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D00184

United Nations Industrial Development Organization

Distr.
LIMITED

ID/WG.13/20
3 February 1969

ORIGINAL: ENGLISH

The Seminar on the Establishment and Development of the Automotive Industry in Developing Countries

Karlovy Vary, 24 February - 14 March 1969

THE INTERNATIONAL LABOUR ORGANISATION AND THE METAL TRADES[1]

Prepared by

The International Labour Office

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id.69-343

Contents

To attempt a full resume of the activities of the International Labour Organisation related to the metal trades, and more particularly to the automotive industries, would be a task far beyond the scope of this paper. The information which follows is therefore limited to a brief description of some of the activities of the I.L.O. in the fields of vocational training and management development technical co-operation programmes and the work of the International Centre for Advanced Technical and Vocational Training, in so far as they relate to the metal trades and, wherever possible to the automotive industry. A short description of the work of the I.L.O. Metal Trades Committee, which was set up to deal specifically with the social and labour problems in the metal trades is also included.

Generally speaking, the activities of the I.L.O. in dealing with the various aspects of labour problems consists first, of formulating international labour standards in such fields as hours of work, employment, labour-management relations and, safety and health, which are applicable to all industrial sectors including those of the metal trades. The I.L.O. is also engaged in continuous research work into labour problems and directs its efforts into the broad areas of human resources (including manpower planning and organisation), the development of social institutions (such as employers' and workers' organisations, and the building up of a sound system of labour-management relations) and conditions of work and life.

If the types of labour required within the automotive industry are analysed, it immediately becomes apparent that

almost all of the I.L.O.'s technical co-operation programmes in the metal trades contribute directly to the development of this industry. Thus, for example, programmes designed to increase the efficiency of management or to up-grade the skills of welders, sheet metal workers, electricians and machinists, as well as programmes directed specifically towards the training of auto mechanics, internal combustion engineers, coil and armature winders and others, are aimed at providing adequate numbers of trained manpower at all levels and thus contribute to the development of the automotive industry. Some of the technical co-operation activities of the I.L.O. have been, and are, concerned more directly with the automotive industry, and these are the projects which will be reviewed in this paper.

I.L.O. Technical Co-operation Activities in the Field of Vocational Training and Management Development

A major problem facing countries undergoing economic development is the absence of an adequate infrastructure - including a transport system - on which they can build their new and expanded institutions. In the more developed nations such an infrastructure has evolved over a relatively long period of time whereas the urgent needs of developing economies precludes the use of time consuming solutions. An example of the urgency of this problem is the United Arab Republic where, in 1968, of a population of 31 million, estimated to double every twenty-five years, ninety per cent. rely on public road transport systems. Immediate answers are required such as a

reduction of the high upkeep, operating and capital expenditures in the existing and future road transport system through: an improvement of the maintenance of transport equipment; a reduction of the cost of spare parts through parts rebuilding programmes; a reduction of the unit labour costs of repair through work study programmes and standard work practices; and, a need to conserve foreign exchange through reduced capital expenditures for new equipment by extending the life of existing equipment and a reduction of its downtime. All of these call for increasing the efficiency of existing personnel and the training of new personnel entering into the road transport industry.

Vocational Training

It has been the policy of the I.L.O. to plan and develop its technical co-operation projects in direct relationship with the economic plans of the countries receiving assistance. Thus, its vocational training projects are designed to fit into national schemes of this type. The following is a brief summary of the I.L.O.'s activities in this area and a review of some of the major problems encountered.

Of the 38 I.L.O.-assisted vocational training centres located throughout the world in 1964, 22 provided training for auto-mechanics, while more than 50 per cent. also provided related metal-working training. More recently, in 1968, the number of I.L.O. experts working in automotive and metal-working training activities exceeded the total who worked in these areas during 1966 and 1967. At present, approximately 200 training experts are working on projects wholly or partially concerned with automotive and metal-working trades. Different countries put differing emphasis on automotive and metal-working

as, for example, Libya where in the Industrial Vocational Training scheme, about 20 per cent. of the training effort is directed towards the metal trades, while in Chittagong, Pakistan, 100 per cent. of a forthcoming project will be devoted to automotive training. Of all current projects throughout the world, 21 are devoted primarily to automotive, diesel mechanics or ancillary metal-working trades. In these countries, a definite need has developed for such training, which is being met to the degree that financial resources permit. The total cost of these 21 projects is well over U.S. $9 million and, as such, represents a substantial part of the total technical co-operation programme of the I.L.O.

Currently-operating projects in automotive mechanics, diesel mechanics, special maintenance for agricultural vehicles or ancillary metal-working can be found in Cambodia, Chile, Kenya, Kuwait, Congo (Kinshasa), South Korea, India, Turkey, Cyprus, Pakistan, Malaysia and the United Arab Republic. New projects which will be operational by 1969 in the same trades will be found in Jordan, Peru, Syria, Gabon and Pakistan.

