Guest Editorial: State of the Environment

Land Use in Trinidad and Tobago

Since this country consists of two small islands with limited land space, careful planning is essential to ensure that there is a balance between built development and other land uses including conservation under natural forests. Under Town and Country Planning legislation, Parliament has approved plans for general land use but the problem has been to ensure adherence to the plans. In periods of economic "boom", as is presently occurring, the task of balancing development and conservation of the land resource is that much more difficult.

Fortunately this country has a good base from which to plan land use in that there is available a detailed soil survey of the two islands. The soils are divided into seven land capability classes, Class I being the best for agriculture and Class VII being unsuitable for agriculture.

In spite of this excellent basis, land use has so far been abysmal. Some of our best agricultural land has been used for housing and industry and agricultural projects have been developed on land much less suitable for agriculture, such as in Wallerfield. This area is now being developed for the University of Trinidad and Tobago, a technology park and recently it has been announced that a new town is to be developed there. This is more appropriate use for that land. Unfortunately the converse does not occur–that is, the good agricultural land which has been given over to housing does not revert to agricultural use!

In Trinidad the largest area of Classes I and II soils occurs in the valleys on the Northern mountain range and in the area at the foothills of that range. Thus Tucker Valley (in Chaguaramas), Diego Martin, Santa Cruz, Maracas and Caura Valleys, the Aranguez vegetable growing area, Valsayn and Orange Grove possess some of the best agricultural land in the country. Regretfully those areas (except Tucker Valley) are now occupied by intensive housing and other built development. Plans have been announced to start with housing development in Tucker Valley. While the present plans would result in little disturbance of the main area of land suitable for agriculture, this development may represent the beginning of a trend which may in the future result in loss of the entire valley from use for agriculture. There is also the very great risk that with the reduction in sugarcane cultivation significant areas of formerly Caroni (1975) Ltd. land will go into non-agricultural use.

Class I soil type is to be found in River Estate in the Diego Martin Valley, formerly a cocoa experiment station. Over the years it has been gradually given over to housing and other built development. The Santa Cruz Valley was once cultivated in grapefruit and cocoa. In the past, in certain months of the year, there was the beautiful sight of the ripe grapefruit stretching down the valley as far as the eye could see (at that time this country exported over a million crates of grapefruit per annum). Now most of that valley is occupied by housing.

From St. Augustine to Arima, where the soil is good for agriculture, land formerly in cultivation is going into housing. There are few parks or open spaces and no market garden (vegetable growing) areas that should normally abut population centres. The quality of life for the inhabitants of these housing developments is undoubtedly deteriorating. A section of the former Orange Grove Sugarcane Estate (with land suitable for agriculture) has been used to construct houses to relocate persons displaced by the construction of the new airport. Approximately four miles further east of this site is poor agricultural land that could have been used for the housing project.

In the South-West section of Tobago there is land classified as "Very Good" to "Moderately Good" for agriculture and which was once occupied by highly productive coconut estates and cattle. Most of this area has gone into tourism developments–hotels, golf courses, housing and most recently a Sporting complex–the Dwight Yorke Stadium.

A planned housing development at Roxborough Estate in Tobago will replace cocoa at a time when the production of world-famous Trinidad and Tobago cocoa continues to decline.

Some of our agricultural developments also result in improper land use. Thus the growing of rice (to enhance local food production) in the Nariva Swamp in an unplanned way did damage to those wetlands. The growing of christophene on the slopes at the side of the Blanchisseuse Road creates an environmental disaster waiting to happen. Steep slopes should be under permanent forest cover.

Since land that has been built on is never returned to agricultural use, if it is not currently being used for agriculture, it should be utilised for timber trees (a valuable commodity) until such time as it is required for agriculture.

There are other planning decisions that affect use of the land. Thus the construction of a North Coast road from Blanchisseuse to Matelot will encourage illegal logging and agriculture which could destroy the forests as has occurred in the western section of the Northern Range. This not only results in constant flooding but also affects our water supply much of which derives from the Northern Range.

Industrial developments which require large areas of land, such as an aluminium smelter, should be carefully considered in relation to alternative developments requiring

less land but giving equivalent economic benefits. Aluminium could be imported and downstream manufacturing developed which probably provides a greater return per unit of energy utilised without the loss of land and risk of environmental pollutants.

While we have the resources from our energy sector, we should also consider claiming land from the sea, wherever this is feasible, to add to our limited land area.

One of our problems is lack of awareness on the part of the population of these issues. This could be corrected by the teaching of geography in schools as a compulsory subject. Modern geography is about the relation of people to their environment and so persons tutored in this discipline will better understand proper land use.

While the knowledge to plan for proper land use is available, and the laws are present, enforcement of such laws is inadequate. With abundant wealth available to government and many citizens at this time, the pressure to circumvent the regulations is great and mistakes in land use that are irrevocable may be made. In this small country with limited land space all planning decisions must take sensible land use into account.

Although agriculture may be of low significance while there is income from oil and natural gas, which are finite assets, the nation's future prosperity will depend on use of renewable resources including agriculture. If a good quality of life is to be sustained in the long-term, the natural environment that is aesthetically pleasing as well as useful must be maintained and this needs proper land-use planning and implementation of the plans. Conservation of the natural environment to preserve biological diversity and to ensure water supplies as well as to prevent flooding is critical to our future well-being.

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Cover photo

A male sphecid wasp on its nest, new to the fauna of Trinidad and Tobago, the first collection north of the Amazon river (see page 53)