FROM SUGAR PRODUCTION TO BIOMASS UTILISATION: THE REFORM PROCESS TO ENSURE THE VIABILITY OF THE MAURITIAN SUGAR CANE INDUSTRY

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Abstract

SINCE 1975, Mauritius, as a member of the African-Caribbean-Pacific (ACP) group of countries, has, through the Sugar Protocol of the LOME Convention, been benefiting from high preferential prices for its sugar exports to the European Union. With the threat of a substantial cut in the preferential prices as from 2006, the Mauritian government in consultation with all stakeholders, implemented in 2001, the Sugar Sector Strategic Plan (SSSP) 2001–2005 to reform the sugar industry so as to ensure the long-term viability. In essence, the plan calls for factory centralisation (from 14 to 7 or 8), rightsizing of the labour force, further generation of electricity from bagasse, improvement of value-added through co-product development, and establishment of a comprehensive R&D programme to take full advantage of biotechnology and cane biomass utilisation. To-date, the number of factories has been brought down from 14 to 11. By 2007, only 7 centralised factories would be operational. The rightsizing of labour force has been successfully achieved with the disposal of 8000 workers through a socially acceptable voluntary retirement scheme (VRS). With the centralisation of factories, the production of electricity from bagasse cum coal would be boosted up. Thus, by 2010, the sugar industry’s share of supply to the national grid would be raised from the current 43% to 71%. Plans to further tap value addition from existing products such as special and organic sugars, ethanol, rum from cane juice and from new ones like sugarchemicals have already been critically examined. Research in sugar cane crop improvement, agronomy, biotechnology, and processes at factory level initiated in the wake of the plan will in the short to medium term be beneficial to the industry at large as it will either lead to cost reduction or productivity enhancement. In the context of diversifying away from sugar, the land conversion scheme as spelled out in the SSSP 2001–2005, allows the sugar industry to venture into economic activities like tourism and real estate development, etc. On the basis of progress achieved so far, the Mauritian sugar industry will, by the end of the reform period, be definitely transformed into a highly viable sugar cane industry positively impacting on other spheres on the economy.

Historical and economic background

The Dutch governor Van der Stel introduced sugar cane among other plants of economic importance into Mauritius from Batavia in 1639. It was not until 1694 that the first sugar was made by one Bockelberg, the colony’s junior surgeon (Rouillard, 1990). In the early days of French colonisation (1715–1810), emphasis was initially on spicies, coffee, cotton, indigo, food crops and animal husbandry.

However, by 1801, cane plantations covered some 4200 ha and 60 mills were manufacturing some 3000 t of sugar (PROSI, 1997). The latter met local demand and provided exports to the island of Bourbon (now La Réunion) and to sailing ships that called at the port.

Under British occupation (1810–1968), the area under cane increased considerably and there was technical progress in all directions. With the signing of the Commonwealth Sugar Agreement (CSA) in 1951, producers were provided with a basic annually negotiated quota with prices higher than that of the world market (Koenig and Ricaud, 1988).

The CSA had profound effects on the island’s economy. By 1970 (or two years after Independence), sugar represented 23% of GDP and nearly 90% of total export earnings (CSO, 1972).
In the first half of the 1970-decade, there occurred two events of major significance to the industry. An all time record of production of 718 000 t of sugar was achieved in 1973. The Sugar Protocol attached to the Lomé Convention that came into force in 1975 after Great Britain joined the European Economic Community, offered practically the same advantages as the CSA. The preferential price fetched by the African-Caribbean-Pacific (ACP) producers including Mauritius has been between one and half to three times higher than that of the world market (World Bank, 1989). However, during this early part of the 1970-decade, it was becoming increasingly clear that sugar cane alone would not be able to sustain the long-term economic development of the island. There was thus the need to diversify the structure of the national economy and curb unemployment.

After three decades, resounding success has been obtained. Thanks to the Lomé Convention and to special trading arrangements with the United States, an export processing zone (EPZ) highly concentrating on wearing apparels was, in 2001, the main foreign exchange earner (IamiIT, 2001). An expanding tourism industry catering principally to the affluent and long-haul markets provides direct and indirect employment to about 50 000 individuals.

