



EUROPEAN COMMISSION

EUROPEAN COMMUNITY

**REPORT ON ACTIVITIES IN SUPPORT OF THE PREPARATION AND IMPLEMENTATION
OF ACTION PROGRAMMES UNDER THE CONVENTION TO COMBAT
DESERTIFICATION (UN-CCD)**

JANUARY 2000-DECEMBER 2001

*Second reporting process on the implementation of the UN-CCD to the first session of the Committee to
review the implementation of the Convention (CRIC- November 2002)*

MAY 2002

EXECUTIVE SUMMARY

This report provides a review of the policies, financial instruments and projects of the European Community, which have contributed and are currently supporting a more sustainable management of dryland areas over the period January 2000- December 2001. This, in accordance with Decision 1/COP.5 relating to the establishment of the Committee for the Review of the Implementation of the Convention (CRIC), whose first meeting is convened from 18 to 29 November 2002 and which should review reports (available or new) from all regions.

The report comprehensively updates the reports already made available in previous years by the Community to the UN-CCD Secretariat, and namely:

- ❑ *European Community - Support to African Countries in implementation of the United Nations Convention to Combat Desertification -Report to the 3rd Conference of the Parties - June 1999 (covering the period 1995- 1999);*
- ❑ *European Community/ Report to the 4th Conference of the Parties to the United Nations Convention to Combat Desertification (COP-4)- June 2000 (covering the period 1994-2000) Support provided in countries in regions other than Africa in implementation of the UNCCD;*
- ❑ *“Addressing desertification and land degradation – The activities of the European Community in the context of the United Nations Convention to Combat Desertification” (comprehensive catalogue of all the projects and programmes financed Europe over the period 1990-99 through relevant Community policies). Report submitted by the EC in December 2000 to the 4th Conference of the Parties to the United Nations Convention to Combat Desertification (COP-4).*

Not all the required data on the volume of aid provided by the Community was available at the time of compiling this report. Whenever this was the case it has been signalled in the document.

Furthermore, given the complexity of the land degradation phenomenon (the number of very different forms that it takes) and the multifaceted Community policy responses it is becoming increasingly challenging to identify projects and activities solely carried out for combating desertification.

Chapter 2 of the report describes the main policy frameworks (Partnership Agreements), corresponding to different geographical regions, governing the activities of the Community in developing countries. This includes actions supported under the European Development Fund (EDF) in Africa, Caribbean and Pacific States, the Mediterranean Partnership, the funds for Asia and Latin America, those for Eastern European and Central Asian countries and thematic budget lines such as the one on Environment and tropical forests in developing countries.

The report quotes interesting projects ranging from local to international scales from all regions in which the Community is active. These cover the promotion of forestry measures to prevent dune encroachment on desert margins, the development of smallholder agricultural production through support for irrigation and land reclamation, integrated rural livelihood and environmental development programmes, water resources management, decentralised co-operation for rural development and a range of measures to promote food security.

Overall by adopting an integrated approach, many of the projects focus strongly on addressing the socio-economic factors, which can contribute to desertification by aiming at improved practices for agricultural land use and water management.

In addition Chapter 2 describes the support provided by the Community under the various research programmes within the EC 5th Framework Research Programme to various activities beneficial for the implementation of the Convention.

Chapter 3 describes the actions regulatory and non regulatory) undertaken to address land degradation issues within the Community territory covering in part certain actions targeting those countries candidates for the accession to the EU. These include Environmental policy (Soil, Water, Chemicals, Impact Assessment and Habitats), Agricultural Policy, Regional Policy, Transport Policy, Research Policy and the European Environment Agency related activities.

Finally Chapter 4 of the report represents in the Community view the most innovative and interesting contribution to the CRIC process since it tackles some fundamental cross-cutting themes which have been identified by the last Conference of the Parties as being crucial for an improved implementation of the Convention. Particularly, issues such Participatory Processes, involvement of Civil Society, land tenure and synergies among Multilateral Environmental Agreements did deserve a political analysis in the report also in view of the debate during the preparatory phase up to the first meeting of the CRIC.

Valuable input for the production of section 1 of Chapter 4 of the report has been provided by the “european networking initiative on Desertification (eniD), a platform of national and international NGO networks active in Denmark, France, Germany, Norway, United Kingdom and in the Mediterranean basin.

1. INTRODUCTION

The Community is committed to the objectives of the United Nations Convention to Combat Desertification (UN-CCD), and has consistently promoted action to address desertification at the local, national, regional and international levels. It has been an active participant in the Intergovernmental Negotiating Committee in charge of the elaboration of the Convention (INCD) negotiations and in the Conferences of the Parties and has also provided financial support, through the UN-CCD Secretariat, to facilitate the participation of developing country delegations at these meetings. The Community ratified the CCD in March 1998, joining all 15 Member States of the European Union.

The total Community aid budget for 2000 broken down by geographical zone:

Mediterranean and Middle East	1005.29 M€
Asia	458.58 M€
Latin America	220.30 M€
South Africa	123.54 M€
New Independent States	447.75 M €
Central and Eastern Europe (including former Yugoslavia)	1985.32 M €

The Community has a strong record of support to programmes and projects, which address the problems of dryland areas throughout the world. Over the period 1990-1999 for instance, a contribution of approximately € 1.1 billion Euro has been committed to over 600 development projects in dryland areas of Africa, Asia and Latin America. The Northern Mediterranean region has also benefited substantially from Community funds.

The European Commission has recently made significant pledges¹ to step-up Community participation in the various UN-CCD fora and initiatives with the objective of revitalising the Convention also in view of the incoming World Summit on Sustainable Development.

This undertaking is two-fold: at international level it implies an increased and improved co-operation with bilateral and multilateral donors active in the field so to get the most out of possible synergies. On the European Commission internal side it requires awareness raising activities on the objectives of the Convention stronger interdepartmental co-ordination and enhanced collaboration with the Commission delegations operating in the affected countries. In this respect the ongoing and far-reaching reform of the management of EC external assistance, commenced in 2000, will considerably strengthen the Community ability to use the available resources to their full effect. This includes in particular strengthening the strategy and programming work, an improved implementation of aid programmes, and a much stronger role for the Delegations in the field in the preparation and supervision of EC assistance, thus enabling a more immediate response to partners needs. Furthermore, as far as partnerships with Member States are concerned, the new approach should represent an opportunity to make real progress with the search for complementarity, for improving working practices, and for sharing information in full consultation.

The reinforcement of dialogue with civil society organisations (southern and northern) as fully-fledged actors in the process of implementation of the UN-CCD is another primary avenue that the Community has started to pursue. This approach involves encouraging a genuine dialogue on those development cooperation and environmental issues at the heart of the Convention to which non-state actors can contribute bringing real added value in terms of experiences and knowledge. As an example European NGOs active in the field of combating desertification have provided an important input to the Community submission for the work programme of the Group of experts to be established under the authority of the Committee on Science and Technology of the Convention.

¹ EU Statement at COP-5 October 2001 and Meeting of 22.1.2002 in Brussels between Commissioner P. Nielson and the Executive Secretary of the UN-CCD H. A. Diallo

2. ADDRESSING DESERTIFICATION IN DEVELOPING COUNTRIES

The European Community's Development Co-operation is founded on Title XX of the Treaty on European Union and is geared towards the twin goals of poverty alleviation and sustainable development.

Three main policy frameworks, corresponding to different geographical regions, govern the activities of the Community in this regard. Each of these frameworks supports the funding of relevant projects on a national or regional context, to address the problem of dryland degradation. In addition, other funding instruments are made available to provide resources for various thematic issues and research initiatives. This wide range of instruments reflects the EC's ability to respond to a variety of needs and circumstances.

2.1 Partnership Agreements

The European Community has a longstanding tradition of concluding Partnership agreements with developing countries under which it provides them with, *inter alia*, financial and technical assistance. These agreements, represent also a powerful means to promote effective action against land degradation thus fulfilling one of the most important recommendations of the United Nations Convention to Combat Desertification (UN-CCD), the one regarding fostering partnership arrangements. These partnership frameworks provide affected developing country Parties with opportunities to seek Community assistance in the implementation of their national and regional action programmes to combat desertification. In this regard the Community is in a unique position since it does not need to conclude new partnership agreements for the purpose of the Convention.

2.1.1. The Cotonou Agreement

The ACP-EU Partnership Agreement signed in Cotonou in June 2000, is a comprehensive new aid and trade agreement between 77 ACP (African, Caribbean and Pacific) countries and the European Union (the Community and its Member States) covering a twenty-year period.²

The Cotonou Agreement builds on twenty-five years of ACP-EU co-operation under four successive Lomé Conventions.³ This provided a model of development co-operation based on the principles of partnership, dialogue, contractually agreed rights and obligations and predictability of (financial) support. A five-year financial protocol providing the necessary resources to the ACP through the 9th European Development Fund (EDF) accompanies the Agreement. The EDF is the most important financial instrument to implement the aims of the Cotonou Agreement. The 9th EDF, will receive total funding of 13.5 billion € over five years⁴. In addition, outstanding funds from previous EDFs can also be used (approximately 10 billion €).

The EDF is implemented according to five-year indicative plans setting out the development priorities of each country. These plans are drawn up and proposed to the Commission by each ACP State. The extent to which any sector is addressed within these National Indicative Programmes (NIPs) will depend largely

² The Cotonou Agreement will enter into force when ratified by the 15 Community Member States and by 51 of the 76 signatory ACP countries. At the date of 30 April 2002 five EU Member States and 45 ACP countries had ratified the Agreement.

³ There have been four Lomé Conventions since 1975. The first three, signed for a period of five years each, placed altogether € 16 billion at the disposal of ACP states. Lomé III placed strong emphasis on food security with drought and desertification control specifically addressed within the agricultural provisions. Lomé IV was signed in 1990 for ten years. Revised in 1995 (Lomé IV bis) with a number of innovations such as provision for policy dialogue in poverty reduction and sustainable development perspective included also a Protocol on the sustainable management of forest resources with a clear link to measures against desertification.

