promoted in order to meet the requirements of both advanced technology and restructuring. To the extent that workers with broader skills may develop a stronger feeling of employment security, training may contribute to a healthier industrial relations climate. However, occupational mobility needs to be encouraged through active consultation and collaboration with worker representatives for at least two other reasons. Firstly, departure from narrow job descriptions should be compensated in higher wages. Secondly, because multi-skilling may affect lines of demarcation among several workers' organisations within the same enterprise, its introduction calls for a high degree of consensus.

It is also becoming clear that with the advance of technology more training will be undertaken within enterprises, a phenomenon with which training institutions will doubtless wish to be associated since it will enable them to bring their activities closer in line with actual needs. Another development associated with more sophisticated technology is for vendors of equipment to become producers of training materials and also to be more active in offering training themselves. Training institutions, for their part, are also playing a larger role in technological development: for example, some vocational and technical schools in Switzerland are involved in the design, development and construction of prototype products and machines, while others subcontract with enterprises for maintenance and repair services or for assistance in overcoming difficult problems.

As trainers join with producers and producers get more involved in training, the cross-fertilisation of their respective experiences opens up new possibilities. In a period of austerity, these make it possible to increase the revenues of training institutions, as well as to utilise some of their idle capacity. It also renders their training more relevant to the world of work.

In the technology age, the importance of maintenance skills equals or exceeds that of direct production skills. Training for maintenance has to focus on diagnosis, which requires the development of multiple skills in the maintenance worker.

Finally, advanced technologies require continuous learning and upgrading. An electronics engineer may need up to 300 hours per year of further training to keep abreast of developments in his or her field. It follows that, in order to make training more responsive to the demands of the technology age, several courses of action need to be followed simultaneously.

C. Matching supply with demand

In a period of rapid adjustment two issues need to be addressed in seeking to match supply with demand. From the qualitative point of view, the degree of proficiency in the skills imparted by training institutions needs to match employer expectations, particularly since product quality is becoming a major strategic concern. Shoddy standards tolerated during the training period can be very difficult to correct later on, and show up in poor-quality products.

As to the quantitative aspect of the problem, traditional approaches to manpower forecasting are proving too simplistic to be of value, given the rapid changes in demand patterns. The variables are many, the uncertainty is great, and the occupational profiles are changing constantly. New ways have to be found to correct short-run mismatches between supply and demand in a systematic and continuous manner. In this respect a mechanism that corrects automatically, at least for the everyday or minor changes that occur, offers the best hope of achieving such an equilibrium.

The recent experience of Western Europe and the United States in creating self-regulating links between training and demand is positive and can serve as an example. When institutions receive funds for training directly from employers (or from a levy system in whose management employers have a strong say), they have every reason to offer what the firms want. When trainers are evaluated and receive financial rewards on the basis of the proportion of their graduates who find the right jobs, they no longer have any cause to take the easy option of repeating the same training courses that have been found wanting.

In the process of matching supply and demand in a period of adjustment there is considerable latitude for government intervention: excessive regulation can be ineffective, but a judicious amount of central planning is beneficial, especially when it is restricted to the critical areas or to those in which major changes are to be implemented, leaving market forces or other self-regulating mechanisms to do the rest.

2. Preparing the infrastructure

Drastic changes in society or in the economic structure call for planned changes in training to allow for expansion and change of direction or emphasis in training output. Furthermore, careers in which training cycles are long need lead time to prepare for such change. For instance, in the training of engineers and scientists fundamental changes require more than a decade to introduce.

Realistic and effective planning can only begin if sound data are available on economic changes and training requirements. Adequate but relatively simple information systems need to be created and gradually refined. These would be used to assess the training resources needed and, by inference, the financial implications of bringing about changes in the training system commensurate with changes in the economy.

Experience shows that the planning of training is a very difficult exercise and is subject to gross error if due precautions are not taken. No single course of action can be universally applied. Rather a strategy should be followed that comprises several courses of action carried out simultaneously in order to cater for various target groups and for changing situations.

A. Links between education and training

Organisations are constantly in search of suitably skilled workers. Such skills can be acquired through a combination of formal education and further training. Whatever the education system omits in terms of knowledge and skill for a given occupation ideally has to be provided by the training system. Thus workers with a poor background in numeracy may have to follow special courses before being trained on numerically controlled machines.

