

Policymaker Summary of the IPCC Special Committee on the Participation of Developing Countries

Executive Summary

1. The Special Committee on the Participation of Developing Countries was established by the IPCC to promote, as rapidly as possible, full participation of the developing countries in IPCC activities. Action was taken, funds were raised and attendance of the developing countries increased.

2. Full participation includes the development of national competence to address all issues of concern such as the appreciation of the scientific basis of climate change, the potential impacts on society of such change and evaluations of practical response strategies for national/regional applications.

3. There is a close link between issues addressed by the IPCC Working Groups such as access to technology and financial resources and the participation of the developing countries in IPCC. The work of the Special Committee was carried out in parallel, necessitated by the tight timetable and limited resources, with work on such issues carried out in Working Group III. The Committee will need to meet periodically to co-ordinate the integration of its conclusions and other concerns of the developing countries in the work of the Working Groups, particularly Working Group III, and the implementation of its recommendations.

4. The industrialized world today emits about 75% of the world total greenhouse gas emissions, and although the emissions are increasing in the developing countries, where 75% of the world population lives, they emit the balance. The legitimate concerns on the part of the developing countries that, although their impact on global climate change is minimal, its impact on them can be grave, need to be taken into account.

5. Any significant climate change would affect every sector of individual and social activity. Thus a single nation or even a group of nations cannot hope to manage the issue adequately by itself. It would take the concerted action of all nations to achieve that end, taking into account not only the past and present responsibility of the industrialized world in the accumulation of the greenhouse gases, but also the present economic and financial capacities of the developing countries.

6. While the global environment has assumed today greater significance for the industrialized countries, the priority for the alleviation of poverty continues to be the overriding concern of the developing countries; they rather conserve their financial and technical resources for tackling their immediate economic problems than make investments to avert a global problem which may manifest itself after two generations, particularly when their contribution to it is significantly less than that of the industrialized countries.

7. The Committee noted that developing countries consider the lack of sufficient assurance so far on the provision and requisite, adequate, new and additional funding particularly for the identification, transfer, adaptation and implementation of alternative safer technologies on a preferential, non-commercial and grant basis, added substantially to the inhibition of the developing countries in taking active part in IPCC activities. It further noted that these countries consider that the formulation of guidelines for funding mechanisms for transfer, adaptation and implementation of clean technologies as against legal and economic measures would create healthier conditions for the participation of the developing countries.

8. These considerations have led the Special Committee to focus on the following five factors that inhibit the full participation of the developing countries in the IPCC process:

- insufficient information;
- insufficient communication;
- limited human resources;
- institutional difficulties;
- limited financial resources.

(i) *Insufficient information:* Many developing countries do not have sufficient information on the issue of potential climate change to appreciate the concern it evokes elsewhere in the world. Information is often insufficient with respect to the scientific basis for concern, on the potential physical and socio-economic impacts of climate change as well as on response options. This applies not only to scientific milieux but also to policymakers and public opinion.

(ii) *Insufficient communication:* Even if the situation with respect to information were to improve, there is the problem of insufficient internal and external communication mechanisms for the proper dissemination of the information on matters related to climate change.

(iii) *Limited human resources:* Lack of adequate number of trained personnel in almost all areas ranging from academic, scientific efforts to applications of knowledge to food and energy production, to water management, to human settlements problems, to trade and economic growth, and to a host of other related endeavours is common to many developing nations. Most of them, if not all, can command only a limited pool of experts and responsible and knowledgeable officials, and even that only in a few of these areas.

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- (iv) *Institutional difficulties*: The multi-disciplinary and cross-cutting nature of the issues involved demands a relatively high degree of co-ordination among the various departments/ ministries of governments.
- (v) *Limited financial resources*: Survival needs come first. After that, the limited financial, and consequent general lack of technological, resources dictate the priorities. Means of meeting the incremental costs of ensuring a viable environment frequently cannot be found. Also, local immediate, environmental concerns generally receive political priority over impersonal, global concerns.

9. The Committee did not consider in detail topics such as financial assistance, economic incentives/ disincentives, formulation of legal instruments, and development of, and access to, environmentally-benign and energy-efficient technologies. These were dealt with by Working Group III and are likely to form the substance of future negotiations among governments. However, the Committee expressed the view that actions to promote the full participation of the developing countries in climate change issues should not await the outcome of such negotiations.

10. Also, there are actions that will arise as a result of negotiations and agreements, and machinery will have to be put in place to implement these. But there are others that need to be taken now, that can be done through existing arrangements; most in this category should be planned and carried out for several years.

11. The impacts of climate change will vary from region to region and nation to nation. Although response strategies for developing countries have to take into account the need for adequate funding and safer technologies, country-specific and/or region-specific approaches will be necessary. For example, response measures that small island states require could be very different from those for large industrializing countries within the developing world. Success in the implementation of many of the recommended actions depend not only on national initiatives but also on stronger regional or sub-regional co-operation.

Recommended actions

12. Uninterrupted travel assistance to the developing countries for attendance at the meetings of IPCC and follow-up activities should be ensured. The Committee wishes to call the attention of the Panel to the importance of continuing this effort and of the donor nations continuing and increasing contributions to the effort, with no cessation after the fourth plenary of IPCC.

13. Serious consideration should be given to supporting more than one expert from each participating developing country to those climate change-related meetings that deal with several aspects of the problem. The

developing countries on their part should facilitate action in this regard as much as possible.

14. Governments and organizations from the industrialized nations are encouraged to continue and increase their efforts in organizing seminars. Developing countries could organize, under the sponsorship of international organizations or otherwise, regional seminars and workshops in order to exchange scientific and technical information. For this purpose, necessary programmes and lists of experts should be developed. As part of the continuing process of information exchange, the Committee recommends that IPCC circulate this Policymaker Summary to all concerned including those attending the Second World Climate Conference. The developing countries on their part could where appropriate designate focal points, as soon as possible, for transmittal of reports, documentation, data and information on seminars. Such focal points should be briefed on forwarding the material to appropriate recipients within the nation for response, review etc.

