

Working Paper

THE DEVELOPMENT OF AGENDA 21: GENERATING A VIABLE FORMULA

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1 Objectives of this Working Paper

The Preparatory Committee (PrepCom) of the United Nations Conference on Environment and Development (UNCED) was in session between March 18 and April 5, 1991. The Project on the Processes of International Negotiation (PIN) sent two observers to the session. Many issues were discussed and debated among the national delegations. One of them, presented in detail for the first time, was Agenda 21, a program to coordinate action on environmental and developmental issues after the 1992 UNCED conference.

The joint purpose of this working paper is to witness the generation of a new *formula* -- an agreement in principle -- concerning Agenda 21 *and* to provide guidance and recommendations to the Secretariat on how to handle this issue to achieve an early convergence of interests among the national delegations. First, the paper presents initial reactions to the Agenda 21 proposal that PIN observed at the meeting. Based upon these reactions, the goals of Agenda 21, and a conceptual understanding of how stable formulas are generated, a range of options for the further development of an Agenda 21 proposal is derived. These options contain what may be a workable formula for Agenda 21 -- one that can be debated and hopefully accepted by the national delegations. Finally, a set of next steps is presented.

This working paper is the product of a larger study of issue and coalition dynamics in the pre-negotiation phase of UNCED. Within that study, this paper serves the purpose of documenting and analyzing the development of a new and important issue for the PrepCom -- the generation of a substantive formula for Agenda 21. While the content of such a formula is being developed, the paper also begins to analyze the initial behavioral development of national perspectives, preferences, and interests concerning this issue. It is hypothesized that these perspectives will eventually result in the formation of coalitions in the context of Agenda 21.

2 Background

Research on the negotiation process has focused on the need of bargaining parties to agree, early in the process, on a formula -- a commonly accepted set of principles that provides the outline or contents of an eventual agreement.¹ The potential implications of failing to reach early agreement on a formula are prolonged negotiations and deadlock. However, empirical analysis of negotiation processes indicate that if bargaining parties *do* share a common vision of the outcome, debate on the details can begin within a framework of mutual understanding, thereby improving the chances of a convergence of interests. Successful formulas do not just happen. They are often a result of iterative presentation and consideration of alternate proposals. Agreement on a formula cannot guarantee success of course, but it does provide a common basis from which to begin.

The preparatory process leading to UNCED relies heavily on formulaic proposals from the Secretariat to guide and frame the debate on substantive issues. On the Agenda 21 issue, initial reaction from the delegates suggests that additional formulations are required from the Secretariat to further the debate. Such formulations are needed to develop a common understanding of the basic content and implementation approaches to be incorporated in this Agenda. This paper begins by presenting delegate reactions to the current Agenda 21 formulation and from these reactions derives the minimum range of options that still must be considered by the Secretariat in subsequent formulations.

¹ Zartman, I. W. and M. R. Berman. *The Practical Negotiator*. New Haven: Yale University Press, 1982.

3 The Current Vision and Description of Agenda 21

Agenda 21 is defined by the UNCED Secretariat as a program of work for the international community, laying out the activities to be pursued following the 1992 UNCED conference in Rio de Janeiro. At the first Preparatory Committee meeting in Nairobi, the Secretariat was requested to develop a proposed program of action, labeled Agenda 21, for consideration by the second PrepCom in Geneva. This was accomplished in Document A/CONF.151/PC/14 Annex, dated 13 February 1991, and briefed to national delegations on March 27. That Annex is attached to this document in the Appendix.

In brief, Agenda 21 is viewed by the Secretariat as a tool for coordinating initiatives that are already underway and directed by other organizations, as well as identifying gaps in current agreements that need to be addressed by the international community in the future. It is *not* viewed as a grand centralized plan that overtakes or replaces other ongoing processes of negotiation in the environmental area. Rather, it is seen as a mechanism to facilitate coordination and collaboration between involved nations and organizations that may be focusing on individual aspects of the environmental agenda independently, but would benefit from a more integrated and holistic perspective.

Agenda 21 makes several unique contributions toward the goal of ensuring environmental security for the planet:

- o It identifies existing legally binding commitments and action plans agreed to by nations on related environmental and developmental issues.
- o It prioritizes action plans across all environmental domains.
- o It identifies inherent linkages across environmental issues.
- o It makes the critical connection between environmental issues and economic development issues.
- o It articulates the linkage between environment-development problems and cross-sectoral issues, such as technology transfer and financial issues.
- o It provides a computerized tool that enables useful information management capabilities to evaluate, sort, modify, update, and revise evolving goals, needs, and action plans related to environment-development issues.

The Annex consciously focuses on the *form* of Agenda 21 rather than its *content*. It presents a proposed structure for a document and describes how an associated computerized tool would operate. The content of Agenda 21, according to the Secretariat, would be derived from the international agreements made at UNCED in Rio and from other parallel processes in which the international community is negotiating objectives, targets, and action plans concerning particular environmental domains.

The computer-based tool developed for Agenda 21 would facilitate searching and sorting through all of these agreements to identify, for example:

- o Action plans developed by different legal mechanisms that could be integrated to achieve greater efficiency
- o Actors that are responsible for certain action plans that could collaborate or coordinate with each other
- o Technologies that could be used to resolve several environmental problems simultaneously.

Many in the international community have acknowledged the need for an integrative strategic program, such as Agenda 21, to coordinate and plan rationally for future actions that deal with global environmental problems. The very resolution that established the UNCED process (General Assembly Resolution 44/228) recognizes the inherent linkage among not only environmental issues, but between environmental and developmental issues. It acknowledges that the complexity of actions required to handle these problems demands serious coordinative effort.