⁴ Total funding is divided up as follows:

- Long term development support: national level: € 10 billion; regional level € 1.3 billion
- Investment facility (managed by the European Investment Bank) € 2.2 billion

on the priorities identified by the governments of the ACP states themselves and on the overall financial envelope decided by the Commission for each country.

The agreement defines a development perspective, which combines a political dimension, trade and support for development strategies. It rests on five interdependent pillars:

- ❑ Poverty reduction and sustainable development as the core objectives
- ❑ A strengthened political dimension
- ❑ Enhanced participatory approaches
- ❑ New framework for economic and trade co-operation aiming at the gradual integration of ACP countries into the world economy
- ❑ Far reaching reform for financial co-operation

Development strategies shall reflect international commitments and ensure equality of partners and ownership of reforms, ensuring full sovereignty of ACP states.

Development strategies should be tailored to the individual situation of each ACP country, taking into account other donors programmes. In this regard one single Country Support Strategy (CSS) for each ACP State, covering implementation of all operations financed, is established in dialogue with the recipient country. Based on an indicative resource allocation over a five years period the CSS is then translated into rolling forward Indicative Programmes. EC Delegations are key- players in the programming process so to ensure a fully decentralised approach.

While reflecting the international debate on poverty reduction the Agreement provides a coherent enabling support framework for ACP development strategies, ensuring complementarity and interaction between the economic, social, cultural, gender, institutional and environmental dimensions of policies and strategies.

This integrated approach -which reflects the complex and multidimensional nature of poverty- places emphasis on three focal areas for support:

- ❑ Economic development
- ❑ Social and human development
- ❑ Regional Co-operation

At the same time the Agreement establishes the principle of mainstreaming into all areas of co-operation the following three horizontal/"cross cutting" themes:

- ❑ Gender equality
- ❑ Environmental sustainability
- ❑ Institutional development and capacity building.

Article 32 of the Agreement recognises co-operation on environmental protection and sustainable management of natural resources as a fundamental supporting tool for ensuring compliance with international environmental commitments. Desertification, drought and deforestation are specifically cited as one of the main fields for such collaboration.

Furthermore, in accordance with Article 20(3) of the Agreement, a compendium of texts on co-operation strategies intended to provide policy guidelines in specific areas or sectors of co-operation identifies the protection of natural resources and of the environment, the halting of the deterioration of land, forests and aquatic ecosystems, the restoration of ecological balances, the preservation of natural resources and their sustainable use, as basic objectives that ACP countries shall strive to achieve with Community support.

In the same context effective mainstreaming of the environment into every sphere of ACP-EU co-operation is linked to the enhancement of existing capacities in ACP countries. Where necessary appropriate measures have to be identified to assist in the implementation of multilateral environmental agreements (MEAs) also in the perspective of building the capacity of the public, private and civil society sector in ACP countries. Again and *inter alia* the CCD is cited here as one of the MEAs whose provisions shall be taken into account in the formulation of country strategies.

2.1.1.1 Implementing external aid in ACP countries relevant for desertification

In 2000 the need for an integrated environmental policy and its impact on vital questions such as self sufficiency and food security has driven EDF financing towards three main directions:

- environmental policies/institutional support
- biodiversity
- in situ conservation.

In the period 1985- 2000 181 projects totalling € 244 million have been committed. In 2000 51 of them were still ongoing. The dividing up of support between these different interventions tried to balance sectoral political and institutional support, as well as in situ actions with the objectives of conservation and biodiversity. 24 new projects amounting to 63 € were supported.

In 2001 environmental work has been very intensive in terms of activities carried out in the fields of Conservation and Wildlife (C&W), Forestry (For) and Sustainable Management of Natural Resources (SMNR) with the implementation of 7 new programmes/projects for a global amount of € 55.1 million, and with the approval of four new programmes totalling € 26 million.

Africa

The interventions promoted by the EC throughout Africa cover the very diverse range of measures promoted in the CCD. Activities involving soil and water resource conservation are included within many different types of development projects. The majority of those identified aim specifically at improving agricultural methods and pastoral practices or at reforestation to improve vegetative cover or replenish woodlands which have been over-exploited for fuel. However, soil conservation efforts are commonly included in a number of projects primarily aimed at managing resources in wildlife and natural parks which otherwise become vulnerable to environmental degradation. In many affected countries these extensive parks act as barriers to the encroachment of desert lands. Other projects have had an important indirect impact towards addressing desertification such as those, which promote the development of alternative energies, and raising awareness amongst local populations and officials.

The major ongoing programme in this sector is ECOFAC, with a third phase started in 2000 for € 23 million with activities related to the conservation of biodiversity, the sustainable use of the natural resources such as forests for sustainable development and lasting improvements in people's well being. Programme activities, co-ordinated by a recently strengthened environmental unit based in Libreville, are taking place in 6 Countries of the Congo forestry basin. The programme has managed to substantially improve the capacity and the awareness of the national authorities in the management of their natural resources. For example in 2001 the size of the Odzala National Park (Congo Brazzaville) has been increased by five times from 2800 Km² to 13 280 Km² and the Monte Alen National Park (Equatorial Guinea) has been extended from 1004 Km² to 2000 Km². Furthermore, it is important to note the establishment of the Network of Protected Area of Central Africa (RAPAC). The willingness of the five world heritage sites in the Democratic Republic of Congo to join the network and the new membership of the Zakouma National Park in Chad are going to give a very positive impulse to RAPAC. Another important activity is the dialogue with the logging companies in order to draft or to improve the concession management plans and to involve the local communities in the control of the illegal bush meat trade and in the establishment of communal forest plots.

Furthermore, several regional programmes have also been financed which directly or indirectly address desertification. The European Community has supported regional institutions such as the Inter-State Committee on Combating Drought in the Sahel (CILSS), the Intergovernmental Authority on Development (IGAD) and the Southern African Development Community (SADC) all of which have made commitments to improved management of environmental resources particularly in the context of the CCD. For example in West Africa, the European Community is the main provider of funds to the CILSS, with important contributions to the diagnostic food security programme (DIAPER III), the regional solar energy programme, the PFIE, the regional reforestation and soil and water conservation programme (PRECONS) and the Sahel 21 reflection on the future of the Sahel. This latter programme has sought to enable Sahelians to identify their priorities for the next twenty years as regards socio-

economic, cultural, political, social, monetary, environmental policy issues, as well as priorities for health and education and private sector development.

Caribbean and Pacific Regions

Detailed information on the Community interventions in these two regions and relevant for the implementation of the Convention is not currently available.

2.1.2 The Euro –Mediterranean Partnership

The countries bordering the southern and eastern coast of the Mediterranean are severely affected by dryland degradation where large areas suffer serious soil erosion. Though the average rainfall of most of the region is below 650 mm per year, one single rainfall event can reach devastating strengths leading to serious damage to arable lands and hillslopes.

Formerly, funding for the Southern and Eastern Mediterranean region was programmed on the basis of bilateral agreements financed under the consecutive five-yearly Financial Protocols. These agreements were progressively replaced by Association Agreements within the framework of the Euro-Mediterranean Partnership (EMP), which was adopted in July 1996. Mediterranean partner countries are Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestinian Authority, Syria, Tunisia, and Turkey.

The main financial instrument for the implementation of the EMP is known as MEDA, which is intended to support financial and technical measures to accompany the reform of economic and social structures. In 2000 the funds committed to the EMP activities amounted to € 1.002 million, most of which within the MEDA Framework. The new MEDA II programme (2000-2006) with a budget envelope of € 5.35 billion aims to improve implementation of the reform programmes and projects.

2.1.2.1 Implementing external aid in Mediterranean Countries relevant for desertification

Significantly, the enhanced relations under the EMP gave the impetus for the preparation of a Short and Medium term priority environmental Action Programme (SMAP) which was launched in November 1997 and mostly in place by the end of 2000. This is a framework programme for the protection of the Mediterranean environment.

Combating desertification in the region is one of the five priority areas for funding under the SMAP. The urgent actions which are referred to within this priority area aim at promoting or maintaining sustainable agricultural practices, mitigating the effects of drought, increasing water availability where possible by using appropriate harvesting techniques and preventing salinisation of soils, preventing and combating forest fires, while protecting the existing forest ecosystems and encouraging appropriate reforestation and combating erosion and dune encroachment. Incentives are also available under this Programme for local populations in order to avoid abandoning of the agricultural land.

During 2000 contracts relating to six regional projects totalling more than € 5 million EC contribution were signed implementing the programme's first phase. Major source of funding is MEDA, although other existing funds may be used and efforts are underway to attract additional public and private donors.

Among these, one project in Egypt, Tunisia and Turkey to promote sustainable use of agricultural land through the introduction of organic farming methods for a total cost of € 1.1 million was endorsed in the priority area "combating desertification". It obtained an EC contribution of € 0.8 million.

In 2001 nine regional projects were selected and endorsed for a total cost of € 29.7 million, with an EC contribution of € 23.3 million.

Among these, two projects in the category "combating desertification" were approved:

- A demonstration project in Morocco and Tunisia on strategies to combat desertification in Arid Lands with direct involvement of local agropastoral communities in North Africa for a total cost of € 4.2 million (EC contribution of € 3.4 million).

- A project in Morocco and Tunisia on monitoring and evaluation systems for National Action Plans for desertification in Maghreb countries or a total cost of € 2.2 million (EC contribution of € 1.5 million).

Furthermore, the European Union's main financial instrument for supporting its internal environmental policy (LIFE) has been extended to apply to third countries. The objective of the "LIFE-Third Countries" programme is to contribute to the establishment of capacity and administrative structures and development of environmental policies in third countries bordering on the Mediterranean and the Baltic Sea. Projects selected in 2000/2001 cover 13 of the 16 eligible countries⁵. Twenty-six projects will be implemented in the Mediterranean region and two in the Baltic region benefiting of an EC total contribution of € 9 million. Within this context two projects concern desertification. A project to monitor desertification in southern Mediterranean countries (Morocco, Tunisia and Algeria) with a community contribution of € 0.3 million. A capacity building programme to improve coastal land degradation monitoring in Lebanon and Syria with a Community contribution of also € 0.3 million.