The implementation of programmes varies considerably depending on the state and level of existing road transport systems and other local conditions. For example, in Cambodia, experts provided for undertaking the practical training of the supervisory and other staff attached to the municiple transport workshops of the city of Phnom-Penh, used the transport vehicles belonging to the municipality in their training classes. The equipment was thus given over to the workshops for repair and maintenance, serving as training equipment, while at the same time receiving supervised repair and maintenance. An Auto Technician and Instructor Training

Centre established in Taipei, Taiwan, to take another example, was extremely successful, training 1,400 drivers and mechanics in its first two years of operation. However, some supervisors, after completing their courses were limited in their efforts to implement what they had learned due to the managerial systems under which they worked. Partly as a result of this, the centre arranged short part-time courses for higher officials in the industry who were then able to appreciate the need for the changes and improvements proposed by their newly trained staffs.

Of particular interest perhaps are problems encountered in the developing countries as they achieve varying levels of industrialisation. It is typical to have the automotive industry develop from an assembly plant for which 100 per cent. of the vehicle parts are imported, and then to have a decreasing percentage imported as the country's metal-working capabilities grow and can be relied upon to supply parts. Examples of successful transitions can be found in firms in Argentina, Brazil, India and Mexico. It should be noted, however, very few if any developing countries build and operate a complete automotive industry in one effort. Rather, a component-by-component growth is the usual method.

In spite of gradual development, however, countries with newly-emerging automotive industries encounter many problems. From the experience of the I.L.O. in the areas of automotive training, three major problems can be pointed out. First, in spite of gradual growth of an automotive industry, there is usually insufficient training given in the area of automotive maintenance. Preplanning for maintenance is either completely ignored or the estimate of future demands for auto-mechanics

is set too low. Second, spare parts needs are extremely difficult to predict, and as a result, the usual situation is that certain parts are abundant while others are almost unobtainable. In developing countries this problem is invariably made worse by foreign exchange shortages. An optimal spare parts inventory is possible and can be predicted with reasonable accuracy. Experience shows, however, that the necessary analytical job is rarely done. Third, in the rush to industrialise, developing countries accept a wide range of vehicles and consequently do not have the advantage of a standardised automotive industry. This failure to standardise aggravates spare parts problems and greatly increases training problems, since auto-mechanics must be trained to maintain a wide variety of vehicles. In short, a developing country which intends to have an automotive industry should give considerable thought to standarisation, spare parts needs and planning for maintenance of the vehicles produced. With these three factors properly considered and acted upon, training problems can be greatly reduced.

Management Development

The main purpose of the I.L.O.'s activities in the field of management development is to establish permanent machinery for raising productivity and assisting management development, while at the same time training local staff to take over and expand the initial scheme.

In the area of management development technical co-operation projects, it is often difficult to isolate specific automotive industry projects because such programmes are not normally directed to one specific industry but are aimed at various levels or types of management or, at times, at firms

of a particular size. One example, however, of a project was in the transport undertakings in India and their automobile service and engineering shops, which was carried out over a two year period. This programme consisted of a combination of demonstration and training in the field of work study. At the time, most of the nationalised transport undertakings in India were in their early years of operation, and many of them were running into acute maintenance problems engendered by the rapid expansion of their fleets and the multiplicity of chassis types of which the fleets were composed. Work was also carried out in the metal-working and engineering shops of these undertakings to demonstrate how speedily and profitably changes in working methods could be brought about by the existing staffs of the undertakings after only a very short training in work study techniques.

Since 1965 there has been a marked tendency to undertake more technical co-operation projects and assign more experts under programmes relating wholly or partly to the metal trades, indicating the increasing importance of this industrial sector as the tempo of industrialisation increases. In 1965, for example, there were 20 such projects, and 160 experts working in this field. In 1966, there were 24 projects and 190 experts, and in 1968, the number of projects had increased to 30 and the number of experts to 240.

Often problems of management development directly affect the success of other projects. Thus, for example, in establishing Industrial Training Centres in Yugoslavia in the early 1960s, the management of many enterprises, not fully convinced of the value of central training, were disposed to "wait and see" how a mechanical engineering centre established at

Smederevo developed before committing themselves to send trainees. And, in the ititial stages of the Instructor Training Institute programme in the United Arab Republic in the early 1950s, few employers had confidence in organised apprentice training and were reluctant at first to co-operate with the programme. In other projects managers felt they could not spare their key personnel for the time needed for training and, as was pointed out in the previous section, even when such key personnel did receive training, there were difficulties in implementing their increased knowledge. In all cases, the initial problems faced were solved and the projects proved highly successful. These examples do, however, indicate how attitudes of management can affect the success of a project or the speed and ease with which such projects can be implemented. Thus, management development projects not only contribute directly to increased efficiency of management and the use of management tools, but also condition management for change and the ready acceptance of needed training programmes.

The Turin Centre

The International Centre for Advanced Technical and Vocational Training, located in Turin, Italy, was opened on 15 October 1965. It had become obvious to the I.L.O. that in addition to the basic training which it was helping to give to workers, foremen, technicians and executives in the developing countries, it was also essential to provide advanced technical training to a limited number of selected individuals in a modern, industrial environment, so as to familiarise the trainees with the conditions and tempo of modern industry.

Accordingly, the Governing Body of the I.L.O. decided to set up an International Centre for Advanced Technical and Vocational Training, housing it in premises made available to the I.L.O. by the Government of Italy in the city of Turin.