The 1989 Hague Declaration suggested that new institutional authorities, or strengthening of existing structures, may be needed to integrate and coordinate corrective activities dealing with atmospheric problems. Many ECE countries, in their national position papers on the environment, support the strengthening of existing institutions to oversee and coordinate global environmental protection efforts. Some NGOs have also recommended a restructuring of the UN to establish an "intergovernmental nerve center" to coordinate policies and activities for environmental objectives in all agencies.²

4 Some Initial Reactions

Initial delegate reaction to the Agenda 21 proposal presented by the Secretariat was mixed due to a general feeling that the proposal needed extensive clarification. There is a general positive consensus on integrated planning for future action on environmental issues. However, the Secretariat's proposal left many delegations uncertain over how such planning would be performed within Agenda 21, how action programs would be identified and incorporated initially and on an ongoing basis, the role of the computer-based system within Agenda 21, and institutional/legal arrangements to manage what is certainly considered a dynamic process.

These concerns are described below in the form of questions that many of the delegates had. Delegate perspectives were identified through interviews and observation of the March 27 briefing at the PrepCom. These reactions represent both developing and industrialized country views. It is emphasized that the comments and questions that follow in this section are not the author's, but views and opinions of national delegates.

a. *How is the current formulation of Agenda 21 designed as an action plan?*

The Secretariat's description of Agenda 21 emphasizes the data base component. It is unclear how this data base constitutes or can be used as an action plan *per se*. Moreover, the current proposal focuses on form and leaves substance to be developed by the PrepCom, the Conference, and beyond. How these issues are to be prioritized and coordinated in terms of future action is a complicated

² United Nations Association of the USA and the Sierra Club, "Uniting Nations for the Earth: An Environmental Agenda for the World Community" (Final Report). New York: UNA-USA, 1990.

problem in itself and is only now being addressed in Working Group 3. It is not clear that this Working Group or the PrepCom will have enough time or scientific support to debate and negotiate these priorities and coordination approaches, assuming they were given the expressed mission to do so.

Additionally, what is the linkage between the proposed Earth Charter and Agenda 21? Can the Agenda be formulated prior to the development of the Charter?

- b. *Is the objective of Agenda 21 to be an instrument to help in future negotiations or a set of goals and objectives?*

The question posed here is whether Agenda 21 should be viewed as a legally binding framework to guide future negotiations linking issues and coordinating actions, or a more informal set of objectives suggesting basic national interests but without legal commitment. Does Agenda 21 seek to obtain national commitments to an ongoing process of coordination, where the content and priorities of action plans will be agreed to at future negotiations? Or is the intent to gain commitment to specific plans of action at Rio on those issues where decisions have or will be arrived at by 1992? Or is Agenda 21 seeking to provide informal guidelines and recommendations to other conventions and fora, outside of any legally binding commitment? If Agenda 21 does not imply a legally binding commitment, how can its plan be enforced?

- c. *How is planning and coordination to be performed within Agenda 21?*

How is Agenda 21 conceived as a planning and coordination mechanism? Will it involve continuing conferences and negotiations? Will it involve formal linkages to other conventions, negotiation fora, and agencies? Overall, what is the process by which Agenda 21 will operate and through what structure or organization will it perform?

Perhaps the most important mission to be played by Agenda 21 is to identify gaps in other negotiations and conventions -- gaps dealing with linked issues and cross-cutting issues.

- d. *How is the content of Agenda 21 -- issue priorities, linkages, targets, etc. -- to be identified initially and modified over time?*

It would be useful for UNCED to establish a prioritization of issues for future action, in addition to an understanding of the linkages across issues. Substantive analyses and recommendations from the Secretariat are needed to get discussion and debate moving productively in the next PrepCom meeting.

- e. *What is the role of the computer-based system within Agenda 21? To what extent is Agenda 21 more than a sophisticated data base?*

A data base, as conceived in the current Agenda 21 proposal, would have been extremely useful as a vehicle to structure and guide PrepCom discussions across linked issue areas. It would also be extremely useful for individual governments to sort out what is happening in other countries, international fora, and within existing conventions. However, the data base is only one component of Agenda 21; the current proposal places too much emphasis on the data base at the expense of a traditional and substantive action plan. One logistical question: Who will manage/control this data base?

f. What institutional/legal arrangements are required to manage Agenda 21 and enforce compliance?

The way Agenda 21 is currently presented -- with emphasis on the data base component -- is too conceptual to even begin serious debate. What is desired is a plan of action that can be presented in a more traditional manner -- where future anticipated actions are laid out and institutional arrangements are made explicit.

Who will have the mandate to coordinate and manage the plan and who will have the power to enforce compliance? An institutional base of some sort is required. The Secretariat appears to be shying away from offering such institutional alternatives. It may fear that suggesting a coordinating body might appear to be a self-serving gesture, since the Secretariat itself could be the likely inheritor of this mission. However, the PrepCom would appreciate an honest range of options to consider from the Secretariat -- from the use of existing institutions to the development of new ones.

Many developing, as well as industrialized, countries do not favor the development of an entirely new organization to manage Agenda 21. Rather, greater efficiency and coordination among existing institutions is desired. However, there are ways in which a new coordinating body could be formulated that would not generate extensive new bureaucracies or additional national representation requirements.

g. Who within the current preparatory phase of UNCED is responsible for developing Agenda 21?

