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United Nations Industrial Development Organization

ENGLISH

Workshop on Fermentation Alcohol for Use as
Fuel and Chemical Feedstock in Developing Countries

Vienna, Austria, 26 - 30 March 1979

POTENTIAL FOR FERMENTATION ALCOHOL PRODUCTION IN BELIZE*

by

A. L. Ayuso**

* The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO.

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** Secretary, Belize Sugar Board, Corozal Town, Belize

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Belize is a small English-speaking country in Central America with a small population of less than 200,000. It is bounded on the north by Mexico and on the West and South by Guatemala. Of the 8,000 square miles of total area of the country, only two of the eight districts, comprising of Corozal and Orange Walk covering an area of 2,547 square miles are devoted to sugar cane. This northern part of the country has proven over the last 30 years to be most adequate for sugar cane production. Most of the cane being produced at the moment finds itself within a strip of about 50 miles long by 20 miles wide where some 60,000 acres are planted in scattered fashion ranging from 5 to 100 acre plots belonging to 4,000 independent Cane Farmers.

The Sugar Board is responsible for issuing licences to cane farmers in relation to the capacity of the two sugar factories which, together, produce about 110,000 long tons of sugar and 30,000 tons of molasses per crop. Because of these constraints on the expansion of sugar cane production the 60,000 acres can produce more cane than the factories can grind in a normal crop. But in spite of this, and as is customary for those of us that are involved in sugar, to live in hopes for better times, there are more than 1,000 farmers who have planted another 4,000 acres of sugar cane which do not have a market.



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ABSTRACT

12 February 1979

ENGLISH

United Nations Industrial Development Organization

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ABSTRACT

POTENTIAL FOR FERMENTATION ALCOHOL PRODUCTION IN BELIZE*

by

A. L. Ayuso**

Belize is a small English-speaking country in Central America with a population of 150,000.

The importation of gasoline for fuel causes a drain on the resources of the country while sugar accounts for about 60 per cent of total exports and is the most important dollar earner.

The north of Belize has proven over the past quarter of a century to be most suitable for sugar cane production, and the present acreage of 60,000 in the hands of the present 4,000 cane farmers is producing more cane than the two factories can grind.

Apart from the present licenced cane farmers there are at least another 1,000 farmers (with at least another 3,000 acres of extra cane) who are hoping to become part of the sugar industry in the event of an expansion.

But expansion beyond our export commitments of 110,000 tons to the European Economic Community and International Sugar Association appears to be remote. Our only hope is the possibility of another product. This could well be fermentation alcohol, provided the economics of such production were favourable.

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** Secretary, Belize Sugar Board, Corozal Town, Belize.

Belize also produces an average of about 30,000 long tons of molasses, most of which is exported to the USA.

Belize welcomes investors who are willing to work along with the Belizean farmers with a view to the economic development of the country and at the same time meet a world need.

The two sugar factories of Belize are owned by a subsidiary of Tate and Lyle. The smaller and more efficient is located in the Corozal District about 15 miles away from the Mexican border, rated at 45,000 tons sugar per crop. The other, more modern in design, located 25 miles away, in the Orange Walk District, is rated at 65,000 tons sugar per crop with expansion capacity to 100,000 tons sugar per crop. Between the two factories a total of 30,000 tons molasses per crop are produced.

Under the terms of the Lome Convention, Belize was granted a sugar quota of 40,000 tons which we have been exporting without fail, to the United Kingdom. Under the terms of the International Sugar Agreement Belize falls under the category of small countries entitled to 70,000 tons as our basic export tonnage. Most of this sugar is exported to our geographically natural buyer, the United States of America.

Sugar production, which, in 1959 accounted for a mere 6 percent of Gross Domestic Produce, has now risen to nearly 20 percent. Cane acreage which was 13 percent of the total area under cultivation in the country in 1961, is now more like 33 percent. The number of people occupied in the production of sugar, including cane farmers, now represents about 15% of the total labor force of the country and above 45% of those employed in agriculture. Export earnings of sugar rose from 22% by value of total domestic exports in 1960 to some 62% in 1974. The gross earnings of Cane Farmers rose from \$917,000 in 1960 to \$47 1/4 million in 1975.