2.1.3 The ALA Agreements

The Community designation of Asian and Latin American countries as "ALA" is a terminology unique to the EU that serves to classify its diverse aid recipients in Asia and Latin America into one category.

Thirty-three countries⁶ in Asia and Latin America have signed Cooperation Agreements with the European Union, some at the bilateral level and others at regional level. Funds are made available under these agreements and are renewed every four years.

In 1992, a Council Decision adopted in direct response to the Rio Earth Summit required that 10% of ALA funds be committed to projects concerning the protection of the environment and natural resources over the period 1991-1995. An external evaluation in 1996 of environmental performance of EC programmes in developing countries concluded that this target has been reached.

New regulations on cooperation with Asia and Latin America aiming at improving effectiveness of programmes are currently in preparation at Commission level.

2.1.3.1 Implementing external aid in Asia and Latin America relevant for desertification

Latin America

The active role played by several Latin American countries in the wider international process of building MEAs has led to a relatively close correlation between the areas defined for EU co-operation funding and international commitments undertaken by the recipient states in the regions.

Specific environmental problems and therefore assistance needs of Latin American countries are encompassed by the five key regional agreements between the Community and Mercosur, Mexico, the Andean pact, Chile and Central America. Among the priorities considered most relevant by these regions are cited soil contamination, erosion desertification and deforestation (Chile); protection and sustainable development of soil resources, water woods, rural landscape (Andinos, Central America, Mexico).

The region is one of great geographical diversity with considerable natural resources as well as exceptional environmental wealth. The Amazonian area forms part of the planet's richest areas in terms of biodiversity and the world's largest temperate forest mass lies between Chile and Argentina. These forests are subject to heavy human pressure because of the search for land, forestry, mining and uncontrolled land clearance. Deforestation has a negative impact on rural communities as on the environment. Poverty is an important factor of environmental pollution because of the search for land that

⁵ Albania, Algeria, Bosnia-Herzegovina, Croatia, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey, the West Bank and Gaza and the Baltic shoreline of Russia (Kaliningrad and St. Petersburg regions).

⁶ China, Mongolia, Bangladesh, India, Nepal, Pakistan, Sri Lanka, Bhutan, Cambodia, Indonesia, Laos, Philippines, Thailand, Vietnam, Yemen, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela.

leads to deforestation, soil erosion and drought, phenomena that further compound the vulnerability of poor people.

Two relevant projects have been funded in the past under the main ALA Funds in Latin America for a total financing cost of € 17 million. The first is an integrated rural development programme in the two northernmost regions of Chile at the edges of the Atacama desert and the second is a project aiming at the improvement of rural smallholder agricultural production in the dry northern region of Nicaragua.

At present EC co-operation with Brazil amounts to some 210 million Euro in terms of projects under implementation. The sector where most financial resources are allocated to ongoing projects is the environment (€ 80 million) mainly in the framework of the Pilot Programme for the Conservation of Brazilian Tropical Forests (PPG7) extremely significant also in educational terms. The RESEX project is one of the most successful components of the PPG7 and aims at supporting the “extractive reservations “ which the Brazilian government set up more than ten years ago and which are very special ecological areas. Native communities living in these areas receive long term land leases and are authorised to use natural resources in exchange of a environmentally sound manner with very positive ecological and economic results.

The majority of actions aimed at environmental protection and sustainable use of natural resources in Latin America have been funded under the thematic budget lines Tropical Forests and Environment in developing countries budget lines (see below for details.)

Asia

The main EU assistance in Asia in 2000-2001 has been focussed on direct poverty reduction measures, for example through support for rural development, infrastructure and institutional capacity building. The environment sector has also received support with substantial programmes devoted to areas such as forest protection (Indonesia and Philippines) biodiversity and environmental technology.

Land resources in densely populated dryland areas throughout Asia are put under severe pressure as a result of drought conditions and other natural factors compounded by intensive exploitation. Since the late 1980s, most of the rural development projects in Asia have incorporated environmental components, particularly reforestation, in order to protect against erosion resulting from unsound land management practices.

Ten projects have been co-financed from 1990-1999 with respective Governments relating to the protection of forest resources and severely degraded pastoral and agricultural land in dryland areas of Asia covered by the ALA Treaties. The majority of these projects are in Northern and Eastern India, and several have adopted a successful participatory approach and in particular focusing on empowering the role of women in community decision making.

Major ongoing activities in the area relating to the implementation of the UN-CCD include:

- the “Haryana Rehabilitation of Common Lands in Aravalli Hills ” project (1990 – 2001 with an EC contribution of € 23.2 million) to protect commonly owned village lands by restoring vegetation and reducing soil erosion;
- the “Haryana Community Forestry project” (1995-2004 with a Community contribution of € 23.3 million) to build on the experiences of working with village level institutions in the development of community based sustainable management of forests and natural resources;
- the project “Community management of natural resources in Gujarat” (1994-2001 with an EC contribution of € 14 million) aiming at increasing household incomes and reverse environmental degradation and migration;
- The Ravine Stabilisation in Uttare Pradesh (2000-2005 with an EC contribution of € 7.900.000 million) aimed at soil stabilisation and conservation of forest to improve lives of rural communities in the ravines.
- The Environmental rehabilitation project in North West frontier Province and Punjab (1996-2003 with an EC contribution of € 25.200.000 million) aimed at halting ongoing processes of environmental degradation in three regions of Pakistan through integrated measures of

rehabilitation/conservation of natural resources; sustainable socio-economic development and community participation.

- In Indonesia the South Sumatra Forest Fire Management Project (2001-2009 with an EC contribution of € 8,500,000) represents the continuation of a previous programme "Forest Fire Prevention and Control - EC Contribution of € 4.100. 000 in the period 1999 - 2001), located in Palembang (South Sumatra). Its objective is to establish a system for the rational and sustainable management of the country's land and forest resources based on a decentralised mechanism involving all concerned stakeholders. It represents a continuing support to an important component of the EC-Indonesia Forest Programme (ECIFP).

2.1.4 Agreements with Eastern European and Central Asian countries and UN-CCD implementation

The Partnership and Co-operation Agreements (PCA) concluded with the partner states of Eastern Europe and Central Asia (NIS) are the basis of the relations with these countries. The main objectives of that relationship are the reinforcement of democracy and the rule of law and the promotion of human rights and the transition towards a market economy. Those objectives are also the basis of the TACIS Programme, which provides the framework for technical assistance to the NIS⁷.

The protection of environment and the sustainable use of natural resources are other main objectives of the relationship and assistance with the NIS. The PCAs include articles on environmental co-operation and the integration of environmental considerations in other sectors. Moreover, environmental co-operation is a priority area for the TACIS regional programmes.

TACIS assistance is identified and defined in multi-annual Indicative Programmes and annual Action Programmes. The Regional Co-operation and the Cross-Border Co-operation Indicative and Action Programmes include most of the TACIS support to environmental activities. Indicative Programmes 2000-2003 were adopted in 2000 and were revised and updated in 2001 on the basis of strategy papers. Main domains of environmental-related assistance are: the Black, Caspian and Aral Seas environmental programmes, transboundary rivers, drinking water, climate change, cleaner production, policy development and implementation, environmental awareness and education, environmental investment preparation and co-financing and the establishment of the Regional Environmental Centres (RECs).

The need to combat desertification is mainly addressed in the support to the Aral and Caspian Sea programmes and indirectly tackled through assistance in other domains, such as on climate change, policy development and implementation, support to the RECs, etc.

The Aral Sea is seriously affected by desertification and a real danger of drying out, in addition to the destruction of the eco-system, bio-diversity and economic activities, due to the massive expansion of cotton production and irrigation schemes on the two rivers that provide its only recharge: the Amu Darya and the Syr Darya. TACIS assistance to the Aral Sea Basin Programme is based in the project WARMAP (Water Resources Management and Agricultural in Central Asian Republics). A first support of €4.75 million was provided for the period 1995-1997, followed in 1998-2000 by a second phase (€2.5 million). That support focused in particular on the preparation of interstate agreements on water management, creation of regional information systems (WARMIS) and analysis of water use and farm management (WUFMAS) as well as overall assistance to the UNDP/UNEP/WB/GEF project.

Support to a WARMAP a third phase project has been adopted in 2000 (€2.5 million) and should start later in 2002. Under the condition that the countries concerned will sign the relevant agreements prepared under previous TACIS assistance, this project will continue providing support to the Interstate Agreements, improved river basin management and dissemination of information.

⁷ TACIS is a technical assistance programme for 13 countries of Eastern Europe and Central Asia (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan), with economies in transition. The Programme aims to support countries in Eastern Europe and Central Asia in their transition to democracy and a market economy.

The Caspian Sea is mainly threatened by pollution from the Volga and other rivers and spillage from the oil and other industries, which have a negative effect on bio-diversity and penalises fisheries and tourism activities, but is also threatened by increased desertification in the coastal areas. TACIS assistance to the Caspian Environmental Programme (€6.5 million) started with a project in 1997 (phase 1) and was followed by a second phase project 2000-2001, finalised in December 2001. That assistance has been instrumental for establishing the initial framework of the Programme, supported the main part of technical research necessary for developing the Strategic Action Plans as well as 4 Caspian Regional Thematic Centres, including one for Combating Desertification, based in Ashgabad (Turkmenistan). The work on desertification issues focused on the identification of hot spots, development of desertification maps, socio-economic analysis and databases.

Further support (phase 3) of €4.0 million has been provided in 2001 and included in the Indicative Programme 2002-2003. This project will continue assisting the concerned NIS meeting their commitments under the Caspian Environment Programme, especially as regards the management of fish resources, pollution reduction, prevention and monitoring, including oil contamination, water level and the quality of the sea.