Accordingly, for a given level of training, the lower the standard of formal education or the more inappropriate its curriculum, the longer and costlier the required training becomes. If too little schooling is needed as a precondition for training, several things may happen. The trainees may not be able to follow the courses given and training centres may end up recruiting trainees with a high probability of poor performance and potential drop-out. If, on the other hand, too much formal education is required for admission to a training institution, those who have reached such a level may set their sights on more prestigious careers or may enrol only if they fail to get accepted elsewhere.

The end of schooling does not have to coincide with the beginning of training. In fact, the policy of making training overlap with the last years of school education has been adopted in many countries. The best-known approach has consisted in introducing vocational training into normal secondary-school programmes. While this may seem a very attractive proposition, empirical evidence suggests that it rarely succeeds in helping students to get better jobs or earn higher incomes. The technological and manual tuition provided is frequently meagre and out of touch with market needs. Clearly it is difficult in such cases to create close links with labour market priorities. Institutions that are overdependent on the State and gravitate around the academic school tend to lose touch with market needs and become less effective. Furthermore, they do not create an environment where true craftsmanship and the values of the occupations taught can thrive. This is particularly true in societies where technical and manual occupations have a low status: students who reach the end of secondary schooling think that they have a right to higher education and, when obliged to take up vocational subjects, do so perfunctorily and without any serious intention of applying the occupational skills taught.

There is also a tendency in some countries to blur the boundaries between education, training and the world of work. Traditional apprenticeships, coupled with theoretical courses in training centres, constitute the well-known "dual system" which yields excellent results in Germany, Austria and Switzerland. This system has proved difficult to reproduce in developing countries. Two of the initial stumbling blocks are the difficulties in setting up the administrative apparatus for getting apprentices hired, and in overcoming the reluctance of employers to take on young workers who are not very productive and do not work full time. However, with some variations, this remains one of the most interesting solutions available.

B. Bringing training closer to firms

In many countries there is a clear trend towards expanding enterprise-based training, for various reasons. A desire to shift rising training costs from government to enterprises may be one reason, but efficiency obtained from a

better match between need and supply is another. Institutions that are closer to the labour market usually perform better, so it is sensible to offer as much training as possible through in-service schemes or through institutions that have close links with them. The dilemma lies in how to match the requirements of a national strategy with the freedom of enterprises to act in this area. Policy-makers tend to use the financial leverage of levy systems, tax rebates and similar means to bring training closer to the enterprise. But this can be self-defeating if management is not sufficiently convinced of the importance of training and therefore views these financial schemes as a tax, rather than as an investment. Alongside such schemes there should also be consultation and involvement of employers in the design of a national training strategy.

The detailed knowledge enterprises have of their own requirements makes enterprise-based training convenient and efficient, since the curriculum can be adapted rapidly to meet evolving needs, such as those arising from changing technology. Furthermore, such an approach offers built-in quality control. Several formats for organising in-plant training are available: in-house training centres may be appropriate in some cases, while outside teams or consulting firms may offer custom-made programmes better suited to small firms where the number of potential trainees is limited; on-the-job training programmes can be enriched with more conceptual preparation, and "sandwich courses" are a suitable solution in certain situations.

Institution-based training must also move closer to the world of work, in order to identify needs more clearly and to offer programmes that can meet changing demands. Flexible, broader and modular programmes are more cost-effective than traditional courses and lend themselves well to new instructional techniques. Furthermore, training centres need to provide specific services to enterprises, such as developing product prototypes, subcontracting to undertake certain operations for the firm, and offering to organise and manage enterprise-based training schemes.

C. Financing of training

Training is expensive and the cost tends to be apportioned differently according to who provides it. In most countries training takes place both in public and private institutions and within enterprises, and the distribution of the cost burden needs to reflect this division of responsibility. In industrialised market-economy countries there are indications that this cost is increasingly being shifted on to the enterprise. In France state expenditure on training amounts to 58.6 per cent of the total and private sector expenditure to 35.4 per cent, with various public and other organisations contributing the remaining 6 per cent. Prior to reunification, 58 per cent of the cost of training in the former Federal Republic of Germany was borne by the public sector and 42 per cent by the private sector. In both countries the

share of the private sector was lower several years ago and is expected to continue rising in the future. In socialist countries and developing countries the State pays most of the training costs.

