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The Natural Ground and Environmental Potential in the Mediterranean Part of Israel

ABSTRACT

The natural potential of a 1000 sq.k. area, where agricultural activities, urbanization and leisure need best be planned, was established. Thirty four qualities, at a level of detail of 1 sq.k., regarding the characteristics of the profile of the ground, as well as the properties of the surface and of the environment, were collected in a multidimensional matrix.

Statistical examination revealed close relations between several qualities of the ground and environment. The main significance of these relations lies in the simplification of the function which represents the potential of the area for different planning purposes.

Studying the interconnections between various components, six key factors were found: the elevation above sea-level, the amount of rock and stone in the ground, the inclination, the amount of sand in the texture of the ground, the volume of

precipitation and the radiation. This, in a characteristic Mediterranean area, geographically extending from the sea-shore, about 20 km near Ashkelon and up to the vicinity of the main watershed line, near Hebron.

The aim of this article is to give the planner and the one responsible for making decisions an additional, new instrument in determining the use and positive exploitation of a planned site. It concerns the criteria for adjusting to the needs and characteristics of the person who will be living and/or working, or vacationing in or using the area of soil in question.

The value of the proposed definitions of the criteria is in their quantitative mathematical expressions. An examination of the parameters of adjustment between man and the soil which are not tied to political, economic or social considerations exclusively, adds an objective, scien-

tific aspect to the determination of the planner and decision-maker.

The proposed system contributes to the vital need of guarding soil reserves so that they will be used effectively and not wasted.

One doesn't have to be a great believer in the theory of the "Roman Club" in order to worry about the exploitation of the treasures of nature. For us the soil — which is very limited in area — is practically the only natural resource in our country and we must be very careful to control it in the most pro-

gressive methods.

Moreover, giving due consideration to the proposed criteria is a positive motivation for the planning of soil use, besides the legal limitations and the political-economic requirements of this time.

The natural potential of the soil and the many varied characteristics of man must direct and determine the scale of preferences in deciding the soil usage in various area : housing, agriculture, relaxation, health, welfare, open spaces, industry, trade, quarries etc.

