DEFORESTATION threatens to cause havoc in parts of the world which, as yet, have remained immune to this serious ecological problem.

The process itself is now well understood, and is being monitored. In places like the Himalayas, it threatens the existence of hill people, forcing many to leave their homes in search of work (thereby magnifying the problems in the towns and the surrounding plains).

Widespread felling of trees causes ecological imbalance by disturbing water tables. This causes flooding which, in turn, wipes away top-soils, destroying plant and animal life on which human populations partly depend. Thus, deserts and dustbowls are substituted for lush-green fields and fertile valleys.

Ecologists, on the whole, fail to identify one of the root causes of the problem: a malfunctioning land tenure system. They blame modern forms of intensive cultivation, implying (where they do not explicitly state) that our problems would be solved by a return to traditional forms of agriculture.

They fail to appreciate that over-exploitation of land is often the desperate measure of hungry people who are unwittingly induced into using ecologically-injurious techniques.

The exploitation of power arising from monopoly ownership of land leads directly to ecological damage. Just how important this factor is, relative to other causes, is a matter still to be evaluated. Here, however, we can only establish the link. Japan provides a useful illustrative example.

KAKUEI TANAKA became Prime Minister in the early '70s. The public scandal over some of his dubious land deals eventually led to his political eclipse. But at the height of his power, he engineered a vast plan for relocating people and industry from densely-populated Tokio and Osaka into rural areas.

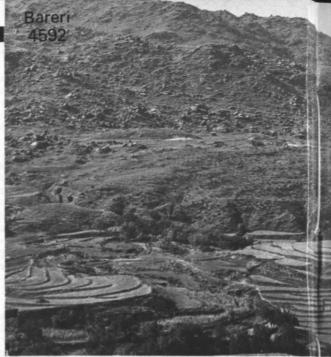
In moved the speculators, to stake their prior claim in the riches which were expected to flow from this remodelling of the archipelago. As Peter Hillmore reported in 1972: "So far the only impact this plan has had is to push land prices still higher." Robert Whymant described how it happened:

"The land values, which had risen faster than incomes were spectacularly affected by the speculative binge of the Tanaka plan... The real estate companies bought up the land, spliced it into small plots, crisis-crossed it with asphalt roads, and waited for the influx of workers with the industrial relocation."

Industrialists benefitted from huge government subsidies, some people were redeployed, and the farmers — those who had not already sold their fields to the speculators — sat on their land to await the fortune which was about to be dumped into their bank accounts.

The label given to those who became the *nouveaux riches* by selling their land was "tochi narikin." The ecological environment, however, became the poorer for it. Whymant notes:

"As pine forests were lopped down, hilltops were sliced off for the fairways of a golf course in Ochiai. In Kanuma, mostly patronised by Tokyoites, another large area of what had been forested land for a century was cleared to make way for the housing development that never came . . . . the anticipated rows of factories failed to sprout, though the weeds in the unsold plots and cracking asphalt did . . ."



The bulldozers wreaked ecological havoc. A doctor in Ochiai lamented: "A lot of forest was lost, and this upset the natural harmony. One result is the drinking water in my well has dropped by 30 centimetres."

**D**AMAGING processes which appear to be ecological in their origins can, in fact, be attributed to a maldistribution of land. The prime examples are salinisation and waterlogging.

These are caused by the inadequate drainage of irrigated land. The water table rises to the point where water evaporates through the topsoil, concentrating the minerals and salt near the surface – and inhibiting plant growth.

In 1977 the UN calculated that 21m hectares, one-tenth of irrigated land, was waterlogged; productivity had fallen by 20%. An estimated 20m hectares were affected primarily by salinization.<sup>3</sup>

This seems to be a *natural* process. Much of it, however – how much, we cannot tell because the necessary research has not been conducted – is due to the need among groups of people to intensify output to satisfy their requirements.