To what extent will the Secretariat develop a substantive set of cross-cutting issues and action plans for the PrepCom to assess and debate? If this is not the Secretariat's role or intention, how will this content be developed? How will the PrepCom come to agreement and prioritize these action areas?

How will Agenda 21 be agreed to in Rio? Will there be different levels of detail in action plans? Will it only include frameworks that have been agreed to at Rio or elsewhere? Or will it include looser sets of wish lists?

Because the organizational structure of UNCED and the PrepCom did not, from the start, emphasize linkages between issues (other than environment and development) -- Working Groups 1 and 2 are structured traditionally along issue-by-issue lines -- it may be difficult now to assign responsibility within the PrepCom for development of Agenda 21's content.

5 Potential Consequences of Current Viewpoints

Some national delegations view the Secretariat's current approach to Agenda 21 as a risky strategy because of its non-traditional format and its unfamiliarity to delegates. It is difficult to understand how the data base element constitutes a program of action. Since this is a major emphasis of the Secretariat's proposal, it makes the entire proposal a key target for rejection.

Others may view the current absence of content in the Agenda as an insurmountable gap in the proposal. Placing major responsibility for developing the content on the PrepCom is seen as inappropriate. If issues these delegations view as critical are not handled by the Agenda as currently proposed, the overall proposal could be seen as irrelevant.

Yet others may view the lack of structural and institutional mechanisms in the current proposal as critical grounds for rejection. Without delineation of control, enforcement, and coordination approaches, the proposal is sorely lacking in detail, making useful debate now and effective implementation later impossible.

Finally, many delegations wanted concrete guidance and recommendations from the Secretariat on content and institutionalization issues. Certainly, these are issues that must be debated and negotiated by the PrepCom, but the initial proposals – the basis for the debate – should come from the Secretariat.

6 The Range of Agenda 21 Options

Given these perspectives by the national delegations, what is the feasible range of options that can be derived for designing a workable Agenda 21 formula? The proposal presented by the Secretariat offers a good beginning for designing such a formula, but only a beginning. The structure for the Agenda is well established in the proposal, as is the concept of a data base. But what that leaves is a shell that must yet be populated with both the *content* of the action program, as well as its *implementation strategy*. These elements of a workable formula are the subject of this section.

a. Content Options

At a minimum, the following content issues need to be incorporated into the final Agenda 21 resolution:

1. The legally binding commitments on environmental and developmental issues that have already been agreed to or will be agreed to at Rio
2. The linkages across issues and with cross-cutting issues
3. The goals and targets that define sought-after environmental constraints, taking into account the linkages across issues
4. The specific integrated approaches and action programs to be conducted to achieve these goals and targets
5. Prioritization of this integrated action program
6. Actors, institutions, and constituencies responsible for implementing this program.

Essentially, the elements of Item 1 can be identified now based upon research already conducted by the Secretariat and the cooperating UN agencies. Items 2, 3 and 4 need to be scientifically determined by means of research such as that conducted by the International Institute for Applied Systems Analysis (IIASA) and other organizations. Some preliminary results are available, but the linkages among issues are far from being substantiated and generally accepted within the scientific community. Items 5 and 6 are policy issues that can be recommended by the Secretariat, but must ultimately be debated and negotiated among the national delegations.

What can be accomplished realistically by the 1992 conference in Rio? Certainly, the agreements that constitute Item 1 will be known. But it will be possible to elaborate with some degree of scientific certainty on the linkages among issues (Item 2) in only a preliminary fashion.

Thus, it will be difficult to reach agreement on them in such a multinational forum. Consequently, Items 3 and 4, which are logically dependent upon a knowledge of issue linkages, can only be sketched out, again in a preliminary way. Policy debate of Items 5 and 6 would be premature, given this situation.

What then is realistic to target for Agenda 21's content?

- a. The Agenda 21 proposal should first seek agreement in principle that:
 - o Environmental, developmental, and cross-cutting issues are and should be linked in terms of policy approaches
 - o Integrated targets therefore should be sought, identified, and agreed to in a multinational forum
 - o Integrated action programs can and should be developed in a multinational forum
 - o Prioritization of these integrated action programs should be debated and agreed to in a multinational forum.
- b. The Agenda 21 proposal should identify, compare, and rationalize the existing legal agreements that have been developed across environmental, developmental, and cross-cutting issues.
- c. The proposal should contain those linkages among issues that have been accepted by the scientific community as being valid.
- d. Where these linkages suggest the development of constraints, targets, and goals, as well as actions and approaches, these should be identified.

The Agenda agreed to at UNCED, of necessity, will not be able to contain detailed targets and goals on all environment-development issues. Some may be accommodated in the Agenda as formulated by the time of the Rio conference, while others may require further research and debate. Thus, the Agenda must be formulated as a framework, facilitating the incorporation of additional linkages, targets, and goals in the future. This reality highlights a critical question of implementation that is addressed below: Is Agenda 21 a process of continuing debate and negotiation, and, if so, how is this process managed and by whom?