The sugar industry played an active role during the early stages of the EPZ and tourism sectors. The start-up capital as well as the technical and managerial expertise for a significant number of EPZ enterprises and for the development of the hotel industry and tourism came from sugar companies (Chalmin, 1989).

In recent years, a new dynamism has been brought to the tertiary sector of the economy through the introduction of a new set of financial services (e.g. offshore banking) with a view to position the island as an international centre for financial intermediation. Lastly, information and communication technology is emerging as the fifth pillar of the economy. As a result of these sustained sectoral development policies, sugar is no longer the backbone of the economy. In 2001, it amounted to only 19% of exports and 5% of GDP (CSO, 2003).

Erosion of industry viability

Sugar production has always been undertaken under risky or uncertain conditions.

There are numerous records of setbacks caused by cyclones, droughts, pests and diseases. Some examples are tropical depression Carol which, in 1960, reduced sugar output to 239 000 t (MSIRI, 1961); gumming disease (Xanthomonas vasculorum) which, in 1964, affected one major performing variety and accelerated its replacement (MSIRI, 1965); and, in 1977, the outbreak of soft scales insect (Pulvinaria iceryi) over more than 3000 ha (MSIRI, 1978).

Until late 1970, these calamities were unlikely to seriously affect the long-term viability of the industry. This is due to several factors like the rapid recovery of the sugar cane plant after a disaster, the crop insurance scheme, the prompt institutional response to problems of a biological nature, and also to little or no uncertainty regarding market access. Nevertheless, financial difficulties were sporadic on account of fluctuations in the exchange rate of the sterling pound.

Since the second half of the 1970s, the more or less positive profile of the industry has gradually changed. Failure to achieve annual profits has become a chronic feature of the industry owing to the cumulative effects of economic and climatic factors affecting either its cost or revenue side. As a result of government policies to influence wage setting in both the public and private sectors, the labour bill has been constantly rising (World Bank, 1989). Between 1982 and 2000, the average daily wage rate for male agricultural workers moved from MUR 36 to MUR 233 (MCA, 2002). Annual output and price have not been to expectations. Between 1976 and 2000, some 13 000 ha were lost to urbanisation or infrastructure development and, despite appreciable increase in productivity per unit area, output has fluctuated mostly between 600 000 and 700 000 t. In the drought year of 1999, it fell to 373 000 t (MSIRI, 2000). Moreover, a steeply progressive export duty at one time representing 13% of government’s revenue continuously depressed gross earnings until its removal in 1994.

In rupee terms, the sugar price (after deduction of insurance premium) inclusive of the higher premium for special sugars, increased from MUR 1617 to 10 626/t. This sizeable increase was due to the constant depreciation of the local currency against the then European Currency Unit (ECU) in order to offset the mismatch between growth in wages and growth in productivity. By year 2000, the cost of production had already reached 18 US cents per pound of sugar (Kushiram, 2001). With an ACP-UE price around 40 US cents per kg (i.e. 18.2 US cents per pound), it had become eminently clear that unless salvaging measures were put in place, the collapse of the industry would be inevitable.
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The need to have recourse to such measures was further reinforced given that, after 2006, the preferential price would be lowered by a substantial amount following the European Union decision to reform its sugar régime so as adopt liberalisation policies compliant with WTO rules and to contain its internal budget. Further, it has to accommodate both an expanded union and the import concessions awarded to the least developed countries (EBA initiative) and to the Balkan countries.


Over the past two decades, there have been several government plans and enactments aimed at restructuring and improving the profitability position of the industry. The most important ones are the Action Plan of 1985, the Sugar Industry Efficiency (SIE) Act of 1988 together with its amended version of 1993, the Blue Print on centralisation of sugar factories of 1997 and the last one which is the Sugar Sector Strategic Plan (SSSP) 2001–2005.

Among other things, the Action Plan of 1985 and the (SIE) Act of 1988 (amended in 1993) were meant to alleviate the fiscal burden of the industry. The rate for the export duty was successively revised downwards until its removal in 1994. Specifically, as per the SIE Act, incentives for rebate on the same tax became applicable for an expanding spectrum of items/activities such as improvement in mill efficiency, sale of bagasse, insurable sugar, agricultural diversion, and investment at field and factory level, etc.

