



INTERNATIONAL CONSULTATION ON ENVIRONMENT  
SUSTAINABLE DEVELOPMENT AND  
THE ROLE OF SMALL FARMERS

Rome, 11-13 October 1988

PROVISIONAL PROGRAMME

TUESDAY, 11 OCTOBER 1988

Morning

Inaugural Session

- 09:30 - 09:40 Welcome address by the representative of the host government, Italy
- 09:40 - 09:45 Welcome address by the representative of the sponsoring government, Norway
- 09:45 - 10:05 Opening Statement by the President of IFAD, Mr. Idriss Jazairy
- 10:05 - 10:15 Keynote Speaker: Hon. Mr. J. J. M. Nyagah, Minister for Environment and Natural Resources, Government of Kenya
- 10:15 - 10:40 Coffee Break

First Plenary Session

"Environment and Sustainable Development at National and International Levels"

- 10:40 - 11:00 Keynote Speaker: Dr. M. S. Swaminathan, President, International Union of Conservation of Nature and Natural Resources (IUCN)
- 11:00 - 11:30 Panel and general discussion
- 11:30 - 12:00 Short presentation/introduction for each of the three working groups on their modus operandi: Mr. A. Kesseba, Coordinator, Technical Unit, IFAD and Mr. M. Alamgir, Director, Policy Review Division, IFAD

TUESDAY, 11 OCTOBER 1988 (contd.)

Afternoon

First Session of the Three Working Groups

14:00 - 16:00 Working Group I - Management of Natural Resources for Sustainable Development

Working Group II - Agricultural Research for Sustainable Development

Working Group III - Institutional Arrangements and Delivery Systems for Sustainable Development

(For the list of issues to be addressed by the working groups, see "Organisation of the Consultation")

16:00 - 16:15 Coffee Break

16:15 - 18:00 Continuation of First Session of the three Working Groups

Second Plenary Session

18:00 - 19:00 Presentation of summaries of discussions in Working Group I, Working Group II, and Working Group III by the Chairmen of the working groups

19:30 - 21:00 Reception to be hosted by the President of IFAD in honour of the participants at IFAD Headquarters

WEDNESDAY, 12 OCTOBER 1988

Morning

Second Session of the Three Working Groups

09:00 - 10:30 Working Group I will discuss Management of Natural Resources with a view to addressing the issues and options, as outlined in the objectives of the Consultation and specific themes for Working Group I

Working Group II will focus on Agricultural Research for Sustainable Development and seek to answer specific questions

Working Group III will deal with the Policy and Institutional Issues - in particular, relationships between national agencies, non-governmental organizations (NGOs) and international agencies and examine other related questions

10:30 - 10:45 Coffee Break

10:45 - 12:00 Continuation of the Second Session of the three Working Groups

Afternoon

14:00 - 16:00 Continuation of the Second Session of the three Working Groups

16:00 - 16:15 Coffee Break

16:15 - 18:00 Continuation of the Second Session of the three Working Groups

Third Plenary Session

18:00 - 19:00 Presentation of summaries of the discussions in Working Group I, Working Group II and Working Group III by the Chairmen of the working groups

19:30 - 21:00 Reception to be hosted by the Government of Italy in honour of the participants at the Jolly Midas Hotel

THURSDAY, 13 OCTOBER 1988\*

Morning

Third Session of the Three Working Groups

- 09:00 - 10:15 Working Groups meet for the Final Session  
Presentation of reports by the Chairmen to their respective Working Groups
- 10:15 - 10:30 Coffee Break
- 10:30 - 13:30 Continuation of Working Group Sessions
- 12:30 - 15:00 Meeting of the Drafting Committee for preparation of the Synthesis of the Working Group reports

Afternoon

Closing Plenary Session

- 15:00 - 17:00 Presentation of the Synthesis of the Working Group reports by the Chairman of the Drafting Committee
- 17:00 - 17:30 Coffee Break
- 17:30 - 18:30 Discussion and approval of the final report
- 18:30 - 19:00 Remarks on the final report by a panel chaired by the President of IFAD
- 19:00 - 19:15 Closure of the Consultation by the President of IFAD

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\* As the programme is tight, in the eventuality that working groups should require additional time to finalise discussions, the Closing Plenary Session may take place on the following morning, Friday, 14 October 1988, thus allowing the Working Groups to conclude their deliberations on Thursday afternoon, 13 October 1988



International Consultation on Environment, Sustainable  
Development and the Role of Small Farmers

Rome, 11-13 October 1988

ARRANGEMENTS FOR THE INTERNATIONAL CONSULTATION  
ON ENVIRONMENT, SUSTAINABLE DEVELOPMENT  
AND THE ROLE OF SMALL FARMERS

Information for Participants

LOCATION

The International Consultation on Environment, Sustainable Development and the Role of Small Farmers will be held from Tuesday 11 to Thursday 13 October 1988 at the Jolly Hotel Midas, via Aurelia 800, 00165 Rome. The telephone number is (39-6) 6506; telex: 625378 Jolmid I; telefax: (39-6) 6808457.

MEETING ROOMS

The plenary sessions of the Consultation will be held in the Salone Midas. The location of the working groups will be transmitted to participants during the meeting.

HOTEL ARRANGEMENTS

IFAD has made a block booking for participants from 10 to 14 October 1988 at the Jolly Hotel Midas.

Special rates have been negotiated with the Jolly Hotel Midas. For IFAD-financed participants, IFAD will settle directly with the hotel the cost of a single room including breakfast. However, participants are responsible for payment to the hotel prior to departure for any extra services, i.e., meals, drinks, telephone calls, laundry, the cost of a double room, etc.

Participants not financed by IFAD may also take advantage of the special rates (Lire 100 000 per night for a single room with breakfast) but must settle all bills (for room, meals and extra services) directly with the hotel prior to departure.

