

USAID Framework for Cooperation in Africa in the Implementation of the Convention to Combat Desertification



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I. Introduction and Purpose

In preparation for the Second Conference of the Parties (30 November – 11 December 1998) in Dakar, Senegal, the United States Agency for International Development (USAID) has outlined the commitments and obligations of the Africa Bureau for cooperation in combating desertification in Africa. This information is discussed below and presented in a series of annexes. Annex A presents estimated levels of resources devoted by the Agency to desertification-related interventions. Annex B outlines a general description of USAID activities in dryland resource management in Africa. Annex C is a summary of one part of the Agency's Sahel Regional Program directly relevant to the Convention. Annex D presents a few examples of progress at country level in Africa. Annex E lists a few examples of USAID assistance in other regions which bear on the objectives of the Convention.

II. The Convention

The Convention, having received more than the required signatories, including the US, entered into force on December 26, 1996. It represents a major step forward in the post-Rio process. Also, the Convention will encourage better use of development resources in arid areas worldwide, but especially in Africa where it mandates a process to combat land degradation which draws on lessons learned from past successes and failures. The Convention emphasizes local community participation, linkage between good planning and implementation, and (particularly in Africa) a 'new partnership' between donors and recipients to promote joint efforts, avoidance of duplication, and respect for national priorities.

The implementation of this Convention will have to depend on existing or planned development resources. While enabling funds are already available in some coun-

tries, all signatory countries clearly have considerable work to do educating all participants regarding the Convention. There is, however, a commitment from all major donors to assist countries in producing integrated plans from documents such as the National Environmental Action Plans, National Conservation Strategies and the National Action Programs (NAPs) to Combat Desertification.

Local community understanding of the Convention in some affected countries must be given high priority. At the same time there is donor concern that consultant missions brought in to draft NAPs should not undercut the bottom-up, participatory process desired in national programming. Thus, there is a strong interest by all participants in improving coordination and in supporting those enabling processes that are country- and community-driven. Also, it is imperative that the quality of program preparation and policy frameworks is maintained at a high level. It is important to remember that, in order to attract more resources in future years, legislatures, ministries, and the general public must all be involved.

III. Obligations of the Parties

Commitments and Obligations of Developed Countries:

1. Assist African countries to combat desertification and/or drought, by providing and/or facilitating access to financial and/or other resources, and promoting and/or facilitating the financing of the transfer, adaptation, and access to appropriate environmental technologies;
2. Continue to allocate significant resources and/or increase resources to combat desertification and/or to mitigate the effects of drought; and
3. Assist in strengthening capacities to enable the improvement of institutional frameworks, as well

as scientific and technical capabilities, information collection and analysis, and research and development.

Commitments and Obligations of African Countries:

1. Adopt combating of desertification and/or mitigation of the effects of drought as a central strategy in efforts to eradicate poverty;
2. Promote regional cooperation and integration in programs and activities to combat desertification and/or to mitigate the effects of drought;
3. Rationalize and strengthen existing institutions concerned with desertification and drought and involve other existing institutions in order to make them more effective and to ensure more efficient use of resources;
4. Promote the exchange of information on appropriate technology, knowledge, and know-how;
5. Develop contingency plans for mitigating the effects of drought in areas degraded by desertification and/or drought;
6. Make appropriate financial allocations from national budgets consistent with national conditions and capabilities and reflecting the new priority Africa has accorded to the phenomenon of desertification and/or drought;
7. Sustain and strengthen reforms toward greater decentralization and resource tenure as well as reinforce the participation of local populations and communities; and
8. Identify and mobilize new and additional national financial resources, and expand, as a matter of priority, existing national capabilities and facilities to mobilize domestic financial resources.

