

Sectoral Review Meeting of the Group of 77 on Energy, Jakarta, Indonesia, 5 – 7 September 1995

- Final Report

I. Introduction

1. Pursuant to the provisions of the Caracas Programme of Action (CPA) on economic cooperation among developing countries, the Sectoral Review Meeting of the Group of 77 (G-77) on Energy was held in Jakarta from 5 to 7 September 1995, hosted by the Government of the Republic of Indonesia.

II. Attendance

2. The Meeting was attended by representatives of the following member countries of the G-77: Afghanistan, Algeria, Argentina, Brazil, Cambodia, Colombia, India, Iraq, Indonesia, Democratic People's Republic of Korea, Republic of Korea, Kuwait, Libyan Arab Jamahiriya, Malawi, Morocco, Myanmar, Nigeria, Pakistan, Panama, Papua New Guinea, Peru, the Philippines, Romania, Rwanda, Senegal, Sri Lanka, Sudan, United Arab Emirates, Venezuela, Republic of Yemen, Zambia. The People's Republic of China also sent a representative to attend the Meeting at the invitation of the Government of Indonesia. Germany was present as an Observer.

3. The following international organizations participated in the meeting: Association of the South East Asian Nations (ASEAN) Secretariat, ASEAN – European Communities Energy Management Training and Research Centre (AEEMTRC), and Organization of Petroleum Exporting Countries (OPEC).

III. Opening of the Meeting

4. The Ambassador of the Philippines to the Republic of Indonesia, H.E. Eusebio A. Abaquin, presented a statement on behalf of the Chairman of the G-77 in New York. In his statement, he stated that on behalf of the G-77 and China, he expressed his gratitude to Indonesia for hosting this Sectoral Review Meeting on Energy. He hoped that the outcome of this meeting would enable the G-77 and China to get closer to their goal of improving the quality of life for everyone. He also mentioned that this meeting on energy will not only provide new dynamism to the Caracas Programme of Action (CPA) but also is a manifestation of the unity and solidarity of the G-77 and China. He further stated that dramatic changes have occurred in the world caused by, inter alia, globalization, the end of cold war as well as deepening interdependence among various economies. These changes offer new challenges and opportunities for expanding such cooperation. He concluded his speech by stating that the deliberation and exchange of views of the participants could lead to the adoption of measures and steps to address national energy deficit, development of new energy sources, uneven geographical distribution of explorations and resource evaluation efforts, efficient use of energy, development of appropriate technologies, upstream and downstream activities, information and training.

5. The Deputy Head Executive Assistant to the Chairman of the Non-Aligned Movement (NAM) presented a statement on behalf of the Head Executive Assistant to the Chairman of the NAM. In his address, he was of the view that the NAM and the G-77 shared common interests, common benefits, equitably shared responsibility and genuine partnership. This similarity was

dedicated to ensuring the survival of the developing countries in the emergence of new international environment of the Post-Cold War through the strengthening of South-South cooperation and the resumption of North-South Dialogue. The NAM was therefore working closely with the G-77 and other like-minded countries, including developed countries, in all relevant multilateral fora to forge a global partnership for development.

6. He informed the Meeting that economic cooperation among the member countries of the NAM was administered under a mechanism called the Action Programme for Economic Cooperation (APEC), which categorized 13 areas of cooperation. This categorization had been thought to overlap with the areas of economic cooperation administered under the mechanism of the CPA of the G-77. To avoid such duplication, both fora had endorsed the establishment of a Joint Coordinating Committee (JCC), which is Co-chaired by the Head of the Coordinating Bureau of the NAM and the Chairman of the G-77 in New York.

7. He further considered that energy is a vital element to the development process of the developing countries. He also believed that the Sectoral Review Meeting of the G-77 on Energy could uplift the quality of life of the people in developing countries by giving contribution towards the alleviation of the energy problems of the developing countries. He was also of the view that the success of the G-77 Sectoral Meeting on Energy would also be a success for the NAM.

