



Policy Name	
Al-Ma'moun University Program for the Conservation of Animal, Plant, and Wild Genetic Resources for Food	
Policy Information	
Issue Date	2023
Revision Date	July, 2024
Evaluation Frequency	Yearly
Level of Confidentiality	Public
Policy Approval Date	December 30, 2024
Policy Statement	
<p>This program aims to contribute to biodiversity conservation, which is crucial for food security and sustainable agriculture in Iraq and the broader region, through scientific research, education, and capacity building.</p> <p>Key Program Objectives:</p> <ul style="list-style-type: none">• Identification and Documentation of Genetic Resources: Conduct comprehensive surveys to identify local and endangered animal and wild plant species, as well as those used for food, including traditional landraces and heritage crops.• In-situ Conservation: Support practices that protect species in their natural habitats, in collaboration with local communities and governmental bodies.• Ex-situ Conservation: Establish and develop gene banks (seed banks and genetic repositories) and living collections to preserve genetic resources outside their original environments.• Scientific Research and Development:<ul style="list-style-type: none">○ Study the genetic characteristics, disease resistance, and adaptability to changing environmental conditions of local species.○ Develop new techniques for conservation and propagation.○ Assess threats facing genetic resources (e.g., climate change, habitat loss, and unsustainable agricultural practices).• Capacity Building and Education:<ul style="list-style-type: none">○ Offer academic programs (undergraduate and postgraduate) specialized in genetic resource conservation, biology, and environmental sciences.○ Organize workshops and training courses for farmers, specialists, and relevant stakeholders on best practices for sustainable conservation and management.• Awareness and Knowledge Dissemination:<ul style="list-style-type: none">○ Raise awareness among university students and the wider community about the importance of biodiversity for food security and the environment.	

- Disseminate research findings and recommendations to the public and policymakers.
- **Partnerships and Collaboration:**
 - Establish partnerships with local and international research institutions, relevant ministries (such as Agriculture, Environment), and non-governmental organizations to enhance conservation efforts.
 - Participate in regional and international networks for genetic resource conservation.

Proposed Program Components and Facilities at Al-Ma'moun University:

1. **Genetic Resources Unit or Center:** Responsible for coordinating and overseeing research and educational activities.
2. **Small Seed Bank / Plant Tissue Culture Laboratory:** For preserving seeds of local plant species of food and economic importance, and propagating endangered plants.
3. **Genetic and Molecular Analysis Laboratories:** To conduct advanced research on the genetic diversity of species.
4. **Educational/Demonstration Botanical Garden:** To showcase local and endangered plant species for research and practical education.
5. **Extension and Awareness Unit:** To organize events, workshops, and provide support to local communities.
6. **Academic Programs:** Within faculties such as Sciences, Agriculture (if applicable), or Biological Sciences.

Expected Impact:

- **Enhanced Food Security:** By preserving the genetic diversity of crops and animal breeds, which provides resilience to food systems in the face of environmental changes and diseases.
- **Protection of Endangered Species:** Contributing to the conservation efforts for endangered wildlife and wild plants.
- **Advancement of Scientific Research:** Enriching scientific knowledge about biodiversity in Iraq.
- **Development of Specialized Cadres:** Supplying the job market with experts capable of managing and protecting natural resources.
- **Strengthening the University's Role:** Solidifying Al-Ma'moun University's position as a leading center for sustainable development and environmental protection in Iraq.

This program directly aligns with **Sustainable Development Goals (SDGs)** such as: **Goal 2 (Zero Hunger)** by promoting sustainable agriculture and genetic

diversity, **Goal 15 (Life on Land)** by protecting ecosystems and biodiversity, and **Goal 4 (Quality Education)** through research and education.