

**GLOBAL ENVIRONMENT FACILITY**  
**PROPOSAL FOR PDF BLOCK B & C GRANTS**

**Country:** Near East (Jordan and Lebanon<sup>1</sup>)      **Focal Area:** Biodiversity

**Project Title:** Conservation, Management and Sustainable Use of  
Dryland Biodiversity within Priority Agro-Ecosystems in the Near East

**Amount of Funding Requested:** US\$ 52,000  
**Co-funding:** US\$165,000 (UNEP, ICARDA, IPGRI and ACSAD)

**Requesting Agency:** UNDP/International Centre for Agricultural Research in the Dry Areas  
(ICARDA)

**Block B**       **Block C**

**Block A Grant Awarded:** No

**I. Summary Project Objectives and Description**

The project will promote the conservation, management and sustainable use of Drylands Agro-Biodiversity in the Near East, through the development of productive and sustainable resource conservation and management strategies in priority agro-ecosystems. Although the number of species may be low in drylands, many of the species are of global importance -- the Near East is one of the most important centres of origin of agriculture. In drylands, the ecosystems are fragile and productive land is scarce; exploitation of these natural habitats is high and the relative loss of this globally important biodiversity by degradation is very serious. A key factor for sustainable development of drylands in the region is our ability to conserve, manage and utilise the agro-biodiversity within the context of integrated natural resource management, within each ecosystem, in a way that can be both feasibly implemented and profitable. Dryland species are highly adaptable to environmental stress. This makes them a vital source of genetic material to improve crop varieties and increase their drought and disease resistance. Although the priority agro-ecosystems can only be agreed upon at the conference foreseen under this PDF request, it is anticipated that the participating country will focus on those sites discussed in detail at the earlier Amman workshops, i.e. thereby addressing issues pertaining to wild relatives of cultivars and land races within a landscape framework.

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<sup>1</sup> Should Syria ratify during the implementation of this Module B submission, and following the 90 days waiting period, Syria will also be invited to participate in the proposal.

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Project

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\$183,000

Amount of Fund  
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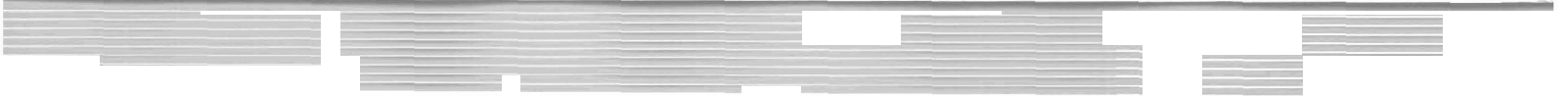
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The immediate objectives for the initial five years of the project, and their associated outputs and activities, are presented under five major themes:

This project will be embedded in a larger project for which resources will be sought beyond the GEF:

1. Assessment of problem and needs in priority agro-ecosystems;
2. Agricultural biodiversity: conservation and utilization of biodiversity in agricultural production systems;
3. Land use management: soil, water, livestock and native vegetation management;
4. Social, economic and policy issues: identification of cultural and socio-economic determinants of resource conservation and management strategies and the evaluation of alternative policy options; and
5. Institutional strengthening and capacity building of national programmes.

It must be understood that GEF/UNDP will only be asked to fund those activities referred to in the summary and listed later under the justification.

The outputs of this project will be achieved by a Consortium of partners in national and international research institutes.

## **II. Description of Proposed PDF Activities**

Important activities already been carried out include: a consultation and project planning meeting in Amman in June 1994, funded by ICARDA, and a follow-up workshop in February 1995, funded by UNEP, ICARDA, ACSAD and IPGRI. At these two workshops, the principle of a regional project was endorsed which adopts a holistic approach to conserving and arresting the degradation of its drylands agro-biodiversity. The project now has to be reformulated in accordance with GEF requirements.

Funds are required for the finalisation of this GEF project over a period of five years (1996-2000) to promote the conservation, management and sustainable use of drylands biodiversity in priority agro-ecosystems in Jordan and Lebanon, through the development of productive and sustainable resource conservation and management strategies in priority agro-ecosystems.

