



# 'More market', planning, forestry and farming: antagonism or symbiosis?

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## ABSTRACT

*The allocation of land between farming and forestry has been the cause of many conflicts. On the one hand there are those wanting a freer, "let the market decide" approach, while on the other hand there are people who see the need for planning controls to achieve other than economic objectives.*

*In this paper, these two approaches are discussed in light of historical developments and of current Government policies. It is concluded that while there is room for market forces in the rural land market, control is still required in some cases. In future there should be less antagonism and a better opportunity for using land for the most appropriate purpose. This is being facilitated by changing attitudes in foresters, farmers, councillors and Government. It would also be helped by correction to deficiencies in the Town and Country Planning Act and if the new Ministry of the Environment act to set guidelines and provide information for dealing with socio-economic and environmental impacts.*

"Farmers want to farm it, business people want to relax on it, foresters want to grow trees on it and tourism wants to show people around it — everybody has a use for rural land" [NBR, Sept. 26, 1986]

Conflicts over land resources have been with us for generations. The farming/forestry conflict with regard to the use of pastoral hill country land is just a more recent example. Here in terms of the above quote we have the situation where "farmers want to farm it, . . . foresters want to grow trees on it and tourism wants to show people around it. . . ." Each party involved feels that their particular use of the land is 'best' (with 'best' variably referring to own interest, the interest of the region or the national interest). The uses advocated for the land are often treated as being mutually exclusive; hence competition for land has been fierce and the relationship between the parties has been one of antagonism.

The reasons for the existence of this situation go beyond the simple fact of competition. Understanding of the conflict requires understanding of the way land is allocated in New Zealand, of the deeply ingrained attitudes people hold about land and of societal objectives.

In this paper I want to look at the issue of allocative systems for land (more market or more planning), at attitudes and at objectives. In light of the current Government's more market philosophy I want to consider if also in the land market 'more market' would be desirable. Finally in the light of recent developments I want to reconsider the farming/forestry issue, see what today remains of the conflict and propose that instead of the relationship being one of antagonism it rather should be one of symbiosis.

## 'MORE MARKET'. WHAT IS IT AND WHO WANTS IT?

A theoretical answer to the first part of the above question is easy. More market refers to a theoretical model of a perfectly competitive market that explains how static economic efficiency in the allocation of resources can be obtained under private ownership. In

simple words the model shows that under this allocative system, given certain conditions, society will achieve the greatest level of community income from the resources which are available to it.

In the market model this is achieved by assuming that consumers maximize their benefits, subject to budget constraints that are determined by individual incomes and the prices of services and commodities. Income is determined by the quantities of resources offered and the prices received for them by their owners. Prices are determined in competitive markets, so that individual purchasers of outputs or sellers of inputs have no control over market prices. Nature and technology constrain the stock of resources in the economy, and the state-of-the-art constrains technology. Competition and desire for profit maximization ensure that producers operate in a least cost manner and derive the greatest value from the firm's assets. Prices will ensure that resources will be allocated optimally and the result of maximum income from given resources will be achieved, subject to some stringent conditions regarding the ownership of property, transactions costs, information etc.

So much for the theory. From it we should note a few things. In the first place the market system (if it works as described, and subject to the conditions alluded to), will lead to an efficient allocation of rural land (and other resources) between forestry and agriculture. In the second place, the theory says nothing about social desirability or about the distributional consequences of different allocations of resources. Thirdly the theory talks about states of the economy and says little about how to move from one state to another, nor does it show clearly (at least without superior information) if such moves are desirable. Finally, it is well known that the outcome of the theoretical model discussed above is very dependent on the fulfilment of the conditions underlying the model.

The forestry/agriculture issue can clearly be analysed within the above framework. If market forces are relied on to allocate land, then the sole criterion that is used is efficiency; i.e. let the activity that earns the greatest return from that land have that land. Hence free competition will direct land to the highest bidder, and in this way maximize society's income from the land.

It is this philosophy that lies behind a lot of the arguments raised by the forestry industry and also the NZ Treasury (or the NZ Government). Both groups are working to achieve a freer rural market in which economic returns are to be the true guide to enterprise choice and that this choice is best left to producers as they are the best people to make judgements on these matters [Johnson, 1986].