Additional sources of income such as electricity and special sugars became eligible for higher rates of income tax relief.

The SIE of Act of 1988 introduced a land tax to discourage the utilisation of agricultural land for non-agricultural purposes. It was also generous to other partners of the industry as it catered for the alteration of the sugar price-sharing ratio in favour of planters and improved working conditions for permanent and seasonal agricultural workers.

Both the Action Plan of 1985 and the Blue Print of 1997 focussed on centralisation but in a different manner. Given that the former plan recommended the closure of selected factories, the separation of growing and milling activities, and the waiving of taxes for transfer of assets and specific land transactions, it certainly paved the way for this course of action. The latter one set the framework within which mill centralisation should take place, i.e. the streamlining of administrative procedures, the socioeconomic commitments towards workers and planters affected by mill closure, and the conditions for land conversion to other purposes.

**Sugar Sector Strategic Plan (SSSP) 2001–2005**

In 2001, the government in consultation with all stakeholders elaborated the SSSP 2001–2005. This five-year plan is meant to create the proper environment to enable the industry to rethink its operations thoroughly, ensure its efficiency and viability, and win the competitiveness battle (MAFTNR, 2001).

Its main targets are to:

- reduce cost of production by 40% (from 18 to 10–12 US cents per pound) over the 2006–2008 time horizon through factory centralisation (from 14 factories to 6 or 7) and the rightsizing of the labour force through socially acceptable voluntary retirement schemes;
- promote enhanced productivity (mainly at field level) so as to ensure a continuation of the commitments to the export markets;
- create value addition through further generation of electricity from renewable resources, especially bagasse, and extensive use of the various fractions of the cane biomass; and
- develop a comprehensive Research & Development program to take full advantage of benefits expected from biotechnology, biotics and cane biomass utilisation.

**Progress under SSSP 2001–2005**

This section reviews the progress achieved under the plan with respect to the following thrusts: reduction of cost of production, productivity enhancement, value addition, biotechnology, and land conversion to other uses.

**Reduction of cost of production**

**Factory centralisation**

To-date, the number of factories have been reduced to 11 with the closure of one in the centre of the island and two in the southern region where the concentration of mills is highest. The closed factories...
were performing below their potential daily crushing capacity. Their aggregated annual sugar output was around 73 000 t, a figure largely below that of a model factory maximising profits at 100 000 t of sugar per year. Thus, with the closure of these mills and the transfer of cane to the nearby-centralised mills, the objective of reducing operating costs at factory level has been partially achieved.

The process remains to be pursued further so as to bring the number of mills to six or seven. In the coming years, two units in the south, namely Mon Trésor and Riche en Eau will close down and their cane load will be directed to Savannah where the mill will be upgraded from 145 to 350 TCH with the installation of a diffuser that represents a landmark for Mauritius. In addition, a 65 MW bagasse cum coal power plant is expected to be operational at Savannah in 2007. The whole process of centralisation and cogeneration will require investments to the tune of MUR 4 billion ($US148 million).

With this development and the expected closure of Mon Loisir factory soon (in 2005?), the industry will be left with eight units including St Félix, a family owned concern of 75 TCH. Should Mon Désert Alma factory in the Centre close down, the objective of the SSSP would be reached.

Rightsizing of labour force

With nearly 8000 individuals taking advantage of a socially acceptable voluntary retirement scheme (VRS) aimed at disposing labour which become redundant as a result of the mechanisation of selected field operations, and constraining labour laws, the labour pool has now been reduced to two-thirds of its size in 2000.

Further, the clauses of the Labour Act which required sugar companies and large plantations to retain, during the intercrop season, at least 20% of those seasonal workers who worked as much as 55% of the harvest period, have been amended.

Taking into consideration the initially large weight of the labour item in the cost of production budget, there is no doubt that the VRS has so far been the key driving force towards meeting the cost reduction targets.

