

Behind the FARM GATE

Farmers in New Zealand are little different from farmers elsewhere. While many subscribe to a conservation ethic, all too often their farm practices are non-sustainable. Farmers cultivate land too fragile to support crops, causing soil erosion; they irrigate wastefully, causing water tables to drop; and they readily spray their crops with pesticides and fertilisers which are injurious to health. Nigel van Dorsser takes a philosophical look at New Zealand agriculture.



Studies in Wairoa, near where this photo was taken, have shown that such slips may take up to 50 years to recover, and then they will have only 70-80 percent the productivity of uneroded land. Photo: R Blakely

RECENTLY A COLLEAGUE asked me: Can our present rate of production continue beyond our great grandchildren's time? Will the soil we use now be in as good condition if not better then? My colleague was really asking: is New Zealand agriculture sustainable? My reply was that sustainable agriculture will be achieved when conservation is integrated with production.

More than half of New Zealand's land area is used for agriculture; about 35 percent of our total land is "improved" pasture, cropping land or orchards. Combined, these account for about 70 percent of our overseas earnings.

The desire for profit and Government policies are the two forces which have mainly affected agricultural land. Over the last two decades, and especially during the Muldoon

era, farmers were invited by incentives and taught by Ministry of Agriculture officials that they should increase production by whatever means were most expedient.

During these buoyant times land values soared to levels far in excess of what farmers could earn off their farms, and many farmers were able to borrow heavily at low interest rates. Non-interest bearing Land Development Encouragement Loans were handed out to farmers to cut bush and scrub from marginal areas, and often vital habitat for species such as kiwi. When combined with suspensory Livestock Incentive Loans, fertiliser subsidies and supplementary minimum prices (SMPs), the damage done to steep hill country was often critical. There was scant regard for water run off or soil conservation.

Government policies have now changed.

Subsequently many farmers have gone out of business, unable to service their huge debts. We are left with a legacy of steep hill country insufficiently protected from major storms, and many farmers who have no funds to invest in soil conservation. Cropping rotations have intensified, with consequent depletion of soil structure and fertility levels.

Maximum production continues to remain the ultimate goal for most farmers: either because they are forced to in order to pay off their debts, or simply because they are still infected with the maximum production mentality. What all this adds up to is:

- The soil is perceived as something used for business, not as a living system. When farmers speak of "asset maintenance" they are not referring to the topsoil, its fertility or the stability of the agroecosystem, but rather