



UNITED
NATIONS

A



United Nations Conference
on New and Renewable Sources
of Energy

Nairobi, Kenya
10-21 August 1981

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Distr.
GENERAL

A/CONF.100/6/Add.6
19 March 1981

ENGLISH, FRENCH AND
SPANISH ONLY

SUBSTANTIVE PREPARATIONS FOR THE CONFERENCE

Activities of the relevant organs, organizations
and bodies of the United Nations system in the
field of new and renewable sources of energy

Addendum

Report submitted by the
International Labour Organisation *

81-07586

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Introduction

1. The International Labour Organisation was established in 1919 as part of the peace settlement that followed the First World War and in 1947 became the first specialised agency associated with the United Nations. The ILO is unique among international organisations as a result of its tripartite structure; i.e. member States are represented at all levels of the Organisation by governments, workers' and employers' delegates who confer together on a basis of equality. The Constitution of the ILO and the Declaration of Philadelphia concerning the aims and purposes of the Organisation adopted in 1944 provide a very broad mandate for ILO action to promote social progress within which the ILO is developing its activities concerning the employment, training and social aspects of new and renewable sources of energy.

2. This broad mandate has been reflected in more specific terms in the ILO's Medium Term Plan, 1982-1987 and the Director-General's proposals for the Programme and Budget, 1982-1983.

Energy and the ILO Medium Term Plan: 1982-1987

3. The Director-General's Medium Term Plan (MTP) for the period 1982-1987 was submitted to the ILO Governing Body and to the International Labour Conference in 1980. The MTP proposed a package of activities aimed at helping member States to discharge their main tasks in areas of ILO competence, viz.:

- (i) The struggle against poverty and injustice in the developing countries through more determined, integrated and practical action to raise levels of employment and technical skill and improve working conditions and the work environment; and
- (ii) the pursuit of social progress in the more advanced countries without jeopardising their adjustment to the new world economic pattern;

all this with full respect for fundamental human rights in the labour field.

To act effectively in both areas the ILO during the 1980s must:

- develop its function as the conscience of the labour world;

- enhance its availability as a unique meeting place for the social partners;
- improve its facilities for the impartial observation of social phenomena;
- perfect its tools for spearheading action in the service of member States.

4. The International Labour Office has nine major technical programme areas: International Labour Standards and Human Rights; Employment and Development; Training; Industrial Relations; Working Conditions and Environment; Sectoral Activities; Social Security; General Analysis of Labour Problems; and Statistics. In addition to these major programmes, however, the MTP placed stress on a number of global themes which provide a more integrated perspective of ILO action during the plan period, e.g. rural development, informal urban sector, women's work, international migration and technological innovation. Energy was also identified as a Global Theme and the MTP noted:

[2.42] "Among the other subjects cutting across particular areas of ILO competence, special mention must be made of energy. The Plan includes activities reflecting the repercussions which energy problems will have on employment and labour. The general issues covered include, for example, the effect of using new forms of energy, and of conserving traditional forms, on employment levels and skill patterns; or the effect of rising energy prices on employment and income distribution. Operational activities and projects dealing with these problems are also foreseen, particularly with a view to action in the rural areas of developing countries, as are discussions on energy questions at Industrial Committee meetings."

5. The Plan also provides more specific proposals concerning energy activities within the sections dealing with several major ILO programmes, e.g. Employment and Development, Training, and Sectoral Activities.

6. Although it was in the Medium Term Plan 1982-1987 that the Office for the first time stressed the specific and special importance that energy issues have upon the achievement of the ILO's overall objectives, energy-related activities are in no way a new area of interest to the ILO.

7. The ILO has carried out activities in the energy area for many years, particularly within its Industrial and Analogous Committee

system which was established in 1945. The ILO's tripartite Coal Mines Committee ¹ (Eleventh Session scheduled for 1982-1983) and Petroleum Committee (Ninth Session held in April 1980) have dealt with many of the most important labour and social aspects of these two major non-renewable energy sources.

