

1. Summary

This report is a proposal for the work to be undertaken as part of the Geomorphology and Physical Resources component of the Jordan Badia Research and Development Programme. The research will focus on the issue of people and the environment in arid lands and aims to provide practical options for sustainable development, for the benefit not only of the Hashemite Kingdom of Jordan but for other arid regions of the world. The research is significantly development driven because there is a need to identify useable natural resources and establish a framework for their effective exploitation and management in a marginal, fragile environment, which is sensitive to change.

Pressure for development of the Badia stems from the fact that the great majority of the population in Jordan is compressed into less than 10% of the country by environmental constraints. It is hoped that the Jordan Badia Research and Development Programme will provide the required framework to ease current environmental pressures, encourage migration to the Badia, a sparsely populated region, and establish economically and ecologically self-supporting communities.

The main areas of research are as follows.

1. Geomorphology, including landforms, processes and hazards.
2. Geology and physical resources.
3. Hydrology, surface water and water engineering.
4. Groundwater.
5. Soils and vegetation.
6. Sediment erosion and mobility.
7. Environmental management.

A preliminary field visit to the Badia was undertaken in August / September 1992. The collection of published and unpublished material, in particular Government reports available within Jordan, is in hand. The main research programme will commence in the spring of 1993, with the period of long term field data collection being concentrated between the summer of 1993 and late 1994.