In the main, the programmes of the Centre are arranged into three categories, which are: programmes for managers and consultants; programmes for vocational training instructors; and, technical specialists and foremen. The length of the programmes attempts to reconcile the time normally available to participants with their need for thorough training, and range from 12 to 24 weeks. The calendar of programmes during 1967-68 included courses in the management of: medium-sized enterprises; production operations; marketing operations; export marketing; maintenance; and, management development. Training for vocational training instructors and technical specialists included courses in: mechanical engineering; automobile and diesel engineering; training in maintenance; electricity and electronics; and, welding and sheet metal work. In the programme for 1969, additional management courses are scheduled in personnel administration, industrial relations, accounting and, finance and investment.

Fellowships are allocated, within the limits that financial resources allow, by the Centre to candidates who show themselves best able to benefit from the programme. Emphasis is placed on the selection of trainees capable, when they return home, of passing on the knowledge acquired during training, thus making the influence of the Centre more widely felt in the receiving countries. There are no formal conditions for acceptance, although in general age, level of knowledge, practical experience in the specialist field and health are

taken into consideration. In addition, the candidate must be able to work in at least one of the working languages of the Centre which are English, French and Spanish.

The Board responsible for the general management of the Centre, under the chairmanship of the Director-General of the I.L.O., is made up of members appointed by governments, the Employers' and Workers' groups of the Governing Body, U.N.I.D.O., the United Nations, U.N.E.S.C.O. and, one member who is appointed by the city of Turin. The resources of the Centre are also international in character coming from voluntary contributions in the form of cash or fellowships granted by governments, private institutions and intergovernmental or non-governmental organisations of a regional or world character. In 1968 these annual contributions enabled the Centre to work on a budget of over two-and-a-half million U.S. dollars.

Since its opening in October 1965, the Centre had, by the end of September 1968 received a total of about 1,500 fellows from over 100 different countries and territories. The planned geographical and technical expansion of the Centre should enable the number of fellows passing annually through the Centre to be increased gradually to between 1,500 and 2,000 each year.

The Work of the I.L.O. Metal Trades Committee

Composition, Scope and Functions

The Metal Trades Committee of the I.L.O. was set up in 1945, along with a number of other Industrial Committees, to deal with labour and social problems of specific industries. It held its First Session in May 1946 in Toledo, Ohio, and has so far held eight sessions.

Like the other Industrial Committees, the Metal Trades Committee is tripartite in character. The membership of each Committee is determined by the Governing Body of the I.L.O., taking into account the relative importance of the industry, an appropriate geographical distribution and any factors which may render the industry of special importance in the country concerned. Each country designated as a member of a Committee sends two Government delegates, two Employers' delegates and two Workers' delegates to participate in its sessions. It is interesting to note that the membership of the Metal Trades Committee has increased from 14 countries at its First Session in 1946 - of which only two could be considered developing nations - to 27 countries at its Eighth Session in 1965 - of which one-third or nine were developing countries. Besides delegates, a number of observers also attend these meetings. Thus at its Eighth Session, 30 observers from non-member States and interested organisations attended, such as the United Nations, the United Nations Industrial Development Organisation, the Organisation for Economic Co-operation and Development, the International Organisation of Employers, and various international workers' organisations concerned with the metal trades.

The Metal Trades Committee is primarily concerned with industries engaged in the manufacture, repairing and servicing of: transportation equipment; machinery; electrical machinery; aerospace products; electronics; shipbuilding and ship-repairing; instruments; and other industries, often known collectively as engineering or metal-working manufacturing.

The conclusions reached by the Committee are intended to be generally applicable to the broad range of industries covered

by the metal trades including the automotive industry. As one of the most important industries in the metal trades, the automotive industry has been studied almost continuously by the Metal Trades Committee since its first session and is cited on numerous occasions. A report prepared by the International Labour Office for the Committee's Second Session, concerned with the regularisation of production and employment at a high level, dealt exclusively with the automobile industry, resulting in six of the Resolutions adopted at that session, while another report prepared for the same session, concerning problems of minimum income security, considered guaranteed wage plans in this industry.[1] Again, at the Third, Sixth and Eighth Sessions of the Committee, developments in the automobile industry were considered in the context of industrial recovery during the post-war period, supplementary unemployment benefits programmes in the industry and economic trends in the world motor vehicle industry including an examination of some of its labour problems.[2]

In addition, many of the delegates who attend Metal Trades Committee Sessions are representatives of the automotive industry and as such, ensure that the results of these meetings are in accordance with the needs of the industry and its workers.

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[1] See: I.L.O. Metal Trades Committee, Second Session, Report II, Regularisation of Production and Employment at a High Level; and Report III, Minimum Income Security.

[2] Ibid, Third Session, Report I, General Report, Chapter II, "The Metal Trades in the World Today"; Sixth Session, Report I, Item 1(c), General Report, Chapter III, "Supplemental Unemployment Benefits in the United States Automobile and Other Metal-working Industries"; and Eighth Session, Report I, Item 1(c), General Report, Chapter III, "Recent Trends in the Motor Vehicle Industry".

