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The material passing the 2-millimeter-mesh sieve contained from 78 to 85 per cent. of calcium carbonate. This left from 15 to 22 per cent. of actual soil, including organic matter, combined water and possible stone particles. The analysis thus showed a very high percentage of calcium carbonate, or coral, and a relatively small percentage of true soil. It was suggested that crops might be grown if the coral were broken up and mixed with as much vegetable refuse as possible. The use of a supplement of blood and bone and muriate of potash was also recommended, but it was considered by the Cawthron Institute that a successful result was not very likely.

The experiment suggested was carried out. Experimental plots were established in Fakaofo, and control or checking plots were also prepared in Samoa in large samples of coral from each of the atolls. Taro, ta'amu, and kumaras were planted and at first showed rapid progress, but as subsequent showers of rain leached out the chemical additions to the coral soil growth slowed and, later on, ceased altogether. It does not appear, therefore, that the addition of chemical supplements represents a good approach to the problem of the infertility of Tokelau soil. Heavy mulching and composting seems to be the only solution, but it is difficult to persuade the Tokelau people to do this consistently in order to raise small crops. They recognize the value of the use of vegetable refuse, however, and they are accustomed to lay down coconut-husks round the bases of their few banana-plants.

12. Trade and Communications

For the past ten years the principal communications with the Group have been maintained by means of Government-chartered shipping or aircraft. There have also been occasional calls of Mission ships, and units of the Royal New Zealand Navy have now resumed annual visits, although these were restricted during the war years. On naval visits the High Commissioner takes the opportunity offered to inspect the Group. Up till two years ago wireless sets were maintained on every atoll. One now functions on Nukunono, but the operators in Atafu and Fakaofo have been withdrawn temporarily to be trained on new and better sets.

Until the war years made it dangerous or inadvisable to do so the Islanders were accustomed on occasion to make visits between the atolls in their own canoes. The distance between Fakaofo and Nukunono is approximately 40 miles and that between Nukunono and Atafu approximately 57 miles. Contact between atolls by Tokelau canoes is at present forbidden except in cases of real emergency. When all wireless sets are again functioning such trips will be permitted subject to certain conditions, including the reporting by wireless both of the departure and the arrival.

Communication by speech is per medium of the Samoan language. The Tokelau people have their own dialect which is not immediately understood by Samoans, but it happens that the Bible they use is the Samoan version, and most of their pastors are Samoans who are accustomed to preaching in Samoan. The official language is therefore Samoan, and all Tokelau Islanders are bilingual. It is a fact that the old Tokelau language is gradually dying out, and most people under fifty are unreliable informants in relation to research on the Tokelau language itself.

Up till a year or so before the war copra was purchased and goods sold in the Tokelau Islands by an Apia firm operating with its own schooner. Just prior to the outbreak of war it became impossible to maintain these communications, and the Department of Samoan Affairs in Apia, which administers the Group, undertook to visit the Tokelau Islands in small launches for the purpose of taking food and other necessaries. This method was developed later with the charter of larger schooners, and the service both in relation to the purchase of copra and the provision of all necessary trade goods has been maintained since that time by the Department of Samoan Affairs. Proposals are now in train to hand back arrangements for the purchase of copra and all trading into