**The first steps towards this will require the following:**

The immediate objectives for the initial five years of the project and activities are presented under five major themes:

This project will  
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Funds are required for the finalization of the GEP project over a period of five years  
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biodiversity in priority agro-ecosystems in Jordan and Lebanon, through the development

of the  
ecosystem

The first steps  
are:

1. **Consultants:** The hiring of consultants to assist with:
  - (a) Obtaining the remaining information to complete the project brief and document; and
  - (b) Preparation of the final document for submission.
2. **Travel:** Supplementary travel by consultants, regional staff, ICARDA, ACSAD and IPGRI staff to Jordan and Lebanon for consultation with the national programmes, NGOs and land user organisations to address all the remaining questions.
3. **Workshop:** The workshop to be held in Amman will synthesise the new material collected and will allow partners from both Jordan and Lebanon countries to agree on both the final project brief and a full proposal to GEF for strengthening of *in-situ* conservation and to promote the conservation, management and sustainable use of drylands biodiversity in priority agro-ecosystems. As a result of the Workshop, funded by this PDF grant, the main project proposal will be fully complementary with all ongoing agricultural biodiversity conservation projects of GEF and other programmes in the same countries. Two further workshops will be held later in 1995, funded by UNEP and organized by the NARS, ICARDA, IPGRI and ACSAD, to finalise training needs in drylands biodiversity.

Efforts will be made to coordinate with the following GEF projects:

<u>Jordan:</u>	Conservation of the Dana and Azraq Protected Areas
<u>Turkey:</u>	<i>In-situ</i> and <i>ex-situ</i> Conservation of Genetic Diversity
<u>Lebanon:</u>	Conservation for Sustainable Biodiversity Protection
<u>Ethiopia:</u>	Farmer-based Approach to the Conservation of African Plant Genetic Resources

The project will also complement a new initiative being proposed by IPGRI: Conservation of Agricultural Biodiversity in Key Countries with *ex-situ* Programmes. The present proposal is more comprehensive than the proposed IPGRI project in that it also considers animal species and wild relatives of cultivars. It therefore seeks an alternate option to the conservation and sustainable use of agro-biodiversity.

Five participants from each partner country will attend: one person from each Ministry implicated in each NARS and one person from a university, NGO or other organization involved in biodiversity issues. The workshop will also include members of the Biodiversity Task Force from all the organisations and representatives from UNDP.

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### **III. PDF Outputs**

**Produce a project brief and final project document:** An output will be to submit a project brief to GEF/UNDP which would include a review mission to assist in the design and preparation of the full GEF proposal on drylands biodiversity for the Near East.

### **IV. Eligibility**

As signatories of the Convention on Biodiversity (CBD), the participating countries have recognized the *in-situ* conservation of drylands biodiversity as an important part of their national strategies to conserve agricultural biodiversity.

Both countries have received programme guidance and training by ICARDA/IPGRI/ACSAD or will receive them following the proposed training programmes.

Both countries have pledged their full support for this important initiative.

### **V. National Level Support (Including key stakeholders, and level and nature of**

The two countries which participate will contribute staff and facilities to the project. *Ex-situ* gene bank facilities exist in Jordan. NGOs in Jordan and Lebanon are more oriented to nature conservation and their interest in cultivated species is limited. However, the formal sector is relatively strong in Jordan. Lebanon is now strengthening its national system on plant genetic resources conservation.

Authorities in both countries are interested in *in-situ* conservation of natural populations of wild crop progenitors and relatives. Key stakeholders are the Ministries of Planning, Environment and Agriculture, universities, NGOs and farming communities. All the Ministries and the universities participated in the two preparatory workshops in Amman and were involved in the preparation of the draft project document. Further consultations will be carried out through correspondence, country visits, and the planned reformulation workshop.

Furthermore, preservation of these resources will benefit agriculture in other developing, and indeed developed, countries of the world where these important species of the Near East underpin their agricultural production.