Range of Subjects Covered

The Metal Trades Committee has dealt with a wide number of subjects during the eight sessions it has held thus far. A full list of the reports prepared by the International Labour Office for each subject examined by the Committee is given at the end of this paper.[1] Although the reports considered by the Metal Trades Committee are prepared by the Office, at times parts of these reports contain contributions from the other specialised agencies or are drafted on the basis of recommendations made by these organisations. Thus, for example, the Centre for Industrial Development, forerunner of U.N.I.D.O., prepared a contribution which was used in the preparation of a report for the Eighth Session of the Committee.[2]

The Committee usually adopts conclusions which may take the form of Conclusions, Resolutions or Memoranda concerning proposed solutions to the problems studied, or suggestions for action either by governments, or employers' or workers' organisations. In practice the conclusions containing suggestions for action can be implemented in a number of ways -by government measures or by action within each industry or plant as for example, through collective agreements. Other conclusions entail action by the International Labour Office for undertaking further studies. Thus, for example, as a result of a resolution adopted by the Eighth Session of the Committee, the Office has recently begun work on the collection of available data on employment, wages, hours of work and injuries in the automobile industry.[3] At times, the conclusions of the Committee although

[1] See Appendix I.

[2] I.L.C. Metal Trades Committee, Eighth Session, Report I, International Co-operation in Dealing with Manpower, Social Labour problems in the Metal Trades in the Developing Countries.

[3] See Appendix II, Resolution No. 69.

dealing with labour problems, touch upon matters within the competence of other international organisations. In such cases the conclusions are transmitted to the appropriate organisation. An example of this was a resolution adopted at the Seventh Session of the Metal Trades Committee requesting intensified programmes of action by the United Nations and the Specialised Agencies concerned with a view to accelerating the growth of the metal trades in the developing nations.[1]

Some Conclusions of the Metal Trades Committee

The conclusions adopted by the Committee over the past 20 years are so numerous and varied that it would be impossible to summarise them all in this paper. Appendix II lists the 70 Conclusions, Memoranda, Suggestions and Resolutions adopted by the Committee at its first eight sessions and gives some indication of the varied nature of the Committee's work. The subjects covered have ranged from hours of work, income security, training, job classification and systems of wage payment, labour-management relations and safety and health, to an examination of the role of employers' and workers' organisations in programming and planning in the metal trades. With regard to the latter subject, the conclusions of the Committee set down some basic considerations to be taken into account when approaching the subject of programming and planning, whether it be in countries where the economy is based wholly or in part on the principle of free enterprise or in countries where the economy is based on public ownership of the means of production.[2]

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[1] See Appendix II, Resolution No. 59.

[2] Ibid, Conclusions No. 64.

Below is a brief review of some of the more important conclusions which have a bearing on the establishment and development of the metal trades, including the automotive industries, in developing countries, which may be of interest to the Seminar.

Problems of Developing Countries and International Co-operation

At its First Session in 1946, the Metal Trades Committee adopted two resolutions of direct concern to the developing nations. In one of these, the Committee recommended that the attention of the Economic and Social Council of the United Nations be drawn to the immediate need of capital equipment, technical training and technological assistance in the developing nations.[1]

Technical assistance, in one form or another, continued to receive the attention of the Committee at almost every session. At the Second Session, for example,[2] the Committee, in examining the problem of the regularisation of production and employment at a high level in the metal trades, noted that the problem presented special difficulties in the developing countries in view of their lack of adequate equipment, and that for the purpose of developing their industrial capacity and thereby helping the achievement of full employment, the developing nations were in need of new equipment, financial aid and technical assistance. The Committee invited the Governing Body of the I.L.O. to support all efforts to overcome these difficulties and requested, once again, that the attention of the competent organisations of the United Nations be drawn to the importance of this problem.

1 See Appendix II, Resolution No. 15.

2 Ibid, Resolution No. 24.

The Third Session adopted a resolution concerning the maintenance and repair of mechanical equipment in the developing countries, calling attention to the need for the adequate development of maintenance and repair facilities to keep equipment and machinery in proper working condition. It invited the Governing Body to examine means by which assistance could be given to governments in the developing nations, working in collaboration with interested workers' and employers' organisations, and paying particular attention to the vocational training needed to ensure formation of a body of mechanics skilled in general maintenance work.[1] A short time later, the I.L.O. began work which led to the publication of a simplified instruction manual for the use of drivers and mechanics of motor vehicles.[2]

The problems of training in developing countries first received consideration at the Third Session and continued to receive attention at the Sixth, Seventh and Eighth Sessions of the Committee. At the Third Session in 1949, for example, the Committee recommended that programmes should be worked out in the developed nations to train a nucleus of officials from developing nations who could undertake the organisation of vocational training in their own countries, as well as instructors capable, on their return, of organising or developing the vocational training of instructors. The Committee added that the movement of trainees between countries should be facilitated by the grant of international fellowships.[3]

At its Sixth Session the Committee noted that there was a need for increased attention to be given to vocational

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[1] See Appendix II, Resolution No. 32.

[2] I.L.O., Maintenance and Repair of Motor Vehicles, a Practical Instruction Manual (Geneva, 1955).

