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# The Future of Land Development in New Zealand

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YOU can approach this subject by looking at it through the eyes of a statesman concerned with the future of New Zealand and inspired with a vision that generation shall follow generations as British subjects, or alternatively through the eyes of a businessman, probing and weighing a project as to its worthwhileness for the investment of capital.

Both, of course, become irrevocably interlocked when you seek a discourse on such a subject from a senior officer of the Public Service for it is not enough for one, charged with the responsibility of wisely advising Government, to view his subject matter only through the comparatively narrow telescope of pure business. On the other hand, it would be equally right to say that he cannot responsibly ignore the clear detail that such a telescope alone can give, and prefer to proffer his advice on the glorious high lights of his own unaided vision.

There is nothing so completely satisfying to the mind of man as his ability to create and nothing so wholesome to his inner well-being as the contemplation of a lasting creation brought to life under his own hands or through his own direction.

When considering the Land and Survey Department's ever-widening activities in the development of land, in recent years, it has always been salutary for me to remind myself that there was such a thing as a "ground nuts scheme" conceived and created, no doubt with the very greatest satisfaction, but destroyed in its infancy because it was malformed. The destruction in such circumstances perturbs me little, if it were not for the fact that it at the same time brings under suspicion the creative instinct and this in the end must inevitably result in sterilisation.

Because I believe that it is of the very greatest importance to this country that every acre of land capable of production should be made productive I have always been fearful that our development operations, and our lending of monies for development under the Marginal Lands Act, should fail to result in a sane blending of good business with that vision which is so essential, in my opinion, to the welfare of New Zealand.

I have already said that in considering the future of land development one must have regard for the view of a statesman and the view of a businessman and I would like briefly to develop these two views.

Most countries of the world, colonised in the last 300 years, were undeveloped when so colonised and one could make ready parallels of America, Canada, Australia and so on but there is one country in particular to which I would like to draw your attention where the commencement of development is shrouded in the mists of the past to such an extent as to make the development of our own country and those I have mentioned as but of yesterday, and that country is Holland.

A mental picture of Holland in those dim and distant days, when the ancient Frisians inhabited scattered islets surrounded by turbulent seas could present no more unenviable a proposition for development anywhere in the world and yet these people, and their succeeding generations, built a proud nation, a highly cultured civilisation and men and women whom we are proud to-day to accept as fellow citizens in this country.

"With five weapons shall we keep our land, with sword and with shield, with spade and with fork, and with the spear—out with the ebb, up with the flood to fight day and night against the sea and against the wild Viking, that all Frisians may be free, the born and the unborn, so long as the wind from the clouds shall blow and the world shall stand."

This was an ancient oath of these people and the very words it contains, and the achievements that have arisen out of them, are a challenge to any people who have land to develop and a nation to build.

We New Zealanders are in that position to-day, for we have land to develop and a nation to build and therein lies the challenge to statesmanship.

It is my personal view, whether one looks at it from the high ethical plane of a duty imposed on food-producing countries to feed the hungry peoples of the world or from the threat that history has proven to exist to under-populated countries such as ours, that no statesman can afford not to foster the completest development of our resources.

At this high level of statesmanship the financial aspect requires big and bold thinking by men of high vision and here I would draw your attention to two projects which could help to bear out the need to think in terms of national values as opposed to purely project values.

The first is the development by the Dutch Government of the Zuider Zee and while my figures are not the latest they are sufficiently accurate to illustrate my point. This project a few years ago was estimated to cost on completion £100,000,000 and the expenditure of that vast sum was authorised to create 530,000 acres of fertile land and in addition a huge fresh water reservoir in the heart of the country.

The second is much nearer home—the rich Rangitaiki Plains in the Bay of Plenty. This area of 80,000 acres was originally a huge swamp through which meandered the Rangitaiki River with the Tarawera and Whakatane Rivers skirting its flanks. Dry land obtruded more or less as islands, and transport, in and out, was by boats and scows. A decision to drain this swamp, and train the rivers, was taken by Government in 1910 and the project commenced. My reports show that by 1921 the production from the area was 179 tons of cheese and 131 tons of butter.