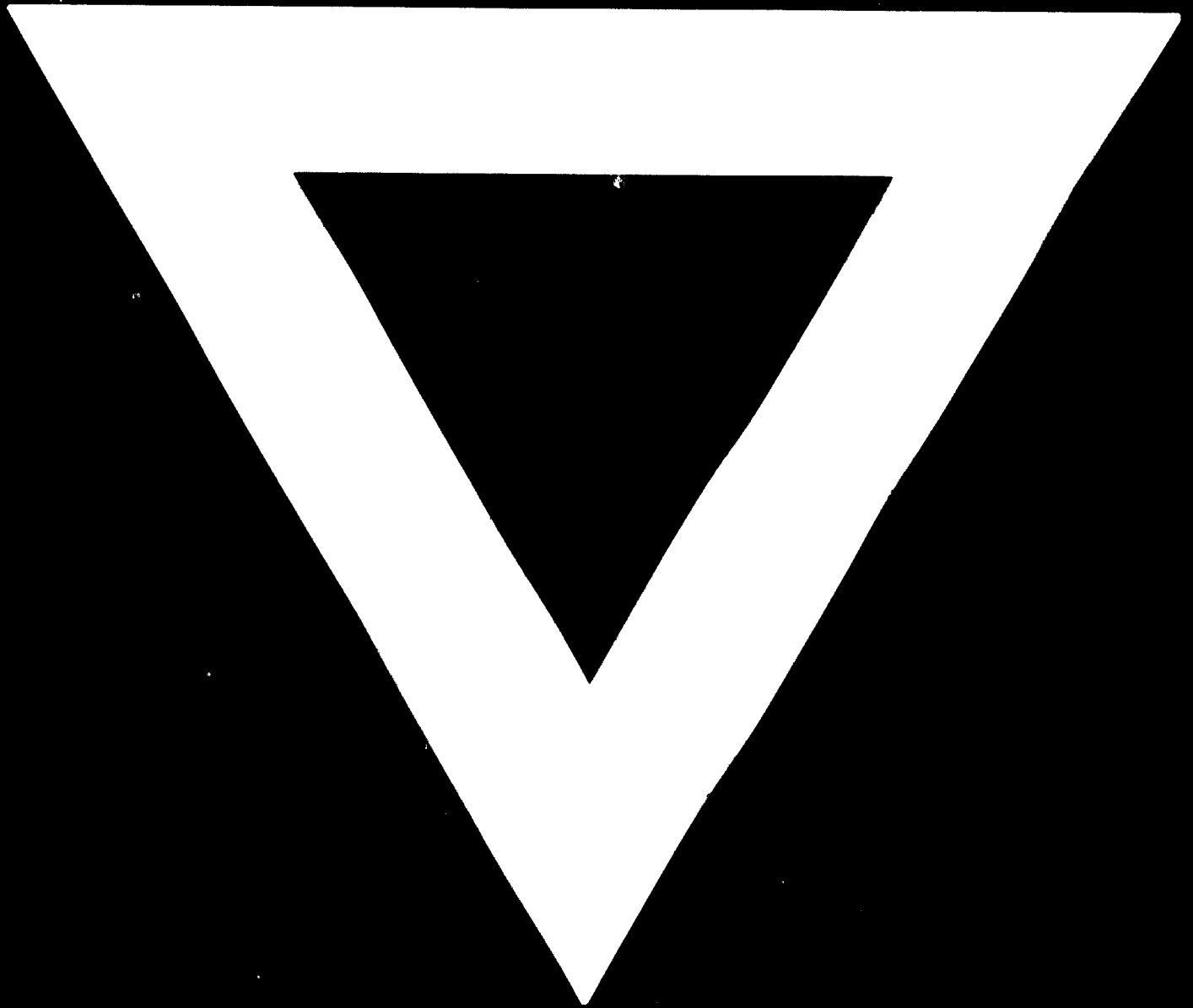
In view of the present trend in world production and consumption of sugar it would appear to be very remote indeed, the chances for an increase of our export quotas in the foreseeable future. Belize is therefore at a standstill as regards to sales of sugar in the face of over-production of the raw material. We therefore look with great expectations to the possible production of Fermentation Alcohol as a ray of hope, provided of course, the economics of such a venture prove to be feasible.

As far as consumption of Fermentation Alcohol is concerned, it is still something new to us and we are of the opinion that feasibility studies would have to be carried out as to its domestic uses and possibly its exports.

It is for economic reasons, coupled with the potential for higher production of sugar cane that we venture to say that Fermentation Alcohol has a future in Belize. But to achieve success our country welcomes investors who are willing to work along with the producers of the raw material, and possibly to advise on the technical aspects of this promising new industry.



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