2.1.5 Assistance to candidate countries of Central and Eastern Europe

Thirteen countries (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey) have applied for EU membership. These candidate countries are all undergoing a comprehensive reform process in order to meet the accession criteria for EU membership and to ensure the proper implementation and enforcement of European Union's rules and standards (the '*acquis communautaire*') before accession. The negotiations will proceed in line with the 'road map' and the timetable endorsed by the European Council, which foresee the conclusion of the negotiations with the best-prepared countries by the end of 2002.

Three pre-accession funds (PHARE, ISPA and SAPARD)⁸ assist ten Central and Eastern European Countries and finance expenditure on the adoption of the existing body of Community law and on development in general.

Apart from PHARE and ISPA the Special Accession Programme for Agriculture and Rural Development (SAPARD) with an annual envelope of € 0.52 billion should be cited since relevant for the UN-CCD implementation. In operation since 2000 it helps the applicants prepare for the Common Agricultural Policy, in particular for its standards of food quality and consumer and environmental protection. Separate aid programmes were also drawn up in 2000 for Cyprus, Malta and Turkey, carrying on from earlier programmes run under the financial co-operation and MEDA agreements.

SAPARD, based on a fully decentralised approach in the applicant countries, implements numerous small scale projects throughout the rural areas. Particularly relevant for this report are two measures. The *Land improvement and reparation* programmes operational in the Czech Republic, Latvia and the Slovak Republic accounting for € 46 million in the period 2000-2006. And the *Forestry afforestation of agricultural areas* programmes operational in Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and the Slovak Republic benefiting of an envelope of € 167 million in the period 2000-2006.

2.2 Thematic Funding sources

In addition to the main funding sources described above, a series of thematic budget lines has been introduced at the instigation of the European Parliament in the annual budget of the European

⁸ The PHARE programme with an annual envelope of € 1.56 billion has been funding modernisation in the Central and Eastern European Countries (CEEC) for over ten years. In 1997 and 1999 it was modified the better to meet the requirements of accession and to prepare the countries for the EU Structural Funds, those financial instruments providing support to the poorer regions to strengthen the Union's economic and social cohesion). It already finances a raft of projects, including cross-border co-operation schemes, in areas that will be covered by the Structural Funds. The Pre-Accession Structural Instrument (ISPA) with an annual envelope of € 1.04 billion has been funding transport and environmental schemes in all the CEECs since early 2000, along the same lines as the Cohesion Fund model designed for the least prosperous EU members. It provides direct financing for environmental projects to help apply directives that call for heavy investment and for transport projects directly connected to the ten pan-European corridors that have been identified in these countries.

Community. These characteristically have lower budgets and tend to promote pilot projects, small-scale NGO projects or research studies. They are generally focused on particular sectors rather than geographical areas.

2.2.1 Environment and forests

Among these actions an initiative to support the environment in developing countries was started in 1992. Initially limited to combating desertification, this budget heading has steadily expanded to become a fully-fledged instrument for actions, which help integrate the environmental dimension in the development process.

This development was influenced, in particular, by the Rio Conference in 1992, which adopted a strategy for sustainable development. Indeed, it was as part of the preparations for this Conference that the budget heading for the conservation and sustainable management of tropical forests and other forests in developing countries was created in 1991.

The total appropriations devoted to the environment and to forests⁹ for the period from 2000 to 2006 are € 93 million and € 249 million respectively. This may not seem much compared with those made available to the geographical financial instruments (European Development Fund, the Asia, Latin America and Mediterranean plans), which can also finance actions in the same areas.

Within the Environment line one of the five priority topics concerns improving practices for the conservation of soils and farmland, management and protection of forests and the fight against desertification.

Other priority areas include the preservation of biological diversity through the conservation of ecosystems, the improvement of the urban environment and policies of land use management and the use of environmentally sensible technologies in the field of energy. The budget line may finance EU policy analyses and environmental impact assessments as well as pilot environmental projects.

The environment and forests thematic actions present specific advantages, since they make it possible to:

- sustain global and regional initiatives, particularly in relation to MEAs
- have a flexible choice of partner states (including medium income countries) of global importance for the environment such as Mexico, Brazil or certain South-East Asian countries;
- give direct support to NGOs and the civil society organisations of developing countries;
- commit to pilot initiatives.

230 projects were in progress¹⁰ during the year 2000. 31 new projects received funding approval, to a total of € 32.1 million. The Commission's contribution varies from € 0.2 million to € 2 million per project, with an average of € 0.7 million for environment and € 1.1 million for forest projects.

Six projects received major EC support of over € 1.5 million:

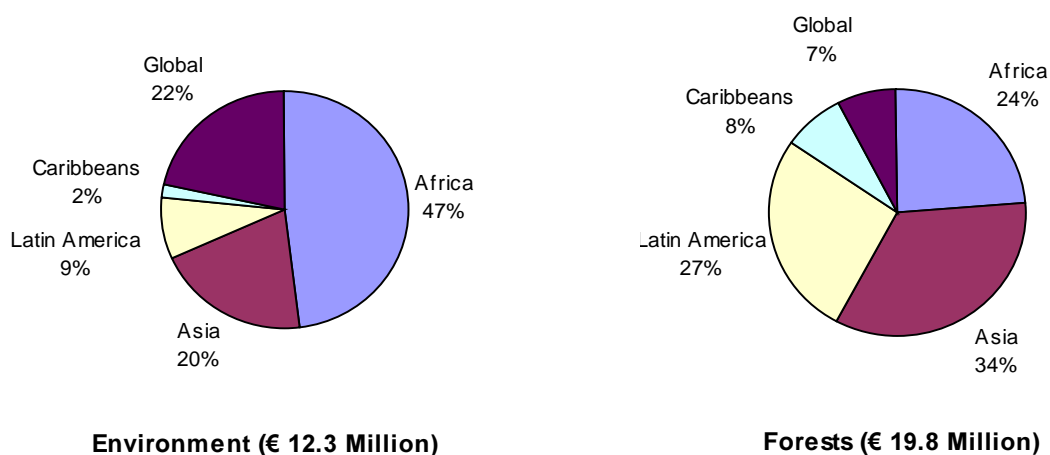
- farm forestry and natural resources conservation project around the *Arabuko Sokoke – Goshi, Coast Province* of Kenya (€ 1.6 million);
- creating agarwood supplies in *Vietnam* (€ 1.7 million);
- community forestry support project in *South East Asia* (€ 2 million);
- development and demonstration of sustainable forest management applied by community and other non-governmental forest managers in *Belize* (€ 1.6 million);
- consolidation of the socio-environmental information system for the forest regions of *Brazil* (Brazil, € 1.9 million);

⁹Budget heading B7 – 6200 results in 2001 from the merger of the two previous budget lines, B7-6200 and B7-6201. These aimed on one side to encourage (Regulation no. 2493/2000) environmental measures adopted in Community development co-operation programmes and on the other (Regulation no. 2494/2000) to support operations in favour of the preservation and the sustainable development of tropical forests and other forests in developing countries.

¹⁰Co-financed out of the various environment and forests budget headings

- supporting sustainable livelihoods for rural and forest communities (*Bolsa Amazônia* project, € 1.6 millions).

Geographical distribution of support by regions and by programme (B7-6200)



	ENVIRONMENT		FORESTS	
Africa	5.899.265	48,1%	4.748.603	24,0%
Asia	2.433.159	19,8%	6.634.313.	33,5%
Latin America	1.048.348	8,6%	5.361.714	27,1%
Caribbean	206.200	1,7%	1.595.115	8,1%
Global	2.670.872	21,8%	1.472.778	7,4%
TOTAL	12.257.844	100%	19.812.523	100%

In 1999 and 2000 a total of 11 projects contributing to the implementation of the UN-CCD related were financed under the budget line for a total Community contribution of € 17 million. Details of the projects are provided below.

For 2001 a precise breakdown of the resources made available for the implementation of the UN-CCD under the budget line is not currently available. However, for reference 29 projects have been selected for a total EC contribution of € 35 million.

Projects co-financed under budget line B7-6200 (Environment and Tropical Forests) in 1999 and 2000 which contribute to the objectives of the UN Convention to Combat Desertification (UN-CCD)

Region	Project Title	Target Country	EC contribution (euros)	Objective(s)
Africa	Forest Resources Creation in the Sefwi Wiawso District	Ghana	889. 920	The project aims at reducing pressure on natural forest resources in the Sefwi Wiawso District within a sustainable development framework, by creating forest resources, improving farming system by integrating trees, halting and reversing land and ecosystem degradation.
	Restauration et Conservation des Forêts dans le Département du Noun (RECOFON)	Cameroon	1. 101 693	Valoriser les potentiels agroforestiers dans les zones de transition dans le département du Noun, afin d'améliorer durablement les conditions de vie de la population et motiver leur intérêt pour la restauration et conservation du département.
	Gestion des ressources forestières dans la région de Fort-Dauphin	Madagascar	1. 135 197	Les objectifs globaux du projet à long terme sont d'assurer le maintien des fonctions biologiques et économiques importantes des écosystèmes forestiers dans le sud de Madagascar et de combiner la gestion sur base communautaire avec des méthodes et politiques durables de gestion des ressources forestières.
	Decision making in the Kuiseb River Catchment: Interactive Environment Learning and Action	Namibia	1. 236 927	Decision makers at all levels managing natural resources of the Kuiseb River catchment have enhanced capacity to understand and manage freshwater and other terrestrial natural resources in a more sustainable manner.
	Farm Forestry and Natural Resources Conservation Project around the Arabuko-Soko-Goshi, Coast Province of the Republic of Kenya	Kenya	1. 682 632	The conservation and sustainable utilisation of natural resources by and for the local communities and private farmers around the Arabuko-Soko Forest Reserve and reduced threats to the conservation of natural resources in and around Arabuko-Soko forest through increased benefits from ecologically and economically sustainable farm forestry activities.
Asia	Tropical Forestry Small Grants Programme	Pakistan, Philippines, Thailand and Vietnam	15 .132 500	The programme aims at complementing existing financing instruments to the benefit of poor and underprivileged forest user groups, such as indigenous people and traditional forest dwellers who do not have ready access to development co-operation funding by pursuing the following key objectives: (i) Act as a catalyst to promote and demonstrate community-based management and resource use that benefit tropical forests; (ii) Draw lessons from local level experience and support the spread of successful community level strategies and innovations among all stakeholders; (iii) Build local capacity at grassroots level through partnership and networks of local stakeholders for action to tackle problems that are contributing to forest destruction and degradation.