IV. The Sub-Regional Effort

In developing USAID's Africa Bureau Framework for Coordination, it should be noted that regional organizations, such as CILSS, SADC, and IGAD, are already linked into the mainstream of what is happening in this area. All three of these organizations now have a stated objective of providing assistance to African countries in the area of implementation of the Desertification

Convention as of 1996 (Box 1). All three receive some funding from USAID, and all three have begun to track the efforts which are already underway at national level in this sector. They also clearly identify how donors can help further the support of these initiatives and add value within the setting of the Convention requirements.

The USAID Framework for Coordination will actively support the Sub-Regional Action Programs (SRAP) using the mechanisms outlined below.

V. Next Steps for USAID's Africa Bureau in Fulfilling the U.S. Commitment to the Convention

1. Several Missions, Regional Offices and the Africa Bureau itself, are actively supporting the preparation of National Action Programs to Combat Desertification (NAPs). Wherever possible USAID should ensure that relevant bilateral proposals should be consistent with NAPs once they are established.
2. The Africa Bureau Coordinator for Desertification at Bureau level will work with the official representatives from the Department of State and the USAID Global Bureau to disseminate this Framework.

Box 1: The Sub-Regional Action Program (SRAP)

Phase 1	Identification and sensitization of potential stakeholders and parties.
Phase 2	Initial identification of issues and programs which could constitute the SRAP.
Phase 3	Preparing and holding the first forum meeting at sub-regional level.
Phase 4	Formulating sub-regional action programs, projects and implementing agreements (from the first meeting).
Phase 5	Undertaking full implementation and follow-up monitoring of program activities.

3. USAID will encourage NGOs/PVOs and local Governments "Get the Word Out" locally regarding the Convention and its importance to the health and well-being of host countries.
4. To assist in the process of tracking the level of effort in this sector, the Sustainable Development Office of USAID's Africa Bureau has initiated a new activity code for "Desertification." This will help in identifying future funding levels specifically targeted at desertification and drought.
5. USAID's Africa Bureau should alert the affected USAID Missions, and should help to inform others of, sub-Regional Meetings. (For upcoming meetings involving CILSS, SADC and IGAD they should contact: Dr. L. Deng, UNSO Bureau for Africa, Nairobi, Kenya; tel: 254(2)-217597; fax: 213748).
6. USAID's Africa Bureau should continue to encourage support for combatting desertification activities, where appropriate, from Regional Programs,

such as, the Greater Horn of Africa Initiative (GHAI); the Initiative for Southern Africa (ISA); and the Sahel Regional Program, and AFR/SD regional activities.

7. Regional programs of USAID's Africa Bureau should ensure that subregional proposals and requests for assistance submitted for funding are in compliance with the respective Sub-Regional Action Programs.

VI. Summary

It is possible for in-country planners and programmers to work with existing activities within existing USAID Mission portfolios to improve the efficiency and effectiveness of existing resources in combating desertification. Obviously the most effective and efficient method of coordination would be to take the national priorities for combating desertification into account during the USAID Strategic Planning Process at Mission and Regional program levels.

Annex A

USAID's Africa Bureau Bilateral and Regional Support Directly Relevant to Desertification*

Strategic Objective	Country	US\$mil.		
		FY96	FY97	FY98
1 Sustainable Dryland Agriculture				
Increased food security	Eritrea	0.45	0.40	0.18
Increased availability of locally produced food grains	Ethiopia	0.13	1.00	1.25
Smallholder agriculture and natural resource management	Kenya	0.66	0.80	0.80
Economic growth	Mali	2.72	2.40	3.06
Rural household increased income in target areas	Mozambique	1.25	0.75	0.61
Improved regulatory environment for agricultural production	Zambia	0.09	1.65	0.65
Increased household food security in communal areas	Zimbabwe	1.92	1.20	0.87
2 Rehabilitation of Dryland Areas				
Rehabilitation and resettlement	Angola	0.04	0.01	0.01
3 Drought/Disaster Early Warning and Mitigation				
Famine early warning & crisis prevention, mitigation & response	Africa	5.34	7.90	7.70
4 Mitigation Using Natural Resource Management				
Protect the natural environment	Guinea	–	–	2.92
Reduce natural resource depletion in target areas	Madagascar	1.68	2.19	2.45
Increased sustainable use, conservation and mgt. Of natural resources	Malawi	1.54	–	4.70
Improved benefit from locally managed natural resources	Namibia	0.12	0.10	0.35
Increased crop production via improved natural resource mgt.	Senegal	3.08	3.85	1.40
Environmentally sustained natural resource mgt.	Tanzania	2.05	1.75	2.00
Sustainable increases in agriculture and natural resources	S. Afr. Region	0.51	2.50	1.75
Conservation in critical ecosystems	Uganda	0.74	1.28	–
Improved policies, programs, strategies in sustainable environments	Africa	0.40	1.80	2.32