15. The establishment of mechanisms for national co-ordination of all their activities related to climate change could be considered by the developing countries. The mechanisms could aid such areas as information dissemination, development and implementation of plans for research and monitoring, and formulation of policy options. The industrialized countries could consider assisting the developing countries in these areas with easy access to needed technologies.

16. The Committee recommends that acquisition, analyses and interpretation of information on climatic and related data would enable developing countries to take more effective account of climate change considerations in formulating national policies. Such actions are necessary also at regional levels to undertake and refine impact studies. The current unevenness in the acquisition and use of such data which is evident between the hemispheres should be eliminated. The Committee further recommends that the developing countries take immediate action to identify their specific needs to determine the financial implications of such action. It would be necessary to mobilize appropriate funding in order to mount a sustained programme and create regional centres to organize information networks on climate change.

17. In many developing countries the meteorological/ hydrological service is the main and often the only institution collecting and recording data with relevance to climate. If associated weather patterns are modified, as some predict they would as a result of climate change, then the capabilities of such services need to be reinforced to enhance their contributions to sustainable development.

18. The Committee recommends that considerations of climate change should be integrated in development policies. National environmental studies should also take into account predicted climate change in order to determine sustainable

development strategies. To reach these objectives, the developing countries and many industrialized countries consider it essential that additional funding be available to enable developing countries to meet the incremental costs resulting from their efforts to combat climate change.

19. The Committee further recommends that its findings be duly taken into account in all relevant areas of the work of IPCC. Programmes of action should be developed and implemented (and the concepts which would lead to such programmes of action developed where needed) without delay, with a view to ensure, provided the necessary means are made available, the full participation of developing countries in the future work and activities on climate change. UNEP and WMO should take the lead in this regard and initiate the necessary consultations. Other multilateral or bilateral organizations should also be contacted for elaborating and implementing these programmes of action.

20. The Committee also recommends that serious consideration be given by IPCC to the provision of simultaneous interpretation and documentation in the customary UN languages for the meetings of the Special Committee, given the complex nature of the subject matter covered and the particular difficulties encountered by the developing countries.

21. The Special Committee is ready to assist in monitoring and reviewing the preparation and the implementation of the above mentioned and other relevant programmes of action.

1. Introduction

1.1 Establishment of the Special Committee

1.1.1 When the IPCC began its work in November 1988, only a few developing countries attended. The reason was not that they were indifferent to the issue of climate change. They were lacking in neither interest nor concern. Climate change had appeared only a short while earlier on the international agenda. By its nature, it is a complex and multi-sectoral issue. Few developing countries have adequate data bases and research facilities to address the problem directly. For most of them, national spending priorities for rapid economic growth precluded expenditure of scarce resources on travel to attend IPCC meetings.

1.1.2 The Special Committee on the Participation of Developing Countries was established by IPCC (in June 1989) to promote, as rapidly as possible, active participation of the developing countries in IPCC activities. This action followed the report of an Ad Hoc Subgroup which was established by the IPCC Bureau in February 1989 to promote ways and means of increasing such participation. The Subgroup was under the chairmanship of Dr. A. Al-Gain, who is also the Vice-Chairman of IPCC. The members of the Ad Hoc Subgroup were Brazil, Saudi Arabia, Senegal and Zimbabwe.

1.1.3 The Special Committee's deliberations owe much to the report of the Ad Hoc Subgroup. The Committee consists of the following members: France (Chair), Algeria, Brazil, India, Indonesia, Japan, Kenya, Norway, USA and USSR. Dr. Al-Gain is a co-opted member of the Committee. (The Committee met as an open-ended group during its plenary session held in Geneva on 31 May and 1 June 1990 following a decision made at the third plenary session of IPCC in Washington DC, on 5 to 7 February 1990.) The Committee's terms of reference are given in Annex I to this Policymaker Summary.

1.1.4 There is a close link between issues addressed by the Working Groups of IPCC such as access to technology and financial resources and the participation of the developing countries in IPCC. The work of the Committee was carried out in parallel with work on such issues carried out within the subgroups, and the topics groups on implementation measures, of Working Group III. This parallel work was necessitated by the tight timetable and limited resources available to the Committee. The Special Committee stresses the importance of taking into account, to the extent feasible, the conclusions of this Policymaker Summary in the report of Working Group III. Further, the Committee will need to meet periodically to co-ordinate the integration of the concerns of the developing countries in the work of Working Group III and the implementation of its recommendations.

1.2 Joint partnership of the industrialized and developing countries

1.2.1 Global warming of current concern results from emissions of the so-called greenhouse gases into the atmosphere. While many of these gases occur in the natural atmosphere, recently observed increases in them come about because of activities that have contributed in a very big way to human survival and welfare such as industrialization, food production and general economic development.

1.2.2 The industrialized world today emits about 75% of the world total greenhouse gas emissions, and although the emissions are increasing in the developing countries, where 75% of the world population lives, they emit the balance. The source of the emissions can be any nation but any warming will not be confined to that nation alone; it will go beyond, encompassing the entire globe. Any significant climate change would affect every sector of individual and social activity. Thus a single nation or even a group of nations cannot hope to manage the issue adequately by itself. It would take the concerted action of all nations to achieve that end. That is, both the industrialized and the developing worlds have to join hands in the action, taking into account not only the past and present responsibility of the industrialized world in the accumulation of greenhouse gases, but also the present economic and financial capacities of the developing countries. This is imperative.

1.2.3 While the management of climate change has to be based on globally agreed-upon action, the deciding factors in arriving at such agreements will be dictated by national and regional considerations. The impact of the predicted warming will be uneven, ranging from beneficial to harmful in various sectors of the economy, and differing from nation to nation and from region to region. Thus, nations and groups of nations will need a sound knowledge base to embark on the agreement process. This need is especially dire in the case of the developing countries. Their access to scientific and other information, and resources will have to be attended to, if they are to share in, and contribute to, the solution. In the process, legitimate concerns on the part of the developing countries that, although their impact on global climate change is minimal, its impact on them could be grave, need to be taken account. Their differing stages of development, and hence their country-specific needs to adjust to climate change, will have to be taken into account also.