Extra water is diverted onto land – at a faster rate than it can be drained off – in an act of desperation which would not be necessary if all the earth's fertile cropland was cultivated at appropriate levels.

A further consequence is that output is reduced on land which was formerly benefitting from the water which has been diverted, creating the classic vicious circle.

Much of this would not happen if world food prices had not been inflated, and the free market distorted, to bolster the financial interests of landowners.

In some cases, prime agricultural land has been deliberately rendered idle. Between 1956 and 1972, for example, US Government policies resulted in 20m of its 140m hectares of cropland being rendered idle. Landowners were paid not to grow food. But had this food been produced, it would have lowered prices, increased exports, and relieved pressure on ecologically vulnerable land elsewhere.



## CARVE-UP OF THE FORESTS

Report: PAUL KNIGHT Photograph: KEVIN COOK

In other cases, food has been produced but stockpiled. The EEC, for example, prefers to adopt this strategy and so force up prices, rather than sell many of its agricultural products at lower prices on the international markets.

The inflated incomes do not benefit tenant farmers (through increased returns on their labour and capital investments); the additional income is capitalised into

higher land values.

The effect is to force many people — who cannot afford to buy food at artificially-inflated prices — onto marginal land. They have to eke out an existence on this land so long as a few blades of grass or coarse grain grow on it, and are too consumed with the short-term business of surviving to pay much attention to the desirability of creating a homeostatic relationship with nature.

LEST WE complacently assume that this link between land monopoly/speculation and environmental damage is relegated to far-flung places like Somalia, it would be as well to note an example close to home.

"Horseyculture" is blighting large areas of the southeast of England. As the *Estates Gazette* noted: ".... some of this wasted land was bought for future development, so that the interim use, given the size of the capital gains involved, is of little consequence."

Speculative purchases on the urban fringe has turned prime land from agricultural use into "pony paddocks",

with

".... horses and ponies standing forlornly in what are now little more than desolate wastelands but were in only the recent past fields supporting reasonable standards of farming... these areas can soon become rundown. Inadequate fencing sags, shanties of second-hand corrugated iron rust sullenly, and the land, overstocked and undernourished, lies rank with weeds."

Landowners disturb sound rural social patterns and agrarian practices when they anticipate cash profits from a change in land use. Once their roles shift from users to speculators, efficiency criteria are sacrificed by altered expectations. But if they were compelled to maintain land in efficient agricultural use until there was an actual need for change, the risks of ecological neglect would be

minimised

Close observers of the rural scene are aware of the conjunction of certain facts which create paradoxes; intuitively, they are aware of the need for some form of remedial action. One such person is Dr. W. W. Yellowlees, a general practitioner in the Scottish village of Aberfeldy, Perthshire. He has expressed his anxieties thus:

"How can we restore to our land pride of place to the small mixed family farm which conserves and enhances fertility and is the most highly productive unit of all? I do not know the answer but I am sure that in the present state of the world, a nation such as ours, which grows only half its own food and sees more than a million of its men standing idle in the city streets while thousands of acres stand idle in the countryside, is giving an example not of nationhood but of lunacy."

The only efficient solution to both the socio-economic and ecological problems is to impose a continuing financial cost on the holding of land. This cost, in the form of an annual tax on the economic value of land, would ensure that land was put to good use, as determined by the

planning laws and collective needs of society.6

Thus, if all land was used properly, and if the markets were not distorted by those with vested interests, the global output of food would be sufficient to meet everyone's needs. So there would be no need to employ methods of cultivation which over-exploited land and dislocated the well-integrated processes of nature.

Until we can show that all available land is being used at optimum efficiency (i.e., at a level compatible with long-term fertility), yet *still* there was hunger, we are obliged to place land reform at the head of the list for priority action.

Will ecologists accept the challenge?

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  4. 'Horseyculture', Estates Gazette, Vol. 252, 3.11.79, p. 459.
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- Marginal land, of course, yields no surplus (rent); it would therefore not be subject to tax payments.