In order for the PrepCom to have sufficient time to consider these content issues, the following timetable is suggested:

1. For PrepCom III in August 1991, the agreement in principle (Item a) should be elaborated on by the Secretariat and then opened for debate and negotiation at the session.
2. For PrepCom III, the appropriate existing legal agreements should be identified, compared, analyzed by the Secretariat (Item b) and then their inclusion in Agenda 21 should be opened for debate and negotiation at the session.
3. For PrepCom IV, the Secretariat should prepare a document, with the assistance

of associated scientific organizations, that identifies those issue linkages which can faithfully be represented as having received sufficient scientific substantiation (Item c). Integrated sets of targets, approaches, and actions should also be presented (Item d). These should be opened for debate and negotiation at the session.

b. Implementation Options

At a minimum, the following implementation issues need to be addressed in the Agenda 21 proposal:

1. *The Agenda 21 process* -- Is Agenda 21 a process of continuing rounds of debate and negotiation to meet at scheduled intervals and make recommendations to other organizations and negotiation fora? Or does Agenda 21 essentially delegate the debate on linked issues to other agencies and fora?
2. *Institutional options* -- Is Agenda 21 managed by a new and unique organization that maintains and updates the action plan; coordinates with other fora, conventions, and agencies; and enforces compliance? Or is it managed by a single or jointly constituted existing organization which serves as a coordinator? Or is responsibility transferred to multiple existing organizations, fora, and conventions to monitor and implement the Agenda in a distributed fashion?

7 What Needs to be Done

A more concrete formula needs to be proposed to the next PrepCom sessions dealing with the content of Agenda 21 and mechanisms to implement it. The Secretariat must develop these proposals. Many outstanding issues remain to be resolved before Agenda 21 can be debated and a formulation of the Agenda agreed to by the PrepCom. Section 6 of this working paper identifies a minimum range of possible options, given the concept of Agenda 21 as laid out in the PC/14 Annex.

The PrepCom may now be ready to begin debating action plans, but guidance and direction is desired and required from the Secretariat on how to formulate such integrated action plans. Importantly, from a substantive perspective, the PrepCom is dependent on the Secretariat for the scientific analysis of issue linkages, realistic targets, appropriate solution approaches and actions, and assessments of the likely effectiveness of these efforts. The prioritization of issues and actions/approaches, on the other hand, is within the policy domain, and thus a proper concern of the PrepCom, Rio, and any subsequent political forum. However, these policy issues cannot be dealt with until the scientific findings are documented and presented by the Secretariat.

A successful Agenda 21 formula must be relatively complete and comprehensive. As it currently stands, the Agenda 21 formula is lacking in what many delegates consider to be critical elements. The current proposal is viewed as a shell and lacks sufficient substance and structure to provide a common understanding and vision of a viable action plan. This *can* be remedied by the Secretariat in future formulations. It must be attended to if an Agenda 21 plan is to be negotiated by the PrepCom and UNCED in earnest.

AnnexPROPOSALS FOR THE DEVELOPMENT OF AGENDA 21: THE PROGRAMME OF
WORK FOR THE INTERNATIONAL COMMUNITY IN THE PERIOD FOLLOWING
THE CONFERENCEReport of the Secretary-General of the Conference

I. BACKGROUND

1. At its first substantive session, in decision 1/6 entitled "Report of the Secretary-General of the United Nations Conference on Environment and Development on the Activities of the Conference secretariat", the Preparatory Committee requested the Secretary-General of the Conference to prepare, for consideration at its second session, a more detailed report on his proposal for the development of a programme of work for the international community in the period following the Conference, and into the twenty-first century.

2. These initial proposals were described in the report of the Secretary-General a/ and, in particular, in paragraph 32 of his introductory statement. b/ In these documents, it was suggested that one of the most important outcomes of the Conference would be a programme of cooperative action to ensure the security of the resources and life-sustaining systems of the Earth and the progress and well-being of all its peoples in the twenty-first century. It was further suggested that this work programme might be termed "Agenda 21".

3. Agenda 21 was briefly described as a prioritized agenda with explicit goals, targets, priorities and assignment of responsibilities, which would provide a framework for action, the continuing process of review and revision, as well as a means of facilitating coordination and cooperation amongst the various actors concerned. These points are further developed here, placing particular emphasis on the dynamic character of Agenda 21, describing its structure, general thrust and facilitating character.

4. Agenda 21 will be not just the work programme emerging from the 1992 Conference, but also a mechanism to enable the international community to cooperate effectively in actions leading towards sustainable development. The 1992 Conference would, in that sense, be the first step in the evolution of Agenda 21. It could involve an agreement on the cooperative structure and mechanism of the Agenda as well as specific agreements on the content of the critical work programmes that would be included in it.

5. The content of the programmes that will form Agenda 21 will be the result of the preparatory process of the Conference. The programmes will also be influenced by and related to other processes, including the negotiation of conventions currently under way, the results of major forthcoming conferences, as well as activities at the national and regional level. They will be further influenced by the current process of review and evaluation of major programmes of the international community.

II. THE ESSENTIAL CHARACTERISTICS OF AGENDA 21

6. Agenda 21 should be the structure and mechanism with which the international community reflects in its agreed actions, basic agreed ethical principles and broad environmental and developmental goals. At the same time, a process for building a consensus on intellectual scientific and methodological issues would provide a basis for the action programme in Agenda 21.

7. The international community has developed many processes for the formulation of programmes of action both on environmental issues and on developmental issues. There are also a variety of processes for coordinating these actions. An important function of Agenda 21 should be to provide a coordinating structure and mechanism for:

(a) Taking full account of linkages between issues in the development of action programmes;

(b) Ensuring that programmes of action simultaneously address both environmental issues and developmental needs;

(c) Ensuring that the programmes are backed up with the provision of necessary support and means for implementation.

8. The programmatic component of Agenda 21 should be designed to meet evolving goals, needs and objectives, adapting it through a continuous process of review, feedback, evaluation and reformulation. To facilitate this process, Agenda 21 will be computerized to allow rapid updating and change. The manipulations that are possible with a computerized system will also permit different cuts to display different elements and the roles of different actors.