1.2.4 The developing world faces special problems. Greater investments for rapid economic development and better satisfaction of basic needs such as food, shelter and income assume paramount importance. At the same time the habitability of the planet cannot be compromised. The developing countries, thus, have to participate fully, willingly and knowingly in the planetary decision-making and the follow-up actions on climate change.

1.2.5 Full participation includes the development of national capacity to address the issues of concern such as the

appreciation of the scientific basis for climate change, the potential impacts of such change and evaluations of practical response strategies for national applications. It is intertwined with the general process of sustainable and steady development.

1.3 Structure of the Policymaker Summary

1.3.1 After introduction, the Policymaker Summary discusses factors inhibiting full participation by the developing countries (section 2), areas of possible action (section 3) and the Committee's conclusions and recommendations (section 4).

2. Full participation of the developing countries

2.1 Objectives

2.1.1 The Committee recognized that achieving full participation of the developing countries in the IPCC process is a necessary but difficult goal: it embraces a number of related objectives. These objectives are both quantitative and qualitative. With respect to quantitative objectives, the Committee acknowledged the need to:

- (i) increase the number of developing countries taking part in IPCC meetings and actions arising therefrom; these include seminars, meetings of the Working Groups and their subgroups etc.;
- (ii) expand the travel support so as to enable a number of experts from each developing country to attend meetings on climate change and related issues to provide for meaningful participation particularly when meetings consider different but related issues simultaneously;
- (iii) expand the opportunities for developing countries to increase their knowledge of the science on climate change and policy-making (eg, energy policy), impacts, and response options appropriate to them, with respect to climate change;
- (iv) expand the opportunities for developing countries to train and enhance the skills of experts in climate-related and climate-change-related research.

2.1.2 With respect to qualitative objectives, the Committee acknowledged the need to:

- (i) provide for continuity of participation from developing countries in the IPCC process to further their involvement;
- (ii) encourage dissemination within the developing countries of information and data on climate issues to increase awareness and knowledge;

(iii) encourage that climate issues are rationally considered in developing national policies with respect to science, economics and the environment to achieve sustainable development;

(iv) promote effective co-operation within developing countries among those responsible for the different aspects of climate issues to foster informed decision-making.

2.2 Factors inhibiting full participation

2.2.1 The factors identified by the Special Committee which inhibit the active participation of the developing countries in IPCC activities can be grouped into the following categories:

- (i) insufficient information;
- (ii) insufficient communication;
- (iii) limited human resources;
- (iv) institutional difficulties;
- (v) limited financial resources.

2.2.2 The above factors have been elaborated at length in the paragraphs below. Without prejudice to their generality, the Committee also took note of the fact that most of the developing countries faced the dilemma of deciding allocation of priorities between environmental issues and economic development. While the global environment has assumed today greater significance for the industrialized countries, the priority for the alleviation of poverty continues to be the overriding concern of the developing countries; they rather conserve their financial and technical resources for tackling their immediate economic problems than make investments to avert a global problem which may manifest itself after two generations, particularly when their contribution to it is significantly less than that of the industrialized countries.

2.2.3 The Committee acknowledged that the above dilemma of priorities poses a serious obstacle to enhancing the participation by developing countries in the IPCC process. The Committee further acknowledged that, even as the process of effective economic development in the course of time would increase the understanding that developmental goals and environmental concerns need not be mutually exclusive, it was necessary to enable the developing countries to perceive the problem in its correct perspective by deepening their understanding of the science of global climate change, its potential physical and socio-economic impacts and response options.

2.2.4 The Committee noted that developing countries consider the lack of sufficient assurance so far on the

provision and requisite, adequate, new and additional funding particularly for the identification, transfer, adaptation and implementation of alternative safer technologies on a preferential, non-commercial and grant basis added substantially to the inhibition of the developing countries in taking active part in IPCC activities. It further noted that these countries consider that the formulation of guidelines for funding mechanisms for transfer, adaptation and implementation of clean technologies as against legal and economic measures would create healthier conditions for the participation of the developing countries.

2.3 Insufficient information

2.3.1 The Committee noted that many developing countries do not have sufficient information on the issue of potential climate change to appreciate the concern it evokes elsewhere in the world. Information is often insufficient with respect to the scientific basis for concern, on the potential physical and socio-economic impacts of climate change as well as on response options (see also para 2.2.3). This applies not only to scientific milieux but also to policymakers and public opinion.

2.3.2 Access to scientific data is limited in the developing countries. Many are unable to participate in regional monitoring programmes, where these exist, or to monitor weather and climate continuously within their national boundaries and in accordance with international requirements.

2.3.3 As stated above, information available in developing countries on the likely impacts of climate change within their national boundaries is limited. While Working Group I of IPCC has noted the inability of current scientific models to anticipate specific regional distributions of climate change, the problem in developing countries is more basic. Many do not have the ability, for example, to project how various increases in sea-level rise would affect them, and hence what steps might be necessary to adapt to it. Similarly, many developing countries do not have sufficient information to judge how best to achieve energy efficiency, or to gauge its costs, security and trade implications. Another area where there is lack of information is that of environmentally less harmful technologies and products. Gaps in information about proper technologies in moisture conservation, afforestation and soil protection were noted as glaring examples in this regard.

2.3.4 With adequate information, developing countries would be able to take more effective account of climate change considerations in formulating national policies. They would also then be in a better position to appreciate that the deliberations on climate change had far-reaching implications on their economic and developmental strategies, and to identify their specific needs to determine which may be met from existing resources and which may require additional resources.

2.4 Insufficient communication

2.4.1 The Committee noted that even if information on climate change and related activities were to be provided, there was a need to improve internal and external communication to ensure the flow of information to appropriate recipients including economists, scientists and policy-level officials in the developing countries. Internal communication is important for informed considerations of national policy issues while improved external communication facilitates the flow of information to and from the outside world.

2.4.2 The Committee also noted that within the developing countries there was need to strengthen and streamline mechanisms to co-ordinate, receive, store and disseminate relevant information either originating from within the country and/or flowing from outside. Lack of such mechanisms often resulted in insufficient appreciation of the need to participate in the international discussions on climate change.