### **VI. Justification**

The project will enable participating countries to implement the CBD's emphasis on *in-situ* conservation to protect significant genetic variability of dryland crops and animals, including their wild relatives; integrated approaches (e.g. landscape ecology) to conserving dryland agro-

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biodiversity and sustainable use of its components. It also covers Article 20.7, i.e. those ecosystems that are most vulnerable, such as those with arid and semi-arid zones, coastal and mountainous areas.

The important issues covered by the GEF Scoping Paper and Operational Strategy on Land Degradation (GEF Council Meeting, Washington, February 1995). National programmes require external, catalytic support to attain appropriate and sustainable capacity to plan and implement *in-situ* conservation of valuable genetic variability of drylands crops and animals.

The project will develop a new area of competence (*in-situ* conservation) through coordinated activities and practice.

Both the participating countries have ongoing *ex-situ* conservation programmes but *in-situ* programmes are needed to:

- provide a complementary back up system for genetic conservation of drylands; capture a greater range of genetic diversity within a crop than is possible in a static gene bank; preserve farmers' landraces (traditional varieties which are not the result of formal breeding programmes) with their adaptive potential;
- cost-effectively involve farming communities in genetic conservation; and
- monitor the major factors contributing to degradation of these dryland agro-ecosystems.

#### VII. Items to be Financed (in US \$)

<u>Item</u>	<u>GEF</u>	<u>Co-funders*</u>	<u>Total</u>
Regional consultant	15,000	10,000	25,000
Travel	5,000		5,000
National consultants (3)	9,000		9,000
Travel	3,000		3,000
Workshops	20,000	155,000	175,000
<b>TOTAL</b>	<b>52,000</b>	<b>165,000</b>	<b>217,000</b>

\*UNEP, ICARDA, IPGRI and ACSAD (Arab Center for the Studies of Arid Zones and Dry Lands)

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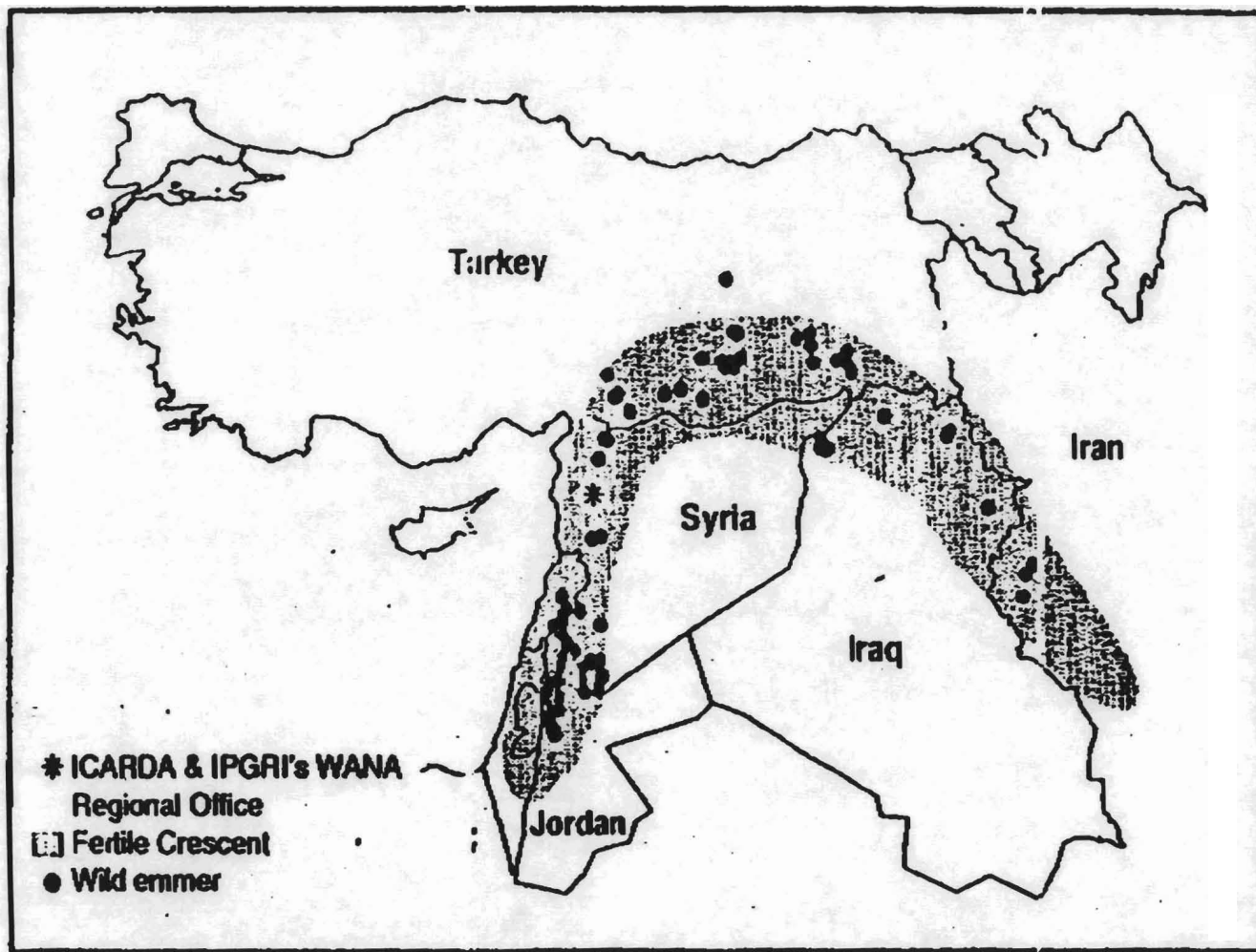
## Annex 1