#### REGISTRATION

Registration of participants will be held in the Galleria Murano and will start on Monday 10 October from 14.30 to 21.00 hours. It will continue on Tuesday 11 October from 08.00 hours.

#### LIST OF PARTICIPANTS

A provisional list of participants will be issued as soon as possible after registration. Participants are requested to notify the secretariat of any amendments.

#### ORDER OF THE DAY

An Order of the Day will be available each morning. It will include a list of events and timings as well as the composition of each working group for the day.

#### DISTRIBUTION OF DOCUMENTS

A Documents Desk will be located in the Galleria Murano.

#### INCOMING TELEPHONE CALLS, MAIL, TELEXES AND CABLES

The telephone number of the Jolly Hotel Midas switchboard is 6506. Callers should refer to the IFAD Consultation.

Personal mail for participants should be clearly marked "Participant, IFAD Consultation on Environment" and addressed to the International Fund for Agricultural Development, Via del Serafico 107, 00142 Rome, Italy. Telegraphic address: IFAD Rome; telex: 620330 IFAD; telefax: (39-6) 5043463. The conference secretariat at the Jolly Hotel Midas will deliver it immediately to the addressee.

#### ENTRY VISAS TO ITALY

Participants should obtain an entry visa to Italy at the Italian Embassy or Consulate in their country. Whenever this is not possible because there is no Italian Embassy nor Italian Consulate in the participant's country, visas valid for 48 hours can be issued by the Border Authorities ("polizia di frontiera") at the Rome airport "Leonardo da Vinci" (Fiumicino) only if details are communicated by telex to the IFAD Protocol Office not later than 3 October 1988, specifying name and surname of participant, nationality, passport number and date of issue and expiry, flight number, arrival date and arrival time. Participants are kindly requested to contact the Protocol and Liaison Office at IFAD upon arrival at the Jolly Hotel Midas to obtain an extension of this visa.

#### TRAVEL ARRANGEMENTS

Upon arrival, participants may contact the Information Counter of Alitalia, the national airline of Italy, immediately after passport control and customs, for travel assistance and general information about Rome.

At the Jolly Hotel Midas, IFAD's Travel Agent will have staff available to assist delegates with travel arrangements.

#### TRANSPORT IN ROME

The Jolly Hotel Midas runs a shuttle bus between the Airport (departure from outside International Arrivals) and the hotel. A schedule is attached as an Annex. Taxis to the hotel from the Airport take approximately 30 minutes and cost about Lire 40 000.

The hotel also operates a shuttle bus service to and from the city centre, details of which will be available at the reception desk.

#### FOREIGN EXCHANGE FACILITIES

Foreign exchange facilities are available at the hotel reception desk, where arrangement has been made to adhere to prevailing Bank rates of exchange.

#### RESTAURANT FACILITIES

Arrangements have been made for an optional fixed-menu lunch and dinner for the participants, to be served in the Sala Baiocco, at a special price of Lire 23 000.

#### SHOPPING CENTRE

The "Silos" shopping centre is in the vicinity of the Hotel.

#### MEDICAL SERVICES

A nurse will be available at the meeting site as well as a doctor and ambulance service.

#### LOST AND FOUND

Articles lost and found should be reported to the Documents/Information Desk.

Jolly Hotel Midas  
(Via Aurelia 800, Rome)

Bus Schedule to and from Fiumicino Airport

| <u>Departure from Airport</u> | <u>Departure from Hotel</u> |
|-------------------------------|-----------------------------|
| 7.30                          | 7.00                        |
| 9.00                          | 8.00                        |
| 10.30 (on request)            | 10.00 (on request)          |
| 12.00                         | 11.30                       |
| 16.00 (on request)            | 14.30 (on request)          |
| 19.00                         | 18.00                       |
| 21.00                         | 20.00                       |
| 22.00                         | 21.30                       |



International Consultation on Environment,  
Sustainable Development and the Role of  
Small Farmers

Rome, 11 - 13 October 1988

INTERNATIONAL CONSULTATION ON ENVIRONMENT,  
SUSTAINABLE DEVELOPMENT AND  
THE ROLE OF SMALL FARMERS

Introduction

The International Consultation on Environment, Sustainable Development and the Role of Small Farmers, sponsored by the International Fund for Agricultural Development (IFAD) will be held in Rome, Italy from 11-13 October 1988. While the theme of the consultation would primarily focus on evolving strategies for sustainable development, the deliberations will throw light on technological, institutional and policy related issues that will help achieve this objective.

Background

The drought years of 1972-74 were the cause of tremendous food deficit/scarcity in many developing areas, due to the fragility of certain countries' agro-ecosystems and their consequent vulnerability to drought.

In response to the food crisis the World Food Conference, organised in 1974, established IFAD to address the priorities embodied in Article 7, Section 1 (d) of its Agreement. The agreement entails that:

"in allocating its resources, the Fund shall be guided by the following priorities:

- (i) the need to increase food production and to improve the nutritional level of the poorest populations in the poorest food deficit countries;
- (ii) the potential for increasing food production in other developing countries. Likewise, emphasis shall be placed on improving the nutritional level of the poorest populations in these countries and the conditions of their lives."

The United Nations Environmental Programme (UNEP), established in 1972, helped generate greater awareness in policy matters and in technical, financial and legal fields, particularly through the Desertification Conference of 1977, and, additionally, through its support to the World Conservation Strategy (Living Resource Conservation for Sustainable Development) prepared in 1980 by the International Union for the Conservation of Nature and Natural Resources (IUCN).

The 1983-84 drought in Africa reflected continuing environmental deterioration, as a result of increased structural vulnerability, evidenced by the debt crisis and by the impoverishment of weaker social groups. The attention of the international community thus turned to environment and development issues. In this context, the World Commission on Environment and Development (WCED), established by the United Nations General Assembly in 1983, began to re-examine critical environment and development issues. In 1985, as its contribution, IFAD designed the Special Programme for Sub-Saharan African Countries affected by Drought and Desertification. It took into account the operations planned by other agencies such as the United Nations Office for Emergency Operations in Africa, the Food and Agriculture Organisation of the United Nations (FAO) and the World Bank. Focussing on the African region where the production base is most threatened by drought and desertification, IFAD explicitly concentrates on the rehabilitation of traditional agricultural systems, the development of staple food crops, small-scale water control schemes, agroforestry and environmental conservation.

