

Samoa project details expanded

Sir

In the last edition of this Journal (Volume 47 (1)) Professor McKelvey recalled an inventory he undertook 36 years ago on the Cornwall Estate, Western Samoa.

New Zealand funded a Bilateral Forestry Aid Project in Western Samoa for almost 20 years and a large number of New Zealand advisors and consultants were involved. As the last Plantation Advisor funded by the Ministry of Foreign Affairs and Trade to this project in 1996, it may be of interest to readers if I recount more of the project history subsequent to Professor McKelvey's work.

A large area of the merchantable forest within the Cornwall Estate was cut over by Potlach Forest Inc. who commenced tree planting in 1971 on the Masamasa Block with 535 ha of mainly Teak, Mahogany and Toona species. An area of 461 ha in the Falelima block was also planted, commencing in 1976 and continuing for three years. Cyclones Ofa and Val flattened this during the period 1990/91. Some salvage logging was carried out and small amounts of *Eucalyptus deglupta* were being recovered in 1996.

Much of the merchantable natural forest in the Island of Savi'i has gone. Between 1977 and 1992, 47% of the merchantable forest was cleared at an average rate of 987 ha/year, while 27% of the non-merchantable forest was lost in the same period at a rate of 847 ha/year (90% of the latter to agriculture). If this loss is expressed as a percentage, then the rate of forest clearance has been three times that of those yardsticks, the Philippines and Indonesia, during the same period.

Potlach folded eventually. It was simply too big for the resource to support and the species unknown to the US market. Kilns, treatment plants and veneer mill are abandoned but a small sawmilling operation was continuing in 1996 under different ownership.

An increase in the planting programme took place between 1981 and 1987 when the Asian Development Bank provided the Government of Western Samoa with a Forestry Development Loan of USD 1.633 million. New Zealand provided co-financing and this period saw an expansion in many areas including labour force, vehicles, buildings and training. New planting areas were added

at Gatavai, Saanapu, Puapua and Lefaga.

Results achieved with this programme in relation to funds deployed were unsatisfactory for a number or reasons. Included in these were the Aopo fire (1983), Cyclone Ofa (1990) and Cyclone Val (1991). By 1996, the plantation area stood at 2500 ha of which almost all was less than 4 years old: i.e., post Cyclone Val.

Enduring successful tree establishment post Cyclone Val proved difficult on some of the sites because of shallow bouldery soils, which include about 50% of recent Pahoehe lava sites. Notably the Aopo and Puapua Volcanic Series. Root architecture is often poor on such areas and as trees develop exposed sail areas, steady attrition through wind throw can occur, despite absence of severe cyclonic events, necessitating extensive blanking/replanting and extended weeding programmes.

Late in 1995 MFAT sent to Samoa a re-design team to fashion a new project. The merit of continuing on the shallow sites was considered doubtful, while there was a desire on the part of both parties to continue with some sort of project. New Zealand was by now also directly contributing to the workers' payroll. The FORENCO Re-design Team produced a series of recommendations, the more important being:

1. Corporatisation of the Western Samoa Forestry Division by formation of an SOE.
2. The Forestry Division role to be separated from the NZ/Samoan project.
3. Development of private and better quality land by a bidding scheme, similar to that operating on the East Coast of New Zealand, with lowest bidders receiving planting funds.

This re-designed project was not subsequently adopted and with completion of the "old project" in 1996, MFAT funding to Samoa for forestry projects terminated.

By then much of the merchantable natural forest outside reserves was gone, to be replaced by some young mahogany plantations of which about half were on sites that could be considered unstable for sawlog plantation purposes.

Maurice Williamson

Forest development in Otago

The article about the Otago Southland Forest Products Group in the May 2002 *Journal* prompted a response from Lindsay Poole. He recalls the debate that took place in 1963 when, as Director General of Forests, he announced plans for an afforestation scheme of 100,000 acres in Otago.

There was fierce opposition from Mr M.R Skipworth, Superintendent of Reserves of the Dunedin City Corporation. In the *Otago Daily Times* of 10 August 1963, Skipworth commented that "Unfortunately for the welfare of New Zealand the public suffers under the misconception that forestry must necessarily be good for the country because trees are wealth.... because of misconceptions that there is an impending world wide shortage of timber and that trees in New Zealand grow faster and better than anywhere else in the world."

He suggested that "there is no shortage now or in the predictable future, both exotic and native timbers being

at present in over-supply. The National Forest Survey reports that at the present rate of cutting, supplies of native timbers in Westland will last for 75 years."

Skipworth questioned the profitability of the New Zealand Forest Service afforestation proposal which was aimed at the establishment of a pulp industry. Referring to pulplog prices in the Central North Island he argued that "on present experience the money obtained by the forest owner will not be sufficient to cover the outlay".

He concluded that "instead of some possible fairy return in 40 years time, a wonderful and immediate uplift could be given to primary production in Otago if the same money were used for some form of subsidy to farmers engaged on land improvement." In any event the NZFS went ahead with afforestation. There was expansion of Berwick and new forests were established at Otago Coast, Silverpeaks, Owaka and Glendhu. By 1987, the NZFS had established a total area of about 74,000 acres (30,000 ha).