2.4.3 In a similar manner, the Committee noted that existing international arrangements, to transmit information on climate change and related activities among the developing countries were not yet effective enough.

2.5 Limited human resources

2.5.1 The Committee noted that to receive, communicate and disseminate information on climate change and related activities, there was not sufficient informed manpower available within the developing countries. Full participation by developing countries has sometimes been hampered by the limited pool of expertise available in each country. Those few experts as are available shoulder heavy responsibilities and are extremely hard pressed to take time away from important national tasks.

2.5.2 Developing countries seek to alleviate the problem in some instances by having their embassy representatives take part in those IPCC activities that are scheduled in various capitals. Even this measure is difficult for smaller developing countries with sparse representation. Another approach, albeit less used at present, is to designate regional experts to represent a group of countries. There are drawbacks inherent in both approaches. Embassy officials may lack the background information in the issues to take effective part in meetings, particularly those calling for specific expertise in science, impacts, policy and legal analyses, problems of human settlements in coastal and low-lying areas, behavioural sciences, and cost and economic analyses. In addition, because IPCC meetings take place in many areas of the globe, it is difficult to provide for continuity of representation through the use of embassy officials. On the other hand, designating regional experts to represent a group of countries invariably requires a high degree of co-operation among such countries and a relatively long preparatory process, unless experts are designated to serve on a long-term basis.

2.6 Institutional difficulties

2.6.1 The Committee noted that in many developing countries the manpower engaged in co-ordinating receiving, transmitting, disseminating and effectively using information on climate change and related activities was not sufficiently supported by institutional infrastructure.

2.6.2 While this requirement for national infrastructure has been met successfully in some of the developing nations, such is not the general case. It is often not clear which ministry or agency is responsible or should have responsibility for a particular climate issue or decision. In addition, co-ordination mechanisms among ministries and agencies in many developing countries are not as well established or effective as climate issues may demand.

2.7 Limited financial resources

2.7.1 For the reasons stated elsewhere in the Policymaker Summary, the Committee did not consider in detail topics such as financial assistance, economic incentives/disincentives, formulation of legal instruments, and development of, and access to, environmentally-benign and energy-efficient technologies. These are being dealt with by Working Group III and are likely to form the substance of future negotiations among governments. However, the Committee expressed the view that actions to promote the full participation of the developing countries in climate change issues should not await the outcome of such negotiations. Some of them could be taken now.

2.7.2 Limited financial resources are intimately tied to a general lack of access to new and better technologies. In addition, survival needs have to be satisfied first. Means of meeting the incremental costs of ensuring a viable environment frequently cannot be found. Also, local, immediate environmental concerns generally receive political priority over impersonal, invisible, somewhat remote, global concerns.

2.7.3 While the root causes of the problem of lack of financial resources may lie in the past patterns of economic development, there are simpler but nonetheless indispensable needs such as travel funds, so that a nation can keep itself informed of activities elsewhere in climate change and related fields.

2.7.4 Developing countries require support for the attendance of their experts at IPCC meetings. Travel needs compete with other national priorities for funds. Without travel support, many developing countries simply would not be able to attend even a single meeting; for others, adequate and effective representation would not be possible. Here, as elsewhere, the issue is not so much an absolute lack of financial resources as the absolute necessity of establishing spending priorities amid a large and growing number of international environmental and other meetings and conferences. This is particularly problematic for the

least developed countries as well as for smaller developing countries, particularly those in the Southern Hemisphere since the majority of these meetings are held in the Northern Hemisphere.

2.7.5 The Committee noted that the attendance of the developing countries in IPCC meetings has shown a steady improvement (see sub-section 2.8 below). Ironically, as the IPCC succeeds in increasing the participation of developing countries, the problem becomes more complex unless funding assistance for participation increases commensurately. To date, IPCC has not established specific criteria or priorities by which requests from developing countries for travel assistance should be considered.

2.7.6 In addition, while pledges to the IPCC Trust Fund for the travel support of invited experts from the developing countries have been generous and increasing, the process has been ad hoc and the remittances have not been timely to prevent periodic acute shortfalls.

2.8 Progress in IPCC

2.8.1 In spite of the factors discussed in the previous sections which inhibit full participation by the developing countries, it is clear that IPCC has accomplished much in its brief existence.

2.8.2 For example, the number of developing countries attending the first plenary of the Panel in November 1988 was 11; this number rose to 17 at the second plenary (June 1989) and to 33 at the third (February 1990). The number of developing countries at the third plenary surpassed that of the industrialized countries (27).

2.8.3 In addition, the Panel had initially allocated SFr222,510 for travel support for the developing countries in its 1989 budget estimate. The actual amount spent was approximately SF 383,904 (see Annex II for a listing of contributions). This amount paid for 85 trips by 80 experts to attend the meetings of the Panel, the Bureau, the Working Groups and their subgroups, and the Special Committee in 1989. The budget for 1990 for similar support is SFr794,000, which is one half of the IPCC 1990 budget. This has already been exceeded at the time of the writing of this Policymaker Summary and is in addition to that channelled through bilateral arrangements.

2.8.4 Moreover, several governments (from the industrialized and developing parts of the world) and regional intergovernmental organizations are holding information exchange and other seminars, for the developing countries, in 1990 and 1991 on the specific issue of climate change. These are designed to build awareness and assist the understanding of the complex interrelationship of the various aspects of the subject.

2.8.5 The IPCC process itself has served to increase awareness and knowledge of the industrialized and the

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developing countries with respect to climate change issues. In this sense, while more remains to be done to increase the participation of developing countries, IPCC has succeeded partially in an essential function. The improving situation cannot yet be termed satisfactory by any means, as the full participation by the developing countries is a prerequisite for any successful action such as the adoption of a climate convention.

2.8.6 As a result of the combined efforts and initiative of a few governments, major financial institutions have undertaken to raise fresh funds to be allocated to the problems associated with climate change. Specifically, the World Bank has targeted climate change as one of the four issues of global importance eligible for additional funding at concessional rates.