#### The Context

During the implementation of IFAD-financed development projects in Africa, Asia and Latin America, a wide range of environmental problems have been encountered. IFAD has thus become increasingly aware of the possible detrimental impact of (often inappropriate) technological choices, on natural resources. Indeed, in its efforts to address environmental problems IFAD has been constantly assessing the design and implementation of its projects and systematically revising them for their impact on environment. As an institution financing agricultural and rural development projects which focus on the needs of small farmers, IFAD pays increasing attention to understanding the link between poverty and environmental degradation. At the same time being sensitive to traditional farming systems which depend on a marginal resource base, IFAD recognises that this link is self-reinforcing: that the poor, confronted with the need for survival, have often no choice but to resort to production practices which further contribute to the impoverishment of that production. This leads to a constant depletion and degradation of natural resources. Such a vicious circle further impoverishes the small farmer.

Through its experience with projects aimed at conservation as well as rehabilitation of the environment, for its second decade of operation, IFAD is reasonably equipped to develop specific guidelines which would help ensure the long-term ecological sustainability of its projects.

Given that environmental conservation is generally a long-term objective whereas the alleviation of poverty and improvement of the

nutritional standard of the poorest populations in food deficit countries is an immediate objective, IFAD is increasingly concerned with reconciling the two objectives. In doing so, it fully recognises the role that the smallholders themselves play in the design and implementation of projects. The involvement of the beneficiary at various relevant stages of the project cycle is the key principle behind the new 'participatory approach' being developed in IFAD projects for sustainable development in rural environments. The approach takes into account the needs and priorities, as they are perceived by the intended beneficiaries themselves.

In the above context, IFAD is aware of the enormous importance and growing influence of non-governmental organisations (NGOs) in the development process and their particular role in influencing development practices and policies with respect to environmental concerns. Their interaction with international development institutions and the experience they have gained at the grassroots level, can form a considerable complementary force to the efforts undertaken by institutions such as IFAD. IFAD considers that the experience of NGOs is bound to enrich its own work. It believes that a collaborative effort with NGOs as well as other donors in Environmental Development would help enhance the Fund's capacity to address environmental issues in project design, implementation, and monitoring and evaluation. It would also ensure better ecological sustainability of the projects which it finances. In the process, IFAD could also give a tangible shape to WCED's principles and recommendations, in a manner consistent with its own mandate.

The proposed International Consultation on Environment, Sustainable Development and the Role of Small Farmers, would be used as a platform from which IFAD hopes to transform the guiding principles of the WCED report "Our Common Future" into concrete plans and approaches to project design.

#### The Purpose of the Consultation

IFAD, by its mandate, is concerned with sustainable development. Given this objective, the purpose of hosting the consultation is to discuss issues related to (i) policy, (ii) institutions and (iii) technology. The consultation would eventually constitute the basis on which a set of guidelines for ensuring the ecological, economic and financial sustainability of agricultural development projects, would be prepared.

To facilitate this, the consultation will bring together policy makers, international financial institutions, and selected international and local NGOs with experience in the field of environment. The consultation would also draw upon lessons learned from the successes and failures of projects supported by the agencies represented, including IFAD, to establish the operational content of the above-mentioned "Guidelines for Sustainable Development".

Since IFAD's projects are located in fragile ecological settings, a systematic approach would be necessary in addressing rural poverty as well as conservation and/or rehabilitation of the environment. Such an approach requires that relevant data on socio-economic, agricultural and ecological processes be gathered and analyzed before project identification. In

addition to quantitative data, local know-how and farming practices must be identified, particularly in relation to people's management of natural resources. With the help of such baseline data, as well as pre-project know-how and perceived needs, monitoring and evaluation can be performed more effectively to improve the design and implementation of future projects.

Within the context described above, technological issues would need to be addressed first. Research must focus not only on the optimisation of resource use and improvements in productivity but also on developing an environmentally safe technology that would conserve as well as replenish natural resources. The consultation would consider these issues while exploring low cost technologies which can be adapted to poor resource endowment areas. The consultation would therefore evolve a systems approach to technology which could be based on linkages for example, between soil and water conservation, agroforestry, and livestock in natural resource management for sustainable development.

Second, IFAD-financed projects in marginal agro-ecosystems would have to be geared to improving institutional arrangements and delivery systems to benefit the rural poor. Environmental imperatives which contribute to shaping the Fund's approach to extension, credit, marketing, etc. would also need to be discussed under institutional issues. In this context discussions would evolve concrete institution building strategies for sustainable development in rural areas, so as to benefit smallholders and pastoralists in the short as well as in the long term.

Third, concrete policy issues would be discussed concerning environmental matters geared to IFAD's small farmers-oriented strategy, participatory approaches and methodologies for project design, as well as monitoring and evaluation techniques.

The Consultation would be exploratory in nature. It is not expected to make binding decisions, but to generate new ideas and methodologies and to clarify issues.

#### Objectives of the Consultation

The overall objective of the consultation is to identify issues and options for strategies leading to sustainable development. The central objectives may be outlined as being inter alia:

- (i) examining ways of enhancing the participation of the rural poor in the planning and implementation of projects to rehabilitate the environment (RE) or are designed to be ecologically sustainable (ES);

- (ii) exploring ways and means of estimating economic and social costs/benefits of environmental protection measures, thereby achieving at least partial cost recovery in RE/ES project activities and components;
- (iii) suggesting means of redressing institutional and methodological weaknesses in developing countries in the field of environmental protection due to insufficient attention paid to sustainability issues in agricultural research, and lack of an economic valuation of environmental goods and services resulting in economic policies having an adverse impact on the environment and national resources;
- (iv) discussing ways of improving coordination between national institutions involved in environmental management and agencies in charge of implementing RE/ES projects and components;
- (v) assessing current experience in environmental approaches and activities with a view to emulating successful models of projects and programmes addressing environmental constraints; and
- (vi) establishing procedures for collaboration between developing countries, NGOs and financing institutions aiming at improving the livelihood of the rural poor through ecologically sound development projects.

