

Agricultural land is usually divided with respect to its slope into four categories:<sup>1</sup>

1. Gentle to zero slopes 0 - 2%
2. Average slopes 3 - 10%
3. Steep 10 - 15%
4. Very steep over 15%

While the first three categories are considered fit for certain appropriate forms of farming, many reclamation experts would consider land of over 15 percent gradient as not fit for commercial farming.<sup>2</sup> Upon applying these criteria to the West Bank, the situation looks gloomy, since more than 60 percent of its land area has a slope gradient of well over 15 percent. The problem of steep slope is further compounded by the predominance of a large proportion of fixed bed-rock and stones.

Both of the above mentioned attributes, slope and rockiness, were taken as the basis for an aerial photographic survey of West Bank land which was conducted by an Israeli firm shortly after occupation. The results of that survey<sup>3</sup> produced a detailed classification of land area surrounding all West Bank villages. The results of that survey are summarized in Table (I-6), which shows that only 10 percent of land area is fit for irrigated farming, 63 percent fit for dry farming but with various degrees of restrictions, and 27 percent is not fit for cultivation altogether. Although it may be questionable from a Palestinian perspective, this classification is certainly indicative of the magnitude of land development problems which are to be confronted by development planners.

1. M Wertheimer, Agricultural Land Reclamation Works in Hilly Areas Under a Xerotheric Climate, a paper submitted to the FAO Regional Seminar on Rainfed Agriculture in the Near East, Amman 5 - 10 May 1979, p 4.
2. Ibid, p 4.
3. Classification of West Bank land, an unpublished mimeographed report, Department of Agriculture, 1979, pp 1-6.

Table (II - 6)

Land Classification according to farming capability

<u>Class</u>	<u>Area</u>	<u>Percent</u>	<u>Description</u>
I	172, 292	2.9	Fit for irrigated crops and trees
II	439,774	7.5	Fit for irrigated agriculture with some restrictions
III	1,431,958	24.3	Fit for dry farming and parts of it for irrigation but with major limitations.
IV	2,262,717	38.5	Farming potential is very limited and reclamation processes are unecomonical
V	591,388	10.1	Fit for grazing but not for cultivation
VI	980,734	16.7	Fit for grazing with some restrictions

N.B. The area reported above includes, by mistake, the area of some Arab villages which lie beyond the pre-1967 borders.  
Source: Department of Agriculture

The implications of topographic constraints on West Bank agriculture are probably more serious and less manageable than those related to rain. The following is a summary of the problems which have been repeatedly voiced by respondents, and clearly identified by the researcher:

1. Steep slope gradients receiving torrential rains falling after a hot and long summer leads to the twin problems of soil erosion and surface runoff. Both problems have been sharply accelerated since occupation due to the deterioration of stone walls and the non-feasibility of restoring them. The loss of an already shallow top soil requiring hundreds of years to accumulate represents an irrevocable loss and a grave national hazard. In addition to soil loss, it is estimated that 15 to 25 percent of badly needed rain water is also lost as surface-runoff on areas of steep slopes.<sup>1</sup>

1. Wertheimer, op cit, p 4.