Many countries, developing and industrialised alike, have introduced schemes to underwrite some of the mounting financial burden of training. The most common of these has been the levy system where 1 per cent (sometimes more) of the wage bill is levied to finance training. Other schemes involve tax rebates, special financing focused on particular target groups, contract training by either the government or the enterprise, or (as in the Republic of Korea) a tax imposed on enterprises employing 500 or more workers if they choose not to offer in-plant training to a stated percentage of their workforce. It is important that the financing system should provide incentives for changing a training course whenever the supply of trainees is no longer in step with labour market needs and, in this way, to render the training system supportive of adjustment measures and employment objectives.

The widely used levy system can become relatively less effective for this purpose if public or semi-public training centres and institutes receive a fixed budget from the levy fund, irrespective of whether they are or are not adjusting their programmes to changing needs. The (often substantial) funds levied on employers are ostensibly intended to serve their immediate and long-term needs. Employers should therefore have a considerable say in the way these funds are disbursed. Only thus will they come to regard a levy system as an investment, rather than as an additional tax.

Tax rebates can be a strong incentive, provided the process of getting the proposed training activity approved for a tax rebate is not so slow and bureaucratic that it discourages enterprises from using it. Contract training works well, but only between dynamic firms and aggressive trainers. The Korean experience of taxing enterprises that fail to provide training has been controversial and has created several problems, due to varying interpretations by the Government and enterprises of matters such as the percentage of the workforce to be trained, and of what constitutes an acceptable period of in-plant training.

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A few patterns stand out with regard to the organisation and financing of training. There is a clear trend towards increased participation by the private sector. Secondly, the variety and complexity of the participation mechanisms used are growing. In other words, more firms are providing and paying for training, more equipment manufacturers offer training for the machines they sell, and different modes of training delivery are used simultaneously. Thirdly, the expansion of private training is being justified on the grounds that it caters much better to the real needs of the market. And finally, despite this growth of private training, there is still plenty of room for publicly financed and delivered training, particularly at the pre-employment stage.

3. Training in the non-organised and informal sectors

Most of the analysis in the preceding paragraphs is relevant mainly to the modern, formal sector of an economy. In a period of slow employment growth in the formal sector, many new entrants to the labour market have no option but to join the informal sector, to become self-employed, or to create and develop small enterprises.

A. Small enterprise development and training for self-employment

Self-employment and employment in small enterprises are major sources of work in many countries. There is evidence that entrepreneurs are more likely to have come from the ranks of small enterprises than from larger ones, which suggests that encouraging small enterprises can have a multiplier effect. Promoting self-employment can also encourage initiative and innovation, promote savings and investment, lead to a better distribution of income, and render economic activity more flexible, since small enterprises can sometimes respond more readily to economic changes than can larger ones.

There are various issues to be tackled in promoting small enterprises ("co-operatives" in socialist countries). To begin with, an entrepreneur needs to be found and trained. If he is already operating, the problem of upgrading his knowledge is not insurmountable. But identifying potential entrepreneurs has to start early. It is, perhaps, unfortunate that education and training curricula in many countries carry with them the notion of dependence on the State or on the formal sector for future employment, rather than stressing self-reliance or alerting trainees to self-employment possibilities: in this respect, attitudes and beliefs have to be changed. To date very little has been done to introduce, even as an option, simple notions of small enterprise management and entrepreneurship in the curricula of normal vocational and commercial schools.

ILO experience also shows that training in this area carried out on its own is ineffective: it has to be combined with credit facilities; with advice and consultancy on the feasibility and management of the intended venture; and with establishing the infrastructure (such as development of industrial estates, availability of power, water, transportation facilities and adequate channels of distribution), particularly in rural areas. These are tasks that governments can assume and recently some have looked at this sector as a possible way of redeploying civil servants made redundant as a result of adjustment measures.

The ILO's limited experience in this particular field has yielded mixed results for three main reasons. Firstly, and obviously, not all redundant employees possess the desired drive and risk-taking ability needed to start a small enterprise: pre-screening of candidates is all important. Secondly,

governments sometimes underestimate the additional effort they have to make in providing credit facilities and other forms of technical assistance. Thirdly, the absorptive capacity of such schemes is often exaggerated: the number of small enterprises that can reasonably be created and supported in a year is usually small compared with the hundreds, sometimes thousands, of civil servants whose employment is being discontinued.