3. Areas of action

3.0.1 The impacts of climate change will vary from region to region and nation to nation, as already stated elsewhere in the Policymaker Summary. Although response strategies for developing countries have to take into account the needs for adequate funding and safer technologies, country-specific and/or region-specific approaches will be necessary. For example, response measures that small island states require could be very different from those for large industrializing countries within the developing world. Nevertheless, the discussion in this section is relevant in general to all developing nations (and, indeed, to all nations) and the Special Committee will need to devote more attention to specific requirements in its future work.

3.0.2 Success in the implementation of many of the recommended actions (see section 4) depends not only on national initiatives but also on stronger regional or sub-regional co-operation. Co-operation between countries of the same region, between countries and regional or sub-regional institutions, and between institutions themselves will achieve cost savings and efficiency. This is particularly indispensable for the smaller countries, including island nations.

3.0.3 Advantages of regional co-operation are obvious for research activities but they are there also for many other sectors. For example, with regards to energy savings, countries could benefit from the know-how of regional "technical centres" which encourage research. Together they could develop technologies adapted to their particular situation by sharing their equipment and existing infrastructures. The creation or strengthening, for example, of regional "departments" of energy and environment would assist the mobilization of support and the co-ordination of research and approaches common to many countries.

3.0.4 Also, there are actions that will arise as a result of negotiations and agreements, and machinery will have to be put in place to implement these. But there are others that need to be taken now, that can be done through existing

arrangements; most in this category should be planned and carried out for several years.

3.0.5 The Committee compiled a list of areas of possible action. This list is not to be viewed as all-inclusive. It is a beginning and is expected to be reviewed periodically and modified and added to as needed. The recommendations of the Committee on specific action items are given in section 4.

3.1 Development of information

3.1.1 While insufficient information is not unique to the developing countries, rectification of the associated problems is likely to take longer in their case.

3.1.2 The kind of information that is insufficient includes:

- reliable scientific data, predictions and interpretation;
- techniques of designing numerical (computer) models;
- analytical tools for performing impact analyses;
- cost and other implications of addressing climate change;
- state-of-the-art methods of energy production;
- availability and the nature of possible policy options.

3.1.3 Such insufficiency can be partially redressed, inter alia, through:

- information exchange seminars;
- skill enhancement seminars;
- development of information centres.

3.1.4 Information exchange seminars should be undertaken on global, regional and national levels. A few governments and international organizations have already planned some. The seminars should be periodic or cyclical to maximize retention and wider dissemination of information. They should be aimed at senior officials, the media and the public. Opportunities such as World Meteorological Day, World Health Day, Earth Day and World Environment Day could be taken advantage of. The seminars could include novel initiatives such as conferences of planners. In this respect, for example, a seminar organized by UNEP in Paris has as its objective raising the awareness of policy and opinion makers on the issue of climate change and of organizing, at the same time, training activities on the actions to be taken.

3.1.5 Skill enhancement seminars are similar to training sessions. These are best achieved in a regional setting. A number of bilateral, multilateral and international

organizations have such programmes. These may require co-ordination to increase their effectiveness.

3.1.6 As stressed in the relevant part of the report of Working Group III, an important component of this effort is the introduction at all stages of education and, on a continuing basis, curricula to inform future citizens and decision-makers. Wider public information programmes are also important to strengthen the mandate of governments to act.

3.2 Development of communication

3.2.1 Networking of scientific and other experts on climate change and related matters at national, regional and international levels is a valuable mechanism for rapid flow of information. National, regional and international conferences planned and held in the developing countries would provide good opportunities for such flow. Existing plans of international organizations such as UNEP and WMO could play a critical catalytic role in this regard.

3.2.2 One of the difficulties for the timely transmittal of documents, letters and requests for information and action between, for example, the IPCC Secretariat and governments is that only a few countries have designated focal/contact points for the purpose. A related problem is that often the focal/contact point is not instructed as to where, for example, a given document should be sent for review etc. Governments are urged to improve appropriate national communication mechanisms to ensure timely dissemination of documents to relevant officials and authorities. The establishment of national climate committees composed of all relevant expertise would be one way to approach this issue (see also section 2 and sub-section 3.4.)

3.2.3 In the past, national embassies have been used by governments to promote this communication. This practice could be helpful in selected cases. Embassy staff, where available, can also be designated to represent governments at IPCC meetings. This can especially be helpful when designated experts, for one reason or another, are unable to attend.

3.3 Development of human resources

3.3.1 Development of informed manpower is crucial if a developing country is to contribute fully and effectively to managing climate change. Any programme in this area should address simultaneously the related issues of education, training and technical assistance (i.e., ready access to analytical tools, techniques and methodologies, etc).

3.3.2 Programmes for the training of experts in the specific field which is relatively new, namely, climate change, are needed. Specialization must be achieved in such areas as the construction and use of numerical models (eg, climate prediction models, biospheric models, econometric models), observations and surveys (eg, atmospheric

observations for climate and related data, socio-economic surveys), laboratory and engineering techniques, human settlements in coastal and other low-lying regions, and data analyses and interpretation for policy applications. Programmes specifically tailored to regional questions would be helpful in addressing common concerns such as policy considerations.

3.3.3 Exchange of visits of experts on climate change and related issues between the industrialized and the developing worlds should be instituted on a continuing, long-term basis. Academic staff from the industrialized countries could be encouraged to spend their sabbaticals in the developing countries with fellowships dedicated for the purpose. Exchange between academic institutions could be encouraged. Account should be taken of the particular difficulties that will be encountered in those developing countries with poorly developed educational infrastructures where the capacity to respond to new educational demands is limited.

3.3.4 Involvement of local expertise should be sought and encouraged when studies in given geographical areas are undertaken, and advantage taken of opportunities for training which arise as a result.

3.3.5 Programmes to provide ready access to state-of-the-art technology and investigative and implementation tools and methodologies (eg, computers of adequate power that could be shared on a regional basis, mass communication methods) should be instituted.

3.3.6 In this context, the Committee is of the view that assistance be provided at the regional level by the UNDP and specialized agencies such as WMO and UNEP. Their assistance should cover, inter alia, the development of expertise in such areas as climate modeling, formulation of scenarios for decision makers, human settlements programmes, and for transfer of adaptive and updated technology. Existing regional centres of relevance in this regard should also be strengthened.