[3] See Appendix II, Resolution No. 33.

training, made necessary by rapidly accelerating technological changes, and again pointed to the need of fellowships for study and experience in the industrially developed countries.[1] At its Seventh Session, the Committee reviewed the problems faced in developing nations relative to training, such as: inadequate levels of literacy; the need to adapt training programmes to suit populations, mainly agricultural with little industrial tradition; and, the lack of teachers in vocational training, and urged increased assistance in this area by developed nations and international organisations.[2] Finally, at its Eighth Session the Committee devoted one of its agenda items exclusively to international co-operation in dealing with manpower, social and labour problems in the metal trades in the developing countries. Problems in the area of vocational guidance and training such as the tendency of talented people to enter administrative jobs and the professions rather than industry and the pressing need for training at all levels of industry, including supervisory and managerial grades, were examined and proposals to ease such problems recommended.[3]

Problems concerning the shipment of machinery and equipment to developing countries were considered by the Committee at its Seventh and Eighth Sessions. The Committee stated that where new machines and equipment were imported into these countries, steps should be taken by all concerned to ensure that such machines were not of an inferior standard, that they be provided with adequate safety devices and arrangements, and that their design and functioning be suitable to the conditions

[1] See Appendix II. Resolution No. 52.

[2] Ibid, Resolution No. 55.

[3] Ibid, Conclusions No. 63.

of the country where they were to be used. The basic aim of the choice of various techniques was, according to the Committee, on the one hand to reach a high degree of productivity and thus speed up economic growth and, on the other hand, to provide jobs for abundant manpower. Although in some cases the adoption of modern techniques was essential and recourse to outmoded techniques would retard the progress of countries just beginning to be industrialised, the Committee noted that the use of intermediate techniques requiring simple, robust and efficient equipment could show advantages both in relation to production costs and to jobs and, that in any event, each country should select the equipment and machinery best suited to its own economic programmes. Particular emphasis was placed on the fact that consideration should be given to the special characteristics of each of the developing countries, as for instance, their economic, social, demographic and technical conditions; the availability of raw materials; domestic market conditions; exporting possibilities; and the quantity and quality of manpower.[1]

Regularisation of Production and Employment, Technological Change, Productivity and Automation

The metal trades, covering as they do a broad range of goods from capital goods to consumer durable products, are subject to economic fluctuations resulting from a variety of reasons which affect the level of production and thus the level of employment. In addition, technological changes are constantly taking place in the metal trades, taking the form -either separately or together- of mechanisation, automation, the introduction of new machines, utilisation of new materials,

[1] See Appendix II, Conclusions Nos. 55 and 63.

new methods of work or new ways of organising work, all of which affect employment and other conditions of work. The Committee at its Fifth Session, while emphasising the world-wide necessity of achieving maximum production and employment in the metal trades, analysed some of the underlying factors affecting the demand for and production of metal trades products, and expressed the view that sharp economic crises and slumps resulting in widespread unemployment were avoidable through appropriate action. It then proceeded to suggest, for example, measures of concerted international action to promote the rapid economic development of the developing countries under conditions which ensured reasonable conditions of living for the workers concerned.[1]

In the late 1940's and early 1950's, there was an increased awareness of new and rapidly accelerating trends in technological development which were inevitably bound to have economic and social implications. In its conclusions the Committee recognised that in developing countries where technological changes appeared more often through the establishment of new modern factories than through the modernisation of existing factories, the problems faced were fundamentally different from those in industrialised countries. However, there were certain labour problems which were relevant both in the developing and developed countries and, in examining the problems raised by automation for example, the Committee pointed out that it had been increasingly recognised that a willingness on the part of both management and the workers' representatives to discuss in advance the installation of new production methods, and the possible impact of these changes

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[1] See Appendix II, Memorandum No. 45.

in a particular undertaking or a particular industrial sector, was necessary to ensure a smooth transition to the new techniques with a minimum of dislocation or stress to the individuals concerned. The Committee also felt that by its nature, automation of a process implied higher speeds of production and the need for reducing interruptions in operations to a minimum, and therefore free and frequent consultations during the early stages of planning of any changes, and throughout the process of changeover would prove a major factor in ensuring efficient operations. The Committee then suggested steps that could be taken to reduce the impact of these changeovers, such as: the timing of changes; the transfer of workers to other jobs; the retraining and readaptation of workers; and the review and possible modification of legislative, collective bargaining and other provisions to ensure that workers could be moved without any loss of their acquired rights.[1]

It should perhaps be stressed at this point that the Committee has always been in agreement that a prosperous and efficient enterprise was essential especially to ensure security of employment and a high standard of living for workers. Technological progress, being inevitable, necessary and desirable, deserved the support of governments, employers and workers. However, the Committee has felt that while all members of the community should benefit from the gains resulting from technological progress, an equitable sharing of these gains would not necessarily take place automatically and the economic and social goals of workers, employers and governments in each country should determine the way in which these gains were distributed.[2]

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[1] See Appendix II, Resolution No.49 and Conclusions No.55.

[2] Ibid., [illegible] and Conclusions No. 55.

General Observations

Possibly the most significant successes of the Metal Trades Committee and its greatest achievements are to be found in its serving as an international forum for the exchange of views between delegates of governments, employers and workers and for the continuous research and study of all current labour problems in the industry, including its automotive sector. The participation of employers' and workers' organisations in the Committee's work provides the best guarantee that the solutions worked out represent realistic guidlines for the industry of each country.

