

Distr.: General 10 April 2008 English Original: Spanish

Commission on Sustainable Development Sixteenth session 5-16 May 2008 Item 3 of the provisional agenda<sup>1</sup> Thematic cluster for the implementation cycle 2008-2009 review session

> Agriculture, rural development, land, drought and desertification: obstacles, lessons and challenges for the sustainable development of Latin America and the Caribbean

> **Report of the second Regional Implementation Forum on Sustainable Development**

## Summary

The Commission on Sustainable Development was established by the General Assembly of the United Nations in December 1992, to ensure effective follow-up to the United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit.

The Commission is responsible for reviewing progress in the implementation of Agenda 21 and the Rio Declaration on Environment and Development, as well as for providing policy guidance to follow up the Plan of Implementation for the World Summit on Sustainable Development at the local, national, regional and international levels. The Summit reaffirmed that the Commission is the high-level forum for sustainable development within the United Nations system. In 2003, at its eleventh session, the Commission decided that the regional commissions should include in their activities regional forums for the implementation of agreements on sustainable development.

Accordingly, during the thirtieth session of the Economic Commission for Latin America and the Caribbean (ECLAC), held in San Juan, Puerto Rico, in June 2004,

<sup>&</sup>lt;sup>1</sup> E/CN.17/2008/1.



<sup>\*</sup> Reissued for technical reasons.

the member countries of ECLAC agreed, by resolution 602 (XXX), to include in its activities a regional forum for the implementation of the decisions adopted at the World Summit on Sustainable Development (Johannesburg, 2002) and to request the Executive Secretary of ECLAC to convene this forum taking into consideration the two-year action-oriented implementation cycles of the Commission on Sustainable Development.

Pursuant to those mandates, ECLAC organized the first Regional Implementation Forum on Sustainable Development in January 2006, when the following themes were discussed: energy for sustainable development, industrial development, air and atmospheric pollution and climate change.

The second Regional Implementation Forum on Sustainable Development (Santiago, 28 and 29 November 2007) discussed experiences, lessons learned and the constraints and challenges faced by Latin America and the Caribbean in recent years concerning agriculture, rural development, land, drought and desertification as they relate to sustainable development. The Forum is a valuable opportunity to exchange experiences and lessons learned in the region in the implementation of Agenda 21 and the agreements of the World Summit on Sustainable Development which, together with mandates such as the Millennium Development Goals, are the targets that the international community has set for itself to achieve development with sustainability. Thus, it contributes to building a Latin American and Caribbean perspective for global assessment of implementation of the commitment to make our development more sustainable.

In support of the second Forum, ECLAC prepared a document containing regional information on the theme "Agriculture, rural development, land, drought and desertification: outcomes, trends and challenges for the sustainable development of Latin America and the Caribbean".

All the selected themes were considered during the Forum. The obstacles, experiences, lessons learned and challenges identified during the discussions are set out in the present report.

# **General background**

1. The region enjoys high levels of growth in agricultural output, exceeding average GDP growth, but this has not led to a reduction in levels of poverty.

2. Agriculture and rural development exist against the background of climate change, which will in the long term have an unpredictable impact on people's lives and on the optimal functioning of the ecosystems on which they depend.

3. Agriculture in Latin America and the Caribbean is faced with an international context characterized by the presence in the developed countries of large agricultural subsidies and trade barriers, together with rising worldwide demand for commodities.

4. The growth pattern of the region's agriculture should be seen in the light of the integration and trade liberalization processes which are taking place and of international integration schemes; this requires a comprehensive assessment of their impact.

5. There are high levels of poverty in the region which must be dealt with; in many cases there are close links between poverty and the degradation of the environment and natural resources.

6. The Latin American and Caribbean region has high levels of biodiversity; extensive forest cover and varied ecosystems, wet, dry and arid, which are vulnerable to the impact of climate change and processes of degradation; and a significant proportion of drylands.

7. The countries observe with concern the rising levels of land degradation, desertification and drought which affect large areas of the region and threaten food security.

8. The countries of the region believe that it is important to adopt a comprehensive and holistic approach to the issues discussed during the Forum, and to emphasize the close connections between those issues.