#### Organisation of the Consultation

The consultation will build on interactions between three groups:

- (i) policy makers;
- (ii) financing institutions and international/intergovernmental organizations dealing exclusively or mainly with environment or environment-related topics; and
- (iii) international and national NGOs, engaging in environment-related activities.

The desired interactions will be facilitated by resource persons, with an inter-disciplinary approach.

The working groups will discuss two major topics, namely:

Working Group I - management of natural resources for sustainable development (SD); and

Working Group II and III - institutional arrangements and delivery systems for SD.

A common set of themes will be considered by all working groups. Questions which need to be addressed tentatively include the following:

- (i) How to estimate economic costs and benefits of environmental protection measures? How to use in practice marginal opportunity cost? How to achieve at least partial cost recovery in activities geared to ecologically sustainable development? How communities, NGOs, and existing or newly formed groups can help to sustain some of the costs not easily borne by small farmers, and contribute to cost recovery? How can investment of labour or other resources in environmental conservation activities be made attractive to the small farmer and stimulate his interest effectively?
- (ii) How to address institutional weaknesses in relation to environmental protection in developing countries, particularly regarding small farmers and pastoralists? How to improve coordination between national institutions involved in environmental matters and international financial institutions as well as donor agencies involved in project implementation to ensure ecological sustainability? How to take into account different social and cultural perceptions of the environment? How NGOs might act as a relay, making people's perceptions of the environment better known to project implementing agencies? How to enhance the participation of the rural poor in the planning and implementation of ecologically sustainable development activities (projects and research)? How to promote sustainable participatory rural development?
- (iii) How to develop a more systematic evaluation of environmental goods and services? How to foster sustainability issues in agricultural research? How to call attention to the physical and biologically detrimental processes to which soils, watersheds, tropical forests etc. are subjected? How to reduce reliance on external inputs and encourage use of relevant indigenous, traditional techniques? How to encourage future research in developing low cost technology which can be adapted to poor resource endowment areas? How to introduce a systems approach in research based on linkages e.g. with agroforestry, livestock, mixed cropping, etc.?
- (iv) How can gains from success stories in relation to the themes of the respective groups be consolidated and used as examples for replicability? How are guidelines on environmental matters be geared towards taking care of smallholders interests and potential in the long-term, in line with IFAD's small farmer-oriented strategy and participatory approach?

Answers to these five themes or questions should help each working group to propose (in relation to its main theme) the mechanisms and procedures for an efficient collaboration among developing countries, NGOs and financing institutions with the objective of benefitting the rural poor through ecologically sound as well as sustainable development projects.

The discussions would be organized around more specific themes in each working group as follows.

Management of Natural Resources for Sustainable Development: Working Group 1

Discussions in this working group should help define the general principles of management of natural resources for sustainable development which should be applied to IFAD projects, while taking into account the target groups' specific characteristics. Target groups, in IFAD's strategy are defined as the rural poor: small farmers, pastoralists, fishermen or artisans, landless labourers and poor women.

Discussions will be centered around issues which are of particular relevance to IFAD's projects such as soil and water conservation, agroforestry, development of low cost environmentally safe technology, use of renewable energy, pasture and rangelands management including measures to arrest the desertification process.

These issues will not be dealt with in a technical manner, but as issues which necessitate a specific approach in IFAD's projects in order to benefit small farmers and pastoralists in a sustainable manner.

IFAD will present its approach to project design and make a critical assessment of how environmental issues are addressed and incorporated in that design, and how they are addressed at the stage of implementation, monitoring and evaluation.

This working group will seek answers to questions common to all working groups as well as to the following questions:

How can common property resource sharing, and possible future changes in land, water, forest and grazing rights (individualisation of land tenure) be taken into account in project design? How can guidelines be developed to protect IFAD's target groups, particularly women, against the potentially negative effects of these changes in their livelihood systems?

At this point of the discussion, it might be useful to set up at least two sub-groups according to the main emerging ideas.

Institutional Arrangements and Delivery Systems for Sustainable Development: Working Groups 2 and 3

Ecologically sustainable development implies a systematic approach in project design, implementation, monitoring and evaluation, which is usually rendered difficult by the multiplicity of agencies involved. Among the many delivery systems, agricultural research will suggest technical options which may help to restore the environment or may degrade it even further. A specific working group would therefore be devoted to agricultural research. While another group would deal with the rest of the institutional set-up and delivery system.

Working group 2 would concentrate on agricultural research for sustainable development, and seek answers to questions common to all working groups, as well as to the following:

(i) How should research be conducted to generate technologies which satisfy the need for increased food production without compromising the natural resource base and the ability of future generations to meet their own needs?

(ii) How can agricultural research and extension be influenced, at the national, regional and international levels, to respond more efficiently to the needs of IFAD's target groups and to the imperative of ecologically sustainable development?

(iii) What are the factors threatening ecological sustainability? What does the sustainability concept mean in terms of planning and applying research? What are the implications in terms of communication and dialogue between international agricultural research and national agricultural systems, policy makers and financial institutions? On these points the report provided by the Technical Advisory Committee of Consultative Group on International Agricultural Research (CGIAR) on the theme of "Sustainable Production Systems" should enhance discussions. Issues such as low input vs. high input agriculture, short-term vs. long-term objectives in agricultural production, etc., are also important where agricultural extension is concerned. What should be the extension message for sustainable production? How can a two-way channel be built between IFAD target groups and research? How can existing systems of natural resource management be improved from within? By building on the farmer's knowledge of the environment? NGO's experience in farmers research should be useful in this respect.