Strategic Objective	Country	US\$mil.	
		FY96	FY97 FY98
5 Awareness Raising in Dryland Nat. Res. Mgt. Dryland information and development	Sahel Region	0.65	1.30 1.50
6 Capacity Building and National Planning Horn of Africa support program Regional technical support	Gr. Horn of Afr. Africa	0.19 -	- 0.35 0.40 0.70

* Based on the Control Data from USAID's Africa Bureau, Office of Development Planning.

Note: Beyond dryland management, many activities supported by USAID support the anti-desertification goals, such as marketing and enabling policies and infrastructure, rural economy growth initiatives, etc. Activities for which USAID provides funding have met the following three criteria:

- Is environment a priority in the USAID Country Strategy? If so, has the Mission taken national priorities for combating desertification into account in preparing its Strategic Plan?
- Assuming an activity is defined within a given National Action Program to Combat Desertification (NAP), how does it relate to the country's National Environment Action Plan (NEAP), and is it clearly coordinated with the work of other donors?
- Has the responsible agency in-country designed and implemented a system of benchmark indicators (as established within the Convention), along with monitoring, evaluation, and mitigation plans? Has policy reform gone forward to the extent that demonstrable progress can be demonstrated toward a policy environment?

Annex B

USAID Activities in Africa – General Information:

Information Relative to Dryland Resource Management*

Angola

USAID assistance is provided via international PVOs which emphasize, inter alia, community infrastructure rehabilitation. This includes: agricultural infrastructure; food, seeds and basic tools for resettling displaced people; and improved and adapted seeds and plant material.

Eritrea

USAID assistance will provide resources for conservation work in upstream watersheds, improvements in food systems upgrading the national tree nursery program, and accessing the grassroots institutional structures for environmental awareness, planning and protection. Assistance will be provided to improve understanding and resolution of environmental issues. Also, short and long-term training programs will be improved to enhance environmental capabilities in selected ministries.

Ethiopia

Preventive services (immunization, health, nutrition education) are being expanded to target groups in order to result in improved health and nutrition, especially for children. In addition, local partners are improving water supplies for communities by protecting springs and developing wells and catchment systems that will not only have importance for agriculture and livestock, but also for the preservation of community water supplies. Program of considerable resources continues for protection and conservation efforts (afforestation, enclosure systems, soil bunding and terracing) to try to arrest further deterioration of the ecosystem.

Guinea

Work with rural populations in watersheds in the ecologically fragile Fouta Djallon Highlands to improve management of natural resources, and to prevent the negative effects of environmental degradation such as soil erosion and the depletion of water resources. Conservation activities eventually improve the quality and quantity of water supplies in the neighboring countries bordering the four rivers. This is a multi-donor effort in which USAID focuses on three of the twelve watersheds. The program aims at: (1) strengthening local capacity for sustainable natural resource management; (2) achieving sustainable increase in farmer's production and incomes; and (3) creating enabling conditions for sustainable impact.