Due to the fact that industrial development has been in the forefront of the efforts of the developing countries for a number of years, it is quite natural that the Metal Trades Committee, representing as it does a key sector in industrial development, has attached more and more importance to labour problems arising in connection with industrialisation, providing guidance with regard to these problems. The increasing interest of the developing nations in the work of the Committee, viewed in this manner, therefore, serves as a measure of the value attached to it by those nations most directly concerned with industrialisation.

The Metal Trades Committee thus constitutes machinery for the establishment and sound operation of a healthy and efficient industry, efficiency which would be unthinkable without due consideration being given to the human element, one of the basic factors of production.

Conclusions

This paper has attempted to give some indication of the

International Labour Organisation's activities with regard to the metal trades and, more particularly, the automotive industry. These activities relate to technical co-operation projects, mainly in the fields of vocational training and management development, to the work of the International Centre for Advanced Technical and Vocational Training and to the activities of the Metal Trades Committee which presents a framework for continuing research, examination and discussion as well as the solving of labour problems arising in the industry.

APPENDIX 1

REPORTS OF THE METAL TRADES COMMITTEE[1]

First Session (1946)

Report of the First Session.
Official Bulletin, 15 September 1947, Vol. XXX, No. 2.

Second Session (1947)

Report I: General Report.
Report II: Regularisation of Production and Employment at a High Level in the Metal Trades.
Report III: Guaranteed Minimum Earnings in the Metal Trades.
Report IV: Co-operation between Employers and Workers in the Metal Trades.

Record of the Second Session.
Official Bulletin, 15 September 1948, Vol. XXXI, No. 2.

Third Session (1949)

Report I: General Report.
Report II: Vocational Training and Promotion in the Metal Trades.
Report III: Systems of Wage Calculation in the Metal Trades.

Official Bulletin, 15 December 1949, Vol. XXXII, No. 4.

Fourth Session (1952)

Report I: General Report.
Report II: Points 1(a) and (b): General Report - Action Taken on the Resolutions Adopted by the Committee (roneoed documents).
Report II: Human Relations in Metal-Working Plants.
Report III: Factors Affecting Productivity in the Metal Trades.

Summary Record of the Fourth Session.
*Official Bulletin, 20 December 1952, Vol. XXXV, No. 3.

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* Out of print in French.

[1] All reports have appeared in English and French. After each session a Note on the Proceedings containing the conclusions adopted is published. Subsequently, these conclusions are published in the Official Bulletin of the Office. In addition, an offprint from the Official Bulletin of the conclusions, together with a summary of the general debate, appears in the form of a Summary Record. Copies of reports and Summary Records, except for those out of print, are available, free of charge. Requests should be made to Industrial Committees Branch, International Labour Office, Geneva, Switzerland.

Fifth Session (1954)

Report I: Item 1(a) and (b): General Report - Effect Given to the Conclusions of the Previous Sessions.
Report I: Item 1(c): General Report - Recent Events and Developments in the Metal Trades.
Report II: Regularisation of Production and Employment at a High Level in the Metal Trades.
**Report III: Practical Methods of Labour Management Co-operation in Metal-Working Plants.

Summary Record of the Fifth Session.
Official Bulletin, 20 December 1954, Vol. XXXVII, No. 6.

Sixth Session (1957)

Report I: Item 1(a) and (b): General Report - Effect Given to the Conclusions of the Previous Sessions.
Report I: Item 1(c): General Report - Recent Events and Developments in the Metal Trades.
Report II: Automation in the Metal Trades.
Report III: Job Evaluation in the Metal Trades.

Summary Record of the Sixth Session.
Official Bulletin, 1957, Vol. XL, No. 4.

Seventh Session (1962)

Report I: General Report.
*Report II: The Acceleration of Technological Progress and its Influence on the Effective Utilisation of Manpower and the Improvement of Workers' Income.
*Report III: Working Conditions and Safety in Shipbuilding and Ship Repairing.

Summary Record (Reprinted from the Official Bulletin, Vol. XLVI, No. 1, January 1963).

Eighth Session (1965)

Report I: Item 1(a) and (b): General Report - Effect Given to the Conclusions of the Previous Sessions.
Report I: Item 1(c): General Report - Recent Events and Developments in the Metal Trades.
Report II: International Co-operation in Dealing with Manpower, Social and Labour Problems in the Metal Trades in the Developing Countries.
Report III: The Role of Employers' and Workers' Organisations in Programming and Planning in the Metal Trades.

Summary Record of the Eighth Session.
Official Bulletin, Vol. XLIX, No. 2, April 1966, and No. 3, July 1966.

** Out of print in English.

* Out of print in English. Copies of Report III available in French.

APPENDIX II

LIST OF CONCLUSIONS AND RESOLUTIONS ADOPTED BY THE METAL TRADES COMMITTEE AT ITS FIRST EIGHT SESSIONS

First Session[1]
(Toledo, Ohio, 2-10 May 1946)

1. Resolution concerning international standardisation of statistics of accidents and occupational diseases.

2. Resolution concerning international standardisation of warning signs.

3. Resolution concerning special safety services and safety committees.

4. Resolution concerning education and propaganda in matters of industrial safety and health.

5. Resolution concerning I.L.O. factual survey [of the various measures taken in the different countries for the prevention of accidents and the protection of health in the metal trades].

