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Expert Group Meeting for the Asian and
Pacific Region, in Preparation for the
First Consultation on the Sugar-cane
Processing Industry

Guangzhou, People's Republic of China
22-24 March 1988

REPORT*

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PREFACE

The System of Consultations

The Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima (Peru) in March 1975, recommended that UNIDO should include in its activities a system of continuing consultations between developed and developing countries with the aim of increasing the participation of the latter in world industrial production by means of enhanced international co-operation. Subsequently, the United Nations General Assembly, at its seventh special session in September 1975, supported this recommendation.

In May 1980 the Industrial Development Board decided to establish the System of Consultations on a permanent basis, and in May 1982 approved the rules thereof (The System of Consultations, PI/84), stipulating its principles, objectives and characteristics - in particular:

"The System of Consultations shall be an instrument through which the United Nations Industrial Development Organization (UNIDO) is to serve as a forum for developed and developing countries in their contacts and consultations directed towards the industrialization of developing countries.

The System of Consultations shall seek action-oriented measures towards increasing the share of developing countries in world industrial production and creating new industrial facilities in developing countries contributing to the establishment of a New International Economic Order. To that end, the problems associated with the industrialization of developing countries shall be considered on a continuing basis from a policy, economic, financial, social and technical point of view.

The System of Consultations shall relate to co-operation between developed and developing countries and among developing countries themselves.

The System of Consultations would also permit negotiations among interested parties at their request, at the same time as or after consultations.

Each Consultation Meeting shall formulate a report, which shall include conclusions and recommendations agreed upon by consensus and also other significant views expressed during the discussions."

Participants of each member country should include representatives of governments, industry, labour, consumer groups and others, as deemed appropriate by each Government.

Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing

At its second session in October 1986, the Industrial Development Board decided to include the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing in the programme of consultation meetings for the biennium 1988-89.

In accordance with this decision and the programme of work adopted, the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing will be held at Havana, Cuba, from 26-30 September 1988.

Preparatory activities have begun at the regional level, including preparation of documents on the sugar-cane processing industry in the Latin American and Caribbean Region and Asia; as well as the organization of two Regional Expert Group Meetings, one for Latin America and the Caribbean (Vienna, 8-10 December 1987) and one for Asia and the Pacific (Guangzhou, 22-24 March 1988).

The Expert Group Meeting for the Asian and Pacific Region was organized by UNIDO in close collaboration with the Sugarcane Industry Research Institute of the Ministry of Light Industry and the Guangdong International Economic and Technical Corporation, and hosted by the Guangdong Provincial People's Government, People's Republic of China. The meeting was held in Guangzhou, People's Republic of China, from 22-24 March 1988.

The objectives of the meeting were:

- (a) To discuss the present situation of the sugar-cane processing industry with special emphasis on diversification of the industry and the potential for expansion of by-products utilization for various purposes;
- (b) To discuss the potentials for, and perspectives of applying new cost- and energy-saving technologies aiming at reducing production costs;
- (c) To identify common and specific constraints which hamper the development of this industry in the developing countries of the region;
- (d) To examine and propose ways and means for international co-operation and actions needed to overcome identified constraints;
- (e) To select specific issues for further elaboration to be discussed at the First Consultation.

CONCLUSIONS AND RECOMMENDATIONS

1. The Expert Group Meeting for the Asian and Pacific Region, held at Guangzhou from 22-24 March 1988, in preparation of the First Consultation Meeting on the Sugar-cane Processing Industry, fully recognized the importance of the economic and technical problems facing the sugar industry in the region and in the world as a whole.

2. As a result of the discussions, the following conclusions and recommendations were agreed upon by the participants.

- In view of the current situation, particularly the overproduction, the market situation, the low prices, searching for alternative and supplementary activities within the industry is necessary in order to overcome some of the present difficulties; it was agreed that one of the ways to deal with the problems would be diversification, which should be given priority in the development of a new agro-industry based on cane as a raw material;
- Diversification should be carried out taking into consideration all aspects aimed at improving the operation of the cane-sugar industry, and which require the redefining of national policies and strategies;
- There is a need for an integrated approach in future development taking into account upstream and downstream connections of the sugar industry; agriculture-industry linkages should be emphasized;
- In the process of diversification the critical factors to be taken into account are the process- and product diversification as well as inter-cropping, where feasible. Special emphasis should be given to the:
 - a) economic aspects of diversification;
 - b) mobilization of financial resources;
 - c) institutional and infrastructural arrangements;
 - d) rational energy utilization;
 - e) improvement of existing production especially in low productivity areas where additional assistance is required.
- It was agreed that greater attention should be paid to the evaluation of the market situation and its prospects, both from the domestic and international points of view;
- In order to improve efficiency and productivity of the sugar industry in the region, technological improvements available to the sugar industry, as well as industries based on sugar by-products, should be progressively introduced. Action should be taken and projects implemented as a continuous process with targeted basic parameters for various elements of the production process;