9. The region has made progress towards achieving the Millennium Development Goals, but the progress is uneven, particularly in relation to rural areas and indigenous peoples. Progress towards the eighth goal of developing global partnerships for development is vital so that the countries can obtain the increased financial and technological resources which are needed for meeting the goals.

10. The countries identified the lack of financial resources as an obstacle, and agreed on the need for easy access to funds from international financial bodies and constant international cooperation.

11. They also emphasized the importance of technology transfer and investment in research and development, together with the need to promote the dissemination of information, increased awareness, and participation by civil society in the issues being considered by the Forum.

12. The countries also agreed that the need to improve the integrated management of rural development, agriculture and the environment was a challenge for the region.

# Agriculture

The following issues were identified during the meeting:

#### Obstacles

1. Agricultural productivity is lowered by the degradation, desertification, salinization and contamination of land, and by the increasing shortages and contamination of water resources in the region.

2. Climate change increases the frequency and intensity of extreme natural phenomena (particularly hurricanes and droughts), with the resulting impact on rural populations, especially the most disadvantaged among them, and triggers migratory processes within and between countries. Agricultural production and forest cover are also affected.

3. Migration causes population ageing in rural areas and land abandonment, which in turn promotes degradation.

4. Among the main concerns in the region is the high rate of deforestation, caused among other things by the expansion of the agricultural frontier and by forest fires, timber consumption and climate phenomena.

5. Another matter to be taken into account is the gap between small subsistence farming and the big producers connected to worldwide trade chains.

6. The pricing system does not take account of environmental externalities which are modified by land-use patterns.

7. High energy prices have a negative impact on agriculture and lead to deforestation.

8. Agricultural production patterns are influenced by worldwide price trends.

9. The efficiency and effectiveness of the use of financial resources are affected by the lack of coordination, coherence, consistency and permanence in cooperation mechanisms.

#### **Experiences and lessons learned**

1. Strengthening of the Mesoamerican and Caribbean biological corridors, experiences which can be replicated in other parts of the region;

2. Incipient socio-geographical approaches to policy implementation;

3. Facilitation of the implementation of national and regional priorities for combating desertification and drought, as strategic tools for agricultural development;

4. Creation and implementation of development instruments, particularly for irrigation, as part of agricultural development strategies to encourage the creation of public-private partnerships and clean production agreements and promote best practices in agriculture;

5. Promotion of social participation.

#### Challenges

1. To identify the actors involved and their responsibilities, and to evaluate the incentive systems which ultimately determine their behaviour;

2. To analyse the impact on the population of the areas concerned of crops having higher growth rates;

3. To examine the potential of urban and peri-urban agriculture;

4. To take account of local particularities;

5. To promote and intensify citizen participation, with particular attention to rural communities and indigenous peoples;

6. To link poverty reduction strategies to the other Millennium Development Goals;

7. To broaden research into the potential impact of biofuels development;

8. To evaluate the environmental and health effects of the use of the new generation of agrochemicals;

9. To create programmes for integrated water management in order to promote more efficient use of the resource, monitor its quality and ensure better access to water for the rural population;

10. To assess the distribution of the impact on the population of climate change and natural disasters;

11. To conduct comprehensive evaluations of the services provided by nature, aside from those associated with carbon capture;

12. To strengthen financing and technology transfer to contribute to the improvement of climate change adaptation mechanisms;

13. To include in agricultural development policies the climate variable and the environment's capacity to adapt to climate change; and

14. To broaden agricultural research in order to improve productivity and adapt agricultural products to changes in climate patterns, and to promote the dissemination of information among those working in the sector.

## **Rural development**

Delegations underlined the difficulty of considering the particular identities of agriculture and of rural development without bearing in mind the close links between the two; consequently, some of the comments in the section on agriculture are applicable also to rural development. The meeting identified the following issues:

## Obstacles

1. In some countries in the region, land tenure is characterized by large numbers of small farmers who have very small areas of land; these do not even permit them to meet their own families' needs, leading to population displacement and migration to urban areas, which in turn leads to major social problems. It is recognized, in any case, that there is a variety of institutional arrangements, regimes and national laws designed to ensure land access and tenure.

2. Access to sources of financing and agricultural credit can be difficult, particularly for the rural population.

3. The dispersion of responsibilities and competences among various public bodies prevents a holistic view of rural development and fragments public policies and actions.