6. Resolution concerning industrial relations in the metal trades.

7. Resolution concerning the observance of collective agreements.

8. Resolution concerning studies to be undertaken by the International Labour Office [on the problems of industrial relations].

9. Resolution concerning wages and freedom of association in underdeveloped regions.

10. Resolution concerning production and employment.

11. Resolution concerning shortages of steel, new equipment and coal in European countries.

12. Resolution concerning government expenditure on capital goods, consumers' goods and services.

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[1] Official Bulletin, Vol. XXX, No. 2, 15 September 1947, pp. 113-122.

13. Resolution concerning unemployment insurance and social security.

14. Resolution concerning technological improvements and hours of work.

15. Resolution concerning industrially underdeveloped regions.

16. Resolution concerning the definition of "metal trades".

Second Session[1]
(Stockholm, 3-12 September 1947)

*17. Resolution concerning the implementation of proposals and resolutions adopted by the Metal Trades Committee.

18. Resolution concerning the definition of "metal trades".

19. Resolution concerning regularisation of production and employment at a high level in the metal trades.

20. Resolution concerning long-term estimates of raw materials requirements by the metal trades.

21. Resolution concerning international consultation in the metal trades.

22. Resolution concerning training and promotion in the metal trades.

23. Resolution concerning technological improvements and their effect on employment.

24. Resolution concerning assistance to economically underdeveloped countries.

25. Resolution concerning assistance to countries devastated by the war.

26. Resolution concerning minimum income security.

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[1] Official Bulletin, Vol. XXXI, No. 2, 15 September 1948, pp. 115-126.

* Note: All conclusions are numbered consecutively from the first resolution adopted by the first Committee. The Official Bulletins of the Committee's Second and Third Sessions, however, do not show this numbering.

27. Memorandum to the Governing Body on questions concerning labour-management co-operation in the metal trades.

28. Resolution concerning studies to be undertaken by the Office [regarding labour-management co-operation].

Third Session[1]
(Geneva, 8-18 November 1949)

29. Resolution concerning vocational training and promotion in the metal trades.

30. Resolution concerning systems of wage calculation in the metal trades.

31. Resolution concerning technical assistance in relation to the metal trades.

32. Resolution concerning maintenance and repair of mechanical equipment in underdeveloped countries.

33. Resolution concerning the use of sandblasting.

Fourth Session[2]
(Geneva, 21 April - 2 May 1952)

34. Resolution concerning human relations in metal-working plants.

35. Resolution concerning human relations.

36. Resolution concerning productivity in the metal trades.

37. Resolution concerning the effect given to the conclusions adopted by previous sessions of the Metal Trades Committee.

38. Resolution concerning the date and place of the Fifth Session of the Metal Trades Committee.

39. Resolution concerning the agenda of the Fifth Session of the Committee.

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[1] Official Bulletin, Vol. XXXII, No. 4, 15 December 1949, pp. 255-266.

[2] Ibid., Vol. XXXV, No. 3, 20 December 1952, pp. 146-167.

40. Resolution concerning consultation of employers and workers by governments on matters affecting productivity in the metal trades.

41. Resolution concerning the agenda of the Fifth Session of the Committee.

42. Resolution concerning a study to be undertaken by the International Labour Office for the Fifth Session of the Committee [on the shipbuilding and ship repairing industry].

43. Resolution concerning studies to be undertaken by the International Labour Office for the Fifth Session of the Committee [regarding a guaranteed minimum income and means of ensuring higher and more stable earnings].

Fifth Session[1]
(Geneva, 25 October - 5 November 1954)

44. Memorandum concerning practical methods of labour-management co-operation in metal-working plants.

45. Memorandum concerning the regularisation of production and employment at a high level in the metal trades.

46. Suggestions concerning the effect given to conclusions adopted by the Metal Trades Committee.

47. Proposals concerning the agenda of the Sixth Session of the Metal Trades Committee.

48. Resolution concerning hours of work in the metal trades.

Sixth Session[2]
(Geneva, 6-18 May 1957)

49. Resolution concerning automation in the metal trades.

50. Suggestions concerning the effect given to conclusions adopted at previous sessions of the Metal Trades Committee.

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[1] Official Bulletin, Vol. XXXVII, No. 6, 20 December 1954, pp. 187-209.

[2] Ibid., Vol. XL, No. 4, 1957, pp. 219-257.

51. Resolution concerning a study of health and safety, and welfare in relation to health and safety, of shipbuilding and ship repair workers.

52. Resolution concerning technical assistance to industrially underdeveloped countries.

53. Resolution concerning a reduction of hours of work in the metal trades without reduction of income.

54. Resolution concerning the use of German and Spanish at sessions of the Metal Trades Committee.

Seventh Session
(Geneva, 17-28 September 1962)

55. Conclusions concerning the acceleration of technological progress and its influence on the effective utilisation of manpower and the improvement of workers' income in the metal trades.

56. Conclusions concerning working conditions and safety in shipbuilding and ship repairing.

57. Resolution concerning tripartite action regarding vocational training in the metal trades.

58. Resolution concerning programming techniques in the metal trades.

59. Resolution concerning intensification of efforts by the United Nations and the specialised agencies in the field of the metal trades.