Region	Project Title	Target Country	EC contribution (euros)	Objective(s)
	Advancing Policy Reform against Fire in Southeast Asia	ASEAN countries	986 496	To secure the essential policy reform at national and regional level within South East Asia that provides a legislative and economic basis for controlling harmful anthropogenic forest fires.
	The Underlying Causes and Impacts of Fires in Indonesia	Indonesia	981. 625	The overall objective is to enhance the understanding of key policy makers in Indonesia at the national and provincial level with regard to fire prevention and suppression, and to facilitate the adoption of improved options. The specific objective is to determine the underlying causes and impacts of land and forest fires in Indonesia.
Caribbean	A Regional Initiative to Promote Community Based Natural Tourism, Environmental Education and Conservation of Islands Ecosystem in Eastern Caribbean	Eastern Caribbean	1 .354 039	The overall objective is to strengthen regional initiatives within the Eastern Caribbean to promote community based nature tourism and to improve the conservation of island ecosystems. The specific objectives of the project are: (1) to strengthen regional NGO co-operation on community based initiatives for nature tourism and conservation of island ecosystems in contrast to isolated actions; (2) to develop a series of specific nature trails and heritage sites and other nature friendly tourism initiatives on 5 islands to create a potential for increased revenues for the local communities involved; (3) to undertake a series of training courses for tour operators and other local site users on all 8 islands to promote the sustainable use and management of the 'eco-sites' by both tour operators and tourists; (4) to promote the conservation of valuable island ecosystems through on site actions on 3 islands; (5) to increase the capacity of women to diversify their revenues and, in particular, benefit economically from nature tourism (6) to raise awareness for the need to conserve the remaining natural wealth of the East Caribbean islands.
Global	OECD/DAC Donor – Developing Country Dialogue on National Strategies for Sustainable Development	Global	625. 794	The objectives of the project are (a) to help developing countries reach the UN target of 2002 and the DAC target of 2005 for developing and implementing, respectively, needs and (b) To assist the OECD DAC, through country/regional dialogues, to develop generic guidelines for donors for assisting developing countries to meet these strategy goals; to develop country-specific guidance for improving donor co-ordination on needs; to directly support and assist 6 donor-developing roundtable dialoguing processes, and to provide co-ordination and technical support for the dialogues.
	Projet d'échanges et d'information sur les textes internationaux concernant les ressources forestières	Pays ACP en particulier Afrique francophone	272. 809	D'une part, analyser et faire connaître le contenu, mais surtout les enjeux, les exigences et les opportunités des conventions et accords internationaux liés à l'environnement, et en particulier à la forêt, auprès des institutions et des acteurs de terrain et d'autre part faire valoir les contraintes du terrain auprès des institutions nationales.

2.2.2 Co-financing of NGOs (Budget Line B7-6000)

A special budget line is set aside for support towards a whole range of projects concerning developing countries carried out by NGOs. It has the overall aim of addressing directly the fundamental needs of the most disadvantaged people in developing countries. Actions are implemented through partnerships between European and local NGOs and mainly concern local rural and urban development, human resource development and institutional support to local partners. Actions of raising awareness of the European public towards development issues are also supported by the budget line to the extent of 10% of the total annual amount. NGOs who can demonstrate successful EC project experience for three years are entitled to apply for a block grant which allows flexibility to the NGOs to support local partners with mini-projects of between €5,000 and €40,000. In addition, up to €300,000 can be made available for NGO projects aimed at strengthening of activities of grassroots organisations in developing countries. Projects aimed at addressing desertification under this budget line have involved improving agricultural techniques in dryland areas, local reforestation actions, and support to local community groups in the implementation of agro-ecological activities. The total annual budget in 2000 was € 200 million.

2.2.3 Decentralised cooperation (Budget Line B7-6430)

This budget line is aimed at providing direct and flexible support to a variety of pilot development initiatives, projects and programmes stemming from non-government bodies in developing countries. It is intended to act as an incentive for promoting information and awareness about decentralised cooperation among all the parties potentially concerned, mobilising and strengthening the development capabilities of these parties, paving the way for larger scale operations. Funded projects include the promotion of local Agenda 21 programmes in Namibia, an Africa wide programme to support the training of farmers representatives in markets and agricultural policy, the development of a participatory approach in local government in Eastern and Southern Africa, and the implementation of decentralised cooperation in 3 pilot programmes in Senegal, to cite but a few examples. The total annual budget in 2000 was € 4 million.

2.2.3 Food Aid and Food Security (Budget Line B7- 20)

This budget line is different in character to the other budget lines and is allocated a much higher annual budget in the order of € 500 million in 2000. It applies to all developing countries though interventions are targeted to priority countries. Community operations in support of food security consist of either supplying food products, or financing development projects relating to structural food security. (Emergency food distribution is financed and managed through the European Community's Humanitarian Office, ECHO). In addition, various types of food early warning system have been financed by the EC. These include systems aimed at detecting food shortages early enough for food aid to be able to fulfil its emergency function and advanced early warning systems based on cross-referencing indicators of various kinds (crop monitoring, income, migration, nutritional state, health) to generate socio-economic and nutritional data. Market information systems, which enable information on market trends to be disseminated to economic operators, have also been set up with EU funding. In addition to support of many national systems, the EC has provided financial support to the FAO towards the development of the Global Information and Early Warning System.

Since the 1996 Regulation (1292/96) covering both food aid and operations to support food security, an increasing emphasis has been placed on actions which promote long term food security. The three major priorities of the new policy involve stronger partnerships with beneficiary countries, appropriate responses to food security (for example, focussing on supporting interventions before crises occur rather than attempting to contain the effects) and more effective integration of strategies into broader development cooperation. A European Food Security Network (RESAL) has also been

set up covering 20 of the low-income countries with high food insecurity. The majority of these are in dryland regions. Each zone is covered by a joint team of European and local experts which work to develop inter-sectoral approaches and debates on food security policies and strategies.¹¹

Projects relevant to the aims of the UN-CCD include soil conservation actions and forestry measures as well as the improvement of food stocking and distribution systems and other measures to mitigate the effects of drought.

2.3 Research Programmes

INCO

Since the early 1980s the Community research programmes have been extended to include scientific co-operation with non-EU countries to strengthen and add value to ongoing research and provide training opportunities in the developing countries (INCO). Between 1994 and 1998 this co-operation focused *inter alia* on the conservation and sustainable use of natural resources. Practically all regions of the world benefit from these research programmes.

The current INCO-DEV sub-programme under the current Fifth Framework Research Programme (1999-2002)¹² seeks to tackle challenges linked directly to the particular conditions of developing countries and to the emergence of a series of far-reaching, interrelated and accelerated changes, like the rapid pace of technological advance, globalisation of knowledge and information, political and economic integration of countries into regional blocks, growing populations increasingly concentrated in urban centres, competition for natural resources and environmental deterioration. For developing countries to keep up with these challenges, research is vital. The problems to be tackled have been defined through appropriate dialogue with developing countries and their sub-regional organisations. Lessons learned through earlier research programmes have stimulated greater emphasis on the policy relevance of research findings.

Within this framework in 2000/2001 the Community continued to provide research opportunities on rational natural resource use in arid and semi-arid ecosystems in most regions (Africa, Asia, Latin America, Russia and the NIS) outside Europe affected by desertification. In the design of the programme a three-level scheme has been followed offering priorities for research based on the principle of partnership building allowing for a true cross-sectoral approach to land degradation and rehabilitation. Due importance has been given to research on individual scientific or technological problems offering tools for development which may be applied in a given system and/or policy context.

Policy research has centred on natural resource use and economic production: adaptation to globalisation and ensuring harmony with the environment. System research has dealt with a practical approach to ecosystem management for sustainability, emphasising the relationship between human activity and the environment and developing strategies for rural productivity. Technology research has been narrowed on technologies suited to small-scale production systems or to production systems under environmental constraint, halting further erosion of the natural resources and preventing over-dependence on inputs arising from the transition from subsistence to commercial patterns of production.

A variety of projects ranging from understanding the dynamics of soil and land cover degradation, over ecological vegetation functions to identifying sustainable agro-ecological strategies with emphasis on appropriate water harvesting, conservation farming and agroforestry have been funded covering all research costs of the participating third country research entities. In addition to research projects two international workshops meant for targeted dissemination of research results were

¹¹ Information produced by RESAL is available from the EC at <http://www.resal.org>

¹² The European Commission has put forward its proposal for the 6th framework programme (FP) to cover the period 2002 - 2006 as well as the proposal for the specific programmes. The proposal is now submitted to the other Community institutions with the perspective of its adoption during the course of the year 2002

financed, one on small ruminants in Sahelian Africa, the other on the future of community rangelands in Southern Africa.

As far as the Coordination and dissemination of results is concerned a new Concerted Action MEDRAP was funded with the aim to enable to establish a link between the scientific community-research results and the policy makers in particular in relation to Annex IV. The programme should also help the relevant groups to contribute toward the elaboration of a regional action programme.¹³

Environment research programme

Also in the frame of the Fifth Framework Programme, the Energy, Environment and Sustainable Development (EESD) programme - established a single, integrated platform for stimulating a pan-European approach to the closely related areas of environmental and energy research. Within this framework research possibilities to address land degradation and desertification in Europe were further offered to the scientific community in relation to 2 main topics: Vulnerable ecosystems, and Fighting land degradation and desertification. In 2000/2001 4 new projects were selected for a total budget of about € 5 million.

In addition to the funding of coordinated research projects, the Commission directly carries out research activities through its Joint Research Centre (JRC). Always in the frame of the Fifth Framework Programme JRC is implementing the "Global Information for Environmental Security" (GEIS) project. Its objective is to provide relevant timely and accurate information, with remote sensing techniques, on changes in the location and condition of vegetation types at the global scale to support EU development and environmental policies, including the implementation of UNCCD.