Kenya

USAID assistance emphasizes reductions in Kenya's population growth rate and activities which will facilitate broad-based economic growth and poverty alleviation that will reduce the numbers of people entering the workforce each year, and enable the government to increase per capita investments in education and health. A smaller population base means higher per capita income. The stress on Kenya's fragile natural resource base and limited arable land will also be reduced if population growth is slowed.

As smallholder agriculture is commercialized, agricultural productivity will increase, thereby stimulating positive growth in the agriculture sector. Such growth will directly affect economic growth, employment creation, and income opportunities for all Kenyans. In the

* Based on the 1998 Congressional Presentation from the Internet.

more marginal areas, USAID assistance in community wildlife development and P.L. 480 Food Aid projects will help move those communities from relief dependency to sustainable development.

Madagascar

To reduce the threat to natural resources, USAID is involved with international and local environmental NGOs in conservation of biodiversity efforts within Madagascar's national parks and forests. Also, programs go forward to improve park and forest management, encourage environmentally-sound income-producing activities for the rural poor, and strengthen Malagasy natural resource management institutions at national and local levels.

Malawi

USAID's strategies for helping Malawi achieve broad-based, sustainable economic growth includes the improved management of the country's constrained natural resources. Funding will support the expansion of community-based action programs, environmental monitoring efforts, an environmental education program, and wildlife conservation activities.

Mali

USAID's efforts in Mali will: enhance the famine warning system, a vital component in the effort to ensure that food is available where and when it is needed throughout the country; examine the linkages between Mali's recent successes with increasing agricultural production and household level food security; and assist many young people who are now making childbearing decisions and engaging in economic and environmental management activities that will impact Mali's future.

Mozambique

USAID-funded activities will support rehabilitation of Mozambique's agriculture on an environmentally sustainable basis by creating opportunities for alternative resource uses through promotion of environmental enterprises, non-timber forest products, community-based natural resource management and integrated conservation and development projects. USAID will encourage community participation with the national government

in natural resource management. In conjunction with the Mission's road rehabilitation project, activities will be initiated to support biodiversity protection in buffer zones by working with communities to develop sustainable alternatives to poaching and illegal logging. Support will also be provided to strengthen the country's capacity to establish and implement environmental policies.

Namibia

Namibia's unique natural environment and its eco-tourism promotion policy have resulted in tremendous growth in tourism. USAID has been supporting these activities with assistance in natural resource management and environmental education through a regional program.

The major focus of the effort involves local communities which derive income from management of local natural resources. USAID provides assistance in the area of Community-Based Natural Resources Management (CBNRM); environmental education information; and legal and regulatory frameworks for organizations, including land management by local communities in targeted areas.

At the regional level, USAID is supporting the exchange of information on natural resources management and environment through sponsored trips and orientation visits to neighboring countries and is coordinating and facilitating regional activities being implemented by the Regional Center for Southern Africa (RCSA).

Senegal

USAID is helping to improve applied research and the extension of improved agricultural and natural resources management. Also, USAID is supporting better land-use planning, including: adopting NRM technologies; anti-salt dikes and water retention dikes; the widespread use of organic composting; environmental monitoring; woodlots and reforested plots, new fruit tree orchards, and new live hedges to prevent erosion and produce animal fodder.

USAID has also provides support to the Senegal's National Environmental Action Plan (NEAP) to ensure that environmental concerns are addressed in all social and economic development policies.

Tanzania

The USAID effort is directed at strengthening institutional capacity and management plans for game reserves with an emphasis on empowering communities through promotion of improved Community-Based Natural Resource Management (CBNRM). In this way communities identify simple and low-cost ways to conserve and productively use land, water, forests, livestock and wildlife resources in order to ensure a balance between conservation and production goals. Sustainability is also addressed by supporting the establishment of community-based institutions and legal/regulatory systems that redress environmental/natural resource abuses.

