

## People's Participation in Plant Biodiversity Conservation: Preserving Endemic Plants in the Zagros Mountains, Islamic Republic of Iran

**SGP Grantee:** Green Message

**Location:** Zagros mountains, western/central Iran

**Ecosystem Type:** mountains, grasslands

**Biodiversity Significance:** high degree of endemic plant species

**Key Themes:** plant genetic resources, community participation in sustainable management plans

**SGP Contribution:** \$25,000 (February 2002)

### Background

The Zagros mountains, which run from north to south along the western side of Iran, are host to a high degree of biodiversity. The central Zagros region, which has particularly dramatic variations in elevation, encompasses a wide range of ecosystems, from wetlands to semi-arid deserts, and from rangelands to forests and high mountain peaks. In addition to being a critical source of water for Iran, these mountains contain an estimated 2,000 plant species, about 200 of which are endemic to the region. Others are wild relatives of commercially important species, such as the grape and tulip. These plants have many traditional uses, and local people, including many of Iran's remaining nomadic people, still retain significant knowledge about their habitats. However, the region's rich biodiversity is threatened by increased conversion of land for agriculture, the overgrazing of livestock, and other pressures associated with increased population and on-going poverty. In addition to biodiversity loss, such pressures also lead to land degradation, which is a threat to the productivity and water resources of this unique region.

### Project Implementation

Green Message is a non-governmental organization based in Isfahan, a city in central Iran. Recognizing the valuable knowledge that local people have about plant species in the area, Green Message has developed and tested a participatory methodology to involve communities in the process of preserving four indigenous plant species. These are *rheum ribes* and *kellusia odoratissima*, which are gathered and sold for human consumption, and *astragalus cyclophylon* and *vica villosa*, which are eaten by animals. Green Message has provided a critical link between local people, university plant specialists, and government officials seeking to develop management plans. Through this project, communities have participated in the identification of the habitats of these four plants, and have contributed to a sustainable resource management plan being developed in conjunction with the Natural Resources Department. At the same time, specialists at the University of Isfahan are developing a germplasm collection for these and other species to support on-going agricultural research. Overall, the project contributes to public awareness about the need to maintain plant genetic diversity, and has helped facilitate the development of alternative sources of livelihood that may be necessary to implement sustainable management plans.

### Results and Partnerships

Green Message has made good progress so far toward its goals. For example, as a result of their efforts, the leaves and roots of *kellusia odoratissima*, commonly known as "mountain celery," were not sold in Isfahan markets in 2003 in order to allow more seeds to germinate. This required significant coordination with local harvesters and sellers, and resulted in an increase in seedlings by the end of the year.

The project's participatory approach has also attracted interest. A large GEF project on protected areas in the Zagros mountains has invited the group to participate in the project's steering committee and stakeholder workshops. The partnership developed between Isfahan University, the Natural Resources Department, and local farmers has been very successful. Finally, in recognition of this NGO's overall efforts to improve natural resource management, Green Message won Iran's National Environment Award in June 2003.