8. Recent ILO activities concerning energy are reflected in the Report of the Secretary-General concerning the Cross-organisational analysis of the energy programme of the United Nations system ² and the Report of the Secretary-General concerning ways in which the United Nations system can more effectively assist member States in the area of new and renewable sources of energy ³.

Programme and Budget Proposals: 1982-1983

9. The Director-General's Programme and Budget proposals for 1982-1983 will be examined by the ILO Governing Body at its 215th Session (February-March 1981) and at the International Labour Conference in June 1981. As regards the global theme concerning energy the Director-General states in part:

[63] "The changing world situation over the past few years suggests that energy-related problems will be among the most vital issues of the 1980s for both developed and developing countries. The forthcoming United Nations Conference on New and Renewable Sources of Energy and other discussions of energy problems in the United Nations system will certainly result in the ILO becoming more involved in energy-related fields of concern to it, i.e. the

¹ The Coal Mines Committee, for example, adopted resolutions at its Eighth Session (Resolution No. 59, 1964), Ninth Session (Resolution No. 69, 1970) and Tenth Session (Resolution No. 75, 1976) concerning "Energy Policy" and the place of coal in future world energy supplies. More specifically, Resolution No. 59 adopted in 1964, for example, called for discussions between the United Nations, ILO and other international organisations concerned with a view to the preparation of a study on long-term needs in both developed and developing countries and envisaged the possibility of convening a special conference which would seek to lay the foundations for an energy policy which would meet expanding world needs. The ILO was called upon to make a special study of the social aspects of such an energy policy and "to ensure that these social aspects are constantly borne in mind".

² Document No. E/AC.51/99/Rev.1 and Add 1.

³ Document No. A/35/531, dated 15 October 1980, paragraphs 87-89.

social implications of new energy policies and their effects on training and employment. With these considerations in mind, an attempt was made, in preparing the Programme and Budget proposals for 1982-83, to formulate a specific - although necessarily modest - programme of activities relating to energy issues falling within the ILO's competence."

[64] "One of the main thrusts of this programme would be concerned with the impact of different forms of energy on employment in rural areas."

10. The following activities related to new and renewable sources of energy have been included in the Programme and Budget proposals:

Technology and rural development

[60.66] "More informed decision-making in respect of rural electrification and renewable energy technologies would help to alleviate poverty in rural areas. A study would be carried out to compare the technical, economic and institutional aspects of renewable energy technologies with rural electrification, taking into account the contribution which each can make to increasing employment and raising productivity in rural industries including handicrafts. This would constitute an input to the work on rural electrification contemplated under Major Programme 70 (Training). Information on small-scale energy technologies, e.g. on micro-hydro-electric plants and biogas units, would be disseminated and would possibly be included in technical memoranda. Advice would be given to developing countries on the scope for generating energy in small employment-creating projects in rural areas. These activities would build upon the work initiated in 1980-81 on rural energy supply."

Vocational training in selected sectors and industries

[70.38] "With a view to helping member States meet training requirements for rural electrification, and drawing on current work on training in the electrical supply industry, it is proposed to: (a) assess training needs in established and planned rural electrification schemes in selected developing countries; (b) prepare an inventory of existing jobs in the electric power sector in rural areas; (c) formulate approaches to meet the training requirements of rural electrification schemes."

Vocational training in rural areas

[70.45] "In the area of forestry training, it is proposed to evaluate forest worker training activities in developing countries; to prepare and disseminate teaching aids especially on intermediate technologies, and to help member States establish comprehensive national training programmes for forestry workers. The ILO would continue to take part in the FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers."

[70.46] "More widespread use of energy-saving techniques in rural areas would contribute to the alleviation of poverty and improvement of living conditions. It is proposed to help member States develop training activities which would lead to the introduction and dissemination of fuel-saving techniques and devices (e.g. wood-saving stoves, solar cookers, charcoal kilns, biogas and so forth). This work would be closely co-ordinated with work on rural energy under Major Programme 60 (Employment and Development)."

