



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

CONVERSION OF FOREST LANDS INTO AGRICULTURE

C. MAXIMEA AND J. ROBINSON

INTRODUCTION

Since the felling of the forest began two years ago with the coming into operation of a logging company, the question has frequently been asked whether the cleared areas or any portions of the cleared areas should go into agriculture, and if so, which areas. The forested Crown Land can be divided into two broad groups: (a) the Forest Reserves either proclaimed or land-zoned for this purpose and (b) Crown Land outside of the areas in (a).

There are two main blocks of Forest Reserves shown on the accompanying map; one block lies in the northern half of the island and the other block lies in the southern half. In addition to these, there are other small areas of Forest Reserves mainly in broken and hilly country. Only the Northern block has been demarcated on the ground; the other areas, although not yet demarcated are accepted by the Departments dealing with land, as Reserved areas.

The total acreage of land within Forest Reserves is estimated at 40,000 acres. The areas of Crown Land outside the Reserves is roughly estimated at 10,000 acres. Inside the Reserves, there are large areas of land which have been classified as being suitable for agriculture while in the areas indicated as Crown Land, there are areas which are unsuitable for agriculture because of the poor quality of the soil or the steepness of the terrain.

In 1960, Mr. David Lang was asked to classify all Crown Land inside and outside the forest Reserves so that an assessment could be made of the areas of land which could be sold. The results of Mr. Lang's survey were demarcated on a 1/25,000 map of Dominica. The small scale map attached indicates Mr. Lang's classification. Soils in groups I, II, & IV have been accepted as being suitable for agriculture. In category V, only tree crops could survive and the land is mostly marginal, while land in categories VI and VII should remain in Forest.

The attached map shows the portions of Crown Land and Forest Reserves suitable for agriculture.

Very small pockets are not shown due to the scale of the map, but the analysis indicates that most of the suitable areas are in the northern and eastern parts of the Northern Reserve Block.

The Need for Releasing Crown Land for Agriculture

There is a constant pressure on the Lands Division to release Crown Land for Agriculture. So far, the needs of the applicants have mainly been satisfied by settling them in the more nearby areas. But these areas are being exhausted and the forested areas will soon be more in demand. They are still largely inaccessible, but as more roads are built a clearer and more definite policy will be required in order to decide to what use the various areas will be put, based on careful study of the differing land requirements. However, as early as 1953, Burra¹ stated in his report that there was already sufficient land in private lands which remain largely unworked. He suggested a system of taxation to bring the land under cultivation.

The demand for land comes from:

- (a) squatters;
- (b) persons who have no land, but who are nevertheless engaged in agricultural work either on family land or on an estate as a labourer or a tenant;
- (c) landless persons who have no particular skill and who are engaged in various types of activities;
- (d) persons who are cultivating their own land, but on plots far too small to provide an adequate income;
- (e) persons who hold permanent jobs and are prepared to do part-time farming;
- (f) persons who hold permanent jobs and who want to hold land partly for security and partly for social reasons.

¹Burra, J.A.N. A Report on Land Administration, Dominica 1953.

In the past, land had been allocated to persons in all the categories listed although, it would be added that over eighty per cent (80%) of the land alienated by the Crown over the past 20 years has gone to peasant farmers, the majority of whom were already squatting on Crown Land, some with established cultivations, the majority practising subsistence farming. It should also be pointed out that only in one locality, unfortunately over a large acreage, have persons holding permanent jobs outside agriculture been the principal grantees, but it must be pointed out that this land was rejected by the peasants. In other settlements more than 80% of the grantees are persons in full-time agriculture.

In considering the future alienation of Crown Land, it could be said that there will be substantial claims by landless persons who are already in some measure employed in agriculture and who wish to become full-time peasant farmers. The claims from other avenues will also be pressing and the percentage of land allocated to those who are already permanently employed outside agriculture should be kept to the barest minimum. The demand for land by investors, both foreign and local will also have to be considered.

It may be asked whether the land already allocated is being worked satisfactorily. By Dominican standards the land parcelled out in all the accessible settlements, save in the Pont Cassé Settlement which consists of marginal lands being farmed by part-time farmers, have been worked satisfactorily e.g. Jean Settlement at Salisbury (80 lots covering 650 acres) on the Western Coast; Hampstead Settlement next to the village of Calibishie (130 lots covering about 900 acres); Burton Constant Spring adjoining the village of Wesley (122 lots over 850 acres) and others such as Mountain Settlement at Portsmouth; Richmond Settlement and Bajo Gutter Settlement near the village of Castle Bruce and Gregg and Crown Settlement adjoining the village of Marigot. On the other hand, the inaccessible settlements such as Stone Hill at Bells and Crapaud Hall have been poorly worked.

The pressure by the peasants and others for Crown Land will grow and it must be decided whether the release of Crown Land as the forested areas are cleared should continue and to what extent. This will depend upon a careful study of the economy and how much effort is put to create other fields of employment. Perhaps a system of taxation and land reform which will cause a revolution in the ownership of land could possibly operate to place land in the hands of persons willing to work the land, and to ease the pressure on Crown Land. A solution is urgently required.

Land for Tourism

Besides agriculture and forestry, the main competing use for the forested areas is tourism.