8. The Secretary-General of the Department of Mines and Energy of Indonesia delivered the keynote speech of the Minister of Mines and Energy of Indonesia and officially opened the meeting. In the Minister's speech, it was stressed that cooperation among G-77 member countries is a vital instrument for accelerating development within the developing countries. Such cooperation will give fresh impetus to international cooperation for development. In this regard, developing countries should make full use of every possibility to strengthen links among members so as to consolidate their collective self-reliance, among others, by developing countries enhancing closer and more direct communications in order to facilitate exchange of experience and information, and harmonizing positions of international concerns.

9. A great deal of initiatives to enhance cooperation among developing countries have been launched but the results must be improved. In this regard, the developing countries should commit themselves to intensify their efforts, initiate new and concrete forms of cooperation, and devise realistic models for their implementation. With regard to the energy sector, there is a need to further strengthen the CPA and broaden the participation of G-77 members in viable programmes.

10. It was also stressed that Technical Cooperation among Developing Countries (TCDC) is an important catalyst in South-South development processes and is essential to further strengthen collective self-reliance. Ways and means should be further developed to enhance TCDC programmes. Developing joint projects, which meet the interest of member countries as well as donor countries or financial institutions should be explored. Similarly, technological innovations, already achieved by G-77 member countries, should be made available on preferential terms through TCDC programmes. In this regard, financing strategies should be further explored.

IV. Election of Officers

11. The following officers were unanimously elected:

Chairman : Mr. Zuhail (Indonesia)

Vice-Chairmen: 1. Ms. Barbara Briglia Tavora (Brazil)
2. Mr. Hammouda M. El-Aswad (Libyan Arab Jamahiriya)

Rapporteur : Mr. Dragos-Mihai Serbanescu (Romania)

V. Adoption of the Agenda

12. The Meeting adopted the Agenda as follows:

- i. Election of Chairman, Vice-Chairmen and Rapporteur;
- ii. Adoption of the Agenda;
- iii. Business Arrangement;
- iv. Review of the Implementation of CPA on Energy Sector;
- v. The Creation of Multinational Enterprises in the Field of Capital Goods for the Energy Sector and Related Industries;
- vi. Cooperation for Manpower Training in All Activities related to Energy;
- vii. Joint Research and Development on New and Renewable Sources of Energy;
- viii. Commercialization of New and Renewable Sources of Energy;
- ix. Other Matters; and
- x. Adoption of the Report.

VI. *Agenda Item 4: Review of the implementation of CPA on Energy Sector*

13. The Delegate of Indonesia gave a presentation on this Agenda item. In his presentation, he reiterated the main objective of the 1981 CPA, which was to develop more comprehensive cooperation in the field of energy. This includes, among others, cooperation in energy sector, exchange of information and expertise, human resources development, energy resources inventory, research of supply and demand for energy, and various aspects of investment as well as energy financing schemes. He also stressed the importance of the development of alternative sources of energy and the development of New and Renewable Sources of Energy (NRSE) to decrease the depletion process of hydrocarbon energy resources. On the other hand, he further highlighted the need to review and evaluate and to give new emphasis on the above cooperation.

14. The Representative of the Philippines highlighted the following:

- South-South cooperation should be emphasized not only in this forum but also whenever there is an opportunity to articulate this issue. In this regard, all the resolutions which have been adopted within the framework of the United Nations, such as resolutions in the UN Conference on Environment and Development in Rio de Janeiro in 1992, the International Conference on Population and Development in Cairo in 1994, the World Summit on Social Development in Copenhagen and the World Conference on Women in Beijing both held in 1995, have attached great importance to South-South cooperation.
- Triangular funding as a modality to implement development of programmes will be explored. The approach is a mechanism by which developed countries provide funds for the TCDC programmes using the expertise of the developed countries. The G-77 is concerned about the decline in Official Development Assistance (ODA) as shown in the reluctance to fulfill their commitments of giving 0.7% of GNP to ODA as agreed upon in various UN fora.