11. Furthermore, an item is included in the Programme and Budget proposals which would provide for the overall co-ordination of the ILO's energy programmes.

12. In addition to the regular budget items cited above, however, the ILO is also planning a substantially increased programme of operational activities related to the energy area to be funded by extra-budgetary sources. Project proposals have been submitted to various donor agencies and countries in the following areas:

- the organisation of a training seminar on charcoal making in Thailand;
- studies on the impact of increasingly difficult access to domestic fuels in rural areas (due to deforestation, etc.) on poor women's work and on family nutrition (the fuel being essential for the cooking of staple foods);
- training activities to facilitate the introduction and dissemination of wood-fuel saving devices and techniques in developing countries;
- additional support for the ILO Programme of Research on the Social Implications of Alternative Energy Policies in Developing Countries (launched in May 1980) to carry out: (a) four studies on the social implications of alternative energy policies, and (b) eight country studies on the macro-economic effects of higher oil prices since 1974 on employment, technology and balance of payments (to complement the four country studies already completed concerning the Indian sub-continent).

13. Mention should also be made of the expanding contribution the ILO's International Centre for Advanced Technical and Vocational Training in Turin, Italy, is making in the field of energy. During 1979 and 1980 the Turin Centre organised the following training courses:

- "Energy Utilisation and Saving in Industrial Enterprises" (15 October - 14 December 1979);
- "Energy Management and Policies in Industry" (10-17 December 1979);

- "Alternative Energy Sources for Rural Committee for South-East Asia" (4 February - 30 April 1980); and
- "Alternative Energy" (15 September - 5 December 1980).

14. Based on the experience gained during the past two years, the Turin Centre is developing and diversifying its training activities in the field of energy resources, particularly taking into account the special needs of developing countries. A new course on "Management of Energy Resources and Energy Savings" is planned for 4 May - 24 July 1981 and will concentrate on the elaboration of feasibility studies of energy projects and energy planning and management for participants from developing countries.

15. In addition to courses organised at the Centre, however, the Turin Centre's years of experience in the training area will also enable it to provide valuable assistance to national and regional research and training centres to:

- (a) identify training needs;
- (b) develop curricula and training material; and
- (c) test and evaluate pilot training programmes.

Conclusions

16. In view of the growing social implications of the changing world energy situation, the ILO is becoming increasingly active in the energy area. The ILO has identified two related and complementary priority approaches to its future work in this area:

- (a) ILO action to advise and support international and regional organisations in their activities related to employment, training and social aspects of energy;
- (b) ILO action to assist governments, employers and workers to develop their capacity to deal effectively with the labour and social aspects of the changing world energy situation.

17. As regards ILO action at the international and regional levels, it should be noted that it appears that the labour and social dimensions of the energy transition have been largely overlooked or underestimated all too often in the past. On the basis of an expanded programme of research and field activities in the energy area, the ILO should identify

the possible negative and positive employment and social consequences of energy-related policies and measures and seek to encourage other international and regional organisations to take these consequences into account at an early stage in their energy programmes and projects.

18. In light of the urgent energy problems facing developing countries the ILO must also, however, expand its direct action to assist governments, employers and workers to develop their capacity to deal effectively with the labour and social aspects of these problems. This will require expanded ILO technical co-operation activities in the energy area, particularly in the least developed countries. The ILO may be able to make a particular contribution, for example, in the following areas:

(a) Energy and Development:

Improved analysis of the relationship between energy and development is required in order to identify energy policy options which might lead to improvements in areas of particular concern to the ILO, e.g. the creation of employment, the alleviation of rural poverty, amelioration of working conditions of rural women, rural-urban migration, the development of appropriate technology and the achievement of a more equitable income distribution. Such analysis could lead to the development of expanded and improved technical co-operation projects in this area as well as more effective ILO advisory services.