4. There are continuity problems in the implementation of public policies designed to achieve changes requiring periods of several years, and in the assessment of their impact.

#### **Experiences and lessons learned**

1. Efforts have been made in some countries, in collaboration with social organizations at the community level, to take a comprehensive approach to issues relating to rural development, such as water, integrated river basin management, regional planning and environmental management tools.

2. Interdepartmental and inter-ministerial bodies should be created in order to promote sustainable rural development, with budgetary allocations and participation by rural organizations and civil society.

#### Challenges

1. To promote rural development through comprehensive development programmes covering the economic, social and environmental dimensions, bearing in mind the problems of access to credit;

2. To recall that promoting rural development processes involves providing services to the rural population and reducing their vulnerability to shocks of various kinds, particularly economic shocks and those relating to natural disasters;

3. To approach regional environmental planning as an opportunity for rural development;

4. To assess infrastructure development in relation to agricultural and rural development, with due consideration of the associated environmental impact;

5. To promote food security;

6. To resolve problems with the coordination of strategies and actions and with the allocation of rural development resources between international cooperation agencies and governments;

7. To promote participation and access to information for civil society in the management of sustainable rural development; and

8. Since the frontiers between rural and urban society are a matter of census areas rather than economics, to redefine those frontiers in light of the fact that agriculture remains the principal economic activity in a large part of the new population centres which are defined as urban.

## Land

Delegations agreed to use the concept of land, which comprises those of soil, water and biota, among other things, and makes it possible to refer more directly to

the management of natural resources, including integrated water management. The meeting identified the following issues:

#### Obstacles

1. Difficulties in access to land and the informality of land tenure were recognized as major problems, particularly in post-war situations, which in turn lead to social conflicts. These phenomena are also closely related to poverty, lack of access to credit and conservation problems in protected areas. In every case, there is a variety of institutional arrangements, regimes and national laws designed to ensure access to and tenure of land.

2. Failure to take account of information on land capability leads to contradictions between sectoral policies, particularly in agricultural, forestry and environmental areas, preventing the best possible use being made of the land.

3. There has been an increase in processes of salinity and nutrient loss, together with water imbalances and insufficient quality and quantity of the available water.

4. It has been observed that in some cases, best practices in agrochemical use are not being applied.

5. There are a number of strategies for the extension of grazing lands which are harmful to the land.

6. There is only limited cooperation among the countries of the region in the area of sustainable land management.

#### Challenges

1. To recognize that degradation and deforestation intensify the effects of natural disasters and damage environmental quality downstream, a process in which the most vulnerable population groups suffer the greatest impact;

2. To advance or broaden land planning;

3. To recognize the river basin as a regional planning unit through the gradual development of integrated river basin management, taking account of quality and availability;

4. To remedy the contaminated condition of water, air and land resources, in order to ensure irrigation, agricultural productivity and food safety; and to improve solid waste collection and disposal systems in rural areas; and

5. To promote existing best practices in agriculture and in agrochemical use.

## Drought

The meeting identified the following issues:

#### **Obstacles**

1. Drought and land degradation are recognized as serious obstacles to the development of the region, which is facing sharp reductions in rainfall that can lead to situations of famine in the Central American countries.

2. The El Niño phenomenon and its associated effects such as drought and negative impact on health are a recurring and constant threat in the countries of the region.

3. It is recognized that extreme and acute phenomena (such as drought and flooding) are related to climate change and variation, which will have considerable impact on the countries' economic activity.

4. There is still a great insufficiency of policies and strategies among governments and international bodies. This is also the case with early-warning systems for forecasting and dealing with cumulative natural disasters such as drought.

5. There is a lack of baselines and indicators to include drought in countries' management systems. Furthermore, the deficiency of data monitoring, processing and follow-up makes forecasting very difficult.

6. Funds earmarked for drought emergencies and the associated food security needs have been diverted to mitigate damage caused by other natural disasters.