Uganda

USAID emphasizes improving natural resource planning, strengthening management of protected areas, and supporting NGOs that are engaged in activities which integrate conservation and development in and around protected areas. Management of Uganda's protected areas has improved markedly through strengthened management capacity, improved infrastructure, and higher revenues from eco-tourism. In addition, the incentives and ability of local communities to conserve bio-diversity have grown due to new revenue-sharing policies, access to resources, and ongoing conservation education.

Zambia

The USAID program assists the national program of sharing wildlife incomes with rural families in order to encourage resource conservation. Especially important are the training programs carried out in natural resource conservation techniques.

Zimbabwe

The USAID program is aimed at establishing a long-term sustainability of community-based environmental and natural resources management activities. The key component here will be the provision of support for the natural resources management program which provides for the conservation of natural resources and the sustainable management of the natural resource base.

Sahel Regional Program

USAID's support for improved access by decision-makers to important environmental, demographic and food

security information has helped build sustained flows of quality information by improving the regional monitoring systems of selected West African institutions, e.g., AGRHYMET, INSAH/Food Security and INSAH/CERPOD, which provide services to CILSS member states (environmental monitoring, population and agricultural policy development and demographic analysis).

The activities supported by this regional program are aimed at increasing the capacity of West Africans to guide their own institutions in their own interests, and to make policies that take account of natural synergies and economies of scale. An important aspect of this objective is aimed at maintaining (and improving) coordination between and among donors, CILSS, and West African states. This effort includes consultations with the various segments of civil society ranging from farmer and women's organizations to national and regional governments and institutions. (More information on this program is given in Annex C.)

Southern Africa Region

USAID has been supporting community-based natural resource management programs which demonstrate that utilization of natural resources in a sustainable fashion can be a viable alternative to unsustainable agriculture practices on marginal lands. This includes a variety of new rural enterprises and a regional network of environmental non-governmental organizations and governmental organizations/universities seeking to collaborate on the development of sound policies and strategies for the environment.

Greater Horn of Africa

The USAID program supports environmental protection as a means of conflict prevention and to create regional cooperative responses. In addition, it supports regional, African-led efforts to protect the environment from both acute emergencies and long-term pressures in densely populated fragile areas in eastern Africa.

West and Central Africa Region

USAID provides assistance in identification of potential adverse impacts of planned activities on the environment and in the assimilation of measures to alleviate these impacts. This includes environmental training and supporting transnational environmental networks and

strengthening the policies and regulations within national environmental action plans.

East and Southern Africa Region

USAID's regional office provides specialized technical support services to assist in the strengthening of regional institutional capacity to identify and manage scarce natural resources while managing innovative regionally-oriented activities focused on the protection of the environment. This program also provides for assistance in: dissemination of environmental information; building capability of regional decision-makers to set environmentally sound policies; innovative training programs in environmental review and assessments; the design of strategies for environmentally sustainable development; and regional environmental and natural resources management issues related to food security and conflicts in the Greater Horn of Africa region.

Africa Region Sustainable Development

USAID's regional programs are aimed at developing effective mechanisms to manage in a sustainable way the natural resource base using approaches which emphasize: (1) local control over local resources, and (2) investments in the development and use of new resource-saving technologies. The program will help build the capacity of African governmental and private institutions to protect their natural resource base while at the same time increasing the productivity of these resources to provide for increased economic welfare.

USAID's Famine Early Warning System (FEWS) provides timely and accurate information about evolving drought situations to key decision-makers, allowing more appropriate, preemptive actions to be taken which can to prevent famine conditions from developing.

Annex C

Sahel: USAID Regional Program

Strategic Objective 3: Decision-makers have ready access to relevant information on food security, population, and the environment.