In addition to the range of support services required to foster small enterprise development, an appropriate policy must also be developed at national level. Such a policy might comprise action related to: tax incentives; guarantee funds; the intervention of development and commercial banks; and the links between the various components of technical assistance. Small enterprise managers, for whom the policy is intended, need to be involved actively in its formulation and their voice can best be heard if they belong to an association or to an employers' organisation, through which they can also be more readily reached for training purposes. This is particularly so in developing countries, where obstacles to establishing small enterprises often tax the energies of individual entrepreneurs, and where a collective approach can help to minimise many obstacles.

B. The informal sector

In most developing countries employment growth in the informal sector outstrips that in the modern sector. So training efforts for this sector should not be makeshift or transitory. The sector needs a well-thought-out approach to training, and an initial step would be to develop better methods for assessing training needs. Not all workers in this sector are engaged in activities for which they can be meaningfully trained, but experiments suggest that in some areas favourable results can be obtained.

Traditional apprenticeship in a craftsman's workshop is currently the chief training method in this sector, especially in rural areas of many developing countries. Efforts should be made to improve this system within the constraints under which many small firms operate, notably through measures that will protect apprentices without discouraging craftsmen from accepting them. Appropriate incentives should also be designed to encourage master craftsmen to improve their training skills. In some cases, special training programmes for craftsmen may be apposite, but this approach has only recently become accepted. Structured training programmes may be a useful means for inducing good work habits and transferring unfamiliar technologies. Experience in this area is still scanty but the prospects appear to be favourable.

Training-cum-production schemes offer real advantages and can be employed meaningfully in various circumstances, but with the precautions necessary to avoid a situation in which either training becomes excessively academic (leaving production a residual or artificial activity) or production for the market becomes the sole objective, with the consequent downgrading of the training component.

The role of conventional training institutions vis-à-vis the informal sector remains to be properly defined. It is wasteful to leave these expensive and experienced institutions isolated from the fastest growing segment of the labour market. On the other hand, the strategies and methods they can deploy to reach informal sector workers are not self-evident. One approach is for them to give resource support to other, smaller institutions by providing training materials and technical assistance and by training trainers for the informal sector. In this connection it may be noted that the role of non-governmental organisations in training for the informal sector is increasingly important. They operate cheaply and are better adapted to working at the grass-roots level than large training centres traditionally established to cater for the modern sector.

4. An agenda for action

Perhaps more than ever before, there is now a consensus among the social partners that training efforts need to be pursued vigorously and examined in a new light, to enhance the chances of success in adjusting to a changing world and in expanding employment opportunities. There may be a lack of consensus among the social partners in certain countries about issues such as occupational flexibility, sharing the cost of training or financing schemes, but by and large there is agreement that training has to form an integral part of a concerted employment policy and adjustment measures.

In proposing an agenda for action, applicable to all countries and target groups, there is a risk of being too general in formulating recommendations, thus diminishing their usefulness, or being too specific, thereby opening the door to an array of exceptions. Nevertheless, it is possible to detect certain trends which call for corresponding action by policy-makers, employers' and workers' organisations and training institutions as well as by the ILO.

A. Action by policy-makers

Policy-makers – be they government authorities or legislative bodies, central or local – should regard training as an essential ingredient of their employment policy. The know-how and experience of the social partners should be mobilised in such fields as the identification of the most serious training problems; the review of current relevant legislation; the co-ordination of training efforts; equity considerations; the cost-effectiveness of the training infrastructure; and the building up of the necessary statistical base.

When austerity measures have to be taken to reduce government expenditure, many countries tend to make cuts along the lines of least political resistance. Education and training are obvious targets as financial subsidies are always politically vulnerable. Policy-makers should guard

against drastically reducing financial support to education and training and should evaluate the likely impact on the economy's long-term productive potential were such cuts to be introduced. They should also guard against reducing resources even in periods of slow economic growth because of the long-term impact this may have when accelerated growth resumes. Fixed budgetary allocations to training institutes tend to breed rigidity and unresponsiveness to changing needs. Policy-makers should review the financing schemes for training incentives, to correct mismatches between manpower supply and demand.