- Exchange of technical information between industry on a regional and global basis should be improved and promoted: better utilization of existing sources and institutions, as well as the establishment of new ones are necessary;
- It was considered that regional advisory and consultancy services should be established under the auspices of UNIDO or another international body to serve development projects and investments. The main objective of these regional industrial research and development centres would be to conduct studies on subjects related to processing, production improvements and crop diversification in the sugar industry as well as to contribute to a better exchange of information;
- International co-operation should be promoted on a wider basis among the countries within the regions and on South-South and North-South bases, for short- as well as for long-term activities and co-operation such as: regional training activities for personnel at all levels; exchange of information, market development, transfer of technology, etc;
- It was felt necessary to continue with the consultation process after the First Consultation Meeting, with emphasis on regional consultations, to develop and implement programmes in the context of the above-mentioned areas.

3. It was unanimously agreed that the issues to be examined at the First Consultation should be as follows:

4. Issue I - Diversification of the cane-sugar industry

- diversification in all aspects;
- production of and utilization of sugar industry by-products;
- improvements in the utilization of sugar;
- socio-economic problems;
- domestic and export market aspects;
- financing;
- international co-operation;
- information exchange and transfer of technology;
- institutional arrangements.

5. Issue II - Improvement of the productivity in the sector aimed at:

- reducing production costs through improved efficiency in production;
- increasing yields;
- rational energy utilization;
- improving the quality of products;
- improving infrastructure.

6. It was suggested that UNIDO and GEPLACFA should co-operate closely during the preparations for the Consultation using the knowledge and experience already accumulated by those two Organizations. Co-operation should also be maintained with other international organizations such as ITC, FAO, and the International Sugar Organization.

7. Adequate time should be devoted to informal discussions among participants during the Consultation.

8. The participants expressed their appreciation to the host country, as well as to the Cane-sugar Industry Research Institute, Ministry of Light Industry, and the Guangdong International Economic and Technical Corporation, China, for the excellent organization of and arrangements for the Expert Group Meeting.

I. ORGANIZATION OF THE MEETING

9. The Expert Group Meeting for the Asian and Pacific Region in preparation for the First Consultation on the Sugar-cane Processing Industry was held at Guangzhou, People's Republic of China, from 22-24 March 1988. The meeting was attended by 14 participants from 9 countries, and representatives of the GEPLACEA Secretariat. (See Annex I for list of participants).

Opening of the meeting

10. At the opening session, the meeting was addressed by the Deputy Secretary General of the Guangdong Provincial People's Government, Mr. Zhu Yiming, who welcomed the participants and highlighted the importance of the sugar-cane industry to the region as well as the complicated economic situation prevailing in the sector.

11. He pointed out that the present international forum, convened with the assistance of UNIDO, would provide a unique opportunity for the exchange of views and contribute to the development of the cane-sugar industry in the world. He also expressed his confidence that this meeting was indicative of the high degree of interest that the international community was showing in resolving the problems within the sector. Finally, he emphasized the need to support and strengthen the productivity as well as the diversification process in the industry in order to contribute to the economic growth and prosperity of the region.

12. The meeting was then addressed by a representative from UNIDO who, on behalf of Mr. S. Hable-Selassie, Director, System of Consultations Division, welcomed the participants and expressed his deep gratitude to the Guangdong Provincial Government, the Sugarcane Industry Research Institute and the Guangdong International Economic and Technical Corporation for their kindness in hosting the meeting, as well as for their generous hospitality. He gave an account of the work that UNIDO was carrying out within the framework of the System of Consultations as a means to encourage contacts between the countries in order to promote the industrial and economic development of the latter.

13. He also referred to the importance of the sugar-cane industry to many developing countries in general, and the Asian and Pacific region in particular. This industry was presently characterized by a combination of complex problems affecting predominantly the developing countries. In his statement the UNIDO representative emphasized the importance of the continuous efforts of UNIDO in the field of industrialization especially with regard to the development of the agro-based industries, and underlined the necessity to expand co-operation among developing countries on a mutually beneficial basis for a better utilization of available technological and financial resources.