Government policies of recent years reflect much of this philosophy. For New Zealand and for the rural area in particular this represents an enormous change of emphasis. In the past, government policies, planning procedures and the attitude of society seemed to equate rural land use with agriculture. Agriculture by definition was good, it would provide society with the export earnings it so desperately needed to maintain living standards. Therefore rural land should be used by agriculture. Today, in the new economic climate this has changed. No longer is rural land equated with agriculture alone. Gone are the policies that favoured agriculture (for whatever reasons they were put into place). This is not to say that agriculture is no longer important — it clearly is — but it does indicate that the close relationship between agriculture, rural land use and society's welfare is no longer encouraged with preferential policies. In a 'more market' environment there is no room for hand-outs, cheap loans, subsidies, whatever. It is more market all the way.

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With regard to land use, no one should have inalienable rights to hold on to land for a particular use simply because they currently use the land or have done so for a long time. "The need to adapt to change requires that policies for land-based industries should not prevent the movement of resources to where they can be used most efficiently. As the relative profitability of various activities changes, resources need to move from those activities in which returns have become relatively low to those activities in which returns have become relatively high. This involves movement of resources not only within sectors (e.g. dairy to kiwifruit or from pastoral farming to agroforestry) but between sectors (e.g. agriculture to manufacturing or vice versa)." [NZ Treasury, 1984]

Many now claim that this movement of resources has not been allowed to take place in the rural land market and especially not when it concerns land use changes from agricultural use to forestry or, "for many years, rural counties have considered forestry to be a second-class land use, with district schemes confining forestry to 'marginal' hill country — anywhere where farmers couldn't make a living from traditional agriculture." . . . "The use of the land has not been determined by who can use it the most efficiently or effectively, but by an administrative process that excludes some users in the name of the public interest." [Procter, 1968]

If the above is true, should we then not also encourage a more market environment in the rural land area? In answering this question, one of the first things that needs to be remembered is that efficiency (even though a laudable criterion) is not the only criterion by which a society judges land use. Many of the so-called inefficiencies introduced in the land market were introduced because of societal concern for things other than efficiency, such as regional development, income distribution, and social and environmental considerations. Therefore before a 'more market' philosophy is introduced also in the land market, it is important that we look back and analyse some of the reasons why society up to now has not allowed this to happen.

## MARKET FAILURE, PLANNING AND LAND USE

Land use planning is something that became fashionable in the cities when peoples' activities and their actions started to affect those living nearby. A whole raft of laws and regulations was developed to deal with cases of nuisance, to separate incompatible uses, and to provide public goods (like parks and open spaces). It was realized that the market failed to optimally provide for certain goods and to control certain less desirable activities. When also in the rural areas similar types of problems and failures arose (open space, environmental quality, incompatible uses, and undesirable impacts) many of the urban laws and regulations were used for planning in the rural area. Over time these laws and regulations were also used to achieve something that became much more important in the mind of Government and society, that was to keep agricultural and pastoral land (in particular the better-quality land) for the production of export products, especially the ones we were good at, i.e. agricultural products. Therefore all should be done to safeguard good land for food production. Our planning law, the Town and Country Planning Act, has as a matter of national importance "the avoidance of encroachment of urban development on, and the protection of, land having a high actual or potential value for the production of food." [Town and Country Planning Act, 1977]

These policies and the wording of the statutes bred into the people an attitude that land (especially good land, but that distinction wasn't always made clear) should be for agriculture and for food production, and only that was wise and efficient use of land. It was this attitude that people wanting to introduce new enterprises such as horticulture and forestry had to deal with.

Up to the recent forestry development boom, even with the Town and Country Planning Act and District Schemes, the market for rural land in New Zealand was very much unconstrained when it came to pastoral hill country. Land moved relatively freely between different enterprises when profitability changed with time. However, it was different when forestry (which had been relegated to the poor-

er and often unused lands) started to encroach on the better pastoral hill lands.

