high value because of their productivity. This makes a major buy-out prohibitively expensive.

The tragedy is not just a tragedy of the hills, but also a tragedy of those hill families, tied to the eroding hills by debt. Many of them know their position is untenable in the long term, but because they have no buyer they stay, knowing that the next cyclone may be the end for them. In the meantime, no really effective restoration work can commence while these properties are still stocked. This in turn leaves the downstream community exposed to the full effects of the next cyclone.

Local government, farmers and foresters naturally favour a strategy of massive taxpayer intervention. They are calling for the reintroduction of the "East Coast Project" – a scheme started in the late 1960s whereby pines were planted on the worst category 3 lands. About 31,000 ha was planted at a cost of $92 million until the project was halted because, even with harvesting, it did not show a financial return. However, Cyclone Bola served to show how well the pines bound the hills; today nobody should contemplate harvesting the pines for that very reason.

Forestcorp, in its haste to realise assets, has sold cutting rights to Mangatu State Forest. As part of the East Coast Project, this taxpayer-funded forest was planted to hold together the collapsing Mangatu Station. This protection is unravelling as rainforest loggers, London Pacific fell the forest. Native mapou and titoki regenerating beneath the pines are harvested. Not a single pine is left to mitigate the continuing slumping and silting into the streams. The region is repeating the original folly of destroying the forest cover.

While the Labour Government has canned the East Coast Project as a financial investment, it has, since Bola, initiated two token catchment protection schemes based on pine planting. Both attempt to sidestep the cost of land purchase.

The first is the East Coast Project Conservation Forestry Scheme. It offers a seemingly irresistible 95 percent subsidy: a 66 percent central government subsidy of $7 million (net) spread over five years and a further 28 percent subsidy from district ratepayers. The farmer's share is just 5 percent.

In the first year 2000 ha were planted out of a possible 15,000 ha to be planted over five years. However landowners are reluctant to participate and understandably so. Why commit scarce resources to a project with no guarantee that one can harvest the trees in the future? No comprehensive land use plan exists to indicate which land requires permanent, no-harvest forest cover, or which land is zoned as suitable for forest which can be harvested without compromising the downstream economy. Few farmers can afford the ongoing silviculture costs when their cash flow from grazing has diminished.

The second government initiative is especially directed towards the multiple-owned land in the north. It offers government loans at favourable rates to companies willing to participate in joint forestry ventures with the land owners. Ngati Porou Forests Ltd, which planted 600 ha of forest last year, is one such venture. However, some of this planting has been done by removing mature manuka. Removing years of healing manuka regeneration is like picking at a scab to keep the wound open.

A further government strategy is an attempt to discourage farming on inappropriate land. Farmers have been warned by the Minister of Agriculture that they should face the risks of farming on these sites by paying their own insurance against disaster. Next time there may not be any taxpayer-funded relief scheme. This is an appropriate suggestion for the East Cape where soil fertility distorts the individual's profit-cost ledger in favour of farming these eroding hills.

However, this sensible strategy is unlikely to have any effect until after another cyclone, and the government of the day will have to stand by what it says. Incautious criticism of the policy by a National Party spokesperson has effectively undermined it anyway.

There is a strategy to reafforest land that is voluntarily retired with native trees. A conservation organisation, the East Coast Restoration Trust founded by John Hogan, is promoting this strategy. The Trust has had some success in raising the profile of East Cape problems, but it is unlikely to achieve any extensive revegetation through this method. The trustees of Rangitukia Station are the first to trial the scheme.

Land classification systems

- Land Use Capability classes (LUC) – The classes 1-8 largely indicate steepness from class 1 (flat) to class 8 (extremely steep).
- Gisborne District Council erosion categories – the categories indicate the severity of erosion from category 1 (nil to slight erosion), category 2 (moderate to severe erosion), to category 3 (extreme erosion).
- A "standard" hill country farm on the East Cape is most likely to be on class 7, category 2 land.

No regional commitment

What is the regional and district council response to the crisis? There is no evidence that they are committed to the only effective strategy, which is for wholesale retirement of stock and farmers from all category 3, and most of the category 2 lands. One would by now expect to have seen a regional plan, zoning water catchment under permanent forest as the only use for all category 3 and the backblocks category 2 lands. I would also expect to see a zone delineating "commercial" plantation or agro-forestry on the remaining category 2 lands, determined by a combination of land stability, topography and proximity to main roads.

I would certainly take local commitment to the restoration of the East Cape more seriously if the district and regional council prohibited the destruction of naturally regenerating native manuka or other scrub species.

Until the region itself shows it is prepared to grapple with the sacrifice of retiring the hills, then it is no wonder that the public and government tinker too with token regional subsidies. What is required is a "green line" beyond which lies a permanent cover of pine and native trees. Buffering this green line there needs to be a zone of sustainable land use for agro-forestry and plantations.

In the meantime there is virtually a stalemate on the widespread retirement and restoration of the East Cape hill catchment. Costs are blocking retirement and revegetation. Retirement planting in pines is an expensive commitment, as they should not be harvested. Fencing to keep stock out of forests is expensive, especially since the fences on unstable ground need continual maintenance. It is more cost effective to retire whole farms in the first instance, and whole districts in the second. In general trees and stock do not mix except on the most favourable land and in the most favourable economic circumstances. Commercial forestry should not be planted on distant unstable blocks requiring extensive road maintenance. Even stable hill farms in the headwaters have a cost, threatening the plains with peak storm run-off and downstream flooding.

The stalemate exists because of the unrealistic value placed on the hill country farms. Market forces which recognise the inherent fertility of the soils do not recognise the costs of maintaining road access, the costs of reticulating power and telephones, and the costs of insuring for the risk involved to both the plains and hill farmers from bad hill country management. New Zealand and the East Cape are being held to ransom by the unrealistic compensation expectations of the East Cape hill farmers. To break the stalemate, both regional and central government have to grasp the nettle of transferring the costs of remaking roads and reticulating power and phones to the farmers. The individual share of these costs will rise rapidly with progressive farm retirement and farm amalgamation. These rising costs will be the true costs of wrenching profit from these hills. Regional rating levels should vary so that people who live in areas with high flood protection costs should pay proportionately more for them.

Rescue package

Such a strategy could not be put in place without a parallel affordable incentive and rescue package that offers farmers a reasonable option to leave with enough capital to start afresh. This depends on having the Crown as a guaranteed last resort buyer. It also requires the implementation of land use restrictions to prevent the substitution of other inappropriate land uses, such as commercial forestry on seriously eroding land or on land that is financially marginal because of its isolation.

A realistic last resort land price may be in vicinity of $40 per hectare. For the farmer the alternatives are to sell to a neighbour, to forestry interests, or to linger on the hills, clearly increasing the chance of losing equity in stock and machinery.

The total cost of a taxpayer-funded retirement of some category 2 and all category 3 land at a realistic price and planting of the entire category 3 land, is unlikely to exceed the cost of the next disaster pay out. Effective restoration will in the meantime have commenced.

Large scale retirement of the hills is the