Policy-makers also need to review the educational curricula and the links between the educational and the training systems. The transition from general education to training can be a source of considerable difficulty and occurs at a point where policies tend to work at cross purposes. The possibility should be examined of reinforcing mathematics, sciences and computer usage in basic education and of introducing simple notions of small enterprise management in technical and commercial schools. There is also a need to review the fit between students completing secondary and tertiary education and their training possibilities and the career prospects available to them after each phase. Incentive schemes inducing more primary or secondary graduates to undertake training instead of pursuing further education should also be carefully considered as a means of reducing labour market imbalances.

Special training schemes should be devised in co-operation with the social partners for the retraining of workers affected by industrial restructuring. The experience of employers' and workers' representatives also needs to be drawn upon and their active co-operation sought in establishing special employment and training schemes for young people. In the industrialised countries the participation of such representatives in counselling and in achieving a more effective role for older workers should be strongly encouraged.

Finally, a policy of encouraging small enterprise development and promoting self-employment should be established and given the necessary backing. In many countries this will mean creating or reshaping an infrastructure of credit facilities, training and related forms of technical assistance to enhance its chances of success.

B. Action by employers

Employers are involved in two ways here: through enterprise-based programmes they provide training, and by employing trained persons they benefit from the training system. So employers need to participate actively in policy-making bodies on training at various levels and in the boards of training institutions. If employers participate through their organisations, then these organisations must be in a position to assess fully and continuously the training needs of their constituents, and to identify the problems and the

reforms needed in the training system, be they in legislation, financing, training infrastructure or curricula. Likewise, employers must have a strong voice in the management of levy systems and similar financing schemes and on their most effective use.

To meet the needs of advanced technology, employers have to embark on more systematic in-plant training. In this respect, strengthening co-operation with training institutions can be mutually beneficial. In their quest for increased flexibility of manpower, employers need to negotiate with workers' representatives and secure their co-operation in order to widen their workforce's skills, and sometimes job categories, beyond the confines of existing job descriptions. This kind of negotiation is important because, as already noted, it can have implications for wages and may involve more than one workers' organisation within the same enterprise.

Employers, particularly in developing countries, need to co-operate more closely with governments to help train young people within their enterprises. They also need to improve training and career prospects for women and to co-operate with governments and workers' representatives in setting up special retraining programmes for those workers who may become redundant as a result of adjustment measures, preferably before such redundancy occurs. Employers' organisations should encourage small entrepreneurs to become members of their organisations either directly or through their associations, and should defend their interests.

C. Action by workers

Workers and their representatives should consider training a priority concern and place it high on the agenda in major negotiations since it provides opportunities for career change (particularly in a period of adjustment), for upgrading and access to more remunerative jobs, and for self-development. Like employers, workers need to participate more actively in the work of decision-making bodies and training institution boards in order to help shape training policies. Their organisations will want to press for the introduction of systematic training that will genuinely benefit their constituents, avoiding the shallow type of training provided simply for the performance of specific jobs as the need arises.

Workers' organisations need to co-operate fully with governments and employers in devising schemes to meet the training needs of workers made redundant as a result of adjustment measures. They also need to co-operate with employers in widening job profiles to promote occupational mobility, and with governments in the schemes established to attract new industries to depressed areas or to facilitate geographical mobility.

D. Action by training institutions

In preference to the establishment of expensive new institutions, existing training bodies need to improve their performance and expand their

services by capitalising on advances in new cost-effective instructional techniques, such as self-development methods, modular programmes, the use of mass media and the like. They should plan their activities with flexibility in mind and be ready to revise curricula and reshape the direction of training as required.

Training for narrow specialisations should be avoided, and the development of numeracy, conceptual approaches and communication skills should be reinforced to cater for advanced technology training needs. Liaison and co-operation with enterprises can be strengthened by offering in-plant training services, developing prototypes or carrying out specific assignments for enterprises.

Training institutions need to keep adjusting their curricula and activities to their graduates' employment prospects and to take active measures to attract female trainees. The subsequent performance and careers of their graduates could be evaluated by such means as tracer studies. They should offer advice and co-operate actively in retraining schemes for both men and women to enable them to move from contracting to expanding sectors; and training in entrepreneurship and self-employment should be introduced as options in vocational and commercial training curricula. Co-operation with NGOs and other grass-roots organisations is also required for extending training opportunities through them to workers in the informal sector.