In the proposed FP 6, the Integrated Scientific Area "Monitoring and assessing Ecosystem Sustainability" includes Research & Development actions to support the planning and implementation of EU development and environment policies (i. a. UNCCD) by assessing ecosystem sustainability, with particular reference to land cover dynamics, land degradation and disturbance (fire). These activities are implemented in cooperation with a network of partners including local teams and experts.

The JRC- Institute for Environment and Sustainability (IES) jointly with IRD (France), has coordinated the INCO DC project CAMELEO (Changes in Arid Mediterranean Ecosystems on the Long term and Earth Observation), involving 8 institutions from Algeria, Egypt, Morocco and Tunisia as well as OSS/ROSELT (Observatoire du Sahara et Sahel/"Réseau d'Observatoire de Suivi Ecologique à long Terme"). In this context advanced remote sensing tools have been delivered to North African partners and dedicated training workshops on remote sensing and GIS techniques were organised.

3. ADDRESSING DESERTIFICATION IN THE EUROPEAN COMMUNITY

3.1 Action taken by affected Member States and Candidate Countries

Individual EU Member States, particularly those affected countries covered by the Annex IV for Northern Mediterranean, have taken different initiatives on soil protection aimed at those soil degradation processes they considered as priorities.

In Central and Northern regions of the Community efforts focus on soil contamination and sealing, while in the southern countries initiatives concentrate on erosion and desertification in the context of the UN-CCD. Portugal, Greece, Italy and Spain have adopted National Action Plans to combat desertification, in which they analyse the desertification process and identify actions to be undertaken.

¹³ see <http://www.uniss.it/nrd/medrap/index.htm>

The Spanish plan has concluded that 31% of Spain is under serious threat of desertification. The plan has launched actions regarding sustainable management of water resources, forest fire prevention and experimental stations on desertification.

The Greek National Action Plan describes the desertification problem in Greece and proposes measures for its prevention and control. The Portuguese plan focuses on soil and water conservation. It targets measures for the recovery of degraded areas to ensure that the population remains in the more depopulated areas.

The Italian plan focuses on reducing the risk of floods and landslides. It relates to the regulation of water use and the co-ordination of the sectoral policies that have an impact on the water cycle. High-risk areas for floods and landslides have been defined.

In France a national action plan on soil management and protection has been agreed that emphasises on the prevention of future pollution. It contains *inter alia* a new soil-monitoring network based on a 16 km to 16-km grid, the completion of the national soil map and maps on erosion risks and soil organic matter. Austria has developed a soil information system with Internet access.

Other Member States have developed a comprehensive approach aiming at the protection of soil functions. In Germany, a soil protection act is in place that aims at the protection and restoration of sustainable soil functions. It obliges all parties to prevent hazards, to avoid soil sealing and to take precautions against harmful soil changes. In the UK, England is developing an overall soil strategy. The consultation paper considers several types of pressure on soil and lists sustainable responses. It sets out a new set of key soil indicators and targets, and addresses the relation between soil and land-use planning. In Denmark and Sweden soil protection is considered an integral part of general environmental protection. In Sweden a monitoring programme on ecosystems includes several soil parameters. Finally, other Member States focus on particular threats. In the Netherlands policy concentrates on various types of soil contamination, including groundwater. Regulations on diffuse contamination define acceptable inputs and losses of agricultural nutrients. In Belgium, Flanders has established a legal framework for a liability regime concerning both historically and newly contaminated sites.

Among the Candidate Countries Czech Republic, Slovakia, Poland, Hungary, Slovenia, Romania, Bulgaria, Cyprus and Malta - signatories to the UN-CCD and covered by the Annex V for Central and Eastern Europe- are preparing national action programs in this context.

In Slovenia soil protection is part of the National Environmental Action Programme that deals with the cleaning up of degraded soils and the implementation of sustainable use of agricultural land. The programme is prepared on the basis of detailed existing soil data, accessible through the Internet.

In Hungary soil protection is driven by the general environmental protection legislation, as well as by specific legislation on the protection of arable land, the protection of soil, land and groundwater and the redemption of contaminated sites.

3.2 Community policy relevant for soil protection

At Community level, the 6th Environment Action Programme, "Our Future, Our Choice" of January 2001, established, *inter alia*, the objective to protect soils against erosion and pollution. In May 2001 the European Community further acknowledged¹⁴ that soil loss and declining fertility are eroding the viability of agricultural land. Along these lines the European Commission adopted by the end of March 2002 a Communication "Towards a thematic strategy for soil protection", including the description of the main threats to soil and of the possible Community regulatory and non-regulatory responses.

Although an explicit Community policy focused on soil protection does not exist at this stage, a broad range of Community instruments influence soil protection. Due to the multifunctional role of soil and

¹⁴ European Commission "A sustainable Europe for a Better World: a European Union Strategy for Sustainable Development" (COM(2001)264 final)

its universal presence, many policies are involved, and, in addition, state aid is permitted for the rehabilitation of contaminated soils. The effect of these policies on the state of soils has so far not been systematically assessed. Most prominent among these are the Environmental, Agricultural and Regional Policies, but the Transport and Research Policies also affect soil.

Environmental Policy

The close link between soil and the other major compartments water and air, is reflected in specific environmental legislation, targeted at them, but in turn generally contributing to the protection of soil. The relationship between soil protection and legislation on waste and land use policy is equally obvious.

Community legislation on water (Nitrates Directive¹⁵ and Water Framework Directive¹⁶) sets standards to prevent the contamination of surface and groundwater by the leakage of hazardous substances or excessive nutrients from soils.

Contaminants in polluted air most likely to reach the soil directly or with precipitation are heavy metals and materials contributing to acidification and eutrophication. Legislation aiming to reduce and monitor air pollution (Air Quality Framework and Daughter Directives¹⁷ and Directive on National Emissions Ceilings¹⁸) therefore impacts on soil protection.

Waste management is one key element to prevent soil contamination. Most directly linked is the Sewage Sludge Directive¹⁹ that regulates the use of sewage sludge in agriculture in such a way as to prevent harmful effects on soil. In more general terms the Waste Framework Directive²⁰ requires that waste is to be disposed without endangering the soil.

Land use policy can play an important role in protecting soil resources, by limiting soil sealing and ensuring that soil characteristics (e.g. soil erosion risk) are taken into account in decisions concerning allocation and use of land. A Communication on “Planning and Environment - the territorial dimension” is under preparation and will take a number of soil-related aspects into account.

General environmental legislation also has an impact on soil protection. The Integrated Pollution Prevention and Control Directive²¹ requires industry and intensive livestock farms exceeding well-defined sizes to prevent emissions of pollutants to air, water and land, to avoid waste production and dispose of waste in a safe way, and to return disused industrial sites to a satisfactory state. The Strategic Environmental Assessment Directive²² requires an environmental assessment to be carried out for certain plans and programmes including the area of land use, which should have a beneficial result for soil protection. The Environmental Impact Assessment Directive²³ requires environmental assessment for certain private and public projects. Inter alia the likely impact on soils has to be examined. EU Chemicals and Pesticides legislation address the risks related to emissions of the substances to the soil compartment. The Habitats Directive²⁴ is of particular relevance since it defines a number of terrestrial habitats that depend on specific soil characteristics, such as dunes, peat lands, calcareous grasslands and wet meadows. The financial instrument LIFE supports innovative solutions for some of the soil threats as well as for sustainable use of soil.

¹⁵ Council Directive 91/676

¹⁶ Directive 2000/60EC of the European Parliament and of the Council

¹⁷ Council Directives 96/92/EC, 1999/30/EC and 2000/69/EC

¹⁸ Directive 2001/81/EC of the European Parliament and of the Council

¹⁹ Council Directive 86/278/EEC

²⁰ Council Directive 75/442/EEC

²¹ Council Directive 96/61/EC

²² Directive 2001/42/EC of the European Parliament and of the Council

²³ Council Directive 97/11/EC

²⁴ Council Directive 92/43/EEC

The Common Agricultural Policy (CAP)

As agricultural production is so dependant on soil and 77 % of land in the EU is used for agriculture and forestry, agricultural policy has by definition a huge impact on soil. The reform of the Common Agricultural Policy in the context of Agenda 2000, building on measures introduced in the 1992 reform, established the importance of rural development policies as the second pillar of the CAP. In 2000 new rural development plans were approved including a definition of Good Farming Practice (GFP), based on verifiable standards where soil protection received considerable attention.

GFP constitutes a core element of the new rural development policy: the granting of compensatory allowances in less favoured areas is conditional on the respect of GFP and agri-environmental measures provide compensation for undertakings going beyond this baseline. Good Farming Practice is defined as the standard of farming which a reasonable farmer would follow in the region concerned. It entails in any case compliance with general mandatory requirements including environmental legislation but Member States may establish additional requirements associated with good practice.

Within the rural development plans, some Member States facing erosion risks included practices such as tillage following contour lines, while some with low soil organic matter have banned the burning of cereal stubble. Maximum livestock carrying capacities have been defined by several Member States to avoid soil degradation through overgrazing.

Agri-environmental measures aimed at soil protection range from overall farm management systems such as organic farming (including maximum stocking rates) and integrated crop management (ICM) to specific measures such as no-tillage or conservation practices, grassland strips, winter covers, use of compost and the maintenance of terraces. Measures aiming at a reduced use of pesticides, such as integrated pest management (IPM) or promoting balanced rotations can also contribute to improve the condition of agricultural soils.

Within the market pillar of the CAP, the Agenda 2000 reform introduced new environmental protection requirements, whereby Member States shall take the environmental measures they consider to be appropriate in view of the situation of the agricultural land used or the production concerned and which reflect the potential environmental effect. These measures may include support in return for agri-environmental commitments, general mandatory environmental requirements or specific environmental requirements constituting condition for direct payments. Member States shall decide on penalties for non-respect of environmental requirements, which may include a reduction or the cancellation of the market support.

