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THE POTENTIAL OF NATURAL RESOURCES IN JORDAN
(PHOSPHATE - SOIL - GROUND-WATER)

by

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The increase in knowledge of phosphate, soil, and ground-water in Jordan has largely been due to the catalysing and stimulating effect of geological field mapping, the mother of applied geosciences. The mapping has been logically augmented step by step, by sophisticated and expensive geoscientific methods applied by highly specialized experts.

In this paper, after some remarks on geology, there is a summary of the work carried out in the search for knowledge of phosphate, soil, and ground-water. These three topics have been chosen for the following reasons: One mineral raw material, phosphate, has been discovered not only in large quantities and in good quality, but also at places where it can be (and is) economically open cast mined, thus contributing to the development of the country. As comparatively large quantities of water are needed for ore dressing, important long-term priorities concerning the distribution and use of the available ground-water need to be determined in the very near future. Ground-water, in spite of being frequently considered a "renewable resource" is - especially in view of the climatic and geologic circumstances prevailing in Jordan - renewable only to a certain extent. The natural limits of ground-water, of the utmost importance for irrigated farming, for human consumption and also for ore dressing, have to be taken most carefully into account and not treated only as statistics.

Jordan, with a maximum length from north to south of 380 km and with a similar maximum width from west to east, has an area of about 96,500 sq km. Its highest elevation of 1856 m occurs in the mountains east of the southern sector of the Wadi Araba - Dead Sea - Jordan Valley depression. In Jordan, this depression morphologically links the Gulf of