14. The UNIDO representative informed the meeting on the increased role of the destabilizing factors in the world sugar economy. He further pointed out that the introduction of alternative sweeteners, sugar substitutes and the declining consumption in some countries had led to the narrowing of the market and the aggravation of the supply/demand balance. On the other hand, some countries had been permanently experiencing shortages in sugar supply and were interested in obtaining up-to-date sophisticated processing technology to meet local demands and reduce imports.

15. In his statement at the opening session the UNIDO representative also drew the attention of the participants to the complexity of the problems faced by sugar-producing countries in Asia and the Pacific. In view of the current economic situation of the industry, the search for higher productivity as well as for alternative and supplementary activities was a reality which called for minimizing the economic problems caused by regional imbalances on the market. In this connection, the development of industry based on by-products and the diversification of the industry in countries with an oversupply of sugar would make it possible to grant them new opportunities, while in countries with a short-supply-situation, special emphasis should be given to improving productivity, rational energy utilization, and modernization of technology. Greater attention should be paid to the evaluation of the market. In this connection a comprehensive economic analysis of by-products perspectives would be of great value.

16. Finally, he emphasized the need for developing co-operation and co-ordinating the activities of the sugar-producing countries in search of efficient utilization methods of existing and introduction of new technologies in the sector. Referring to the importance of the sugar industry in terms of its contribution to the gross domestic product and employment in the region, he expressed his confidence that co-ordinated efforts would inevitably help the interested parties to find a successful solution to existing problems and he hoped the meeting would determine those areas which were crucial for the future development of the cane-sugar industry in the Asian and the Pacific region.

II. SUMMARY OF DISCUSSIONS

17. Mrs. Bao Guo Yu, Chairman of the Academic Committee of Sugarcane Industry Research Institute and Vice-Chairman of the Chinese Society of Sugarcane Technologists, was elected Chairperson of the meeting. She stressed the importance of the Expert Group Meeting for the Asian and the Pacific Region for the preparation of the First Consultation on the Sugar-cane Processing Industry. Referring to the complexity of the problems facing the sugar-cane industry of the region, she invited all the participants to try to make the outcome of the forthcoming discussions fruitful and productive.

18. In introducing the agenda, she indicated that in order to fulfil the objectives of the meeting, attention should first be given to reviewing and characterizing the problems of the cane-sugar industry in Asia and the Pacific before determining the priority areas and issues for consideration by the Consultation meeting. The agenda was adopted and is attached as Annex II.

19. A representative from UNIDO's Department of Industrial Operations presented an overall view of the role and technical assistance of UNIDO to the agro-based industries in developing countries. In his statement he highlighted the principal sources of project financing, and gave a comprehensive picture of the system of priorities of technical assistance. In the field of agro-industries, UNIDO concentrated its efforts on the improvement and rehabilitation of existing plants, training of personnel and managerial skills. In the sugar-cane industry, in particular, UNIDO has been involved in projects related to the utilization of bagasse and production of animal feed.

20. Continuing with his presentation, he stressed the importance of understanding the complexity and diversity of the situation in the sector. There were three types of sugar-producing countries: those who are net exporters facing tough competition on the world market in combination with declining prices; those with insufficient domestic production; and those with high domestic prices and domestic market protected by tariffs and non-tariff barriers. In the light of this classification, a cautious approach should be taken to the general analysis and recommendations.

21. In accordance with the agenda, the Chairperson requested the participants to discuss the documents prepared for the meeting and to follow up with the characterization of the problems affecting the region's sugar-cane industry. Appreciation was expressed to those participants who submitted reports relating to their own countries. The experts then gave an account of the situation of the cane-sugar industry in their countries with regard to production, consumption, exports, energy utilization, price trends, development of by-products and diversification of the industry.

22. The participants recognized that during the present decade the situation of the cane-sugar industry has been characterized by high stockpiles which, in 1985, reached a peak level of 40 per cent of consumption. Low prices on the international market have been, as a result of that surplus, below the production costs of most producing countries. A standstill in the growth of world consumption, resulting from inroads made by substitutes - both caloric and non-caloric sweeteners - in the markets of the major industrialized countries has led to further undesirable developments and trends in the sector.

23. Following the characterization of the problems affecting the sugar industry in global terms, the participants concluded that owing to the tight international market, the competition among exporters also contributed to the destabilization of the production schemes. Tariff and protectionist barriers have created the build-up of the beet sugar industry in the EEC member states, and failure to reach a new comprehensive International Sugar Agreement had caused a dramatic momentum to a group of export-oriented countries.