- The results of the sectoral review meetings on energy as well as on food and agriculture which will be held in Guyana, January 1996, would be reported to the Ninth Meeting of the Intergovernmental Follow-up and Coordination Committee (IFCC-IX) in Manila on 9 – 12 February 1996 for further consideration.
- The availability of services to be provided by the South Centre and the possibility of utilizing the services of regional development banks such as the Asian Development Bank (ADB), and other institutions such as the United Nations University, and the six G-77 Chapters in addressing the question of information should be explored.
- The Perez-Guerrero Trust Fund (PGTF) could also be tapped to support feasibility studies regarding exchange of information. The key element in requesting for funding from the PGTF is the multiplier effect or the project could be replicated in other countries members of the G-77.

15. The Delegation of India highlighted the following:

- The appreciation of the efforts made by the Indonesian Government to identify the achievements and shortfalls in the follow-up of CPA and to focus on areas which need to be pursued more vigorously to enhance South-South cooperation.
- India welcomes any opportunity to enhance South-South cooperation and offers its capabilities in the fields of energy, particularly in upstream and downstream activities relating to oil, coal, power as well as new and renewable sources of energy.
- India welcomes foreign investment and joint ventures from all countries.
- India offers its expertise in the field of training and manpower in providing consultancy services, research and testing facilities as well as exploitation of new and renewable sources of energy in order to share in the development efforts of the G-77 countries.
- Suggestion to establish a national focal point dealing with the energy sector in order to facilitate exchange of information.

16. The Head of Delegation of Zambia proposed a mechanism for information exchange within the structure of the G-77, which could facilitate member countries by providing information on programmes of cooperation, which are provided and needed by member countries. This was supported by India and the Philippines who suggested that there should be hierarchical organizations in the region and modalities for inter-regional exchange of information on available technologies and expertise among member countries could be worked out. The concept for an information center was supported by all the member countries.

17. The Head of Delegation of the Libyan Arab Jamahiriya stated the following:

- South-South cooperation is vital. It is reflected in the fact that there are many G-77 member countries cooperate with Libya in many sectors.
- North-South cooperation should also be maintained for the purpose of transfer of technology and financial aid.

- From the experience of his country's suffering from the sanctions being implemented by the United Nations, he emphasized not to consider economic sanctions as a penalty on any country of the world, as it affects the development plans of the concerned country.
- Supported the point raised by the Indonesian delegate in his paper on a review of the CPA, and felt that the CPA should always be under review to consider all the changes affecting that programme.
- The possibility to create a data bank system within the G-77.

18. The Director of AEEMTRC informed the meeting that:

- AEEMTRC has conducted various activities in the energy sector, which include: policy and master plan; and training programmes on energy efficiency, energy management and energy technology. It is also an information centre compiling the energy data of ASEAN member countries and operating an energy database comprising six thousand energy projects.
- AEEMTRC could be a model on how to establish an information mechanism within a region.
- AEEMTRC welcomes further collaboration and cooperation through networking with other information centers within members of the G-77.

19. The Delegation of Brazil informed the Meeting that the Government of Brazil and Brazilian companies have several projects with other developing countries in the field of energy, such as with Argentina, Venezuela, Peru, Colombia, Libya and Angola. She further stated that such cooperation was a good example of cooperation between members of the G-77 in the energy sector.

20. The Head of the Delegation of the Philippines stated that a mechanism for disseminating information should be established in a hierarchy or systematic geographic clustering. He further stated that the AEEMTRC could be a model for G-77 cooperation in this regard.

VII. AGENDA ITEM 5: THE CREATION OF MULTINATIONAL ENTERPRISES IN THE FIELD OF CAPITAL GOODS FOR THE ENERGY SECTOR AND RELATED INDUSTRIES

21. The Delegation of Indonesia made a presentation on this item. In his presentation, he explained that thousands of parts, equipment and special services are required by the energy sector and energy related industries. The opportunity is offered to G-77 members to consider the creation of several multinational enterprises capable of selling their services and products to member countries. The line of activities and the location of these corporations should be carefully studied based on objective considerations. He further proposed that the creation of these multinational enterprises are to be classified as G-77 projects, and selection should be based on the following considerations: product selection market strength, geographical selection, infrastructure availability, raw materials, sufficient skilled labor, technological selection of products, regulatory matters and local political-economic stability. He also stressed that the G-77 member countries should also be allowed to participate financially in the established operating

companies through the existing stock exchange or by special arrangement sponsored by the respective governments. Private sectors are primarily encouraged to take the lead in these projects. He further stressed the importance of looking into the possibility of either creating new multinational companies, internationalizing existing production facilities recommending case-by-case international cooperation by means of joint-operations, etc., during the final selection of recommended actions. In this regard, several countries including Indonesia have been successful in placing several of their companies in the international stock market.