60. Resolution concerning international co-operation in dealing with social and labour questions in the metal trades in developing countries.

61. Resolution concerning the agenda of the Eighth Session of the Metal Trades Committee.

62. Resolution concerning the agenda of the Eighth Session of the Metal Trades Committee.

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[1] Official Bulletin, Vol. XLVI, No. 1, January 1963, pp. 1-54.

Eighth Session[1]
(Geneva, 6-17 December 1965)

63. Conclusions concerning international co-operation in dealing with manpower, social and labour problems in the metal trades in the developing countries.

64. Conclusions concerning the role of employers' and workers' organisations in programming and planning in the metal trades.

65. Resolution concerning a reduction in hours of work without reduction of income in the metal trades.

66. Resolution concerning women workers in the metal trades.

67. Resolution concerning labour statistics in the metal trades.

68. Resolution concerning freedom of association and trade union rights in the metal trades.

69. Resolution concerning future action of the International Labour Organisation relating to the metal trades.

70. Resolution concerning the agenda of the Ninth Session of the Metal Trades Committee of the International Labour Organisation.

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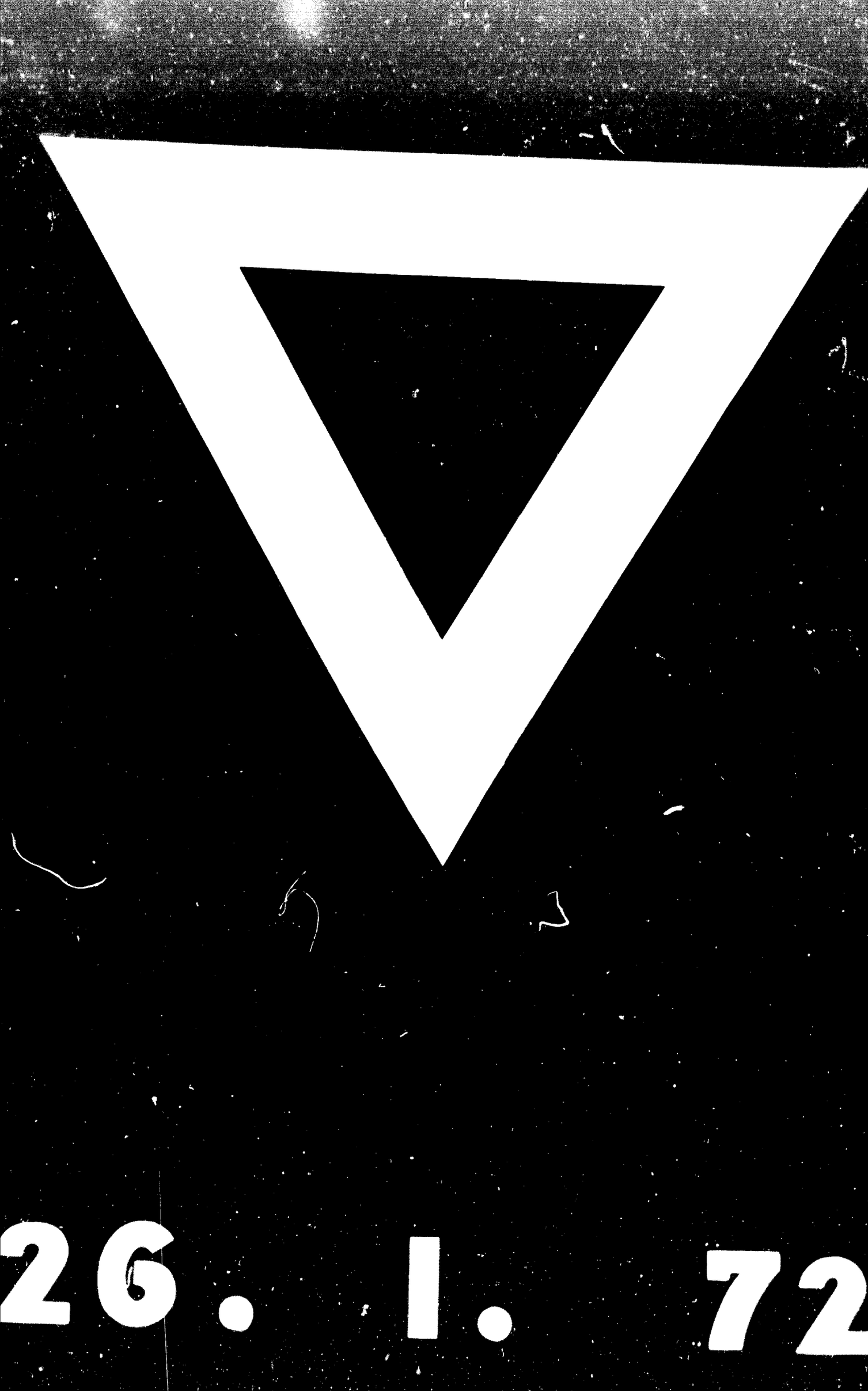
[1] Official Bulletin, Vol. XLIX, No. 2, April, and No. 3, July 1966, pp. 196-7 and pp. 313-388.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