

EROSION: New Zealand's Urgent Problem

(Major J. R. Kirk, M.B.E.)

"Erosion has, indeed, been one of the most potent factors causing the downfall of former civilisations and empires, whose ruined cities now lie amid barren wastes that once were the world's most fertile lands."

—Dr. G. V. Jacks—"The Rape of the Earth."

LIFE for most is such a hurried thing to-day, and its interests so complex, that evident facts, such as that grass is green, that rain causes floods, if observed at all, are hardly given a thought. For life goes pleasantly on, and legislators have been appointed to do all the necessary thinking to keep it so! Indifference is thus engendered, and it is usually not until the dire effects of some calamity of nature which overtakes a district are observed and perhaps felt, that indignation displaces indifference and the necessity for greater thought for the future is clearly seen. It is principally for those who have little time or inclination to read long articles or a scientific

symposium that the following facts have been marshalled.

Life depends absolutely upon the top layer, and the top layer only, of the earth's surface-soil. Remove that, and desert conditions result; nothing can grow, nothing live. It has been estimated that one inch of top soil was laid down every 500 years—in some places it took 1,000 years. Yet water and wind can take in a single day all the top soil from land which fire or mechanical process has first laid bare!

The natural vegetation, comprising trees hundreds of years old, tussock and other native grasses, protected and fed the soil. When the rain descended, its damage as floods was

A COMMON SCENE IN PAKEHA (WHITE MAN) TIMES. Photo T. W. Collins.

1st Prize Forest Destruction Section. Photographic Competition.