There is still considerable scope for lessening dependency on field labour. With further mechanisation, more savings on labour would be possible. A recent study showed that with total mechanisation, the overall labour requirement for 60 000 ha would be less than 8000 units (Tonta, 2001).

Research

Research in the area of field mechanisation, weed control and plant nutrition will further contribute towards cost efficiency. Modified or re-designed agricultural implements for stone removal, scum (filter cake) application, cutting of cane setts, cane transport for cane mechanically harvested in the super-humid zone, have already been evaluated. Studies on the minimisation of the use of chemical herbicides and on biological nitrogen fixation are underway.

At factory level, the focus has been mainly on the minimisation of energy consumption in view to maximise the co-generation of electricity from bagasse. The work comprised the introduction of continuous processes like continuous A centrifugals, vacuum pans, reduction of process steam usage by proper utilisation of evaporators and heaters, and use of electric motors for mill drivers in conjunction with efficient condensing extraction turbo alternators.

Review of service providing institutions

Through a global tax levied on production, the sugar industry finances service institutions dealing with research, extension to small-scale growers, milling arbitration, mechanised land preparation and related works, bulk sugar handling and co-ordination of industry matters. A task force is currently studying the different ways and means to improve their cost-effectiveness. Proposals for reducing their aggregate budgets from MUR 500 to 350 million have been developed.

Productivity enhancement

The SSSP sets a production target of 620 000 t of sugar to be achieved on 60 000 ha which by 2010 would have been prepared for total mechanisation and out of which some 32 000 ha would be irrigated. This implies that average productivity would have to be raised to 10.3 tonnes of sugar per hectare. (Under the favourable climatic conditions of 2001, sugar productivity averaged over the 73 300 ha harvested, was 8.8 tonnes per hectare). As the industry is in a transitional phase, it appears too early to assess changes, if any, that have occurred at field level. However, at institutional level, no efforts are being spared. As per the recommendation of the government, task forces have worked on the funding of irrigation, derocking and mechanisation projects. Their findings are not yet public.
Research initiatives in the area of crop improvement and agronomy have already given some tangible results. Between 2001 and 2003, three new varieties (one mid-late maturing with relatively higher fibre content and two for early harvest in specific zones) were released for commercial cultivation. Under experimental conditions, one newly released variety outyielded the existing commercial ones by some 50%. With further shortening of the selection program, the release of more productive varieties will become more frequent.

Studies of deficit irrigation to cope with water shortage has shown that it is possible to spread the available water over an additional 11% of irrigated area, thereby increasing water use efficiency by 10%. High-density planting trials have given promising results. In addition to productivity increase, they enhance weed management and the efficiency of the chopper-harvest. Preliminary trials have shown that significant increases in sucrose content could be obtained when high-yielding late varieties were artificially ripened and harvested early in the season.

**Value addition from the cane biomass**

In Mauritius, only the juice and the fibre fractions of sugar cane are commercially exploited. Raw and special sugars are made from the juice. The fibres in the form of bagasse, that were traditionally used only for the generation of steam in the sugar factories, have over the past three decades been a growing source of material for the production of electricity for sale to the public grid. The other by-products are molasses, filter cake and furnace ash. The former is mainly exported but at highly volatile prices. The latter two are returned to the fields.

In the present industry context, the valorisation of the sugar cane plant through greater utilisation of its biomass not only compensates for revenue shortfall from the sugar commodity but also provides new opportunities likely to have positive spillover effects on the economy. This view is fully supported by SSSP. The latter's program on diversification within sugar emphasises further generation of electricity from renewable sources, in particular bagasse; more value added from special sugars; desugarisation of molasses; production of rum from cane juice; and the identification of new products from the various fractions of the cane biomass including molasses and ethanol derived therefrom.

To that end, a task force has already submitted its findings on the status of co-product development, and the technological, environmental, economic, marketing, and research issues that will have to be addressed. The key findings of the task force are summarised below.

**Electricity from bagasse**

In 2001, power plants in sugar factories, utilising either bagasse only or bagasse cum coal accounted for 43% of the electricity required for national consumption. The value of such production was around 10% of total sugar proceeds.