E. Action by the ILO

Funds permitting, the ILO could play an important role in three ways. Firstly, it could focus its research more closely on the relationship between training policies and employment and adjustment policies by undertaking, for example, a comparative analysis of the impact of budget cuts on education and training; by conducting case studies of the impact of adjustment on training systems; by examining how certain countries have changed their training efforts to respond to the technology age; and by studying various schemes designed to help retrain workers affected by restructuring, as well as other schemes used to finance training and their impact on the mismatch between manpower supply and demand. The network of institutions established by the ILO in various regions for vocational training and, on an inter-regional basis, for management development could be an important tool for collecting the information needed for this research, as well as for inducing changes in training policies at the regional and country levels.

Secondly, through its extensive technical co-operation programme in the training field, the ILO can assist training institutions and policy-makers in improving the relevance and cost-effectiveness of their activities. Through advice, seminars and workshops, it can also help employers' and workers' organisations play their training roles more effectively, and where these organisations carry on their own training activities, the ILO can directly assist

their efforts. The ILO's activity in this field must be initiatory and forward-looking, not merely reactive.

Thirdly, the ILO needs to play a leading role within the United Nations system by undertaking joint studies and activities in training for adjustment and employment promotion, in co-operation with organisations such as UNESCO, UNIDO and the World Bank. It should also work more closely with UNESCO in forging clearer and more rational links between education, training and employment, and in making the International Monetary Fund and the World Bank more aware of the negative impact on economic growth of reducing expenditure on support to education and training in the developing countries. The ILO might examine the feasibility of organising a world training conference and of establishing round-tables for continuing policy dialogue on employment and adjustment-oriented training efforts.

5. Some unresolved issues

There remain certain issues in training policy on which it is difficult to take a stand without raising controversy: they are reviewed in this final section under six broad headings.

(a) *How much planning is needed and how much should be left to market forces?*

A rapidly changing environment and the impact of adjustment measures render the planning of training a difficult exercise subject to major miscalculations. To seek to plan everything can breed bureaucracy and ultimately prove ineffective. On the other hand, it can be argued that waiting for market signals to indicate scarcities (for example, higher wages reflecting scarce occupations) may not be the most effective response, because preparing training programmes for certain occupations requires a long lead time. Certain critical areas clearly require a deliberate effort to anticipate training needs, while others are best left to adjustment processes like market forces. Countries have to find their own solutions in this respect. Some prefer to concentrate on quality education and leave the rest to market or local regulation, but this is not the generally preferred solution.

(b) *How much training should be carried out by firms and how much by the government?*

Training given by enterprises tends to be self-regulating. Qualitatively, it is sufficient to satisfy immediate needs and costs are kept within bounds. However, it is argued that this type of training may be too shallow. Most governments have traditionally been active in training, but a greater, more comprehensive government involvement may bring the risk of rigidity and in certain countries could encourage bureaucracy. In many West European countries there is a marked trend towards shifting costs and efforts to the enterprises. Should this trend be followed? Which training roles should the

government and enterprise respectively assume in countries with different economic systems and at various stages of development?

(c) *Where are the links between education and training?*

Most developing countries suffer from serious problems of quality in their schools. As a result, training institutions accept individuals who have received an inadequate basic education. Some are forced to lower their standards on account of the insufficient preparation of incoming trainees and this may jeopardise the quality of the training that can be offered. For this reason, several institutions prefer to reinforce their programmes with courses on subjects that should already have been mastered in normal schools, which results in longer programmes of study and higher costs.

Thus the respective roles of general educational and training institutions are often blurred. Many schools offer vocational preparation and many training institutions also offer mainstream educational subjects (e.g. reading comprehension, mathematical concepts and science). Therefore, the links between them are complex and often dysfunctional, and they need to be examined with an open mind in a co-operative spirit.