9. For example, the Agenda could be displayed in terms of all the actions or programmes that involve reforestation or training activities. It could also be displayed in terms of the actors that will need to play an active role in aspects of the implementation, for example, local authorities. The fact that it is computerized will also allow for a broad network of users and actors to have easy access to the programme of work and be aware of changes or of progress achieved.

10. The implementation of the goals that Agenda 21 is directed at will involve a vast array of agents and decision makers - national Governments, the international community through the United Nations system and other international organizations which will be the direct implementors of many programmes; the multilateral and bilateral aid community and other institutions involved in supporting these programmes. Agenda 21 must also address specific constituencies and groups.

11. In summary, the main characteristics of Agenda 21 should be that it is:

(a) Flexible, responding to varied and evolving needs and requirements;

(b) Expedient, in that it builds on what exists, modifying and strengthening it as required;

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- (c) Innovative, in that it identifies new solutions to known problems;
- (d) Acceptable, in that it is based on a wide-ranging process of consultation and agreement;
- (e) Universal, in that it actively involves the various groups that have a stake in the process of sustainable development;
- (f) Effective, in that it will provide the structures, mechanisms, procedures and supporting measures that make action possible.

III. THE STRUCTURE AND GENERAL CONTENT OF AGENDA 21

12. Agenda 21 would be structured around a series of major clusters and sections. The accompanying chart presents this structure graphically. Each of these sections would be supported by reference material, and would describe how to access this material.

13. The first cluster - the basis for action - will be formed by three elements: an overview of the state of development and environment; the enunciation of basic principles underlying sustainable development including strategic action principles and broad developmental and environmental goals.

14. The second cluster - the action agenda - would be articulated along two sections: an analytical one describing programmatic approaches, and the action section, which would describe the programme of action proper.

15. The third cluster - the instruments for action - would consist of two sections: the specific tools for analysis, management and action, and the supporting structures and enabling mechanisms that can make action possible. In this connection, the major strategic directions and essential actions that are necessary to reach goals for the world community would be the most important thrust of this cluster. Material would be drawn from a very broad array of technical and scientific material, national and regional experience as well as from the preparatory process itself and associated activities.

A. THE BASIS FOR ACTION

1. Overview of the state of development and the state of the environment

16. The purpose of this element would be to give the context within which Agenda 21 is placed. It would contain a brief overview of the current state of development and of society covering such issues as the state of human populations; the state of the international economy, trade patterns, the debt situation and other important developmental parameters. Linked to this would be a review of the state of the environment, including trends in global change, the current status of natural resources and resource use. Thus the overview will pay particular attention to the interaction between developmental and environmental issues.

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17. This overview would clearly show the current opportunities and constraints within which the process of sustainable development must be promoted. By continually updating this body of information, there would be a base of factual data on which to base decisions. Thus, updating should be part of an agreed programme to monitor the status of development and environment.

2. Principles underlying sustainable development

18. The purpose here would be to gather agreed principles that should govern a society that is sustainable in both human and developmental as well as environmental terms. Basic principles spelled out in the Earth Charter and agreed upon by the international community to guide the relations between people and between nations and between humankind and nature would be elaborated in terms of translating them into action. The scientific basis for guiding strategic interventions that can further the process of sustainable development would also be touched upon, including, for example, ecological principles guiding environmental management and principles governing the processes of social or economic interactions and the management of developmental processes.

3. Setting broad developmental and environmental goals

19. This section would articulate the major developmental and environmental goals for the human community as it moves into the twenty-first century - goals such as the eradication of poverty, achievement of greater equity, stemming of the degradation of the environment and achieving a sustainable balance between human and natural resources.

20. These goals would draw upon those that have already been mentioned in General Assembly resolution 44/228, and synthesize the main directions which can be drawn from the preparatory process.

21. An important methodological effort should be made here to develop ways of spelling out these goals so that they simultaneously address developmental and environmental aspirations, and also to exemplify the new economic thinking that must support the sustainable development process.

B. THE ACTION AGENDA

1. Defining programmatic approaches

22. The main purpose of this section would be to stress the evolving relationship between environmental and developmental issues and the areas of policy or sectoral action and highlight the linkages between and among the different factors involved in environment and development.

23. This suggests a distinction between issues and action areas. The issues are those referred to in General Assembly resolution 44/228. The action areas refer to clusters of programme activities that have a common economic or institutional

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basis. A given issue - say climate change - may require action in more than one action area - say, energy, transportation, settlements planning, reforestation. Equally positive action in any one area - say, forestry - may contribute to solving more than one issue. For example, reforestation programmes can simultaneously respond to the need to provide carbon sinks to counteract the effects of emissions, provide timber and fuel for development purposes, provide habitats for wildlife and protect watersheds and soils.

24. It is important to try to scope these action areas, in order to identify the most crucial areas where action can respond to the requirements of solving various developmental and environmental problems before the Conference. The Preparatory Committee may wish to determine which are the important leverage points on which it might concentrate for the moment. In time, these leverage points may shift and would need to be revised.

2. The programme of action

25. This section will describe the indicative programme of action to be agreed upon by the international community. It would address the problems and objectives identified in General Assembly resolution 44/228, structured around the leverage points identified by the preparatory process. The programme of action would particularly emphasize the policy directions and coordinating mechanisms that can support the sustainable development process as the world community moves into the twenty-first century.