In 1925 a Commission was appointed by Government to inquire into, and report upon, the causes of the financial difficulties of the settlers, the capacity of the land to bear the charges thereon, whether the Government should proceed with further development and other matters associated with this drainage scheme.

The net capital liability at that time was £481,000 and the Commission recommended that this be written back to £185,000. They also, however, weighed all the evidence available to them, and that of course was unlimited, strongly recommended that further capital expenditure should be limited to a sum of £40,000 to round off certain works, and of which only £20,000 should be added to the Land Drainage Account.

In effect the Commission took a "dim" view of this Rangitaiki Land Drainage project, but to-day that project is producing some 6000 tons of butter annually.

Successive Governments have continued to foster this scheme financially so that the actual loss to the Crown now substantially exceeds the figures I have quoted, but against that is an annual gross production figure exceeding £2,000,000 coming from the area, while

hundreds of people who have played, and are continuing to play, their full part in the citizenship of this country have found a way of life, as well as a means of livelihood, in this once useless swamp.

It is for statesmen to determine whether such expenditure made New Zealand better or worse and whether the monies that were written off did not in fact represent a very good investment in nationhood, but my reason for traversing this case, in some detail, is simply to parade an example of the two points of view—the cost of a project valued as part of the whole in building a nation, and the cost of a project valued as a project alone.

Now let us have a look at land development as a project and here, while I could sensibly break this furtherance of development into three parts, viz., (1) Crown land, (2) privately-owned land, and (3) Maori land, I propose to limit it to the first two. This is not because I ignore the very substantial nature of the third but simply because my Department plays a part in the first two only and because a high measure of statesmanship enters into the furtherance of the development of Maori lands.

Land development of course, irrespective of the ownership of the land, breaks itself into two main parts, viz., the development of wholly unimproved land and the improvement of land which is already being farmed; and while it may well be that our greatest immediate upsurge in production can come from the latter it is of the former to which to address myself.

Members of your Association will, I am sure, be aware that the Lands Department has been developing land in a very substantial way for some years and the figures, of acres grassed, since 1948-49 form a substantiative background on which to base costs and results.

1948-49	.....	17,702 acres
1949-50	.....	32,026 acres
1950-51	.....	35,006 acres
1951-52	.....	45,835 acres
1952-53	.....	45,811 acres
1953-54 (estimated)	.....	50,273 acres
		226,653 acres

While some may consider that greater areas than those quoted should be brought in annually by the Department I can assure you there are very many good reasons why it should not be so.

The most substantial contributions to the acreages quoted come from our activities in the pumice plateau in the centre of the North Island based on Rotorua and from those in North Auckland based on Auckland and the King Country based on Te Kuiti, for these three districts alone contribute in round figures 36,000 to 40,000 acres of the annual totals I have quoted.

Now one of the first things any manufacturer wants to know is the availability and quantity of his raw materials and their location in respect of his factory or factories.

So far as the Department's activities in land development are concerned we were forced into urgent manufacturing, because of the exigencies of servicemen settlement, without any real attempt to weigh up our resources, though of course it was sufficiently obvious that the greatest expanses of Unalienated Crown Land were located in the localities I have mentioned above.

Despite the need to keep pushing ahead, in the interests of land settlement, we have however now got a reasonable picture of our resources, through our Land Utilisation Survey, to enable us to plan, all

things remaining normal as to finance and other matters of course, on a factual basis. Members will appreciate that this is not just a simple matter of arranging staff, even though that in itself is of very great importance, for it involves planning by many other organisations and people who fit into the overall picture. Contractors who bring the land to grass, Ministry of Works officials who build the roads, officials of the Department of Agriculture who are responsible to see that the needs of New Zealand in fertiliser and grass seed are available and following behind them Power Boards, the Post and Telegraph Department, Dairy Factories and all those who provide the services once grass is brought into being. Even local government in the no-man's land of part of the pumice plateau must be planned for.

To briefly enlarge on the foregoing the following figures for the year 1951-52 are quoted.