Working group 3 will deal with relationships between national agencies, NGOs and international agencies as policy and institutional issues. An ecologically sustainable (ES) project requires a data base on ecological, socio-economic and demographic processes. Data are collected by different agencies for different purposes. An important issue, then, is how to obtain coherent sets of data. An ES project must deal with different government agencies and ministries. How can conflicts be minimized and cooperation be maximized? When a number of donors with individual approaches are involved in the same country in similar environmental activities with similar objectives how can donor coordination be improved? To what extent do development policies take environmental issues into consideration? Other issues related to the impact of credit systems on the environment should be examined, since credit availability, interest rates, loan terms, etc., are linked to choices of production systems and technologies. Marketing systems must also be examined, particularly in relation to such matters as potentially dangerous chemicals used on farms and in storage facilities. Road construction to facilitate communications and marketing should also be examined from the viewpoint of sustainable development.

In working groups 2 and 3, IFAD will present its experience with the institutional set-up and delivery system, including agricultural research and extension.

#### Output of the Consultation

At the closing session of the consultation, reports of the working groups will be presented to the plenary and discussed. A drafting

committee will then meet to produce a consolidated statement covering the most important issues and options for action. This statement would not commit IFAD to underwriting specific policies or decisions, but would provide a framework for future collaborative endeavours among national programmes, NGOs and international financial institutions.

The output of the consultation would result in a set of preliminary guidelines for future projects and the contributions received by IFAD would provide an overview and general policy direction as well as a better understanding of the policy, technological and institutional issues associated with sustainable development. Moreover, it would promote further exchange of relevant information and possible follow-up in order to arrive at a concrete approach and methodology for smallholder-based sustainable development.

Recommendations for Consideration of Working Group II  
Delivery Systems for Sustainable Development  
The Role of Research - Working Group II

1. The discussions in Working Group II may largely focus on the issues and recommendations outlined below. The discussions would primarily need to define the role of Agricultural Research - both agro-economic and socio-economic research as part of the delivery system - for providing sound technological bases and the appropriate extension message. In particular the discussions should highlight ways of achieving increased productivity of degraded agricultural resources in an economically and ecologically sustainable manner, within the context of small farming systems. The Working group will, therefore, be expected to resolve the following issues;

Policy Issues

2. How can agricultural research and extension be influenced, at the national, regional and international levels, to respond more efficiently to the needs of IFAD's target groups and to the imperative of ecologically sustainable development? What are the implications in terms of dialogue and communication between international agricultural research and national agricultural systems, policy makers and financial institutions? How can Centres for Technology Integration and Dissemination be supported and encouraged to focus further on the small farmer? How can Policy makers ensure balanced, equitable development by allocating agricultural research resources to more socially relevant activities? How can agricultural research programmes for sustainability and environmental issues be made more efficient by identifying and focussing on areas where the better social rates of payoff lie? How can research be used to improve economic policy for a more efficient and sustainable economic growth? Given that sustainable agricultural systems can entail slower rates of growth and that the long term social benefits may not exceed or equal social costs how can we promote/research that lack definition of appropriate policies that recognise macro effects relating to income, equity etc.? What are the platforms on which multi-disciplinary research can foster with a close collaboration among social, biological and physical scientists?

Institutional Issues

3. What should be the extension message for sustainable production? What role can research play to provide one? How can a two-way channel be built between IFAD target groups and research? How can existing systems of natural resource management be improved through research? (linkages with Working Group I). How could farming system research be improved by building on farmers' traditional knowledge of the environment? NGO's experience in farmers research is useful in this respect - how could other Industrial/Information Societies, Conservation Societies be promoted for this and to strengthen research on delivery systems?. How can research resolve issues such as low input vs. high input agriculture, short-term vs. long-term objectives in agricultural production; could agricultural extension be suitably equipped to transfer such messages? How can

communication and dialogue between international agricultural research and national agricultural systems, policy makers and financial institutions be improved (eg. the advantages of networking)? In this context, the report provided by the Technical Advisory Committee of Consultative Group on International Agricultural Research (CGIAR) on the theme of "Sustainable Production Systems" may provide further direction. How can socio-economic research be made more rigorous to understand better the constraints faced by IFAD target groups? How social science research can contribute by helping design appropriate institutional arrangements, for example those that can internalise externalities and provide new "social technologies"? How can short-term expediency give way to long-term planning and sustainability be taken into account in farmer's decision- In which ways could research resolve this central issue?

### Technology

4. What are the factors threatening ecological sustainability? (linkages with Working Group I) .Within the framework of the above criterion, how can research focus on issues of sustainable agriculture subject to the constraints in a smallholder environment - what guidelines can research offer to IFAD target groups in terms of concrete steps to (i) ensure sustainable soil conservation practices , (ii) encourage agroforestry in areas where forests/rangelands, natural vegetation is being denuded, (iii) develop effective methods of weed control and pest control, (iv) look for alternatives to traditional shifting cultivation where demographic pressures on resources make it unsustainable - development of new farming practices (alley farming etc.), reduction in land preparation requirement etc.; (v) raise productivity in drylands - agrometeorology ; irrigation - communal irrigation systems , water harvesting, moisture conservation, breeding for drought tolerance , (vi) enhancing role of livestock - research on crop-livestock integration and livestock management in different agroecological conditions (link with Working Group I issues).

5. Apart from these the Working Group may focus on other innovations which research can offer -those that can be brought to bear on problems of raising small farmer productivity. e.g. how can new opportunities in Biotechnology be exploited for the benefit of small farmers and reconciled within low input framework, for example development of safe and effective herbicides within the reach of small farmers and transform agroeconomic practices for instance. through zero tillage, reconciling the need for cultivation and saving physical labour for other issues (linkages with Working Group I and Working Group II issues).