3.4 Functioning of institutions

3.4.1 Difficulties in national co-ordination are evident to most of the developing countries. In the case of IPCC activities, for example, only a few countries have designated national focal points (see also sub-section 3.2). This not only hampers the flow of information and the continuing participation of the developing countries, but also the follow-up actions needed to be taken at the national level.

3.4.2 Efforts to promote national co-ordination of activities on all aspects of climate change should be redoubled. This is imperative for information flow, planning and implementation of data collection and analyses programmes, studies on cost, international treaty and trade implications, and policy options, and to establish and maintain national review and implementation machineries.

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Achieving co-operation among the many national agencies engaged in climate change in one way or another is a long process requiring many steps. Any delay in initiating this effort will make it that much more difficult to respond to climate change and maintain sustainable development. Information on effective institutional arrangements and their establishment should be exchanged between countries.

3.4.3 National centres would provide natural foci for timely and effective flow of internal and external information. This is important in view of the possibility of concerted regional and international actions in addition to purely national ones. The centres would facilitate communication among experts in different discipline areas; the necessity for such communication cannot be overemphasized in the context of climate change, which is inherently multi-disciplinary.

3.4.4 There are many international organizations that are involved in climate change studies and issues such as ICSU, UNEP, WMO, WHO, FAO and the World Bank. While their work is necessarily mission specific as mandated by their respective governing bodies, the efforts are quite complementary to each other and can profit from more cross referencing. In this regard, it would be very helpful if the same briefs are provided on the climate change issue to all delegations from a nation to the different meetings of the various international organizations. The respective governing bodies would then be kept fully in the picture and can make decisions in a wider context. This would avoid unintended duplication of work and at the same time help identify questions that are likely to be missed because of novel inter-disciplinary and multi-disciplinary characteristics. All this can, in turn, only strengthen national co-ordination. The offices of the UNDP resident representatives and resident co-ordinators could assist recipient governments in their efforts of co-ordination at country level in this regard.

3.5 Development of financial resources

3.5.1 Plans and action strategies of developing countries for their economic development should be respected. Developmental assistance should in general be enlarged and accelerated.

3.5.2 The question of access to new technologies and methodologies for undertaking studies as well as putting into effect implementation measures is intertwined with that of general lack of financial resources. Bilateral and multilateral technical assistance is imperative for initiating and/or modernizing existing installations and practices to address climate change. (The problem of technology development and its transfer to the developing countries, and financial assistance, is dealt with by Working Group III, as already stated.)

3.5.3 The Committee, however, wants to stress that developing countries would require financial assistance to meet the incremental costs of incorporating climate change

considerations in their current developmental planning. Such assistance should be extended. Wherever it is feasible for the developing countries to incorporate climate change considerations in their action strategies without incurring additional costs, such incorporation should be made. The modalities (the amount and method of funding, for example) form part of the consideration of Working Group III. The Committee noted the conclusions of the Working Group III financial measures paper on a future work programme, including the need to advance the concept of a new mechanism, in the context of a future climate convention or its protocols. It considered that this issue should be given a high priority.

3.5.4 Recognizing the need to incorporate measures for adjusting to climate change with developmental planning, all developing countries which are in a position to integrate activities such as climate monitoring, impact analyses and studies on adaptation options should be encouraged to promote them and carry out research with financial assistance that primarily aims at securing the following:

- data acquisition and exchange;
- data archival, retrieval and analyses;
- correlative studies (eg, precipitation & vegetation, energy production & climate factors, health indicators & desertification, policy responses & cost implications);
- education and training including provision of scholarships and fellowships;
- specific technological development.

3.5.5 Continuity of travel assistance to experts from developing countries to attend IPCC meetings should be ensured. Such assistance should be extended for attendance at follow-up activities and other climate and climate change meetings (eg, the Second World Climate Conference, Geneva, 29 October—7 November 1990). As has already been stated, full participation implies more than physical presence at meetings.

4. Concluding remarks and recommendations

4.1 Overview and need for action

4.1.1 The Special Committee on the Participation of Developing Countries was set up by IPCC to seek ways and means of promoting, as quickly as possible, effective participation by the developing countries in its activities. There is a clear need to continue the efforts of the Committee.

4.1.2 The Committee hopes that the views expressed here and its recommendations would be helpful in ongoing

international efforts to draft and adopt a convention on climate change and protocols.

4.1.3 The Committee takes the opportunity to express its gratitude to the countries that have contributed generously to the IPCC Trust Fund so that support can be extended to experts from the developing countries to participate in the meetings of IPCC. It urges that contributions for such purpose continue and be increased in the future.

4.1.4 It is necessary to prepare specific programmes of action for the furtherance of the participation by the developing countries in the IPCC process and in the activities based on that process. Such programmes should include, as extensively as possible, action items, time schedules, identification of requisite resources and institutions, and implementation and review procedures. The Committee will give priority to the promotion of such programmes.

4.1.5 It should be noted that action on the Committee's recommendations should be initiated and developed as quickly as possible. Action on some has already begun and needs to be sustained. It is likely that IPCC will continue its work after its fourth plenary when it will complete its First Assessment Report. Thus the recommended actions should continue through the life of IPCC. Some of the actions are of such a nature that international organizations (eg, WMO, UNDP, UNEP, ICSU, WHO) can implement them.

4.1.6 The Committee emphasizes that having regard to the global nature of climate change and the need for participation by all States if the objectives of the recommended activities are to be achieved, the total programme will stand or fall depending on the availability of adequate funding to those countries in need.

4.2 Specific recommendations

4.2.1 The Committee recognizes that there are several issues justifying actions in their own right and which will contribute to dealing with the longer term climate change issues. It is thus evident that no country should rely solely on the international processes leading to protection of the climate to deal with all the issues which have been identified.

4.2.2 Uninterrupted travel assistance to the developing countries for attendance at the meetings of IPCC should be ensured. The Committee wishes to call the attention of the Panel to the importance of continuing this effort and of the donor nations continuing and increasing contributions to the effort, with no cessation after the fourth plenary of IPCC.