Fencing wire	1,100 tons
Posts	384,000
Water piping	776,000 feet
Grass seed	1,430,000 lb.
Superphosphate	32,000 tons
Lime	25,000 tons
Roads formed	87 miles
Roads metalled	102 miles

Now all of this demands farming in a vast way as well as developing from the raw material to grass, and "pushing out" at the other end land ready and equipped for settlement, so that in June, 1953, we carried:—

390,500 sheep
5,973 dairy cattle
67,206 run cattle

All of this activity is run by three main factories located at Auckland, Te Kuiti and Rotorua, though minor ones exist in all Land Districts to serve certain local needs.

The Land Utilisation Survey shows that in these three localities we have the following acreages of undeveloped Crown Land or in other words raw material, already owned by the Crown to supply our departmental factories.

	Definitely suitable	Probably suitable
Waikato-Te Kuiti	60,000 acres	15,000 acres
Northland	120,000 acres	50,000 acres
Rotorua-Taupo	250,000 acres	25,000 acres
	<u>430,000 acres</u>	<u>90,000 acres</u>

The overall picture of undeveloped farmable land in these three localities which includes Crown, Maori and privately owned land held in substantial blocks but ignores small parcels and parts of existing farms is assessed as follows:—

Waikato-Te Kuiti	284,000 acres
Northland	865,000 acres
Rotorua-Taupo	571,400 acres
	<u>1,720,400 acres</u>

These acreages are subject to further investigation in detail, particularly as to the type of settlement that ultimately will result from development but they are sufficient meanwhile to determine the type of factory and so on.

It will be seen then, that without purchasing further raw materials which exist in quite a substantial way in these localities, the life of our development organisation stretches ahead for 12 to 15 years. Here it must be remembered that the "processing," prior to disposal, takes at least three to five years following the first intake of the raw material.

The next thing then to consider is the availability of the processing materials, such as fencing wire, posts, grass seed, fertiliser, livestock and so on. Here of course we have the advantage of a background of experience and while one may at times have some fears regarding certain items, such as phosphatic fertilisers, I anticipate no real hazards provided we do not over extend our annual target of 40,000 to 45,000 acres, or some national disaster should overtake us.

Having satisfied oneself that there is sufficient raw material and sufficient other materials to allow us to proceed with an annual programme of 40,000 to 45,000 acres the remaining question is to determine the finance required and the returns that may be expected from such expenditure.

Members of the Society will realise that in considering this aspect, that each individual project must be examined as an individual project and because of the extreme variations of contour and soil types that a substantial range in costs must occur throughout New Zealand, but here again our past experience gives us a reasonable yard stick for a global approach if we take those relating to the development of the pumice plateau.

The following figures are estimated present day costs of developing a dairy farm in (a) the Rotorua District and (b) the North Auckland District:—

#### ROTORUA DISTRICT.

155 acres, 65 cows and replacements.

	Part Developed	Fully Developed
Fencing .....	£ 798	£1,254
Clearing, Cultivation, Grassing .....	£2,691	£2,691
Water Supply .....	£ 230	£ 690
Buildings .....	—	£4,075
Farm Tracks, Crossings, etc. ....	—	£ 150
Elect. Power .....	—	£ 65
Roads, Public .....	£ 300	£ 300
Value of Land .....	£ 620	£ 620
<b>Total Cost .....</b>	<b>£4,639</b>	<b>£9,845</b>
<b>Estimated Value .....</b>	<b>£4,700</b>	<b>£8,100</b>

#### NORTH AUCKLAND.

145 acres, 65 cows and replacements.

	Part Developed	Fully Developed
Fencing .....	£ 404	£ 981
Clearing, Cultivation, Grassing .....	£2,850	£2,850
Water Supply .....	£ 233	£ 700
Buildings .....	—	£3,852
Farm Tracks, Crossings, etc. ....	—	£ 210
Elect. Power .....	—	£ 65
Public Roads .....	£ 300	£ 300
Value of Land .....	£ 435	£ 435
<b>Total Cost .....</b>	<b>£4,222</b>	<b>£9,393</b>
<b>Estimated Value .....</b>	<b>£4,260</b>	<b>£7,100</b>

The foregoing are estimated capital costs and it will have been noted that I have not included any amount for livestock and chattels, which of course must be purchased.