Forestry on "good" agricultural land (and in those days good land, in the minds of many people, ranged from Class I to Class IV or V land, to judge by the arguments presented at Planning Tribunals) was not considered to be wise land use and to many this was something that should be discouraged (i.e. planned against). The reasons why it was not considered wise land use were complex. They varied from gut level reactions implying that land that had been developed with so much expense from the bush should not go back to trees, or that forestry did not produce food and that good land should be left for food production, to many other sociological and economic arguments. For example, forestry was said to be different, too much like corporate farming with absentee ownership, that forestry would bring totally different people into the rural area, that it had a different style of work, incompatible with local work patterns, that it would destroy rural services, cause environmental destruction, that its logging trucks would rip up the roads and many other things.

Yes, many reasons were given why forestry should not be allowed in the rural area. Some can be explained as market failures (e.g. uncompensated roading costs, environmental impacts, uncertainty); others clearly reflect objectives other than efficiency (e.g. the great concern for social impacts, rural depopulation, loss of rural services, closure of schools and the preservation of rural land for agricultural pursuits). On more detailed analysis, some of the reasons given had no basis to stand on, others were hard to prove or disprove [Clough, 1986], but others were based on real experiences.

Travelling around the country one can see examples of native bush being indiscriminately destroyed by forestry firms; there are examples of forestry firms buying up land wherever they could and so having a serious impact on the viability of rural communities; there are also examples of extensive road damage by logging trucks. At the same time however, there are examples of forestry activities leading to an increase in employment in regions, and to a revitalization of rural communities; of forestry firms being very sensitive about environmental preservation leaving good land for agriculture or horticulture.

The latter examples are more from recent years while the negative impacts are more from the initial years of the recent forestry boom in New Zealand. In those years the forestry companies showed little concern for the impacts (especially social impacts) of large-scale land use changes. New Zealand had not as yet experienced land-use changes of that nature, and hence there was a lot of uncertainty about the possible impacts. The Taumarunui Planning Tribunal hearing (1981) clearly showed this. On the one side there was the County Council faced with enormous uncertainty regarding the social impacts of the forestry proposals, and on the other, forestry companies not willing to compromise their plans to accommodate this uncertainty. The decision went against the companies and regulations were put into place that restricted forestry to certain areas only (i.e. certain areas were off limit for the companies to purchase land for afforestation purposes).

As a result then of the 'mistakes' made by forestry companies, of market failures and of other than efficiency objectives by society, the rural land market became constrained by many regulations, especially ones relating to forestry. Some of these regulations were way out of proportion to the possible impact they were intended to protect. They led to overkill in terms of controlling forestry and hence led to inefficient land use by not allowing change where it should have and could have occurred without major impacts. Much has been written about all this. Often county councillors and planners have been criticized for their unreasonable attitudes towards forestry, for the impossible ordinances they wrote to keep forestry out at all cost and for the inefficiencies they created in the land market [Fowler & Meister 1983, Meister 1984, Meister 1985]. However, county councillors and planners were not the only ones at fault. As explained above, part of the blame should also go to the forestry companies. But blame seeking should not stop here either; part of the blame must also go to the Government, for two reasons, a) its

policies and b) the Town and Country Planning Act. The latter required the writers of District Schemes to deal not only with land-use issues but also to deal with social and environmental issues.

The system found it difficult to cope with all this. The people in charge weren't trained to deal with these new and wider requirements (planners trained in urban planning and county councillors who were often retired farmers). Also the tools didn't appear to be there either. Many planners wouldn't (or didn't dare to) go beyond the model ordinances as found in the 1953 Regulations to the Act, and the Town and Country Planning Division of the MOWD was very conservative in their interpretation of the Act. The result of this was that when, for example, in a region it appeared that uncontrolled large-scale forestry development would cause serious social disruption, the council's only option to retain control was to zone and declare forestry a conditional use. As has become obvious from later experience, this was like trying to crack a nut with a sledge hammer. It created unnecessary distortions in the land market.

It is obvious then that for several reasons a 'more market' allocative system in the rural sector was not acceptable to society. As discussed, some of the reasons were based on good arguments (market failure and social and environmental objectives); others however derived from attitudes and gut level reactions which no longer appear to be solidly based. Further, the tools used to control and regulate the land market appeared not to be the most suitable means to achieve the ends in mind. This has in cases introduced unnecessary inefficiencies in the land market.