4.2.3 Serious consideration should be given to supporting more than one expert from each participating developing country to those climate change-related meetings that deal with several aspects of the problem. The developing countries on their part:

- should compile a list of national experts and make it available for travel assistance;
- should agree to contribute to the effort through travel subsidies when their national air carriers fly to meeting places;
- should agree to designate jointly an expert or a single group of experts to attend meetings where their interests can be commonly represented.

4.2.4 Governments and organizations from the industrialized nations are encouraged to continue and increase their efforts in organizing seminars. Developing countries could organize, under the sponsorship of international organizations or otherwise, regional seminars and workshops in order to exchange scientific and technical information. For this purpose, necessary programmes and lists of experts should be developed. As part of the continuing process of information exchange, the Committee recommends that IPCC circulate this Policymaker Summary to all concerned including those attending the Second World Climate Conference. The developing countries on their part should designate focal points, as soon as possible, for transmittal of reports, documentation, data and information on seminars. Such focal points should be briefed on forwarding the material to appropriate recipients within the nation for response, review etc.

4.2.5 Developing countries should consider the establishment of mechanisms for national co-ordination of all their activities related to climate change. The mechanisms would aid such areas as information dissemination, development and implementation of plans for research and monitoring, and formulation of policy options. The industrialized countries should consider assisting the developing countries in these areas with easy access to needed technologies.

4.2.6 The Committee recommends that acquisition, analyses and interpretation of information on climatic and related data would enable developing countries to take more effective account of climate change considerations in formulating national policies. Such actions are necessary also at regional levels to undertake and refine impact studies. The current unevenness in the acquisition and use of such data which is evident between the hemispheres should be eliminated. The Committee further recommends that the developing countries take immediate action to identify their specific needs to determine the financial implications of such action. It would be necessary to mobilize appropriate funding in order to mount a sustained programme and create regional centres to organize information networks on climate change.

4.2.7 In many developing countries the meteorological/hydrological service is the main and often the only institution collecting and recording data with relevance to climate. If associated weather patterns are modified, as some

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predict they would be as a result of climate change, then the capabilities of such services need to be reinforced to enhance their contributions to sustainable development.

4.2.8 The Committee recommends that considerations of climate change should be integrated in development policies. These policies could favour projects which have as their objective the prevention of and adjustment to adverse effects of climate change, promotion of the awareness of, and education on, the problem and the development and deployment of appropriate techniques and methodologies. National environmental studies should also take into account predicted climate change in order to determine sustainable development strategies. To reach these objectives, the developing countries and many industrialized countries consider it essential that additional funding be available to enable developing countries to meet the incremental costs resulting from their efforts to combat climate change.

4.2.9 The Committee further recommends that its findings be duly taken into account in all relevant areas of the work of IPCC. Programmes of action should be developed and implemented (and the concepts which would lead to such programmes of action developed where needed) without delay, with a view to ensure, provided the necessary means are made available, the full participation of developing countries in the future work and activities on climate change. UNEP and WMO should take the lead in this regard and initiate the necessary consultations. Other multilateral or bilateral organizations should also be contacted for elaborating and implementing these programmes of action, such as:

- (i) In the field of research and monitoring:
 - the UN and its Specialized Agencies
 - regional intergovernmental organizations such as the European Community
 - non-governmental organizations such as the International Council of Scientific Unions.
- (ii) On seminars and workshops in such areas as public information, negotiations and legal aspects:
 - non-governmental organizations in addition to the UN and its Specialized Agencies and regional intergovernmental organizations.
- (iii) On education and training and technical assistance:
 - UN and its Specialized Agencies
- (iv) On financing or funding:
 - multilateral financing institutions such as the World Bank, the Regional Development Banks, the UNDP etc.

4.2.10 The Committee also recommends that serious consideration be given by IPCC to the provision of simultaneous interpretation and documentation before, during and after a session in the customary UN languages for the meetings of the Special Committee, given the complex nature of the subject matter covered and the particular difficulties encountered by the developing countries.

4.2.11 The Special Committee should be mandated by IPCC to monitor and review the preparation and the implementation of the above mentioned and other relevant programmes of action.

4.2.12 To provide a basis for future programmes of action, the Committee requested the Chairman, within the financial resources available, to arrange for the extraction of the recommendations and action options arrived at by the Working Groups of IPCC; this document should be circulated, after review by the Special Committee, to donor and other countries, international organizations and regional groups.

ANNEX 1

TERMS OF REFERENCE OF THE IPCC SPECIAL COMMITTEE ON THE PARTICIPATION OF DEVELOPING COUNTRIES

1. The Committee will recommend to IPCC and its Bureau, specific measures to be undertaken for promoting the full participation of the developing countries in all IPCC activities.
2. It will include in such recommendation institutional arrangement(s) and implementation schedule(s) if and as needed.
3. It will develop action plans for the implementation of its recommendations.
4. It will identify the resource requirements and the means of meeting them to accomplish the task outlined in (1) above.
5. It will periodically review the progress of the implementation of its recommendations and make modifications thereof, as appropriate.
6. It will work closely with IPCC Working Groups.
7. It will continue its work until its dissolution by IPCC.