It will be appreciated that I have in the second column produced more figures than are necessary to get a picture of what a land developing company must face up to in financing its project, for primarily it is not concerned with land settlement and it is doubtful whether any organisation developing even 10,000 acres annually would contemplate using it for dairying.

If we use the partly developed column in the Rotorua figures it will be seen that the result cost per acre is approximately £30, and therefore an organisation developing 10,000 acres to this stage must have £300,000 of initial capital. To this must be added sufficient buildings and other essentials to handle the area as a station, plus the sum required for capital stock.

At this stage many varied views as to the farming approach must occur. For instance we carry a very high ratio of cattle to sheep, as primarily our job is to speed up a pasture condition for closer settlement. On the overall Dominion picture our ratio is one cattle beast to six sheep though in the pumice area, based on Rotorua, it rises to one to three and a-half.

For that reason I do not propose to carry the matter any further for I think I have given sufficient information up to the basic needs which would be common to all and leave it the individual to weigh the approach from there on. All my evidence is that the farming venture is a profitable one and sufficiently so, that given five to ten years, the capital costs of development at least equate with values.

So much for wide scale development, but there still exists a vast potential for production in "the bits and pieces" of every farm which remains partially developed or completely undeveloped. The answer to these is the intelligent working farmer assisted by readily available finance.

Despite all sorts of problems that have arisen because of the high income New Zealand has in recent years been enjoying from the sale of our primary products, it is undoubted that that fact alone has created an upsurge in development of these "bits and pieces."

I think more has been done on the smaller farms, where such conditions exist, than on the larger farms and while one might deplore this from the point of view of overall production it is to me heartening that farmers of barely economic properties should take the opportunity of consolidating their position while times are good. If this is not done then a lot of these farms will go out of production if a recession occurs and the sum total of such a loss could be quite substantial.

The Marginal Lands Board has, in recent months, because of the extraordinary calls upon the monies it has available, adopted some preference in assisting this type of case, for the very reasons I have outlined.

The Board is charged by Government to assist in the financing of land development to increase production but it is obvious that it could not take over the financing of all land development in this country and I think it would be ill-advised for anyone to suggest such a course.

If it is so then it is equally obvious that certain preferences must be established. Would anyone question the sanity of the present attitude to bring the barely economic farm to a stage where it will with-

stand the buffeting of a recession in prices, and thereby continue to produce?

The Annual Report of the Department for the year ended 31/3/53 shows that advances approved by the Board up to that date should result in 11,515 acres being sown down in new pasture and carrying capacities, on a conservative estimate, should be increased by 900 dairy cows, 30,000 sheep and 3,200 run cattle. Further substantial increases could be shown if the figures were brought up to the date of this address.

An attempt has been made by our Land Utilisation Officer, Mr. R. L. Innis, to forecast the increases in carrying capacities that should take place in the nine Counties of Northland when the grassed land are brought to full effectiveness and the undeveloped farmable lands are brought to grass. As this forecast is the anticipated resultant, as applied to one particular province, of development and financial assist- and I quote them as a close to my address.

County	Dairy Cows in milk		Breeding Ewes	
	Existing	Potential	Existing	Potential
Mangonui	25,000	90,000	30,000	107,000
Whangaroa	5,000	21,000	15,000	62,000
Hokianga	22,000	71,000	44,000	142,000
Bay of Islands	25,000	104,000	65,000	270,000
Whangarei	60,000	178,000	90,000	267,000
Hobson	35,000	101,000	79,000	225,000
Otamatea	32,000	80,000	76,000	180,000
Rodney	27,000	66,000	93,000	225,000
Waitemata	33,000	82,000	70,000	172,000
Totals	264,000	793,000	562,000	1,650,000

In looking therefore at the subject matter of this paper, I feel that there is no real deterrent to a purposeful continuation of the development of our undeveloped resources, that the development of land is financially sound as a project and a sine qua non in the retention of our standard of living and our survival as a nation.