### Structure of Discussion on major Issues

- I. Research Priorities and Strategies
- A. Conservation of Basic Agricultural Assets
  - (a) Land and Water Use;
    - (i) Conservation Areas
    - (ii) Restoration Areas
    - (iii) Sustainable Intensification Areas

*Agro-ecosystem*  
*Maintenance*  
*Risem*  
*Anticipatory*  
*Research*

(b) Biological Diversity

National Mechanisms for Conservation and Utilisation

(c) Monitoring Systems

*(c) Agricultural Knowledge of local Communities*

B. Production Systems

(a) Factors of Production

- (i) Land Management
- (ii) Water Management
- (iii) Nutrient Management
- (iv) Pest Management

(b) Integrated Farming Systems

Crop - Livestock - Fish - Forestry - agro-forestry  
Crop/Farm Animal/Fish Management

*Participatory Research*

(c) Post - harvest Management Systems

- (i) Part of direct value in human consumption
- (ii) Rest of Biomass

(d) Delivery Systems

- (i) Knowledge and Skill
- (ii) Inputs essential to apply new knowledge
- (iii) Incentives for Group Cooperation

(e) Employment Generation

- (i) On-farm and Off-farm employment
- (ii) New opportunities for women
- (iii) Youth and new frontiers in technology

II. Implementation Mechanisms

Spatial Dimensions

- (a) Local
- (b) National
- (c) Regional
- (d) International

Organisational Structures

- (a) Public Sector
- (b) Private Sector
- (c) Scientist - Farmer Joint Research
- (d) Collaborative Research

Public Policies

- (a) Incentives for Group endeavour
- (b) Reorganisation of extension and input delivery systems

Role of IFAD

- Eco-zone priorities*
- (a) Developing the conceptual and operational framework essential for combining scale neutrality, resource neutrality, economic viability and ecological sustainability in technology development and transfer.
  - (b) Re-designing of Farming Systems Research in order to promote better growth linkages among the primary, secondary and tertiary sectors of the rural economy.
  - (c) Organization of a Biotechnology Network for the sustainable enhancement of small farm productivity and income.

III. Resource Allocation Mechanisms

- (a) Local
- (b) National
- (c) Bilateral
- (d) Multilateral

*Research on Policy*



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International Consultation on Environment,  
Sustainable Development and the Role  
of Small Farmers

Rome, 11-13 October 1988

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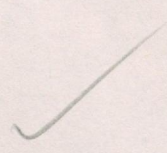
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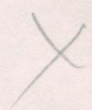
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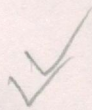
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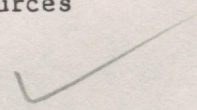
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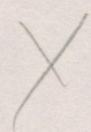
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International Consultation on Environment,  
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Rome, 11 - 13 October 1988

ORGANIZATION OF THE WORKING GROUPS



Statement by the Ambassador of the Kingdom of Norway  
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Torbjorn K. Christiansen to the International  
Consultation on Environment, Sustainable Development  
and the Role of Small Farmers

Rome, 11 October 1988

Mr. Chairman, Distinguished Delegates,

It is an honour for me to address this Consultation at the opening of its proceedings. Let me start by conveying to all of you the best wishes of Mrs. Gro Harlem Brundtland, the Prime Minister of the Kingdom of Norway, for a successful meeting. The World Commission on Environment and Development, of which she was Chairman, presented its report to the Forty-Second Session of the United Nations General Assembly in October 1987. The General Assembly welcomed the report and invited Governments and international organisations to take account of its analysis and recommendations in determining their policies and programmes.

The report of the Commission is a political document which covers the whole international agenda - an agenda for change and for sustainable development. The report gives a particular emphasis to poverty as a major issue, as a main cause and effect of environmental degradation. However, severe threats to the global environment and natural resources are also due to the unacceptable pollution problems and the increasing consumption of industrialised countries.

One of the main conclusions from the Commission is that international economic inequalities are a root cause of the environment/development stalemate. Clearly, the developing countries will have little opportunity to pursue a sustainable path of progress unless external conditions allow them to develop their human and economic potential.

In July this year, the Secretary-General of the United Nations and the executive heads of 22 UN organisations met in Oslo at the invitation of Prime Minister Brundtland to explore how the UN system could promote sustainable development in their work. In a joint summary from the meeting, it was concluded that sustainable development is a common objective for all the organisations, including the financial institutions. The participants, and in particular the President of IFAD, underlined that poverty alleviation and environmental preservation can be made cost-effective components of development plans and programmes. The participants also agreed to include, in their proposed programmes, budgets and medium-term plans, appropriate measures responding to the recommendations of the World Commission on Environment and Development.

The close link between sustainable development and poverty, which has been stressed by the World Commission, makes IFAD a particularly central institution for the implementation of the recommendations from the Commission. IFAD has a clear mandate to assist the poorest food-deficit countries in improving the nutritional level of the poorest populations in the developing countries. Perhaps the most important challenge facing IFAD as well as others in the coming years, is to find ways to support economic and social development by not depleting the resource base. To do this, strategies must be discussed and guidelines prepared to ensure the ecological, economic and financial sustainability of agricultural development projects.

This is why Norway suggested, and was able to finance, this International Consultation on Environment, Sustainable Development and the Role of Small Farmers, which takes place on the occasion of IFAD's Tenth Anniversary. We support the efforts of the President and his staff to make the Consultation a reality, and the excellent preparations made are evidence of IFAD's concern and determination to implement the recommendations of the World Commission in the IFAD context.

We look forward to a fruitful exchange of views which will hopefully enable IFAD to respond even more effectively to the needs of the rural poor.

Thank you, Mr. Chairman.



