

## Results of a preliminary survey of livestock owners in the Badia research and development programme area

### 1. Introduction

The Badia region is significant within the Hashemite Kingdom of Jordan, both in terms of land area and availability of resources, and of future potential for development. Owing to environmental factors (notably the erratic rainfall and wide ranging temperatures) pastoralism has been the primary economic activity of the Badia population for generations, the practice of which only began to change after the First World War. The development of the modern State and the extension of its infrastructure and authority into the Badia region, along with the arrival of technological innovations and availability of new services, is now reshaping many aspects of social and economic life.

The Badia region of Eastern Jordan covered by the joint research and development project of the Jordanian Higher Council for Science and Technology and the British Royal Geographical Society extends for some 11,210 square kilometres and constitutes over 15% of the total Badia area of Jordan. The programme area falls within a climatic zone generally receiving less than 200 mm of precipitation annually. In the villages to the north west of the programme area, some rain-fed agriculture occurs, although rainfall diminishes moving south and east across the programme area, decreasing to less than 50 mm. Much of the programme area is covered by a rolling plain of black basalt rocks, known locally as *al-harra*, which extends from the foothills of the Jebel Arab in the north-west to the flat sandy plain of *al-hamad* in the east. In the far south and west of the programme area lie plains of black flint and gravel, *as-suwan*, onto which encroach a few areas of stabilised sand dunes in the district of 'ash-Shama'.

In addition to the village of Safawi, where the Jordan Badia Research and Development Programme's Field Centre is located, there are about thirty other villages and hamlets, grouped in the north-western corner of the programme area. A dispersed population of mobile pastoralists makes exact assessments of population within the area difficult, but the figure is judged to be about 15,000.

The Badia Programme area contains an important livestock resource in the country, consisting of 107,000 sheep and goats (Ministry of Agriculture, 1991). Although many households have incomes drawn from mixed sources and the majority of people in the area are now sedentary, pastoralism continues to play a highly significant role in the economy. Whereas the population of the Badia cannot be described simply as pastoralist, most of the people in the Badia Programme area depend, at least in part, on livestock for their livelihood; in 22% of households livestock form the main source income, while 35% of people list livestock production as their major activity. (Jordan Badia Research & Development Programme, 1993).

### 2. Aims of Survey

The survey was designed and implemented as the combined first phase of the dual research proposals of Darius Campbell and Alan Roe, and as such has distinct objectives;

- The survey was primarily intended to provide a preliminary contact with pastoralists in