

out part of the soil content by ample use of "sweet" water, Jordan Valley soils proved extremely fertile and gave record yields. Due to its mild topography, abundance of underground water, and its exceptionally warm winter the Rift Valley was put, prior to occupation, under very intensive farming and had become Jordan's most important production area for vegetable crops, citrus and banana. For purposes of dry farming, however, this region is of little value given the present level of technology and market structure.

In general, soil quality in most rainfed hill slopes is of such marginal depth and fertility and is so vulnerable to runoff that much has to be done to avoid the hazards posed by these constraints.

Climate

By virtue of its geographical location near the equatorward border of the Mediterranean Zone, the West Bank is characterized by an extreme Mediterranean climate. This basically means a comparatively short rainy season of 3-4 months and a long rain-free summer. Seasonal variations in the length of day and night are moderate, ranging from 14 hours for the longest day (June 21) to ten hours for the shortest (December 22), as compared to 18 and 6 hours respectively, in London.

Insolation rates (duration of direct exposure to sunlight and intensity of sunlight) are particularly high. Insolation is further strengthened in the summer by almost completely clear skies.

These characteristics, together with high summer temperatures have important consequences for agricultural patterns, as we shall

explore at length in a later section.

Temperature

As a result of strong insolation, temperatures are comparatively high but they vary considerably from one region to another, depending on altitude, exposure to marine influence and wind directions.

There are generally three distinctive isothermic regions in the country: western foothills, the hilly plateau, and the Jordan Valley. The former registers an annual average of 20°C (68°F), the hills 17°C (63°F) and the Jordan Valley an average of 25°C (77°F). January is normally the coldest month and August is the warmest (see Table II-1).

Table (II - 1)

Monthly average temperatures in January and August

	$^{\circ}\text{F}$	<u>January</u>	$^{\circ}\text{C}$	$^{\circ}\text{F}$	<u>August</u>	$^{\circ}\text{C}$
Western foothills	53.5		12	77.0		25
Hills	48.5		9	75.5		24
Jordan Valley	55.0		13	87.5		31

Source: Orni and Efrat, op cit, p 135.

The impact on agriculture of high summer temperature, occasional heat waves, hail storms, and frost is very grave, particularly more so on olives and other rainfed fruit trees. This will be analyzed later under respective sections.

Wind

The East Mediterranean coast is influenced by a number of winds, cyclones, and anticyclones. Among the most hazardous to agriculture, however, are the "khamaseen" and "Sharav" winds.