A number of measures within the individual market regimes offer opportunities for soil protection. These include set-aside in the arable sector, the extensification premium in the beef sector and the possibilities within national envelopes in the dairy, beef and sheep sector.

An increased level of integration of environmental concerns into the CAP is to be envisaged in future: the further shift of resources to rural development foreseen in the Commission Communication on Sustainable Development²⁵ will provide new opportunities for agricultural techniques protecting soils.

Regional Policy and Structural Funds

Regional and agricultural structural fund programmes have as a general and compulsory objective to contribute to sustainable development. Measures in these programmes contribute directly or indirectly to the improvement and protection of soil. Examples are erosion and flood prevention, rehabilitation of derelict and polluted land and measures for sustainable tourism and leisure. For all large planned investment measures an environmental impact analysis study is to be performed.

The Community's strategy for Sustainable Development also makes reference to the need to put the European Spatial Development Perspective (ESDP) into action, including the implementation of an

²⁵ COM (2001) 264 (page 6)

observatory network to analyse the regional impact of Community policies. The European Spatial Planning Observatory Network (ESPON) programme includes several measures relevant to efficient land protection.

Transport Policy

The range of potential effects of transport on soil is very broad. Most important are the land take by transport infrastructure and fragmentation of ecosystems and habitats through transport networks. Soil quality is affected by water runoff from roads and airport runways, use of persistent herbicides on railroads, emission of NO_x from motor vehicles, disturbance of groundwater flows due to construction work and contamination risks associated with the transport of dangerous goods.

The White Paper on a Common Transport Policy²⁶ describes the current transport policy. It sets out the need for the integration of transport into sustainable development. It lists packages of measures aimed at shifting the balance between modes of transport, in particular from road and aviation to the more environmentally friendly modes of rail and waterway transport.

The indicator system TERM provides a monitoring system aimed at assessing the environmental performance of the transport sector. It includes indicators for land take and fragmentation.

Research Policy

In the context of various Community research programmes, a number of soil protection problems are addressed. In the current 5th Research Framework the programmes “Environment and Sustainable Development” and “Quality of Life” are supporting soil-related research.

In the key action “Sustainable management and quality of water” a number of research activities are dedicated to assess and minimise pollution originating from industrial activities, from contaminated land, waste disposal sites and sediments or diffuse pollution originating from land-use practices. The interactions between soil and water are also being studied in the context of integrated water management. Ongoing RTD activities are addressing sustainable, risk-based management of contaminated land and groundwater. The Contaminated Land Rehabilitation Network for Environmental Technologies, CLARINET, is a policy-orientated expert network on the management of contaminated land.

In the Environmental Applications domain of the “Information Society Technologies Programme” several research projects are carried out which are relevant for improved management of soils.

The key action “Global change, climate and biodiversity” studies vulnerable ecosystems, of which soils are principal components, in relation to climate and global change. Particular attention is given to the driving forces in land degradation and desertification in the fragile ecosystems of Europe. Research effort is also put on assessment of impacts of policies and practices.

In the “Quality of Life programme” research is carried out on new farming systems reducing negative impact on environment and soils. Prevention and control of erosion and salinisation form also part of research activities promoting sustainable use of the soil. For instance, the PESERA research project will assess soil erosion risk all over Europe.

In addition, the European Soil Bureau, a specific project of the Commission’s Joint Research Centre (JRC), is a network of soil science institutions. It is carrying out scientific and technical work programmes in order to collect, harmonise and distribute soil information from countries all over Europe relevant to Community and national policies.

The proposed 6th Research Framework supports soil related research in the priority “Sustainable Development, Global Change and Ecosystems”. It will focus on large scale integrated assessment of land/soil degradation and desertification in Europe and related prevention and mitigation strategies. Furthermore, it will address soil aspects in relation to the water cycle. Other priorities aim at a better

²⁶ COM (2001) 370

understanding of terrestrial biodiversity and on the role of soil as a carbon sink. In addition under the priority “Specific activities covering a wider field of research”, the 6th framework programme will support research underpinning the formulation and implementation of Community policies (6th Environment Action Programme), including environmental assessment (soil and water, including the effects of chemical substances). The JRC programme will continue to support the European Soil Bureau as a network of soil science institutions providing policy relevant soil information to the Commission services.

European Environment Agency (EEA) related activities

In 2000 the European Environment Agency (EEA) in Copenhagen co-ordinated and developed together with the UN-CCD Secretariat and the Foundation of Applied Meteorology (FMA) the project “Desertification Information System to support National Action Programmes in the Mediterranean (DIS/MED)”.

The project, which will last for 3 years endeavours to improve the capacity of the Mediterranean countries to effectively program measures and policies to combat desertification and the effects of drought. This aim is pursued by reinforcing the communication amongst the partners, facilitating the exchange of information and establishing a common information system to monitor the physical and socio-economic conditions of areas at risk, assess the extent, severity and the trend of land degradation. The overall goal of DIS/MED is to offer to decision-makers the possibility of taking measures and adopting appropriate policies to effectively combat desertification based on the production (and availability) of new knowledge, indicators and information.

A participatory approach is proposed for the development of the information system. Recipient countries belong to two different regions: Northern African sub-region (Algeria, Egypt, Morocco and Tunisia) and the Northern Mediterranean region (Greece, Italy, Portugal, Spain and Turkey). Further expansion of the project is expected in terms of participation of other potential partners in the Mediterranean area. The participation of Northern African Countries (Annex I to the Convention) and the design and development of the information system is funded by the Italian Co-operation. The participation of Northern Mediterranean Countries (Annex IV to the Convention) is funded by the countries themselves.

EEA role in the project is to provide the technical and institutional assistance in order to facilitate the consensus on technical options and to overview the co-operation between the different national institutions. As main results of the project communication between national and regional partners in the project has improved also thanks to three project workshops which took place in the period 2000-2002

4. ANALYSIS OF KEY-THEMATIC TOPICS FOR THE IMPLEMENTATION OF THE CONVENTION

The Community would like to lay emphasis on this part of the report since it tackles the cross-cutting themes which have been identified by the last COP as being crucial for an improved implementation of the Convention. This part deserves a prominent position since the thematic topics tackled in this context will be the subject of presentations and debate in the preparatory phase up to the first meeting of the CRIC.

4.1 - Participatory Process involving civil society, NGOs and CBOs

Participation is one of the key-elements for successfully combating Desertification. Encouraging a policy of active decentralisation as well as the assumption of responsibilities by local communities is therefore essential to effectively translate the UN-CCD aspirations into concrete actions. The issue of how to achieve the right balance between decentralisation, local governance and participatory development represents therefore the overriding theme for the implementation of the Convention.

The unsustainable use of fragile environments, including land degradation, is often exacerbated by causes such as policy, legal and institutional arrangements. To address this problem it requires a focus on implementing measures providing an enabling framework for sustainable and equitable land use. The real challenge is to place land use into its socio-political framework.

Land tenure has in fact emerged as probably the central political issue in the majority of NAPs on which detailed information is often lacking also because considered culturally sensitive by governments. Considering that desertification is in part a symptom of malfunctioning land use systems, good governance is then required for balancing the interests of different stakeholders, all the way from community level to national level. Also customary land use does not have the capacity to meet growing pressures on land in the form of more people, more claims and less availability. Hence the need to reinforce or supplement existing local institutions for land use management.

The Community believes that policy formulation on land use needs to be pro-active towards sustainable resource management, not exclusively focussed on drylands conservation but above all encouraging sustainable systems change. In this perspective good governance and as a corollary, participatory processes, have crucial role to play in order to balance stakeholder interests. Broad ecological awareness raising and empowerment of civil society in policy making is important.

Furthermore, the issue of control over and access to natural resources and the underlying debate on institutional reforms so to ensure that rural populations are better represented, is central in the current efforts to understand the link between rural poverty and the environment. In order to examine in depth this complex link the Commission is currently working on a Communication on fighting rural poverty, which will set out an approach within the new policy framework for rural development, food security and natural resources management. Rural poverty is in fact a multidimensional problem that includes low incomes, inequalities in access to productive assets, low health education and nutrition status, natural resources degradation, vulnerability to risk and weak political power. Strategies for rural poverty reduction must therefore address all of these problems and take account of the diversity of rural areas and population groups, as well as the changing context of rural poverty.

Decision 8 of COP/5 which submitted for consideration to the World Summit on Sustainable Development as official UN-CCD input the valuable Chairman's summary of the Ministerial and High level interactive Dialogue Sessions on the poverty-environment nexus, is fully consistent with this approach, having the land tenure and good governance related issues being given ample room in the document, as pre-requisites for a proper and full implementation of the Convention.

In 2001 NGOs have started an "european networking initiative on Desertification/UNCCD (eniD)" to increase the impact of their partners' activities in addressing Desertification. The initiative involves national and international NGO networks from Denmark, France, Germany, Norway and United Kingdom as well as from the Mediterranean Basin.

Cooperation concentrate so far on:

- strengthening partner related cooperation in selected African countries, particularly in the field of capacity building with regard to the UNCCD process, but also in related sectoral fields
- strengthening cooperation among NGOs in the European context; in response to the still rather low level of involvement of European NGOs in the UNCCD process an initiative to making more European NGOs become interested to join the combat of Desertification as suggested by the Convention.
- sharing about experiences with the involvement of the local level/CBOs and NGOs in the implementation process of the convention, particularly working on indicators that allow for more operational insights in the context of the work of the Committee of Science and Technology (CST) under the UNCCD.

At COP-5 /UN-CCD in October 2001 on two occasions NGO and Government representatives met for an open and interactive dialogue on two major topics relating to the implementation of the Convention, the poverty-environment nexus and the role of civil society in combating desertification. On this last aspect the exchange of views among participants proved to be extremely meaningful. Particularly the importance of an effective and regular NGO consultation and the need to strengthen civil society participation, including the improvement of NGO-government co-operation, were some of the main conclusions of the debate. Building on this promising momentum the Community and the Member States and eniD agreed to establish a structured and recurrent pattern of dialogue on land degradation and related issues. Particularly, it was considered essential to develop adequate means to ensure a regular consultation and information flow on the respective activities relating to the implementation of the Convention, above all in conjunction with major UN-CCD “institutional” events (for instance before and after major meetings such as COP, CRIC, CST etc.).