ICARDA (The International Center for Agricultural Research in the Dry Areas) as the name suggests, focuses its research on drylands and has for about 20 years, established collaborative **partnerships** with NRIs, IARCs and ROs and has developed **key networks** in the region through which the proposed consortium will operate. ICARDA's headquarters are centrally located within the Near East (see attached map) and therefore it is in a unique position to act as the "**convening**" center in this eco-regional initiative. In addition to expertise in agricultural biodiversity and natural resource management, the Genetic Resources Unit currently holds over 90,000 accessions of cereals and food, forage and pasture legumes from WANA in its germplasm bank.

At the same time, IPGRI has located its regional office for WANA at ICARDA; IPGRI scientists, in collaboration with national programmes, conduct research, collection and documentation activities, covering a range of species, including vegetables, tree crops, and native shrubs and grasses. In May 1992, the **WANA Plant Genetic Resources Network (WANANET)** was established by the **WANA Plant Genetic Resources Committee (WANA-PGRC)**, which consisted of national representatives of the entire WANA region. The **WANA-PGRC** will identify common problems, prioritize collaborative work and identify possible solutions, and open avenues of collaboration with other networks in this field, both regionally and globally. The **WANA Regional Office of IPGRI** serves a secretariat to the network.

ICARDA (The International Centre for Agricultural Research in the Dry Areas) as the main partner. ICARDA focuses its research on drylands and has for about 20 years established collaborative relationships with IARC and ICRD and has developed key networks in the region through which the proposed consortium will operate. ICARDA's leadership and expertise in the area of genetic resources is well known and therefore it is in a good position to act as the 'convener' center in the one-regional initiative. In addition, ICARDA currently holds over 10,000 accessions of cereals, forage and pasture legumes from a wide geographical area.

At the same time, IPGRI has located its regional office for WANA in ICARDA. IPGRI scientists in collaboration with national programs, conduct research, collection and documentation activities covering a wide range of species, including vegetables, tree crops, and native shrubs and grasses. In May 1994, the WANA Plant Genetic Resources Committee (WANA-PGRC) was established by the national representatives of the entire WANA region. The WANA-PGRC will identify common priorities, coordinate collaborative work and identify possible solutions and opportunities of collaboration with other networks in the field, both regional and international.



**Fig. 1: The Fertile Crescent, location of ICARDA and IPGRI's WANA Regional Office, and geographical distribution of wild emmer, the progenitor of durum and bread wheat.**