22. The Head of the Indian Delegation in her statement mentioned that the demand for energy would continue to grow rapidly in the developing countries to keep up the momentum of economic growth. There has also been considerable concern on the environmental impact of energy production and use. However, the perception on this issue is different between developing and the industrialized countries. It was, therefore, recommended that suitable policy initiatives should be taken in order to achieve the goals of sustainable development. It was recommended that all members of the G-77 should incorporate in their energy policy and planning programmes for energy efficiency, environment, and give greater attention to research and development in order to promote and commercialize new and renewable sources of energy.

VIII. AGENDA ITEM 6: COOPERATION FOR MANPOWER TRAINING IN ALL ACTIVITIES RELATED TO ENERGY

23. The Delegation of Indonesia made a presentation on this item. In his presentation, he stated that manpower training needs assessment is necessary. He further stressed that human resources development for meeting the requirement of a sector needs to be based on the size of the development effort and the technologies being used, particularly for the energy sector. With regard to international cooperation in the human resources development in energy activities, he expressed the view that since the Caracas conference in 1981, there have been many developments with regard to energy institutions in developing countries, as witnessed by the establishment of new agencies, training and/or research institution in the field of energy. He further stated that interregional cooperation with developed regions is also in existence in the energy field, as also through the UN system with its specialized agencies and regional commissions. He added that the services of energy institutions, such as those national in character and specializing in certain energy sub-sector, regional or interregional in character, should be explored for manpower training cooperation in the energy field to assist those developing countries which are not in a position to meet their training needs for the international standards of qualified personnel. In conclusion, he stressed the importance of funding and the implementation of a plan of action to promote international cooperation on manpower training in energy activities.

24. The Delegation of Indonesia presented another paper on Manpower Training in the field of electricity. The training consists of two clusters of target-learners: Vocational Training and Managerial Training. The former offers training on the subjects of basic mechanics, basic electricians, power station operators, maintenance technicians, electric power system operators, consumer administration, accounting and public relations. The latter covers supervisory courses, management courses, professional programmes, refreshment/personnel programmes, betterment programmes and management programmes.

25. Through a paper presentation, another member of the Delegation of Indonesia informed the Meeting that Indonesia had established a Manpower Development Centre for Mines with the objective of conducting manpower development in the field of geological engineering, mining engineering, administration and management.

26. The Delegation of Indonesia also informed the Meeting that Indonesia has conducted three programmes of TCDC in drilling, production, refinery operation and economic activities since 1984. Thirty-three countries from Africa, East Europe, Asia and Latin America have participated in the programmes.

27. The Representative of the Philippines suggested that member countries could maximize the experience of developing countries in implementing TCDC programmes for enhancing the quality of manpower. It was also suggested to take advantage of the PGTF as funding source for feasibility studies on TCDC programmes.

IX. AGENDA ITEM 7: JOINT RESEARCH AND DEVELOPMENT ON NEW AND RENEWABLE SOURCES OF ENERGY

28. The Delegation of Indonesia stated that to conduct joint research and development on new and renewable sources of energy (NRSE) between members of the G-77, it is essential to master science and technology related to NRSE. He further stated that since the development of energy conversion technology has reached the commercial stage, there is a need to undertake assessment of NRSE such as solar energy, biomass, micro hydro and wind power. In this regard, seminars, workshops, exchange and sharing of information, training and exchange of expertise should be undertaken to enhance cooperation related to NRSE. He explained that Indonesia has valuable experiences in the development of NRSE particularly with regard to high temperature solar collector development, photovoltaic equipment and manufacturing of biomass converter. These experiences could be shared among the members of G-77.