ANNEX 2

Table 1: 1989 Contributions to the joint WMO/UNEP IPCC Trust Fund		
CONTRIBUTOR	AMOUNT SFR	CURRENCY RECEIVED
Australia	24 963.05	\$ 15 175.00
Canada	14 519.50	C\$ 11 000.00
China	16 400.00	\$ 10 000.00
Denmark	7 550.00	\$ 5 000.00
Finland	7 950.00	\$ 5 000.00
France	25 303.00	FF 100 000.00
Federal Republic of Germany	43 750.00	Sfr 43 750.00
Japan	75 500.00	\$ 50 000.00
Netherlands	40 250.00	\$ 25 000.00
Norway	25 050.00	\$ 15 000.00
Saudi Arabia	16 500.00	\$ 10 000.00
Switzerland	55 000.00	SFr 55 000.00
UK	90 578.85	£ 35 000.00
USA	199 500.00	\$ 120 000.00
UNEP	125 000.00	SFr 125 000.00
WMO	125 000.00	SFr 125 000.00
TOTAL	SFr 892 814.40	

- a. The IPCC budget is in Swiss francs (SFr) since this is the currency of the WMO budget. The joint WMO/UNEP IPCC Trust Fund is administered by the Secretary-General of WMO in accordance with WMO Financial Regulations.
- b. The amount contributed exclusively for travel support to developing countries in 1989 was SFr 182,000. Many contributors gave flexibility to the IPCC Secretariat on expenditures, while all affirmed their desire that at least part of their contributions should be spent on travel support to developing countries to attend IPCC meetings.
- c. One-half of the 1989 expenditures in the IPCC Trust Fund was devoted to the travel support of the developing countries.
- d. The 1989 account of the IPCC Trust Fund showed a surplus which was carried over to 1990. Nevertheless, the Fund was experiencing acute and continuing cash shortages throughout 1989.
- e. The Government of Norway has given Nkr 700,000 to the IPCC Secretariat for organizing an information exchange seminar for the developing countries on climate change issues. This has not been shown in the table, since this contribution is through a special Memorandum of Understanding and not to the Trust Fund.

In this connection, it may be noted that several countries are planning regional seminars on the same and related topics. These countries are:

- France: Seminar on greenhouse warming in late 1990/early 1991 jointly with the Energy and Industry Office of UNEP;
- Japan: Seminar on the environment and fossil fuel consumption in the Pacific Region, mid-December 1990; information exchange seminar for the developing countries in Asia at the end of January 1991;
- Spain: Seminar for the Spanish-speaking developing countries in the third quarter of 1990;
- Australia: possible joint seminar with the Economic and Social Commission for Asia and the Pacific (ESCAP).

Table 2 Receipts, IPCC Trust Fund, for 1990	
MEMBER	AMOUNT EQ.SFR
Australia	83 490 (4)
Canada	30 506 (7)
Denmark	153 000 (3)
Finland	15 743
France	48 573 (5)
Federal Republic of Germany	70 494 (2)
Italy	83 500
Japan	75 500 paid in 1989
Netherlands	151 384
Norway	33 985 (6)
Sweden	43 075 (8)
Switzerland	30 000
UK	86 224 (10)
USA	298 970 (1)
UNEP	329 000
WMO	125 000
Rockefeller Foundation	68 000
TOTAL	1 726 444
USSR	\$85 000 (9)

- (1) Of the US contribution, \$ 100,000 is earmarked for the travel support to the developing countries.
- (2) The Federal Republic of Germany contribution is DM 160,000 for both IPCC and the Second World Climate Conference. The contribution to IPCC is one-half of this amount.
- (3) The Denmark contribution is specifically for travel and other assistance to the low income developing countries for 1989 and 1990 (see the following page for a listing).
- (4) Of the Australian contribution, AUD 20,000 was earmarked for the travel support of South Pacific delegates to the meeting of the Coastal Zone Management Subgroup of Working Group III (Perth, 19-23 February 1990).
- (5) In addition, France has contributed Ffr 200,000 to augment the staff of the IPCC Secretariat; the Secretary-General of WMO has assigned to the IPCC Secretariat a full-time Scientific Officer seconded to WMO by the Government of France.
- (6) In addition, Norway has given Nkr 700,000 for the purpose of holding an IPCC Information Exchange Seminar for the developing countries on climate change issues through a special Memorandum of Understanding.
- (7) The Canadian contribution is part of Can\$ 100,000; the full Canadian contribution includes translation of the three IPCC Working Group reports into French.
- (8) This is in addition to the support provided by Sweden to the 4th Plenary of IPCC.
- (9) The equivalent in roubles was provided by the USSR to support travel of experts from developing countries to meetings of Working Group II.
- (10) In addition, UK may give £ 100,000 for a series of seminars for policymakers in developing countries, through a special Memorandum of Understanding, in a manner similar to the contribution of Norway reflected in (6) above.



INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



IPCC

CHAIR : SWEDEN

VICE CHAIR : SAUDI ARABIA

RAPPORTEUR : NIGERIA

IPCC BUREAU (16 MEMBERS)

CO-ORDINATING BODY DURING IPCC INTERSESSIONALS

WORKING GROUP I

SCIENCE

CHAIR: UK

VICE CHAIRS:

- BRAZIL
- SENEGAL

WORKING GROUP II

IMPACTS

CHAIR: USSR

VICE CHAIRS:

- AUSTRALIA
- JAPAN

WORKING GROUP III

RESPONSE
STRATEGIES

CHAIR: USA

VICE CHAIRS:

- CANADA
- CHINA
- MALTA
- NETHERLANDS
- ZIMBABWE

SPECIAL COMMITTEE ON THE PARTICIPATION OF DEVELOPING COUNTRIES

CHAIR: FRANCE

WMO/UNEP JOINT IPCC SECRETARIAT
(LOCATED AT WMO, GENEVA)

1988-1990



INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



IPCC

CHAIR : SWEDEN **VICE CHAIR** : SAUDI ARABIA
RAPPORTEUR : NIGERIA

IPCC BUREAU (20 MEMBERS)

CO-ORDINATING BODY DURING IPCC INTERSESSIONALS

WORKING GROUP I

SCIENCE

CHAIR: UK

VICE CHAIRS:

- BRAZIL
- GERMANY
- INDIA
- SENEGAL

WORKING GROUP II

IMPACTS

CHAIR: USSR

VICE CHAIRS:

- ARGENTINA
- AUSTRALIA
- JAPAN
- KENYA

WORKING GROUP III

RESPONSE
OPTIONS

CHAIR: USA

VICE CHAIRS:

- CANADA
- CHINA
- MALTA
- NETHERLANDS
- PERU
- ZIMBABWE

WMO/UNEP JOINT IPCC SECRETARIAT
(LOCATED AT WMO, GENEVA)

NOTE: The Special Committee on the Participation of Developing Countries has not met since the completion of the IPCC First Assessment Report (1990)