## RECENT DEVELOPMENTS AFFECTING FARMING AND FORESTRY

In recent years many things have changed that have affected the farming/forestry conflict. I will briefly mention them and then consider how they impact on the question of an allocation system for the land and how they have changed the conflict.

What are some of these developments?

**a.** Ideas about world food scarcity have changed. Despite the chronic food problems in Africa, food production in the rest of the world is relatively abundant. Countries that not so long ago were declared to be impossible to feed, now have become exporters of food — India, Thailand, Brazil and China. Worldwide we see policy makers who are backing away from their commitment to agriculture, both in the domestic sectors and in the international system. In New Zealand we have a Government that no longer tries to pick winners, that has floated the exchange rate, has taken away all support for agriculture as well as forestry and now wants the market to decide how rural land should be allocated.

**b.** The economic environment in which rural land users live these days has changed tremendously. No longer is there the stability provided by guaranteed markets, a stable exchange rate, and a Government which is there to help when times get rough. The exchange rate is influenced by the capital flows in the financial markets. These flows internationally dwarf international trade [Drucker, 1986]. The consequences of this are serious for countries like New Zealand which depend heavily on trade. Our comparative advantage for industries comes and goes with changes in the exchange rate (witness US and NZ Agriculture). Production from the land for trade has become much more risky. Picking winners by planning will not work. Also in the rural areas we may have to rely less on the family farm with its great reliance on deficit financing through high levels of mortgage and debt, and look towards co-operative farming and more corporate involvement, as is the case in forestry.

**c.** Also in this new economic environment it is important not to have too many eggs in one basket. With this in mind, forestry has been looked on as one way to diversify. The outlook for forestry products varies from good to mediocre, depending on whom you listen to (for an example see an article in the NZ Farmer "Why we need to plant more trees" [Gimblett, 1986]). The point, however, is that no longer will Government encourage the best options. It is now left to the market to decide what the winners are.

**d.** Recent research has made people more aware of the multiplier effects of different land-use activities. The labour and income mul-

tipliers of forestry activities, especially when a sustainable yield forest has been arrived at, are good. In areas in New Zealand where forestry has established itself, such as the East Coast and Northland, forestry is creating jobs and is helping to revitalize rural services. This is not to say that agriculture did not do this, but it simply means that we no longer have to rely on agriculture alone to provide the labour opportunities. Also a more diversified rural area will be able to cope better with the ups and downs of agricultural returns.

**e.** Recent changes to the tax law have placed forestry on the same footing as agriculture. According to the Government, the new tax ruling is neutral and shouldn't affect returns. Somehow, however, it seems that neutrality does not consider the 28-30-year waiting period for the returns and that capitalized costs mean little after 28 years. The result of the tax change has been a complete stop to forestry planting, with associated employment consequences. Now the Government is talking about making money available to the new Forestry Corporation to continue planting, not for economic but rather social reasons.

**f.** At the District Scheme level, County Councillors have learned to appreciate that forestry is just an alternative land use. All around the country we see greater flexibility with respect to forestry. Slowly ordinances are disappearing which restrict forestry to the poor lands only. Even Federated Farmers of NZ, who used to appeal all District Schemes which allowed forestry an inch or two, now have stopped appealing schemes and accept that forestry development can be beneficial to regions.

**g.** The forestry companies themselves have learned a lot. They are more sensitive in their dealings with farmers and councils. They try, where possible, to subdivide off the good land for horticulture or other enterprises. They encourage community involvement in their planning, and they look toward other options besides straight conventional forestry. Joint venture forestry operations have yet to become a significant feature of forestry operations in New Zealand.

**h.** The development of agroforestry, the increased profitability of woodlots and shelterbelts and the possibility of joint ventures all offer farmers diversification opportunities to get into forestry while remaining on their farms and keeping control of the final crop. From a regional and social point of view this may be a much more desirable approach to forestry than straight conventional afforestation.