29. The Delegation of Sudan presented a country paper, which mainly discusses the renewable energy resources in Sudan. Biomass Energy plays a very important role in Sudan, not only due to the fact that it plays a vital role for the daily life of the people of Sudan. The recommendations of the Sudanese paper were based on the New and Renewable Energy Subcommittee in the Global National Strategies Conference held in 1991, which among other things recommend joint ventures especially involving developed countries to develop infrastructures for renewable energy technologies in developing countries.

30. The Delegation of the Philippines presented a paper on "Cooperation for Manpower Training in Energy", in which the importance of the establishment of training centers for implementing cooperation in the energy sector was emphasized. The presentation was preceded by introductory remarks by another member of the delegation mentioning that the Philippines offered its hand in full support for the Indonesian initiatives of establishing and advancing training centers for cooperation on energy. He was of the view that cooperation in geothermal energy should be explored. The Philippines through the state-owned enterprise Philippines National Oil Company (PNOC) can offer expertise and experience in a South-South partnership and cooperation in the field of geothermal energy. In this regard, the Philippines proposed a regional geothermal energy-training center for the consideration of the Meeting.

X. AGENDA ITEM 8: COMMERCIALIZATION OF NEW AND RENEWABLE SOURCES OF ENERGY

31. The Delegation of Indonesia emphasized that the main objective of the commercialization of NRSE is to reduce the dependency on fossil fuels through, among others, a diversification programme of energy sources. In this regard, Indonesia could share her experience for New and Renewable Sources of Energy (NRSE) development in the field of rural

electrification and private electricity development. He also stressed that the function of the state-owned electricity company is a facilitator and accelerator for the development of an independent private sector. In this regard, the state-owned electricity company has promoted a small power purchase tariff for encouraging the private sector to develop NRSE. Indonesia is aware of the need of financial incentive and institutional framework in the implementation of NRSE programmes.

32. The Meeting was of the view that exploration of possibilities for commercializing new and renewable sources of energy could be initiated. However, such efforts should be balanced with attaching importance to the cost and safety of enlarging energy plantations for commercial purposes. It also noted that the development of energy commercialization is closely related to the existing national structures. In this regard, the intervention of government is needed to facilitate the commercialization.

XI. CONCLUSIONS AND RECOMMENDATIONS

33. Energy plays a crucial role in the development of the developing countries. And, therefore, it is of utmost importance to strengthen cooperation among those countries in that particular field.

34. It was also noted that the developing countries should rely more on South-South cooperation to enhance collective self-reliance. In this regard, a comprehensive set of short, mid-term and long-term measures for cooperation in the energy sector should be explored.

35. It was felt that while North-South cooperation is important as far as the technology transfer for developing countries is concerned, a dynamic South-South cooperation among developing countries will achieve a better understanding and cooperation with the North.

36. The meeting acknowledged the importance of information exchange in general as a pre-requisite for future expansion of energy cooperation in various areas but pointed out that currently efforts should be concentrated on priority areas and projects so as not to needlessly diffuse the limited resources available to member countries. It was considered important that a mechanism for the exchange of information should be established based on a hierarchy or systematic geographic clustering.

37. With regard to the issue of creating multinational enterprises in the field of capital goods for the energy sector and related industries, consideration should be given to the various provisions of the Uruguay Round.

38. The meeting agreed to recommend the following:

- (i) Recognizing the importance of information mechanisms to enhance cooperation in the energy sector among members of the G-77, energy information systems should be developed to identify the availability and demand of technology, expertise, equipment and services in the energy sector. To increase the flow of information between member countries, the following, inter alia, should be adopted:
 - a. Creating an information data bank.