As a follow-up in January 2002 a consultative process between eniD and the Community (Commission-Member States) has been started associating also two major African networks (ENDA/TM and PELUM). In this framework eniD was actively involved in the Community preparatory process for the submission of the recommendations for the programme of work to be undertaken by the Group of Experts under the CST, in accordance with Decision 18/COP.5. and the accompanying selection criteria.

Furthermore, it was agreed that the EU would support through eniD decentralised networking activities in the European context. Focus of these activities will be

- to increase the number of Europe based organisations to be involved in the UNCCD process
- to contribute to the improvement of the indicators on participation in the context of the work of the CST regarding Monitoring & Evaluation of the UNCCD process
- to compile a state of the art of guiding experiences in combating land degradation
- to establish continued exchange and consultations between EU/CEC and eniD on other matters related to Desertification and the UNCCD process.

On a more general level it is worthwhile mentioning that the European Commission is currently taking stock of its experience of the greater and more active involvement of civil society in development policy dialogue and implementation. The outcome of this exercise will be in 2002 a strategy to support civil society in developing countries tackling many of the issues directly relevant for the implementation of the UN-CCD.

4.2 – Legislative and institutional frameworks or arrangements

Please refer to relevant description in Chapter 2

4.3 – Resource mobilisation and co-ordination (domestic and international including the conclusion of partnership agreements)

Please refer to relevant description in Chapter 2

4.4 – Linkages and synergies with other environmental conventions and with national development strategies

Again in the Community view the Chairman's summary of the Ministerial and High level interactive Dialogue Sessions on the poverty –environment nexus included in Decision 8 of COP/5 on the World Summit on Sustainable Development should be used as an effective pointer to the issues deserving careful consideration in this area. It emphasised the need for synergies in the implementation of MEAs given the importance of dryland biodiversity and the likely scale of the adverse impacts of climate change on drylands.

The main objective in this area should now be an enhanced co-operation of the UN-CCD with the UNFCCC, the CBD, the Convention on Migratory Species (Bonn) and the Ramsar (Wetlands) Convention to ensure that the problems of land degradation and its effects on the poorest countries are recognised in the other fora. A significant role in building the necessary bridges and linkages among these MEAs rests with the various scientific bodies established in the Conventions.

The Community is party and signatory to numerous MEAs. Similarly developing countries are parties to a wide range of environmental agreements and processes. Encouraging developing country participation in such agreements, processes and their implementation are issues currently addressed in the policy dialogue and programming with partner countries. The most important measures include identifying country specific priorities and addressing them within the framework of comprehensive national strategies for sustainable development.

Other activities include capacity building for designing and implementing policies and measures and for training monitoring and reporting on progress, and collaboration on research and technology development. Linked to this is the need for the Community to identify opportunities to strengthen capacity of developing countries to negotiate emerging environment agreements, to participate fully in relevant international fora, as well to prepare their negotiating positions within like-minded groups.

The Community places great emphasis on supporting developing countries efforts to respond to global environmental issues and to implement the major UN Environmental Conventions on climate, biodiversity and desertification. The requirements of these Conventions are also mainstreamed into EC economic and development policies as well as in several other sectoral policies and programmes through the elaboration of implementation strategy papers.

In its conclusions of 31 May 2001 the Council reiterated the importance of environment to be mainstreamed into all EC development co-operation efforts and that special emphasis should be given to strengthening the capacities of partner countries to implement MEAs.

For this purpose the Commission has developed a comprehensive strategy identifying opportunities and key-entry points for the integration of environmental dimension into development cooperation. In this respect the Commission has developed a number of instruments such as Country and Regional Support strategies, an Environment Integration Manual and thematic budget lines (described above) and also a briefing document providing an overview of the major MEAs and processes highlighting commitments and options for EC development cooperation so to:

- identify and avoid harmful environmental impacts of programmes and projects undermining sustainability and counteract achieving development cooperation objectives;
- recognise and realise opportunities for enhancing environmental conditions.

The Community is also working to define more targeted activities relating to the combat against desertification in the affected regions involving in the exercise its delegations, the Member States and other International organisations so to ensure critical synergies on the ground.

Furthermore and in line with the recent ongoing debate at UNEP level (Governing Council/ Global Ministerial Environment Forum) on the matter and also in the WSSD preparations, MEAs clustering should be effectively pursued as an effective approach to their implementation. Coordination among MEAs should be built on the "organising principle" of a strategic grouping according to MEAs scientific and natural relationships. Within each grouping common functions (capacity development,

technology transfer, education and awareness raising, information dissemination and reporting) could be conceived leading to operational and holistic work programmes facilitating the fulfilment of the international obligations undertaken by both developed and developing countries. Such a rationalisation exercise would ease the burden of implementing MEAs through harmonised procedures streamlining for instance national reports and developing implementation programmes able to capture synergies among Conventions.

Another strategic dimension for improvement is the coordination at the national level, essential for the effective implementation of the various MEAs. Focal points and government officers in charge of the implementation of the various Conventions are often spread in different ministries and not aware of the respective activities. On the other hand enhanced co-ordination and complementarity between the Community, the Member States and the other donors is one of the priority objectives so to ensure coherence between trade and investment on one side and poverty reduction, social and environmental objectives on the other.

Finally, considering the increasing importance played by financial mechanisms in enabling activities geared towards sustainable development current efforts encouraging synergies in terms of e.g. common lending criteria, reporting policies between multilateral and bilateral donor agencies should be enhanced.

4.5 – Measures for the rehabilitation of degraded land and for early warning systems for mitigating the effects of drought

On-going work at the Joint research Centre focuses on the integration of remote sensing data with other data sources and models to provide spatially distributed indicators of land degradation and desertification in relation to soil erosion and land cover dynamics with focus on affected Mediterranean Member States (Portugal, Spain, Italy, Greece).

Furthermore, work has been initiated within the framework of projects financed by the Environment Research Programme such as MEDALUS and DEMON, GeoRange and DesertLinks and PESERA (Quality of Life research Programme). Often in this context National action plan committees and focal points of UN-CCD Annex IV countries as end-users are directly involved in the projects. The EU research projects DemonII/Modem/Georange described above represent an indirect way to address the problem of monitoring desertification from space. They developed and experienced methods to enable to analyse, over a period of 20 years, the trends in degradation in pilot zones of southern Europe with the more long-term objective to enable pre-operational tools for monitoring to be developed.

Furthermore, the EU research project DESERTLINKS has been financed with the aim to contribute to the effort of Annex IV countries to establish, at the Mediterranean level, a framework system for desertification indicators and methods to identify sensitive areas. The MEDACTION project is more looking towards land management scenarios for new policies developments.

4.6 – Drought and desertification monitoring and assessment

The research activities described above (Chapters 2.3 and 3.2) and the developed methods are considered possible components of regional scale monitoring and early warning systems and have been demonstrated and applied throughout the Mediterranean Basin (North and South). Thus, the Soil & Waste Unit of the Joint Research Centre the European Commission is addressing priority areas for action specified in UNCCD Regional Action Programme documents (RAP), which refer mainly to the creation of a working method to lay the foundation and provide the cognitive elements required to implement the UNCCD at a regional level (ICCD/COP (4)/3/Add.3 (B)).

These key priorities are:

1. The areas most at risk of desertification: aiming at a common methodology to identify the areas most at risk of desertification and territorial degradation.

2. Common indicators for assessing desertification processes; aim is to identify indicators and methodologies for assessing the extent of ongoing phenomena and relative trends.
3. Collection and analysis of technical and scientific data;
4. Exchange of data and information.

Through the Global Vegetation Monitoring (GVM) Unit of its Joint Research Centre the European Commission has developed the “World Fire Web”. A software package has been developed to allow the monitoring of active fires using satellite data from the NOAA-AVHRR Instrument. The system has been installed in a number of local receiving stations that cover most areas of the world prone to desertification, and in particular in Italy, Spain, Australia, Brazil, Argentina, Peru, Senegal, Niger, Central African Republic and South Africa. Observations collected locally are pooled in a common database shared among the partners and accessible through the worldwide web. Historical satellite records have also been used to analyse the trends in fire patterns over the African continent for the period 1981-1991. GVM has also developed, in cooperation with the AGRHYMET centre and the Burkina Faso Met office, a satellite-based procedure to allow the mapping and monitoring along the dry season of small water bodies in arid and semi-arid regions using low-resolution data from the VEGETATION instrument onboard SPOT satellites. Furthermore it has developed, in cooperation with FAO, a procedure to improve the detection of vegetation growth in desert regions in order to facilitate the fieldwork of plant protection technicians tracking the upsurge of desert locust.

GVM has initiated in 2000 the Global Land Cover (GLC 2000) project, whose objective is to produce a reference land-cover map over the whole globe for the year 2000, using a special set of data collected with the VEGETATION instrument. The end product will permit multi-scale integration, from local/regional to global. This is carried out in partnership with a large number of local institutions, as well as FAO and UNEP. In parallel the Global Burnt Area (GBA 2000) project uses the same dataset to deliver a reference map of burned surfaces for the year 2000.

4.7 – Access by affected country parties (particularly affected developing countries) to appropriate technology knowledge and know-how

Access from affected developing countries to the results of research described in paragraph 4.6 is achieved in two different manners. In first place the development of the GLC-GBA network of partners including teams and experts from developing countries ensures their involvement in the research itself. Furthermore results are delivered to institutions that can ensure the sustainable use of the results through their own networks of contacts, such as FAO for desert locust monitoring, UNEP for fire monitoring and Millennium ecosystem Assessment (MA) for land cover mapping. Concerning specific actions related to affected countries, the focus of the project is on the Annex IV (Mediterranean) and Annex V countries (Central Eastern Europe). As a deliverable of the project, the extension of the European Soil Information System has been completed for both areas. Additionally, a specific workshop is planned in the near future with Annex V countries in order to further identify further actions.