A. Program

This SO captures USAID's contribution to the multi-donor/multi-state support to CILSS, and to the companion activities of the Club. The CILSS and Club du Sahel system has proven to be one of the most successful African-donor institutional collaborations in Africa. Originally created as a mechanism to coordinate food aid and other emergency resources in the Sahel, CILSS has become a source for environmental monitoring and early warning information (AGRHYMET); for research and policy and strategy development in the areas of population and development, agricultural research, economic and sociological research (INSAH); and for policy analysis and planning (CILSS headquarters). The Club has served as a forum for policy debate among Sahelians and their Northern partners. Noteworthy Club efforts focused around food aid coordination, approaches to cereals policy reform and the ICC-D. In 1997, CILSS made steady progress toward achieving its mandate to improve food security and combat desertification to attain ecological balance, and the Club drafted a new strategic framework.

In a broad context, the continued avoidance of food crises in the Sahel translates into substantial savings of money and life. The successful execution of the programs of the West African and OECD organizations supported by the SRP will contribute to more open trade; improved food security via improved resource management and better coordinated and focused agricultural research; and better, more rational national population policies, all with more strategically-placed donor assistance. All technical support provided to the CILSS by the SRP was and will continue to be demand-driven

B. Example of How Program was Used to Combat Desertification

1. Coordination

The Sahel is subject to periodic pest attacks and shortages in rainfall, with resultant variations in food and pasture production, but the region has been able to avoid famine for most of the last 20 years – attributable to coordination through the CILSS/Club mechanisms. Information provided at the 1997 meeting of the Food Crisis Prevention Network suggests that the application of the Food Aid Charter remains in the same range as in the past – fair-to-good. It was decided at that meeting that, since CILSS is initiating a crisis prevention activity which would largely transfer the Network agenda to CILSS, the Club component of the Network would begin to take a smaller role as the CILSS component grows. The impact evaluation of USAID experience using food aid for development in the Sahel (CDIE/SRP) was finalized in 1997 and was specifically shared with CILSS and the Club by the SRP, in addition to the normal CDIE channels of dissemination.

The AGRHYMET system is the primary CILSS institution involved in the regional famine early warning system. The AGRHYMET Regional Center (ARC) continues to interpret satellite data on vegetation and weather and transmit the information electronically to its national correspondents in the CILSS member states. In turn, all of the nine CILSS states continue to produce at least a monthly bulletin, based in part on databases and other information from the ARC. In 1997, the ARC, at the request of collaborating national units, began to intensify training of national units so they are better equipped to use the information and technology, which is now available to them; this is the major emphasis for 1998. In an effort to improve the use and availability of information at the national level and to provide client feedback, multi-disciplinary work groups were created in each country.

2. Support for the Desertification Convention:

The CILSS has been designated to represent the ECOWAS states in implementation of the Africa Annex to the International Convention to Combat Desertification, including the establishment of impact monitoring systems. A key theme of the ICC-D is participation by affected peoples. The CILSS plays a major coordinating and technical support role in helping CILSS member states develop action plans and early start programs and in donor coordination, in which the Club du Sahel has a lead role. Jointly, ECOWAS and CILSS have begun the development of the subregional action plan called for under the ICC-D. The first subregional planning meeting was held in Niamey in July 1997, which identified concrete steps and appointed a secretariat. Thematic working groups with broad representativeness were formed later in the year.

The responsibility that CILSS has accepted for the monitoring and impact analysis portion of the Convention is shared by AGRHYMET and INSAH. The major accomplishment this year was the development by CILSS and *Observatoire Sudano-Sahelien* of indicators to be used to monitor the Convention's impact. These were discussed and finalized at several regional meetings.

A joint INSAH/AGRHYMET project to monitor and analyze physical status and socio-economic causes of changes in land use and land cover over the last 30 years was designed in 1997 and will begin work in 1998. Four test sites have been selected by AGRHYMET, which will develop land cover and land use measures based on satellite images from the 1970s, 80s and 90s. INSAH will

design and execute the socio-economic analyses. In addition to use for ICC-D implementation monitoring, this work will help provide a baseline for a large European Commission project based at AGRHYMET to monitor land use that will begin in 1998. In 1997, INSAH emphasized the creation of research poles (lead institutions for small ruminant, natural resources and small grain research.) The programs for these poles have been set, but financing has not been assured. The USAID INTERCRSP helped define the program for the NRM pole which will be located in Burkina Faso. A concerted effort has also been made to improve the integration of livestock producers into natural resource management systems. Specific themes dealing with livestock and resource management were developed and assigned to individual countries (Mali, Burkina Faso, and Niger) in 1997 – this will be financed by Canada. The USAID support for INSAH's agricultural research coordination comes from both SRP and AFR/SD/PSGE resources.