26. Agenda 21 will be presented in terms of the policy-level agenda, which would be endorsed at the Conference in Brazil. The operational aspects of the agenda would be developed within this policy framework. Programmes described in full detail would constitute the work programme for the international community. It should be noted that, by the time of the Conference only certain of these programmes could be developed in full detail. Others would be in different stages of development.

27. The programme would have defined objectives and targets within an agreed time-frame and would define agents and institutions and their responsibilities. These agents would include a wide array of groups and constituencies, but their commitments and responsibilities would differ according to their respective roles. Thus, the primary emphasis would be for the programmes of the United Nations system. However, the framework of the programme of action would be broad enough to include and facilitate actions by other constituencies and they are being encouraged to establish their own agenda to complement and support Agenda 21. The programme would define the appropriate and necessary supporting and enabling mechanisms to carry out the programme. Finally, as far as possible foreseen actions would be costed. These points are described in greater detail in section IV below.

28. This programme would be subject to a continuous monitoring and review process, leading to adjustments and to an evolving set of objectives, targets and actions to reflect changing circumstances. The dynamic nature of Agenda 21 would thus be most

evident at this level. But in order for the Agenda to be implemented and in particular, by the agencies of the United Nations system, and fully incorporated into their programmes, ways and means would have to be devised to set up an ad hoc review and approval process.

C. INSTRUMENTS FOR ACTION

1. Tools for analysis, management and action

29. This section would describe the "tool kit" and methodological and guiding tools and procedures that are needed for analysing and acting upon the development/environment interphase that is necessary for giving operational reality to Agenda 21.

30. Essential tools for analysis and action would be described, including those for integrating developmental and environmental factors, for introducing environmental variables into economic analysis and others. These would be drawn from the existing repertoire of "best practicable practices" as well as from current work aiming to elucidate the nature of the development and environment linkages and to give an explicitly operational content to the concept of sustainable development.

31. This tool kit would be constantly refined and updated, giving the possibility of increasingly sophisticated and effective management methods.

2. Supporting structures and enabling mechanisms

32. The purpose of this section would be to provide the framework, basic principles and major reference points that underlie the more specific mechanisms that would be developed in respect of particular areas and actions. At this level, only major mechanisms would be delineated, but references would be made to both international as well as national dimensions.

33. The basic facilitating structures and mechanisms that can give operational reality to the process of sustainable development, as identified in General Assembly resolution 44/228 and particularly paragraph 15 thereof, would include:

(a) Institutions and related structures, processes and mechanisms that support and guide the sustainable development process;

(b) Legal instruments and regulatory processes that concern the developmental and environmental protection process;

(c) The mechanisms for funding and for facilitating transfer of additional financial resources, particularly to developing countries for financing the sustainable development process;

(d) The mechanisms to facilitate the development of, ensure favourable access to and transfer of environmentally sound technologies, including special

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concessional or preferential terms, as well as the methods, procedures and equipment to support the process of sustainable development;

(e) The major economic mechanisms and instruments that can be applied to promote sustainable development;

(f) The package of scientific research and knowledge, monitoring, assessment and information exchange, awareness-raising, environmental and developmental education and training, which provides support to the environmental and developmental process.

IV. ELEMENTS OF THE PROGRAMME OF ACTION

34. As already suggested above, the specific areas of action will emerge during the preparatory process. However, the generic elements that will be included when developing programmes in specific action areas can be defined now. Various aspects would be covered for each of them and are briefly described below.

35. Objectives will be agreed upon and formulated in both developmental and environmental terms. The duality of purpose will be made clear at all times. These dual or multipurpose objectives will assist in providing a more explicitly developmental-environmental direction.

36. Linkages between environmental issues, development sectors and action areas will be a key element. Analysis of these linkages along various lines are possible, including issue to issue, environmental issue to development sector, sector to specific action area, action area to cross-sectoral issues and others are possible. This analysis would be illuminated and supported by work currently being undertaken on the nature of these interactions. Particular emphasis would be placed on the interactions between population, production and consumption patterns, quantifying environmental and social change in some cases. By exploring linkages it would also be possible to determine areas of convergence or stress.

37. Priority setting will follow the identification of the crucial areas of action and will determine the shape of the programme. The most effective leverage points could be selected for concentration of priority actions, which will also take into account the results of the preparatory process. Of particular usefulness would be to focus on the vulnerable areas and irreversible processes.

38. Setting targets will give focus to action and will provide markers against which progress can be monitored. These targets would be expressed in terms of the concrete developmental and environmental results expected. For example, if the objective is to achieve food security through sustainable production systems, the target would have to be formulated in terms of desired amounts of food, various levels of resilience and flexibility of the system and given levels of consumption. These targets could be expanded to include targets for factors such as institution building, levels of resource transfers and degrees of training. There cannot however be a precise quantification in each case, as it must be recognized that the process of fixing targets is a continuous one, with many variables.

39. A time-frame for the setting of priorities and reaching of targets will also be necessary. Perhaps three major time groups could be considered. A first cut, which would be specific and detailed, could encompass the period up to the end of the century, to coincide with current programme cycles; this would be followed by broad directions for the next 20 to 25 years and finally some quite general suggestions for possible directions into the middle of the next century.

40. Specifying programme actions will be the most critical step of the process. It will be important to ensure that actions are directed towards the causal factors and root problems. Likewise, it will be important to ensure that the programme actions are articulated in such a manner that they can respond to multiple objectives and be supportive of other actions taken elsewhere. These strategic directions and programme actions will build upon existing programmes at the international and national level and will endeavour to fill gaps and impart innovative approaches where necessary.