Opening Statement by Donald Brown  
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Sustainable Development and the  
Role of Small Farmers

Rome, 11 October 1988

Distinguished Friends, Ladies and Gentlemen,

It gives me great pleasure to welcome you on behalf of IFAD to this International Consultation on the Environment, Sustainable Development and the Role of Small Farmers.

Your presence here underscores the growing awareness of the importance of the environment and the objective of sustainable development for our collective future. Your own rich and varied backgrounds make this Meeting a unique one and I am sure we shall have a most stimulating exchange of ideas and experience in the next three days.

The economic and environmental processes we will be discussing are extremely complex and have only recently received due attention at senior policy-making levels. I must, in this regard, pay tribute to Prime Minister Brundtland of Norway. Her leadership of the World Commission on Environment and Development gave fresh impetus to international deliberations about the environment. In particular, the Commission's work marks the culmination of a critical evolution in thinking about environmental issues over the past two decades by placing these issues at the very heart of the development agenda.

This evolution started with the United Nations Conference on the Human Environment of 1972 which provided a conceptual framework for environmental issues and created the operational machinery of the United Nations Environment Programme (UNEP).

The World Food Conference of 1974 provided a new perspective on the interlinkages of food security, poverty and environmental vulnerability which has inspired IFAD ever since, the Fund itself being an outcome of the 1974 Conference.

Further dimensions were added by the Desertification Conference of 1977 and, in 1980, by the World Conservation Strategy which was articulated by the International Union for the Conservation of Nature and Natural Resources (IUCN), whose distinguished President, Dr Swaminathan, is with us today.

In recent years, serious droughts and other natural calamities have sharply underlined the grave consequences of continued neglect of our environment. More than ever we understand that short-term relief, no matter how necessary at the time, is no substitute for measures to promote sustainable development.

Environmental issues are broad and involve all elements of mankind's wellbeing. But our concerns during this Consultation centre specifically on environment, sustainable development and the role of small farmers. And it is in this particular context that I want to address my remarks this morning. First, I will indicate in broad terms some of the dimensions of the problems as we see them in IFAD. Then I want to describe what we feel are key issues in these circumstances. Next I will review some of IFAD's experience. Finally, I would want to suggest what all of this may mean on where we might go from here.

### Dimensions

First, then, the structural aspects of environmental degradation are well documented. Indiscriminate destruction of tropical forests for farmland, for commercial logging, for grazing resources and for fuelwood, have devastated forest resources. Within this century alone 30% of the earth's forest cover has disappeared, while today tropical forests are shrinking at the rate of 11 million ha per year. Intensive use of former forest areas has led to soil erosion through rapid surface water run-off.

Overuse of drought prone, semi-arid lands covering one-third of the world's land surface, leads to loss of natural vegetation and increasing desertification.

On the other hand, many large-scale irrigation schemes with inadequate drainage have caused serious problems of water-logging, salinization and alkalinization.

Most specifically, the productive capacity of the majority of inhabitants of the world - poor smallholder farmers and rural dwellers in developing countries - is severely weakened as the environment around them is damaged by forces beyond their control, or when they are pushed by external pressures onto marginal lands, or when their own population growth causes them to over-farm or over-graze their lands. The most vulnerable on earth are most directly threatened by environmental degradation since it is their very existence which is at stake.

### The Central Issues

These developments raise serious technological, policy and institutional questions - questions which have been explored at some length in the IFAD Background Paper which you have, as well as in the many excellent papers submitted by the participants to this Consultation.

I would like to touch briefly on those questions which, from IFAD's own experience, seem to be of critical importance. The first, which is basic, is equity - fair access to natural resources, both within the present generation and between the present and future generations.

Inequitable access to resources can lead to their abuse and the resulting strong linkages between poverty and environment assume a form of vicious spiral.

In the past, poor communities evolved systems of land rights and use, effective and rational techniques of slash-and-burn, and workable irrigation systems that functioned in harmony with nature.

Now, demographic pressures and changes in land tenure have caused a breakdown of many of these traditional systems, leading to land fragmentation, over-cultivation and over-grazing.

Growing numbers of the poor are pushed by socio-economic forces into increasingly marginal lands which are then over-exploited in a desperate effort to eke out a subsistence. The resulting soil and water erosion leads to further impoverishment and the poor become victims of the environment rather than being the main agents for its preservation.

While it is the poor who directly suffer from environmental degradation, it is often rich farmers who cause it. Large-scale mechanized agriculture may exhaust soils and lead to shifts in operations on to even other lands which are then damaged. Large-scale ranching operations over-graze and deplete pastures and rangeland. Thus, inappropriate commercial use holds serious risks for the environment which directly impact on the welfare of the poor.

Equity is also relevant between generations. Future generations have the right to a resource base comparable to that inherited by the present one. How this is to be treated is a profound question, particularly given the great uncertainties of future technological and cultural changes that will, perhaps radically, change the relative scarcities of economic and environmental goods.

#### Policy and Institutional Aspects

There are also certain key policy and institutional aspects, both at the national and international levels, which are particularly important.

I do not have to dwell on the impact that the collapse of commodity prices, the onerous burden of external debt and the decline of financial flows have had on export earnings and investment programmes of developing countries in this decade. But an often ignored consequence of this situation is how the compulsion of the short-term need to increase cash crops and commodity export earnings can lead to oversight of the longer-term environmental impact of these activities.

Domestic policies of industrialized countries also adversely affect developing countries. Large agricultural subsidies and other forms of protectionism have generated food surpluses in the former countries, while discouraging investment and production in the developing world. This misallocation of global resources involves a serious imbalance in the use of land resources. Here one can see the potential interrelationship of agricultural trade aspects of the Uruguay Round with the matters we are discussing in this Consultation.