7. Agricultural mismanagement promotes desertification and land degradation.

8. There are no regional centres to take an integrated approach to the problem of drought.

### Successful experiences and lessons learned

1. Existence of country reports submitted pursuant to the United Nations Convention to Combat Desertification describing the main challenges, including drought, as central elements in combating desertification;

2. Development of agricultural production practices for coexistence with drought;

3. Development of early-warning systems and drought contingency plans;

4. Development of incentives for public-private partnerships, particularly for irrigation, as part of the strategy to combat desertification; and

5. Existence of software and information mechanisms, such as Retrieval of Data for Small Areas by Microcomputer (REDATAM), available in the countries of the region for drought assessment.

## Challenges

1. To adopt a differentiated approach to the problem of drought within rural development strategies;

2. To quantify the economic impact of drought and its early evaluation in order to apply preventive policies, especially sustainable land management policies;

3. To apply regional planning as a major tool for dealing with the problem;

4. To establish systems to monitor the effectiveness of the instruments applied;

5. To develop and implement early-warning systems for drought, taking into account the possibility of making use of those which already exist for flooding;

6. To promote inter-agency and intersectoral coordination by formulating integrated policies relating to sustainable land management and rural development;

7. To develop mechanisms to deal with the issue of food security, bearing in mind that in some cases the drought process is almost irreversible;

8. To give priority to research and development programmes to tackle the problem of drought, particularly through the development of technologies which make it possible to maintain agricultural production in areas with water deficits, replacing inappropriate practices;

9. To promote networks and ongoing sharing of information and indicators among countries, as well as monitoring the occurrence and impacts of extreme weather phenomena; and

10. To consider the synergies between the principal multilateral environmental agreements in order to tackle the problem of drought.

# Desertification

Noting the high incidence of desertification in the region, which does not affect only dry areas, the meeting identified the following issues:

#### Obstacles

1. The phenomenon of desertification is a broad one. Among other things, it includes soil erosion, chemical damage to soil through the accumulation of salts and pressure on water resources and the decline of natural fertility and productivity as a result of unsustainable practices of agricultural exploitation, which affects food security.

2. Regional and environmental planning is not taken into account. This has a negative impact on degradation and desertification processes and, together with unsustainable practices of agricultural exploitation, causes great uncertainty as to the viability of agriculture in the future and sustainable development.

3. It is difficult to create and implement interrelated national strategies in an integrated manner (in areas such as desertification, biodiversity and climate change) at the territorial level, for which land planning is of key importance, without forgetting the appropriate participation processes.

4. There are difficulties in reaching the most disadvantaged areas, which are distant in geographical terms from public interventions in relation to desertification.

5. There is a lack of visibility of the desertification issue on the national, subregional, regional and worldwide levels.

6. There is a lack of public support and financing for the application of the measures provided for in the United Nations Convention to Combat Desertification and in national plans.

7. There is insufficient coordination between the three conventions, little participation by the actors involved, and a lack of clear definition of their roles and responsibilities, as well as strong competition for the few resources available for their implementation.

## Successful experiences and lessons learned

1. Existence of subregional programmes of action;

2. Existence of indicators and information available in the region;

3. Strategies being developed within the framework of the United Nations Convention to Combat Desertification; and

4. Positive examples of public-private partnerships to combat desertification, particularly between governments and landowners.

#### Challenges

1. To strengthen the application of existing legislation and land planning and promote more sustainable agriculture;

2. To emphasize sustainable land management in order to tackle the common causes of desertification and drought and to find common solutions in light of their close connection with climate change;

3. To strengthen the monitoring of desertification and the state interventions designed to reverse it;

4. To ensure the implementation of national programmes and plans of action against desertification;

5. To study in depth the relationship between land degradation and the use of pesticides and fertilizers, and the effects of mechanization on agricultural production;

6. To develop and disseminate the stock of traditional knowledge in the region in order to apply it to sustainable land management;

7. To increase awareness among the general population and among decision makers;

8. To increase the coherence of existing institutional structures, in relation not only to desertification but also to its connections to climate change and biodiversity;

9. To promote technology transfer and the sharing of successful experiences, and to make use of the technical and academic knowledge present in the region;

10. In view of the fact that the region is suffering the effects of climate change, to obtain a substantial, long-term increase in international cooperation; and

11. To identify obstacles to the application of the United Nations Convention to Combat Desertification and harmonize efforts arising out of the three environmental conventions adopted at the United Nations Conference on Environment and Development, achieving synergies and coordination with other international initiatives, particularly the Millennium Development Goals.