- b. Establishing a focal point responsible for the energy sectors in member countries.
 - c. Inter-regional and intraregional cooperation should be further enhanced in disseminating information to member countries.
 - d. Utilizing the Office of the Chairman of the G-77 and the six Chapters of the G-77 through its journal, as a medium for exchanging specific information concerning the energy sector.
 - e. Involvement of the South Centre in Geneva whose mandate is to help developing countries in providing information on research and development and issues related to social and economic development.
 - f. A model of cooperation between developed and developing countries in creating an information mechanism, such as AEEMTRC, could be considered as a prototype.
 - g. The Special Unit for TCDC in the UNDP could be utilized as a medium for exchange of information. This Special Unit for TCDC is a linkage between the G-77 and the agencies of the UN system. It provides funding for special projects designed to advance development efforts of G-77 members. It is involved in the administration of the PGTF and in the granting of annual award for Economic and Technical Cooperation among Developing Countries (ECDC/TCDC).
- (ii) The Meeting was of the view that one of the obstacles to the implementation of the provision of the CPA is inadequacy of funding for programmes/projects in the energy sector. The following actions may be taken:
- a. To make the maximum use of resources emanating from various international organizations, such as ADB, ESCAP, UNIDO, and UNDP, to support implementation of the CPA.
 - b. To fully utilize the Perez Guerrero Trust Fund (PGTF) to finance feasibility studies for TCDC activities related to the energy sector.
 - c. To explore innovative mechanism such as, “triangular funding”, whereby source of financing to support activities in the energy sector could be secured from third party donors to ensure that projects/programmes of more than two developing countries could be implemented.
- (iii) The Meeting was of the view that concrete cooperation between members of the G-77 in the energy sector should be realized. Despite the fact that G-77 is the largest producer of energy and natural resources in the world, the cooperation among members to utilize each others’ technological capability in energy sector remains to date at minimum level. This is mainly due to the insufficient information of the energy-related capabilities of G-77 members made available to each other. This insufficiency should be overcome soon.

The Meeting was of the view that there are sufficient capabilities of highly sophisticated manufacturing, engineering, technology, construction and organization and management capabilities to support energy development activities, which can be supplied within G-77 member countries. The utilization of these capabilities will strengthen South-South economic cooperation. In this regard, the Meeting recommended to explore ways and means to promote the establishment of multinational enterprises in the field of capital goods for the energy sector and related industries, first on regional basis. After sufficient experience is obtained, the cooperation can be enlarged to the G-77 members in general.

- (iv) With regard to cooperation for Manpower Training in activities related to energy, the following actions may be carried out:
 - a. Identification of the training needs of developing countries with the intention of developing training programmes/projects that could derive maximum benefit of TCDC programme which includes electric power, oil and gas, coal, geothermal and new and renewable sources of energy.
 - b. Special emphasis should be given to training of trainers in specific fields related to energy.
 - c. Training activities should preferably be tailored to the needs and requirements of the region concerned, without prejudice to the other regions of the G-77, in order to make full use of existing and potential capabilities of developing countries.
 - d. Cooperation in human resources development through training in the field of electric power, oil and gas, coal, geothermal, and new and renewable sources of energy under the TCDC scheme is necessary. For that purpose, the member countries should make better use of each others' already existing training facilities.
- (v) On Research and Development in the field of new and renewable sources of energy, the Meeting realized that the stage of development is different from one country to another, hence it is recommended that cooperation be carried out in either assessment of resources, technology development, or design and testing of components or systems and their fabrication to suit an individual country's needs. It also realized that for successful cooperation, a commitment or a kind of political will on the part of member countries is essential.
- (vi) Commercialization for the development of NRSE should consider:
 - a. Economic Scale
 - b. Government intervention, such as incentives, diversifications, etc.
 - c. Economic pricing structure for all energy commodities.

39. The G-77 decided during the VIII Intergovernmental Follow-up and Coordination Committee (IFCC) to take up the offer of the Government of Indonesia to host the Sectoral Review Meeting on Energy. In this regard, this meeting will submit its report to the Ninth IFCC Meeting which will be held in Manila on 9 – 12 February 1996. In the interest of harmonization

of activities related to the CPA of the G-77 and Action Programme for Economic Cooperation of the Non-Aligned Movement, a copy of this report will also be furnished to the Non-Aligned Movement.

XII. ACKNOWLEDGEMENT

40. The Meeting expressed its appreciation to the Government of the Republic of Indonesia and its people for the warm hospitality and excellent arrangement made for the Meeting.