(b) Training:

There are at least three areas in the training field where the ILO might be able to make an expanded contribution to the introduction of new and renewable sources of energy:

- (i) Managerial support and backup will have to be at least as effective as that made available for conventional energy sources if new technologies are to be successfully introduced. Therefore, training teams should preferably comprise both technologists and managers who can demonstrate how the new technologies operate and how they can be most effectively managed. The ILO's management training programme would be able to provide a unique and useful contribution in this area which would be a logical extension of existing work programmes concerning training managers in the choice and implementation of appropriate technologies.

- (ii) Craftsmen, artisans and other skilled and semi-skilled workers will be needed to build and maintain the equipment involved in new and renewable sources of energy. The use of the curriculum development system conceived by the ILO and known as Module of Employable Skills (MES)¹ could be particularly relevant for the training of these people. The generation of new and renewable energy and energy conservation processes will be novel in the sense either of manufacturing a new product such as fuel-efficient stoves, or of combining traditional skills in a non-traditional application such as a biogas plant, or improved charcoal conversion processes.² In either case, people with relevant experience from whom vocational trainers can be drawn will be hard to find. If the skills needed are to be disseminated rapidly and effectively throughout rural and urban sectors in a developing country, a modular approach with a strong self-instructional orientation such as the MES system contains, will be an essential basis for the training to be given. There will also be a need for the training of trainers in the most effective training methods to be used including MES.
- (iii) The ILO is significantly expanding its training activities in rural areas, particularly as regards artisans and poor women. Projects are being developed and implemented which will teach rural women to produce many of the things that they need from local resources. Efforts are also being made to introduce techniques which will decrease the time and energy required for certain traditional tasks and, in addition, new income earning skills for women are being introduced. The ILO has also developed considerable experience and expertise in implementing its programme of rural artisan training centres which may be particularly relevant to the energy area. The ILO's rural training

¹ MES is based on a number of learning elements which can be increased or reduced according to the educational level of the trainee. Such flexible methods are particularly essential in cases where a curriculum has to be revised or adopted to meet the requirements of technological development.

² The ILO, for example, has prepared an illustrated training manual entitled Charcoal Making for Small-Scale Enterprises (1975).

activities will provide new opportunities to introduce appropriate sources of energy (e.g. biogas and solar energy) and to facilitate improved energy conservation (e.g. the production of improved stoves).

(c) Rural Institutions and local participation:

One of the main problems encountered when introducing new and renewable sources of energy in rural areas is the lack of institutional arrangements and infrastructure. The ILO's work in the area of providing assistance in the establishment and/or support of rural institutions and expanded local participation could provide a useful contribution in this area.

(d) Energy and Appropriate Technologies:

The ILO tripartite Working Group on Appropriate Technologies which met in Geneva in December 1980 reviewed ILO activities in the field of appropriate technology generally and inter alia gave special attention to energy questions. The Working Group recommended a significant expansion of ILO activities through studies and operations, in the field of energy conservation and decentralised production with the objective of making available additional technologies appropriate to the needs of developing countries.

19. The Governing Body at its 214th Session in November 1980, was provided with information concerning the UN Conference on New and Renewable Sources of Energy and the ILO's participation in the preparations for the Conference.¹ The Director-General indicated that although the Office's participation had been limited up to that time, an increasing number of requests had been received from the Conference Secretariat. He noted that resources permitting, he would like to be able to respond to those requests which were particularly relevant to the achievement of the ILO's overall objectives.

20. The ILO has made a special effort to be represented at a number of the Ad hoc Group of Expert meetings of particular interest to the ILO, i.e. education and training, rural energy, financing and research and development and transfer of technology. In addition, the ILO will participate in the Synthesis Group Meeting in February, 1981.

¹ GB.214/IO/3/4

21. The ILO is looking to the UN Conference on New and Renewable Sources of Energy to establish priorities for future action in this area and the ILO will do its best to respond to the Conference's requests for action falling within its competence.