The contribution to food security of these activities is substantial. For example, short-season groundnuts, rice, cowpea, maize, millet and sorghum varieties have made it possible for farmers in the Sahel to adapt to shorter and/or more variable growing seasons, which has definitely contributed to stabilizing food security and reducing the need for food aid in the Sahel. These successes are part of the reason that there has not been a food crisis in the Sahel in recent years. While better weather patterns are perhaps the most important factor, agronomic research, better resource management, better food policy, and more open markets have meant that less and less food aid is needed in the Sahel. This might be the subject of a PPC/CDIE impact assessment.

Annex D

Examples and Illustrations of Desertification Control Where USAID Was Involved

Mali

The Current National Environmental Action Plan

Process uses the participatory and extension approaches pioneered by the USAID-supported Village Reforestation Project. USAID is also represented on the Working Group and Donors' Committee for the Action Plan. The devolution of authority for natural resources to local communities has ensured responsible use through the implementation of village resource management agreements and conservation technologies, which show positive environmental impact as a result of decreased soil erosion, increased water retention and improved soil quality. Farmers are seeing the economic benefits of the use of these practices.

Adoption of Improved NRM Practices

In the DHV zone in 1993, nine villages undertook NRM and environmental protection activities on a pilot basis. By 1997, 267 villages (45 percent of all villages in the zone) and 26,200 farmers had adopted improved NRM practices and technologies extended by this effort. This transfer of improved practices is reflected in a 93.5 percent increase in overall crop production and a 66 percent increase in revenue generation in the DHV zone over the period from 1993 to 1997.

Senegal

The Women's Group- Darou Mougnauguene cited a number of Natural Resource Management practices which both men and women now use: windbreaks, stone lines, compost, live fencing, regeneration of *Acacia albida* and fruit trees. They said that the knowledge gained through training was a gift which could not be taken back, which the women were us-

ing to train other household members including their husbands. They also remarked on the participatory approach which made them responsible for decision-making – unlike assistance provided in the past – it offered women their first opportunity to play a significant role in community-level decision making and gave them a chance to prove that everyone is better off if women play a greater role in the political and economic decision making in the community.

The US Department of Interior, Geological Survey, Earth Resources Observation System (EROS)

Data Center, with USAID support, has been conducting unique long-term environmental monitoring activities in collaboration with Senegal's ecological monitoring center (*CSE*) over the past 5 years. These efforts, using a three-tiered approach, combine the strengths of biophysical and socioeconomic ground site investigations, repetitive airborne videography and photography, and high-resolution satellite images for detailed mapping and change detection, have provided unique insights into agricultural and natural resource changes in Senegal spanning the last 35 years. A recently available worldwide satellite photo archive dating back to 1963 will make it possible to conduct further analyses of long-term environmental changes. These monitoring activities are part of a unique effort to establish an unprecedented database, rich in both thematic and time-series data, while strengthening the environmental monitoring capacity of *CSE*. In addition to this program, major outreach efforts to promote environmental awareness were completed in public schools. To date, environmental maps and images have been distributed to over 1,000 secondary schools.

Annex E

Examples From Other Geographic Regions

Global – Central Programs

In addition to the work in Africa cited above, the USAID Environment Center, focuses on strategic support objectives that contribute to managing the environment for long-term sustainability in many other countries. Central programs have helped improve the conservation of biodiversity and critical habitats in India, Mexico, Central America and Central Africa. They also support comprehensive natural resource conservation programs and promote effective management in order to significantly slow or reverse the process of environmental degradation and to assist local organizations to manage their areas effectively.