Following an energy audit completed in 2002, it was estimated that by 2010, total electricity demand for the island would be equivalent to 2400 GWh. Conditional upon the erection of four power plants similar to one in the North of the island, the sugar industry would be able to supply 71% of that demand in the long-term. To fully optimise the use of bagasse, these new plants would have to be located close to centralised factories. The efficiency of the latter will have to be further improved with appropriate investments to allow maximum export to the national grid.

Additionally, half of the two million tonnes of dry matter from cane tops, leaves and trash which are grossly underutilised could be used as a supplement to bagasse for electricity generation. At island level, this strategy would further lessen the dependence on coal and heavy oil for the production of energy.

**Molasses and derived products**

Mauritius annually produces between 150 000 and 185 000 t of molasses. Given the instability in export earnings, the need to look for alternatives that improve value added becomes crucial. Three options exist. These are desugarisation, fuel ethanol, and alcochemicals.

The desugarisation of molasses appears to be feasible but various technical issues still have to be addressed. However, a low sugar price may not be conducive to its adoption. Fuel ethanol offers interesting prospects. It could easily replace 20% of the amount of gasoline used in the country. The ethanol-gasoline blend would minimise environmental risks and reduce the petroleum import bill by nearly 20%. A detailed technical, financial, environmental feasibility is thus warranted. In the area of alcochemicals, the spectrum of products obtained by either dehydration, or oxidation, or modification of alcohol is quite impressive, ranging from polyvinyl chloride to aspirin. The technology required for their manufacture is not highly
capital intensive. Their export potential, especially to the southeastern African region, needs to be appraised.

**Sucrochemicals**

Carbohydrate-based products derived from sugar have their applications in pharmaceutical, cosmetics, tobacco, detergent, textile, and food industries. The manufacturing of fatty acid esters for use as bleaching boosters in the detergent industry are avenues for consideration in the local context. Research on these aspects has to be initiated.

**Special and organic sugars**

Mauritius is a world leader in the production of special sugars. The latter whose processing is a trade secret, preserve the natural goodness of the cane juice together with its richness of flavour and its molasses and mineral content. Sixteen types are manufactured and each type meets specific household (e.g. coffee crystals to sugaring coffee beverages) or industrial (e.g. production of selected wines) uses. The export volume is 70 000 t with the combined ACP-EU and US quota systems consuming 62 000 t. The rest is sold to 23 world market countries. Competition from other countries has already put a cap on the price premium obtainable in the EU markets.

Within the philosophy of diversification within sugar, the special sugars represent the innovation that has successfully given more value added to processed cane juice. In the context of SSSP 2001–2005, efforts are being geared towards the re-engineering of the strategy for its marketing, and the development of new types of products. Further, a packaging plant to enhance quality assurance benchmarks and promote the Mauritian label will become operational once corporate arrangements regarding its ownership are finalised.

Mauritius has already acquired the necessary expertise to meet the stringent requirements associated with cultivation and milling in order to produce organic sugar conforming to international norms. A major project was implemented in the west of the island in 2002 with the production of 500 t in 2003. The objective is to produce 1000 to 1500 t in 2004 and 5000 t thereafter. In the long run, the plan is to devote all the cane produced on 4500 ha to organic sugar production.

**Rum from cane juice**

With the relaxation of legislative constraints, some entrepreneurs have started to produce the above high-priced spirit. In case of severe cuts in the preferential prices, it may partly make up for the revenue shortfall from sugar.

**Biotechnology**

Research activities in sugar cane biotechnology at the Mauritius Sugar Industry Research Institute (MSIRI) have been as follows:

- tissue culture for rapid multiplication of disease-free plantlets (mainly new varieties) for distribution among local growers and for exchange of germplasm with other countries;
- molecular mapping and marker-assisted selection for the identification of traits such as resistance to major diseases (e.g. yellow spot) as well as agronomic traits, with the ultimate objective of shortening the cane breeding and selection programme;
- development and application of molecular diagnostic tools for the control and diversity studies of pathogens (e.g. sugar cane yellow leaf virus), and also for the monitoring of exotic varieties introduced in quarantine;
- genetic engineering for cultivar improvement.