41. Identifying the actors and institutions. The primary focus of the programme of action will be on the role of departments, organizations and agencies in the United Nations system. However, by defining other possible agents in the international community, in national Governments, non-governmental organizations (NGOs), specific constituencies, the private sector and others, it will be possible to define programmes so that all may contribute in a concerted and efficient manner to reaching targets and objectives.

42. Defining the legal framework will also be an important element of the programme. The links of the programme of action to international agreements would be specified. In addition, national or regional legal provisions and legal regimes would be mentioned where relevant. An important element in this area is the question of enforcement of compliance, and how this can be achieved through the programme.

43. Defining the various enabling mechanisms and supporting measures necessary to implement the programme in all its various aspects is the most important crucial aspect that can give operational reality to the programme. The following would be given prominence but would not exclude other elements that might come into play in special cases:

(a) The role of science and research;

(b) The application of various tools, including monitoring, assessment and evaluation as well as economic and management tools;

(c) The type and extent of human resources, development and the manner of imparting education and training;

(d) The awareness-raising campaigns and information exchange necessary to give prominence and acceptance to the programmes.

44. Defining the technological requirements to implement the programme is yet another important element that will determine the environmental soundness of the

programme and the rate of development. Here it would be important to specify the types of technology needed and levels of further development as well as modalities to ensure favourable access and transfer of environmentally sound technologies.

45. Costing the actions will give a clear picture of the magnitude of the effort required, and indicate how to make a more efficient allocation of scarce resources.

46. Financing the programme actions: in addition to indicating the source of the funds required to carry out the action programme, including new and additional financial resources, it will be necessary to indicate the funding mechanisms that come into play, and draw up a strategy for efficient deployment of these funds in each case.

47. These elements of the programme are intended to illustrate the types of factors that must be taken into account, but are not exhaustive. Others would emerge during the preparatory process. Whatever other additional elements are included, they must all be reviewed through the normal process of programme management, that includes a constant follow-up process of monitoring, assessment, evaluation and readjustment.

48. The elaboration of this framework will have to be done with greater specificity for each area. A tentative example follows.

V. AN EXAMPLE OF PROGRAMME DEVELOPMENT: PROTECTION OF THE ATMOSPHERE

49. The example presented here is meant only to illustrate the structure of a potential part of Agenda 21. Consequently, the various boxes are not meant to be either exhaustive, or representative of those issues, but only preliminary examples at this stage. Furthermore, the Preparatory Committee is not required, at this stage to approve the content of this example. If the Preparatory Committee agrees with such an approach, more detail can be provided at the next session. //

50. Table 1, major environment and development issues, divides the atmosphere issue into its three main environmental components: climate change, air pollution and the ozone layer:

(a) In each case, considerable attention has to be paid to the developmental linkages, as well as the linkages between sub-issues, such as, for example that between climate change and air pollution, as well as between issues, such as between forestry and climate change. These linkages are important for the analysis of the problem, but more importantly to develop specific sectoral targets, policy responses and appropriate institutional mechanisms for these;

(b) For each of these issues, overall goals and objectives could be set, based on first principles, or other fundamental ecological or socio-economic factors. For example, in the area of climate change, one such objective may be the stabilization of the global atmospheric carbon dioxide concentrations.

51. In Table 2, a possible programme of action, a number of major action areas are given as examples. These would eventually have to be prioritized. The action areas can have impacts on one or more issues and sub-issues, as shown in the third column. It is important to note, that these programmes can, and indeed will, have important impacts on other issues also, which are not shown in this table:

(a) For each programme action specific sectoral targets could be set at the national, regional or sometimes even global levels. Such targets may include national carbon dioxide emission targets, automobile efficiency targets, as well as goals to achieve a certain level of public transportation in a country or in a city;

(b) Some programme actions may differ, depending on the geopolitical region concerned. For example, energy efficiency in most industrialized countries might mean carrying out the same activity with less energy input. The same concept in a developing country, on the other hand, may mean carrying out more activities with the same energy input;

(c) Similarly, for each programme action, the agents will have to be identified. These could be national Governments, regional and global intergovernmental, or non-governmental organizations. In this section, attention could be drawn to any lack of appropriate actors or institutions, and proposal could be made for changing the mandate of existing institutions or even proposing new ones, if necessary;

(d) Again, each programme action will necessarily have a technology component. Some technologies will need to be developed, while other, existing ones may need to be transferred to developing countries. Many actions will also require the development of human resources;

(e) Finally, each action will have a finance, and economics component. On the one hand, programme actions will have a cost. A discussion will have to be made of the overall requirements; the sources of new funding, and the modalities for making these funds available. Furthermore, in some cases, economic instruments, such as targeted subsidies, taxes, emission permits, etc., may be used to achieve a certain goal. In the case of climate change, for example, carbon taxes could be used to encourage the transition away from fossil energies to more efficient and less polluting alternatives.

Notes

a/ A/CONF.151/PC/5 and Add.1 and 2.

b/ A/CONF.151/PC/5/Add.1.