These are some of the more recent developments that have taken place on both sides of the farming/forestry debate. They have invalidated many of the reasons for the regulations introduced against forestry. Forestry is now seen as a legitimate alternative land use (even though it doesn't produce food). Preserving land for agriculture, i.e. export earnings, is no longer a reason to restrain forestry development as this latter enterprise also can produce significant export earnings. Neither is the uncertainty about social impacts. A lot more is known today about the consequences of large-scale land-use changes. Forestry no longer has to be constrained by conditional use procedures; if control is required then predominant use with some conditions will be satisfactory. The current depressed state of the agricultural scene makes forestry (conventional, woodlots, shelterbelts or agroforestry) a possible diversification option. Also in the changed and much riskier economic environment trying to pick winners through planning constraints and policies makes little sense and has little chance of success.

Does this then mean that a 'more market' allocation system for rural land should be introduced? If by 'more market' one understands a system where market forces play a greater role than they have in the recent past, then my answer is "Yes". However if 'more market' means a free market ruled solely by the criterion of efficiency then the answer is "No". The reason is that even though many of the arguments for control on forestry developments have disappeared, others still remain. The market system still fails when property rights are not clearly defined or when external effects are not taken into consideration. Also the objectives of the forestry firm may not coincide with those of society. There may be divergence in the discount rate used in planning for long-term considerations and environmental objectives are bound to differ. Social consequences, which (even though we understand them now much bet-

ter) may be severe when large-scale land-use changes are taking place, are still impacts falling outside the decision framework of the firm. In such a situation gradual change may be much more desirable from a social welfare point of view in lessening the social cost. To achieve this, however, some control is needed in case we want to exercise it. Even though forestry companies have become much better in dealing with people and in recognizing the wider economic and non economic impacts of their actions, they are commercial organizations, not fairy godmothers. They will not hand over money if they don't have to. The forestry roading issue (where logging trucks create damage sometimes beyond the value of the road use charges) is a case in point.

## CONCLUSION

The forestry/farming debate has now reached a stage in which the players — the foresters, the farmers, the councillors, the people in the rural area and the Government — all realize that forestry and farming can live harmoniously in a symbiotic relationship. They complement each other in terms of employment provision and income generation. They can be in a region as separate enterprises or they can be together on a farm as agroforestry, woodlots, or shelterbelts. For some farmers forestry can provide the opportunity to sell their land, which may be more suitable to forestry, and start again somewhere else.

With regard to 'more market' and planning, I have argued in this paper that even though there is more room for market forces in the rural land market, control will still be required in some cases. Therefore I am not arguing for a free market system in the rural area. The Town and Country Planning Act has its deficiencies, but at the same time it is much less restrictive than what people make it out to be. The restrictions more often reflect the attitudes of the actors than the requirements of the Act. The deficiencies in the Act are recognized by Government, and hence the Act is currently being reviewed. Also there is great hope that the new Ministry for the Environment may help planners by setting up guidelines and providing information for dealing with socio-economic and environmental impacts. With regard to attitudes, also here people realize that changes are necessary.

Realization, however, is not enough. Attitudes need to change and that takes time. When groups of people have lived in an antagonistic relationship for a long time, it is hard to undo some of those feelings, and to alter those trusted District Schemes that protected one against the other. It is, however, encouraging to see that change is

taking place all around the country with people realizing that some of the reasons for controlling forestry are no longer relevant. More could and should happen.

All these changes, referred to in the previous paragraphs, should greatly improve the planning and control of resource use (which, as argued above, is still essential). At the same time it should also create a better balance between the role of the District Scheme and other statutes.

From observations, the farming/forestry conflict is nearly dead. Sure there still are stragglers (farmers, foresters, counties, and others) but on the whole the attitude has become much more positive. The word antagonism shouldn't be mentioned any more; the two enterprises can in many places complement each other. In other situations, forestry may replace agriculture. Whatever the situation, it is to be hoped that entrepreneurs in both enterprises will be reacting to signals and constraints that are not unnecessarily distorted by attitudes or policies, and which therefore indicate the best opportunities for that land. This should lead also to higher levels of welfare for New Zealand.

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