

ABSTRACT

An Evaluation of Wetland Conversion for Agriculture at Nariva Swamp, Trinidad.

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A number of areas within the Nariva Swamp have been converted over the years for agriculture. One such area is the Kernahan/Cascadoo Village located in the Southeastern part of Nariva Swamp. This area is thought to be representative of Nariva Swamp as it is the only agricultural community there. The agricultural activities included crop production, fish collection and livestock production. The scale on which these were carried out ranged from large and medium-scale, commercial type operations to small-scale commercial and subsistence-type ones. The scale and, ultimately, the suitability of the operation, depended on social, economic and, to a large extent, land capability considerations. A wide variety of crops were cultivated including vegetables, root crops, food crops and fruit crops. Rice (*Oryza sativa*) and watermelon (*Citrullus lanatus*) were the two major crops cultivated. These crops are cultivated in the wet and dry seasons respectively.

The inability of farmers to cultivate two crops of rice, as facilitated by the crop's agronomy, is primarily as a result of severe water management issues. This, together with the imposition of a commodity grading system for rice, in an environment that does not support its stringent requirements, has resulted in a sharp decline in rice production at Nariva Swamp. Generally, based on routine soil testing, all crops were cultivated on soils that were found to be relatively fertile, however, impeded drainage and the absence of adequate drainage facilities posed serious problems to their successful cultivation. Nevertheless, farmers cultivated a wide variety of crops on these soils, regardless of the crop's requirements, and with varying success ratings.

Overall, it appears that commercial crop production at Nariva Swamp may not be as viable an option, as originally thought, as compared to both livestock production and, particularly, swamp fisheries, which appears to be the most viable alternative, with less environmental impact.

Keywords: Agricultural activities, Soil testing, Land capability, Water management, Environmental impact.