(d) *What training should workers demand?*

Whereas workers' representatives have or should have a major role in training, they are faced with a delicate situation: one of the issues involved is the balance between productivity and access to training. Enterprise managers seek maximum productivity from the training they offer and, broadly speaking, their interests coincide with those of workers. But firms may concentrate training resources on a few critical occupations and offer much less to the majority. Likewise they may focus training on higher-level staff. Workers therefore have an interest in closely monitoring the distribution of training amongst the workforce, since training makes them less vulnerable to business cycle fluctuations.

On the other hand, overemphasising the welfare aspect of training may be wasteful. Certain workers may not be sufficiently prepared to benefit from training; for example, training the hard core of unemployed has not usually yielded the results expected. It has also been suggested that, in the long term, offering training on welfare grounds alone may not actually promote the original welfare objectives, since it is the link between training and production that must always remain paramount. What then is the proper balance to be struck in the pursuit of productivity and equity?

(e) *What can large training institutions offer to the informal sector in developing countries?*

Many developing countries have well-established training institutions that have acquired considerable experience in training for the modern sector. But they were not designed to operate in the informal sector and do not display much interest in doing so. NGOs and grass-roots movements, on the

other hand, are increasingly active in the informal sector. But while they display most of the traits required to succeed in this sector, they have little if any competence in training. How can their vocation to operate in the informal sector be combined with the technical expertise of established training institutions?

(f) *Should traditional apprenticeship be encouraged?*

In many low-income countries, particularly in Africa, traditional apprenticeship provides a means of livelihood and training for many young people who have no hope of enrolling in a training institution or of gaining access to further education or to employment in the modern sector. Learning their occupation on the job with a craftsman often enables them to become craftsmen later and to train others. This channel is also a good source of trained labour for the countries concerned. Nevertheless, the system gives rise to social concerns about the need to protect apprentices from exploitation and from working in precarious conditions. Many attempts have been made to regulate this system, either by extending social security coverage or by other means, but in most cases such well-meaning policies have resulted in the craftsmen refusing to take on further apprentices. Assuming that traditional apprenticeship is to be encouraged in developing countries, what kinds of policies are needed to strike a balance between the conflicting demands of economic necessity and social protection?

Major sources consulted

Tendencies and issues in training:

Dougherty, C. *Education and skill development: Planning issues*. Asian Development Bank/World Bank, 1990.

Ducci, M. *La formación profesional en el umbral de los 90*. Montevideo, CINTERFOR/OIT, 1990.

Middleton, J.; Ziderman, A.; Van Adams, A. *Vocational education and training in developing countries*. Washington, DC, Education and Employment Division, World Bank, 1990.

Moura Castro, C. de. "The soul of vocational schools: Training as a religious experience", in *International Review of Education* (Dordrecht), Vol. 34, No. 2, 1988, pp. 195-206.

—; Cabral de Andrade, A. "Supply and demand mismatches in training: Can anything be done?", in *International Labour Review*, 1990/3, pp. 349-369.

UNDP. *Education and training in the 1990s*. New York, 1989.

Wiemann, G. *An international comparison of didactic models in vocational education*. Paper presented at the UNESCO International Symposium on Innovative Methods of Technical Vocational Education, Hamburg, 1989.

Specific issues and regions:

Adams, R. *National training policies in major OECD countries*. Paris, Center for Educational Research and Innovation of the OECD, 1985.

Bregman, J.; Mersier, P. *The French vocational training system*. Washington, DC, World Bank, 1989.

Cantor, L. "The role of the private sector in vocational education and training: The case of Japan's Special Training Schools", in *Vocational Aspect of Education* (London), Aug. 1987, pp. 35-41.

Center of Education and Training for Employment, United States. *The unfinished agenda: The role of vocational education in the high school.* Columbus, Ohio, National Center for Research in Vocational Education, Ohio State University, 1989.

Corvalán, O. *Comparative study of apprenticeship in Latin America: Preliminary report.* Santiago de Chile, Centro de Investigación y Desarrollo de la Educación, 1981.

Hayes, C. *Four national training systems compared: Achievements and issues.* Columbus, Ohio, National Center for Research in Vocational Education, Ohio State University, 1986.

Wilms, W. *Captured by the American dream: Vocational education in the United States.* Paper presented at the Vocationalising Technical Education Conference, Institute of Education, University of London, 1986.

Wirt, J. *National assessment of vocational education.* Testimony before the House Education and Labor Committee. Washington, DC, US Department of Education, 1989.