In Dominica, there are no white sandy beaches, flat land with low rainfall or night-spots such as are to be found in other islands. There are no coral reefs or bird sanctuaries as are found in Trinidad and Tobago, no seaside resorts as in Jamaica or Antigua nor the numerous tourist facilities to be found elsewhere. Dominica must, therefore, turn to those things which it has and which can be exploited in order to attract the tourist. The natural green of the forests, the numerous clear and unpolluted rivers, and the clear freshness of the environment must be promoted. The visitor and, indeed the Dominican, must be able to be transferred from the hot and drab environment of the town to the deep heart of the forests in a short time. The more accessible areas will be those on which there will be a heavy demand for land whether for agriculture or forestry or tourism.

Tourism demands that several acres of accessible forests remain untouched and only selective felling should be allowed so that the attractiveness of the forests would not be lost. The visitor wants to see the forests and enjoy the natural environment. There should be paths in the forests where he can roam about and even within the forest tourist facilities can be built. This type of venture could prove economical if areas are kept forested while there is limited extraction at intervals.

It should be emphasized that the tourist industry can provide a good deal of employment directly and indirectly. Adequate consideration should be given to promotion of such an industry and the diversification of employment that it offers. It could also help to stabilise a fluctuating agricultural economy.

The Future Generations

Consideration must be given to future generations before deciding to allocate Crown Land suitable for agriculture on a freehold basis. Crown Land is not leased so that there is no chance of land being returned to Government for redistribution. The system of granting land on a freehold basis should be examined.

Dominica is now a State and must conserve its resources. It is unwise to exploit resources haphazardly. Opportunities in other fields of employment should now be provided and so relieve the pressure on agriculture. During the last war the people of Dominica were permitted to work Crown Land in order to sustain themselves. An economic crisis could also force Government to make Crown Land available.

THE CASE FOR FORESTRY

It may be said that, the most prosperous countries with the highest standard of living to-day

are those countries which have an adequate area of forest per capita, where forests are considered a great national asset and which have national forest policies such as Switzerland, countries around the Baltic Sea, Denmark, Sweden, Finland, Canada and United States.

In 1953 Burra¹ observed "the present outlook by all but the most intelligent is that the forest area is excessive, that motor roads should be driven into the Crown Lands in order to extend agricultural production, and that the necessity for forest protection is of little, instead of primary importance to the island's prosperity. This outlook is often perpetuated by the very persons whom it would be expected would support forest conservation and, were it not for a level-headed minority, forest reservation would not be considered of importance at all. The need for reservation for production purposes is hardly recognised by any person."

But this situation is by no means peculiar to Dominica. In his report on Development and Welfare in the West Indies, Major General Sir Hubert Rance pointed out, "there is in most communities a great degree of ignorance about the vital part played by forests in their general welfare. Forests are too much taken for granted and while their importance as suppliers of essential commodities such as timber and fuel may be recognised (and is too often exploited improvidently), their outstanding value in safe guarding water supplies and preventing soil erosion is often not given serious thought."²

The fundamental aims of the Food and Agriculture Organisation of the United Nations, expressed by its motto "Fiat Panis" are:

- i. to increase the production of food materials;
- ii. to improve their distribution;
- iii. to reduce preventable waste of such materials and thereby bring about higher standards of living for the people of the world, particularly in countries where they are low in comparison with those of other countries.

These aims can only be achieved by a national utilization of the natural resources through which food materials can be produced, namely soil and water which should be considered as the basic natural resources of a country since they are essential for life. Forests are often made the watchdog and protector of these basic natural resources.

¹Burra, *Op. cit.*

²No reference available (editors' note).

Forests and Forests By-Products

Opposition to forest reservation is usually the result of lack of knowledge. The average person believes that wood is good only for lumber and fuel. "Yet, wood has more uses than any other material. Utilization of the full resources of the forest would constitute a major, bloodless, beneficent world revolution."¹

It is seldom realised that apart from soil and water conservation and the amelioration of micro-climate, that wood supplies many by-products essential to modern living and could be made to provide even more in the event of a major disaster. In addition, forestry has the following uses:

- (i) water-catchment and soil conservation;
- (ii) nature reserves;
- (iii) recreations (national park).
- (iv) extraction of timber

Because of the long-term investment nature of an extraction industry and partly because of a fear of destruction of the forest which has social and protective functions, many people oppose the utilisation of forests for extraction purposes. Nauliyal and Osborne² in considering the investment prospects state that,

"Proof that high returns are possible in forestry can be seen in the figures reported by Grut (1965) from South Africa who found annual returns of 29.0 and 15.2 per cent from *P. patula* and *P. radicata* respectively. Eucalyptus yielded 5.0 to 28.6 per cent annum and poplars 8 to 16 per cent per annum".

Forest Reserves Policy

With the invaluable guide of Lang's³ land-capability classification and Shillingford's⁴ subsequent Land-Use Studies together with the necessary modification to avoid unmanageable fragments of reserves here and there among agricultural plots, allocation of land for forestry can be implemented.⁵

¹Glesinger Egon - Chief of Forest Prods. Branch F.A.O., "The Coming Age of Wood".

²Nauliyal C. and Osborne J.E., "Is Growing Trees Worth-while?", *Commonwealth Forestry Review* Vol. 43. (3) Sept. 1968.

³Report on the Utilization of the Reserves of Crown Land in Dominica by David Lang.

⁴Land Use and Farm Planning Unit - J.D. Shillingford.

⁵For a report on Jamaican Policy see: Swabey C. Reservation Policy in Jamaica. J'ca.