Table 1. Major environment and development issues

ISSUE/SUB-ISSUE	DEVELOPMENTAL LINKAGES	LINKS WITH OTHER ISSUES	GOALS, OBJECTIVES
<p>1. CLIMATE CHANGE</p>	<ul style="list-style-type: none"> - Energy Production, Consumption - Transport - Land Use (Forestry, Agriculture, etc.) - Coastal Development - Human Settlements - Consumption Patterns, Life Styles - etc. 	<p>OTHER SUB-ISSUES:</p> <ul style="list-style-type: none"> - Ozone (e.g. CFCs destroy Ozone) - Air Pollution (same process responsible) <p>OTHER ISSUES:</p> <ul style="list-style-type: none"> - Forests (CO2 sinks) - Oceans (Coastal Area Managmt.) - Water (Chngd Hydrology) - Land-use 	<ul style="list-style-type: none"> - Rate of Global Climate Change (e.g., x°C/decade) - Stabilize and reduce to a certain level, in a certain time period anthropogenic greenhouse gases - etc.
<p>2. AIR POLLUTION</p> <p>2.1 <u>Local Air Pollution</u></p> <p>2.2 <u>Transboundary Air Pollution</u></p>	<ul style="list-style-type: none"> - Energy Production, Use - Transport - Industry - Human Settlements - etc. 	<p>OTHER SUB-ISSUES:</p> <ul style="list-style-type: none"> - Climate (same process responsible) <p>OTHER ISSUES:</p> <ul style="list-style-type: none"> - Industry (major energy use and pollutant) - Health (direct impact) 	<ul style="list-style-type: none"> - Outdoor/Indoor Air Quality (e.g., from WHO) - Transboundary Pollutant Flux - Country Pollutant Emissions
<p>3. OZONE LAYER</p>	<ul style="list-style-type: none"> - Industry - Consumption patterns, Life Styles - etc. 	<p>OTHER SUB-ISSUES:</p> <ul style="list-style-type: none"> - Climate (CFCs are also greenhouse gases) <p>OTHER ISSUES:</p> <ul style="list-style-type: none"> - Hazardous Wastes (same strategies) 	<ul style="list-style-type: none"> - Global Atmospheric CFC concentrations/emissions

Table 2. A possible programme of action

ACTION AREAS	PRIORITY CATEGORY	IMPACTED ISSUES, SUB-ISSUES	TARGETS	CONSTITUENCY OR REGION SPECIFICITY	INSTITUTIONS, AGENCIES, LEGAL FRAMEWORK	TECHNOLOGY REQUIREMENTS AND TRANSFER	CONSTLING, FINANCE, ECONOMIC INSTRUMENTS
ENERGY EFFICIENCY		1, 2.1, 2.2	eg. Global, regional, country or sector-specific efficiency targets, etc.	eg. Same activity with less energy use for ICs; more activity with same energy for DCs, etc. a/	eg. National Action; Various UN Agencies, etc.	eg. Capacity-building in DCs; Development of Tech.; Transfer to DCs;	eg. Programme level funding; Global, National, Energy/Carbon Taxes; Tradeable Emission Permits; etc.
ALTERNATIVE ENERGY SUPPLIES		1, 2.1, 2.2	eg. % of non-fossil supply in region, or country, etc.	eg. Increased non-fossil supplies in ICs; As above + more efficient fossil conversion in DCs; etc.	eg. National Action; Various UN Agencies, etc.	eg. Capacity-building in DCs; Development of Technology; Transfer to DCs; etc.	eg. Programme level funding; Global, National, Energy/Carbon Taxes; etc.
SUSTAINABLE LAND USE (Biomass Supplies, CO ₂ Sinks, etc.)		(1)	eg. Net biomass growth (global, regional, local); CO ₂ sinks; etc.	eg. Correlate with other land-use needs for DCs, etc.	eg. National Action; Various UN Agencies, etc.	eg. New Agricultural technology, etc.	eg. Debt-Mature Swaps, etc.
TRANSPORT, SUSTAINABLE SETTLEMENTS		(2.1, 2.2, 3)	eg. % Public vs. Private transport; Personal travelled, etc.	eg. Need more person- and ton-km for DCs, etc.	eg. National Action; Various UN Agencies; etc.	eg. Efficient Cars; Public Transport; Urban Planning; etc.	eg. Transport fuel taxes, etc.
LOW-POLLUTION PRODUCTION & CONSUMPTION		2.1, 2.2, 3 Also: 1	eg. Region/country/sector emissions; Waste production; etc.	eg. Indoor biomass combustion in DCs, etc.	eg. National Action; Regional Commissions; UN Agencies, etc.	eg. Low-pollution technologies, etc.	eg. Programme level funding, etc.
ADAPTATION		(1,2,3)	eg. Coastal Mgmt. in No. of Countries; Stabilize, restore food prod.; etc.	eg. Needs of vulnerable countries/people, etc.	eg. National, Regional Action; UN Agencies, etc.	eg. New Agric. Tech; Integrated Coastal Area Management; etc.	eg. Basic grants to most vulnerable, etc.
RESEARCH, MONITORING, FORECASTING		1, 2.1, 2.2, 3	eg. Global Ocean Monitoring Netw.; Reliable forecasts; etc.	eg. Specific actions in vulnerable areas, etc.	eg. National, Regional Action; Various UN Agencies, etc.	eg. Monitoring and assessment technology, etc.	eg. Funds for R&D activities; networking; etc.
EDUCATION, TRAINING, INFORMATION		1, 2.1, 2.2, 3	eg. Public access to information, etc.	eg. Capacity-building in DCs, etc.	eg. National Action; Various UN Agencies, Regional Commissions, NGOs, etc.	eg. Teaching and training tools, etc.	eg. Funds for local capacity-building, etc.

a/ IC = industrialized countries; DC = developing countries.

Figure 1

GENERAL STRUCTURE OF AGENDA 21

The different "boxes" represent chapters or sections of the Agenda. This figure is intended only to give an overall view of how the Agenda might be articulated. The column to the left indicates the three major clusters of the programme. The column to the right indicates the contents of the sections of Agenda 21.