Policies within developing countries themselves have also had adverse effects on the environment and sustainable development. One policy I must underline, is the recurring bias against agriculture in general and the smallholder farm sector in particular. The institutions serving the poor - extension, credit, marketing, and input distribution,

as well as the social services - have generally been inadequate to meet their requirements. As a result, not only have smallholders faced severe difficulties in meeting their own needs, but the production potential they possess is inadequately tapped for national benefit. These institutional weaknesses also provoke insufficient opportunity for off-farm employment, reinforcing pressure on the land. Thus, little progress has been made in many of the most threatened areas in the world to break the cycle between poverty and environmental degradation.

#### Methodology for design and evaluation

A complicating methodological factor is the deficiency of methods for evaluating environmental components. Traditional Cost/Benefit techniques do not incorporate environmental concerns adequately. To do so requires a proper specification of the full environmental impact and a proper means for assessing the costs of environmental deterioration and the benefits of enhancement. Finally, an appropriate discount rate, given the long-term nature of environmental costs and benefits, is important for inter-generational equity.

#### IFAD's experience and approaches

Let me turn, then, to how IFAD has sought to deal with these entwined problems of poverty and environment. IFAD recognized from the beginning that the problem of environmental degradation is intimately associated with the conditions under which the rural poor earn their livelihood. The first step therefore is to mobilize their under-utilized potential by giving them access to improved techniques, credit, resources and inputs and fair markets. If this is done the adverse interaction of the poor and their environment can often be reversed and made into a positive one. The poor themselves have the largest stake in preservation and enhancement of their surroundings but they can attend to that only if their basic nutritional needs are assured.

A key element of working with the poor, in IFAD's experience, is maximising the participation of the beneficiaries. They best identify their own problems and how they might be solved. Their participation in implementation is critical to sustainability. This issue of beneficiary participation applies equally to planning and carrying out the environmental aspects of projects if there is to be a truly integrated conservation-based development strategy. Unless participants are involved in project design and implementation, and unless they are assured of the benefits of environmental components, they will have little interest in their preservation or maintenance.

In functional terms, IFAD has found that small-scale irrigation and soil and water conservation in semi-arid areas can have dramatic effects, both in increasing productivity and incomes and in enhancing the carrying capacity of the soil. Water conservation methods, combined with more specialized techniques of sand dune fixation, afforestation and proper selection of plant species, have shown promise in a number of IFAD interventions in halting the process of desertification and rehabilitating degraded lands at the edge of the desert. Another focus has been agroforestry and the integrated management of animals, crops and trees.

However, the most difficult issue which IFAD has experienced in project development is how to make environment enhancing activities

economically and financially viable for the rural poor. One approach which has had some success is to combine long-gestation activities, such as agroforestry or soil conservation, with crop intensification that can improve productivity and incomes in the short run and provide incentives for longer-term steps. But both the technical and the financial parameters of such comprehensive approaches vary in different conditions and much more needs to be known regarding them.

A matter to which IFAD has given particular attention is to make the methodology of evaluation more comprehensive and take into account properly the costs and benefits of environmental factors. While considerable progress has been made, we must seek further those economic analysis techniques which fully capture all the nuances of environmental changes.

Environmentally safe biological pest control methods have also shown great promise in IFAD operations in a variety of situations. Such methods have been used to protect the vital cassava crop in sub-Saharan Africa and are being developed for the date palm tree which is being threatened by a fungus in much of the Near East and North Africa.

IFAD has found that creating conditions to mobilize the under-utilized potential of the rural poor not only helps to increase their productivity on the land, but also makes it possible for them to start income-generating off-farm activities. With growing population pressure, rapid increases in such employment are critical for preventing further land fragmentation and overuse of vulnerable areas.

#### Where do we go from here?

Now, what does all this tell us about where we go from here? Individual countries, bilateral donors and international institutions like IFAD have started to accumulate considerable experience in promoting environmentally sound development. There remain many gaps in our understanding of the physical and biological processes as well as the economic and social interactions. Thus we must conduct more research, trials and pilot activities. We must improve our methodology and broaden our appreciation of these complex interrelated systems.

The present Consultation comes at a particularly opportune moment. Action is required at various levels, national and international. There is need for greater understanding of the issues of environmental consequences of policies. Elimination of distortions of public policy and market structures that encourage wasteful resource use must occur. The questions of debt, financial transfers and reform of agricultural subsidies have a key bearing on promoting sustainable development. At all levels, there is need for sensitizing policy makers to the key linkages of environment to sustainable development and the elimination of hunger and poverty.

For its part, IFAD has moved the issues of the environment and the implications for sustainable development to the centre of design and implementation of its projects. The Fund already has developed close ties with other international and national institutions involved in the field. We are working increasingly closely with NGOs, who have often taken a leading role in promoting awareness of the problems of environmental degradation.

Despite all we have done so far, we certainly look to your deliberations here to help the Fund's future operations. Your view on the following questions, among others, would be welcome:

- How might the Fund sharpen its focus on environmental issues, recognizing its role as a financial institution?
- How can the Fund best improve its analytic and accounting capacity regarding the interrelationships between poverty alleviation and natural resource conservation, again keeping clearly in mind the Fund's responsibilities as a financial institution?
- Given the limited resources the Fund has available for support of research, what research issues should be given priority that can contribute to IFAD's primary mandate for rural poverty alleviation while also opening up new understanding about natural resource conservation?
- To what degree should the Fund, as a financial institution, contribute to consciousness-raising, training and policy dialogue with respect to environmentally sustainable agriculture? What might this mean for IFAD's growing relationships with NGOs and for collaboration with other elements of the private sector?

This Consultation, as I said at the beginning, is a unique opportunity. The collective wisdom and experience represented here must be tapped and mobilized so that each of our institutions can become increasingly effective in touching those living on the margin of the environment, trapped between the poverty of the past and the degradation of the present. For we must remember that, ultimately, environmental protection and sustainable development have a clear objective - of ensuring that the hundreds of millions of deprived peoples of the world can be reached and given the means to help themselves. In so doing they in turn will help to ensure that the world that we bequeath to our children is at least as bountiful as that which we inherited ourselves.

Thank you.

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