In the area of genetic engineering, transgenic plants resistant to selected herbicides have been developed since 1999. With the enactment of the appropriate legislation, they are likely to be field evaluated in the coming months. A joint project with a US organisation on drought resistance has been initiated. Lastly, in collaboration with Brazil, investigations on the production of biodegradable plastics from bagasse will be launched.

Clearly, the bulk of the above activities is concerned with productivity enhancement which is one of the top priorities of the agenda of the SSSP 2001–2005. Under favourable conditions, biotechnology will be likely to be a key vector that would rapidly help towards achieving the desired crop productivity targets.
Land conversion to other uses

With the proposal for reducing the area under cane from the current 75,000 to 60,000 ha, there arise increased prospects for diversifying away from sugar. The SSSP 2001–2005 includes a component (a land conversion scheme) that allows such diversification. Under this scheme, the conversion of existing cane lands and non-cane lands belonging to the sugar industry are exempted from current land conversion taxes.

This scheme has initially enabled the sugar industry through the sale of land to recoup costs associated with the implementation of the labour voluntarily retirement scheme. Further, it provides the opportunity to embark into new ventures that will contribute towards the economic growth of the island. These range from the cultivation of palmito and other crops, to ecotourism, leisure resorts, industrial and real estate development as well integrated resort schemes (IRS).

Basically, the IRS consists of a complex of luxury villas of international standard situated in an idyllic setting near the coast and with high-class facilities and amenities. The villas are mostly destined for sale to foreign individuals and foreign companies registered in Mauritius. Implicitly, they are meant to attract the foreign capital required for economic development.

In the south west of the island, a major project involving the construction of four tourist hotels, a world-class golf course, and luxury villas according to the IRS concept will be operational soon. It has entailed the use of some 120 ha of land, 80 ha being previously under cane. The investment has been of the order of USD 180 million. Similar projects are about to be implemented on the eastern and western coasts.

Conclusions

In reviewing the SSSP 2001–2005 some two years after its implementation, the focus has been on cost reduction, productivity enhancement, valorisation of the major fractions of the cane biomass, biotechnology and land conversion to other uses. The analysis, though mostly qualitative, has provided an insight as regards the fate or path followed by each of these thrusts.

The program of cost reduction is definitely moving in the right direction. With further factory centralisation and mechanisation of field operations, it may be expected that by 2010, costs will be quite close to the target set.

An average sugar productivity of 10.3 t/ha is, in essence, feasible. However, under present conditions, the time horizon over which such a target would be reached cannot be determined with precision. It appears that productivity enhancement is an area where institutional efforts specifically with respect to irrigation, derocking, mechanisation, etc. would have to be further intensified.

Potentially, large benefits in the form of value added may be obtained from the industrial use of the various fractions of the cane biomass. In consequence, it is felt that a full appraisal of these possibilities undertaken from a holistic perspective will enable the establishment of an action plan for further work on the products identified.

Research in sugar cane crop improvement, agronomy, and biotechnology initiated in the wake of the plan or earlier will in the short to medium term be beneficial to the industry at large since productivity will be enhanced, a matter of critical importance with the reduction of the area under cultivation.

In the context of diversifying away from sugar, the land conversion scheme as spelled out in the plan, allows the sugar industry to venture into a new spectrum of economic activities.

On the basis of progress achieved so far, there is no doubt that, by the end of the reform period, the Mauritian sugar industry will be successfully transformed into a sugar cane industry that is highly viable. Further, it will be likely to emerge as an entity positively impacting in several spheres of the economy, ranging from the supply of electricity to the domestic grid, the manufacturing of chemical products, to the sustaining of tourism development.