Asia and the Near East – Egypt, Jordan, West Bank/Gaza, Morocco, and Mongolia

In, Egypt USAID is involved in a large program in support of organizations in the water/wastewater, air pollution and natural resource management sectors. Especially important are institutional reforms and service improvements which strengthened the capacity of local utilities to deliver improved services. USAID is also involved in activities dealing with new or rehabilitated wastewater pumping stations and treatment plants. This assistance is focused on urban centers of economic growth where water and wastewater problems are the most critical and where the maximum number of people can benefit from the interventions. In addition USAID fosters sustainable management of tourism resources in Egypt.

In Jordan USAID is involved in upgrading of Amman and Zarqa's wastewater treatment facility, which will significantly improve the quality of treated wastewater available for irrigation use. In addition, USAID is assisting in the development of critical water management infrastructure, increasing the Government's capacity to de-

sign and implement new water projects, improving water quantity monitoring, and facilitating open discussion on water policy reform, as well as increasing public awareness.

In the West Bank/Gaza, USAID is involved in the rehabilitation of storm water and sewage collection systems, village water networks and improved access to potable water, including: increasing the quantity and quality of water at the village and municipal levels by developing new sources, upgrading and extending water systems, and monitoring water quality; promoting more effective use of available water by reclaiming waste water and storm water, and instituting conservation measures and loss prevention programs; and enacting policies for more equitable allocation of water resources at a regional level by establishing water data banks and adopting water resources master plans to include regional conservation, loss prevention and reuse measures, and the identification of new sources.

USAID actively works with national institutions in Morocco, including local governments and citizens' groups on improving environmental services delivery, strengthening key urban development institutions, and providing basic environmental infrastructure, such as sewers, potable water and sanitary landfills. It also provides assistance in policy and institutional strengthening, with pilot activities demonstrating improved technologies relating to erosion control, urban waste water treatment and reuse for agriculture. In the irrigated agriculture sector USAID activities promote water savings through system-level and on-farm water-use efficiency improvements, water quality improvements through promoting integrated pest and fertilizer management technologies, and strengthening of participation by farmer water-user groups in decision-making related to water management.

USAID promotes national and local environmental awareness campaigns relating to water scarcity and conservation in Central America and the Middle East. In addition, in Mongolia USAID is assisting a new program intended to support critical needs of farmers and herds-men. It will begin by working on the development of rural-based NGOs and, in due course, hopes to develop additional programs in rural infrastructure and small-scale private enterprise.

Latin and Central America – Mexico

USAID activities in Mexico promote the conservation of key terrestrial and marine ecosystems, strengthen the management capacities of NGOs to protect parks and conserve neotropical migratory birds. In addition, USAID activities have promoted the adoption of renewable energy, energy efficiency, and pollution prevention technologies and practices in targeted industries and municipalities in support of the Mexican climate change program. This program includes the development of a climate change mitigation action plan, a national climate office, and a leadership position as a key climate change country.

Europe and the Newly Independent States – Central Asian Region

USAID promotes activities in countries, such as Turkmenistan, which allow the country to participate in regional oil and gas initiatives and the establishment of a policy environment conducive to attracting foreign investment in oil and gas exploration, processing, and transport in an environmentally responsible manner.

USAID is also assisting in water management programs in regions such as the Aral Sea, where the underlying causes of environmental degradation will be addressed through regional cooperation to promote long-term, international agreements for a multipurpose (power vs. irrigation) management of cascades of dams and water sharing and quality. Further, legal and regulatory reform in water pricing, privatization of local water use rights, and organization of self-sustaining, non-governmental water user associations will be pursued. This will involve passage of reform legislation and implementing rules and regulations which would establish water user associations, waste management guidelines, and a pollution fines system.