

MAIZE SUGAR CANE (EARLESS CORN)

Prepared by:

CPL Business Consultants

Milton Park Innovation Centre, Abingdon, OX14 4RY, United Kingdom

Tel: +44 1865 257 252, info@cplconsult.com, www.cplconsult.com

STRATEGIES TO GROW YOUR BUSINESS

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In this case study, a diversified company in foods and agriculture engaged CPL Business Consultants to examine the feasibility of developing a business based on Maize Sugar Cane, and earless corn variety.

Maize Sugar Cane (MSC) is an earless form of corn that accumulates ear-less 25 percent or more of sucrose, fructose and glucose in the stem. The crop, which includes High Stalk Sugar Corn (HSSC) has potential applications in sugar production, and also in silage and as a substrate for biofuel.

The project examined the technical data available and reviewed its commercial prospects. Consultations were held with knowledgeable individuals in the sugar industry and the study to assess the potential as a source of white sugar from both a technical and commercial viewpoint.

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Executive Summary

Introduction to Maize Sugar Cane

Evaluation of Key Issues

Technical Aspects

- Breeding and Seed Production
- Photoperiod and Temperature Responses
- Sugar Corn Agronomy
- Future Crop Development
- Dry Matter Production and Sucrose Accumulation
- Sugar Production Curve and Distribution in the Plant
- Annual Availability of Earless Corn
- Harvesting High Stalk Sugar Corn
- Impurities from Sugar Production
- Colour formation, Crystallization Inhibitors and Sugar Loss

Sugar Extraction

- Juice Clarification
- Crystallization

Other uses for Earless Corn

- Alcohol
- Silage – Animal Feed

By products

Trials

- Comparison of Earless Corn with Other Crops
- Growing, Agronomy, Harvesting, Extraction, Production Costs

Visit Reports

Market Opportunities

Introduction of Maize Sugar Cane in Europe

Proprietary Rights and Protection

Economic Aspects

- Seed Production Costs
- Cost of Sugar Production from Earless Corn
- Maize Sugar Cane Processing Costs

Economics of a Stock Seed Company

Commercial Collaboration

Please look at our [PowerPoint Introduction](#) and Brochure describing deliverables, differentiators and case studies. [Eight case studies](#) can also be reviewed.