24. The participants recognized the growing complexity of the international sugar market as one of the obstacles facing the growth of the industry. The lack of efficient tools and mechanisms to regulate the market hindered any efforts to reach a mutually acceptable compromise in trade issues. The participants agreed that it was necessary to use any international forum or organization, especially the International Sugar Organization and GATT to stabilize the sugar prices at fair levels. It was stressed that the UN System in general and UNIDO in particular could provide consultancy and technological services in that field contributing to the general efforts to up-grade the performance of the industry.

25. In the course of discussions, attention was drawn to the phenomena of the rapid restructuring of the international sugar market. Many of the participants pointed out the importance of the growing demand for and supply of "white sugar". It was agreed that any increase in the processing activities and of value-added in the sugar industry would undoubtedly lead to the strengthening of the position of the sugar exporting countries. In this connection, the meeting came to the conclusion that a comprehensive and thorough economic analysis of the market forces as well as the structural aspects of the international trade in sugar should be made and would lead to a better understanding of the present situation and perspectives.

26. Continuing the deliberations on the international aspects in the sector, the participants noted that a better exchange of, and access to information was of vital importance to the development of the industry. Many countries, especially those in the Asian and Pacific region, would benefit directly from the creation of regional or world-wide data banks on sugar prices, commodity flows, know-how, technology and diversification processes. It was recommended that an evaluation be made of the possibility of utilizing existing institutions and organizations serving as regional centres.

27. The participants recognized that in view of the current situation of the cane-sugar industry, the search for alternative or supplementary activities within this industry was a necessity if the problems mentioned above were to be overcome. It was agreed that one of the ways to deal with them was by diversification of the sugar industry. The representatives of GEPLACEA highlighted the various aspects of the use of by-products and production of derivatives of sugar cane. It was noted that some of the efforts had been on the verge of achieving their objectives; some of them failed and resulted in losses of investments. Nevertheless, a number of countries continued to initiate and carry out programmes of such kind stressing the importance of the activities in this field and considering the diversification as a high priority area.

28. It was also agreed that diversification and expansion of the production of co-products presented vast opportunities for solving the problems of renewable raw materials, sources of energy, and food supply, not only to net exporters of cane-sugar but also to the other countries of the Asia and Pacific region. The participants highlighted the greater multiplier effect of the sugar-cane by-products in general, especially in those countries and regions where the sector played a dominating role in their economies. In this regard, the following aspects were considered: energy security, regional development, employment, strengthening of the capital goods industry, speeding up the rates of growth of GNP and economic development.

29. The participants noted that diversification of the sugar industry might face many obstacles on the way to successful development. Special emphasis should be placed on the analysis of the potentials of the international market and trade as well as the domestic demands in such countries as the People's Republic of China and India. Moreover, by-products and derivatives should meet quality standards and marketed at a competitive price. Economic incentives and tax stimulus packages were needed in many countries to give rise to this new subsector of the industry and to draw the attention of producers to innovations and new technologies. The participants emphasized that at the forthcoming Consultation, special emphasis should be placed on the analysis of the most economical utilization of the cane-sugar industry by-products.

30. In the course of the discussions, it was recognized that more attention should be given to the general increase in production. The out-dated technology and lack of investment capital for restructuring and renovating of existing mills and by-products processing lines hindered the development of the industry and sometimes prevented it competing effectively on the international market. It was agreed that new regulations should be adopted at national and regional levels to stimulate the flow of capital for the rehabilitation of the sector. Changes in depreciation rates, employment regulations and general improvement of management should also be considered as ways and means to solve the existing problems of the technological under-development and the lack of modern production equipment.

31. Many participants expressed the opinion that an integrated approach was needed to deal with the present complexity of the cane-sugar industry in the region. The proper and balanced combination of diversification, rise of productivity and efficiency, and improvement of the market situation should be taken into consideration. The production of "inter-cropping", "non-traditional products", introduction of better varieties of sugar-cane, increasing the rate of processing, and orientation towards the production of white sugar were mentioned as promising ways to deal with the existing problems. It was agreed that further research and more experience/know-how were needed in order to mobilize the potentials of the sugar-producing countries. The importance of socio-economic aspects of the development of the sugar industry was also brought to the attention of the participants.

32. The participants expressed their confidence that the meeting had presented an excellent opportunity to discuss the situation of the cane-sugar industry in Asia and the Pacific in general and to make productive and concrete recommendations in particular. The necessity for further co-operation among the sugar-producing countries as well as their contacts with international bodies and UNIDO was stressed.