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DE LA PRODUCTION SUCIERE A L’UTILISATION DE LA BIOMASSE : LE PROCESSUS DE REFORME POUR ASSURER LA VIABILITE DE L’INDUSTRIE DE LA CANNE A SUCRE DE MAURICE

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Résumé

L’HISTOIRE de l’industrie sucrière de Maurice est étroitement liée à celle du pays. La canne à sucre fut introduite par les Hollandais en 1639 et l’industrie sucrière fut établie durant la période française (171–1810). Cette industrie devint par la suite l’épine dorsale de l’économie du pays sous l’occupation britannique (1810–1968). Quand Maurice acquit son indépendance en 1968, le sucre représentait près de 90% de la valeur des exportations et 30% du PIB. Le gouvernement d’alors, réalisant le danger associé à cette économie reposant entièrement sur une monoculture, entrepris un vaste programme de diversification, orienté vers d’autres secteurs tels que le textile et le tourisme. L’industrie sucrière joua un rôle important dans ce processus de diversification qui connut un franc succès durant les trois dernières décennies du 20e siècle. En 2001, le sucre ne représentait plus que 19% de la valeur exportée et 5% du PIB. Depuis 1975, Maurice en tant que membre des pays d’Afrique, des Caraïbes et du Pacifique (dits les pays ACP) a bénéficié de prix préférentiels élevés pour son sucre exporté à l’Union européenne, à travers le protocole sucre de la convention de LOME. Cependant, avec la globalisation du commerce international et suivant les négociations sur l’agriculture à l’Organisation mondiale du commerce, une réduction des prix préférentiels est prévue à partir de 2006. En 2001, le gouvernement en consultation avec les partenaires de l’industrie, a élaboré un plan stratégique pour le secteur sucre, le Sugar Sector Strategic Plan (SSSSP) 2001-2005, afin de
DE PRODUCCIÓN DE AZÚCAR A UTILIZACIÓN DE BIOMASA: EL PROCESO DE REFORMA PARA ASEGURAR LA VIABILIDAD DE LA INDUSTRIA CAÑERA DE MAURICIO

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Resumen

Desde 1975 Mauricio, como un miembro del grupo de Países de África-Caribe-Pacífico se ha venido beneficiando, a través del Protocolo Azucarero de la Convención de LOME, de altos precios preferenciales para sus exportaciones a la Unión Europea. Con el riesgo de una reducción sustancial en los precios preferenciales para el año 2006, el gobierno de Mauricio por medio de consultas con todos los accionistas, implementó en el 2001, el Plan Estratégico para el Sector Azucarero (SSSP, por sus siglas en inglés) 2001-2005 para reformar la industria azucarera de tal forma de asegurar su viabilidad a largo plazo. En resumen, el plan se orienta a una centralización de ingenios (de 14 a 7-8), redimensionamiento de la fuerza laboral, mayor generación de electricidad a partir de bagazo, aumento del valor agregado a través del desarrollo de co-productos y establecimiento de un buen programa de investigación y desarrollo para tomar plenas ventajas de la biotecnología y de la utilización de la biomasa de caña. A la fecha, el número de ingenios ha sido reducido de 14 a 11. Para el 2007, solo 7 ingenios centralizados serán funcionales. El redimensionamiento de la fuerza laboral se ha alcanzado satisfactoriamente con el retiro de 8000 trabajadores a través de un programa socialmente aceptable en su forma de retiro voluntario (VRS, por sus siglas en inglés). Con la centralización de los ingenios, la producción de electricidad a partir de bagazo se incrementaría notablemente. Con esto, para el 2010, el porcentaje de electricidad generado por la industria a la red nacional habrá subido del actual 43% a un 71%. Planes para aumentar aún más el valor agregado de productos existentes como los azúcares orgánicos, etanol, rones de jugo de caña. Y de nuevos productos como los sucoquímicos ya han sido críticamente analizados. Investigación en el mejoramiento del cultivo de la caña de azúcar, agronomía, biotecnología y procesos a nivel de fábrica empezados al inicio del plan serán en el corto a mediano plazo muy beneficiosos para la industria ya que inducirán a una reducción de costos o a un aumento en la productividad. En el contexto de una diversificación que no implique el azúcar, el esquema de conversión de tierras como se propone en el Plan SSSP 2001-2005 permite a la industria azucarera buscar inversiones en otras actividades económicas como el turismo y desarrollo de bienes raíces, etc. En base a los progresos obtenidos hasta ahora, la industria azucarera de Mauricio se habrá transformado definitivamente al final del período en una industria azucarera bastante viable impactando positivamente en otras esferas de la economía.