33. The representative from UNIDO's System of Consultations Division summed up and submitted the conclusions and recommendations which were adopted by consensus for further elaboration and presentation at the First Consultation.

III. CLOSURE OF THE MEETING

34. The Chairperson closed the meeting, reiterating her appreciation of the work carried out by the participants in the fulfilment of its objectives. She thanked the experts for their excellent professional contributions, efforts and enthusiastic and fruitful participation.

Annex I

LIST OF PARTICIPANTS

Bangladesh

Mohammed Abdul Karim, Principal Cane Breeder, Sugarcane Research and Training Institute, Ishurdi, Pabna

Belgium

Andre Jacobs, General Manager, ABAY Hong Kong Representative Office, Hang Lung Center, Room 2101A, 2-20 Paterson Street, Causeway Bay, Hong Kong

China

Weirong Xie, Deputy Division Chief, Department of International Relations, Ministry of Foreign Economic Relations and Trade, Beijing

Fuchun Cai, Deputy General Manager, Guangdong International Economic and Technical Corporation, 19/F Guangwei Road, Guangzhou

Bao Guo Yu, Chairman of Academic Committee, Sugarcane Industry Research Institute (GCRI), Ministry of Light Industry, Chigang, Henan, Guangzhou

Chen Jing Xing, Senior Engineer, Head, Department of By-Product Utilization, Sugarcane Industry Research Institute (GCRI), Ministry of Light Industry, Chigang, Henan, Guangzhou

Shi Zhi Chen, Senior Chemical Engineer, Sugarcane Industry Research Institute (GCRI), Ministry of Light Industry, Guangzhou

Fiji

Suresh Chand Prasad, Research Officer/Plant Breeder, Sugar Cane Research Center, Fiji Sugar Corporation Ltd., P.O. Box 3560, Lautoka

France

Patrick C. du Genestoux, Managing Director, Société Etudes et recherches sucrières (ERSUC), 131 avenue des Champs Elysées, 75008 Paris

India

Ram Kumar, Director, National Sugar Institute, Kanpur 208 017

Mauritius

Joseph Maurice Patureau, Chairman, Joint Economic Committee, Plantation House, Place d'Armes, Port Louis

Pakistan

Masood Ahmed Bhalli, Managing Director, Matiari Sugar Mills Ltd., 144-K,
Hali Road, Block II, P.E.C.H.S., Karachi

Philippines

Rogelio R. Covar, Officer-in-Charge, Special Operations Office, Sugar
Regulatory Administration, P.O.Box 70, North Avenue, Diliman, Quezon City

Thailand

Manu Leopairote, Deputy Director-General, Department of Industrial
Promotion and Adviser to Office of Cane and Sugar Board, Ministry of
Industry, Rama 6 Road, Phya-Thai, Bangkok

Intergovernmental organizations

Group of Latin American and Caribbean Sugar Exporting Countries (GEPLACEA)

José Antonio Cerro, Executive Secretary, Av. Ejército Nacional 373, 1er
 piso, 11520 México DF, México

Antonio Celso Sturión, Assistant Secretary on Technology, Av. Ejército
 Nacional 373, 1er piso, 11520 México DF, México

Annex II

AGENDA

1. Opening of the meeting
2. Election of chairman
3. Adoption of the agenda and organization of work
4. Situation of the sugar-cane industry in Asia and the Pacific
5. Selection of main issues to be presented at the Inter-regional Consultation
6. Consideration and adoption of the report of the meeting.

Annex III

LIST OF DOCUMENTS

Sugar Situation in Africa, Asia, Latin America and the Caribbean, and Oceania: Problems and Solutions prepared by GEPLACEA	IPCT.54 (SPEC)
Sugarcane Processing Industry of Bangladesh prepared by Mohammed Abdul Karim	---
Review on the Bagasse Particleboard Production Technology in China prepared by Chen Jing Xing	---
The Sugar Cane Processing Industry and Diversification of the Industry in China prepared by Bao Guo Yu and Chen Shi Zhi	---
Sugarcane Processing Industry in Fiji: Current Status, Plans and Prospectives for the Future prepared by Suresh Chand Prasad	---
Contributions on Economic and Market Aspects prepared by Patrick du Genestoux (France)	---
Medium and Long Term Development of Cane Sugar Factories in Mauritius prepared by Joseph Maurice Paturau	---
Sugar Cane Processing Industry - Pakistan prepared by Masood Ahmed Bhalli	---
Diversification in the Philippine Sugarcane Processing Industry prepared by Rogelio R. ...	---
Sugar-Cane Processing Industry in Thailand prepared by Manu Leopairote	---