

September 2011



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Food and  
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Продовольственная и  
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Наций

Organización  
de las  
Naciones Unidas  
para la  
Agricultura y la  
Alimentación

# COMMITTEE ON COMMODITY PROBLEMS

## JOINT MEETING OF THE THIRTY-SIXTH SESSION OF THE INTERGOVERNMENTAL GROUP ON HARD FIBRES AND THE THIRTY-EIGHTH SESSION OF THE INTERGOVERNMENTAL GROUP ON JUTE, KENAF AND ALLIED FIBRES

Salvador, Bahia, Brazil, 16-18 November 2011

### HARD FIBRES DEVELOPMENT STRATEGY

## I. INTRODUCTION

1. At its Twenty-ninth Session in 1996, the Intergovernmental Group on Hard Fibres adopted a development strategy to meet the requirements of the Common Fund for Commodities (CFC) that projects submitted for funding should be accompanied by evidence as to how they fit into an overall improvement program for the commodity.<sup>1</sup> The strategy statement is reviewed and adjusted periodically by the Group.<sup>2</sup>
2. The prevailing development strategy for hard fibres is given in Section II. The Group may wish to examine it carefully with a view to focusing on priority concerns and defining specific areas where action might be expected to result in tangible improvements in the hard fibres economy. The Group might further wish to consider whether more detailed indications of needed action should be included in the strategy and whether a plan for implementation and measurement of achievement should also be developed.
3. Aside from the function of the strategy in guiding commodity development proposals, the Group may wish to consider how it might also be reflected in precise priority activities under the Group's Plan of Action.

<sup>1</sup> CCP: HF 96/9

<sup>2</sup> The most recent revisions were endorsed at the Joint Meeting in Pasay City, Philippines, 20-22 October 2009.

## II. COMMODITY DEVELOPMENT STRATEGY FOR THE IGG ON HARD FIBRES

### A. BACKGROUND<sup>3</sup>

4. Each of the three major hard fibres (sisal, abaca and coir) is confronted by similar serious problems, the contraction of their markets due largely to the growth of synthetic substitutes, which, coupled with increasing production costs, threatens their viability. However, these fibres are not homogeneous materials going into the same end-products; rather, they serve widely differing end-use markets. The bulk of sisal goes into harvest twine, although other outlets are absorbing increasing quantities of fibre. Abaca is used primarily in specialty papers, white coir predominantly in floor coverings and brown coir in rubberized pads and mattresses. Applications of these fibres overlap only at the margins with sisal and abaca both being used in paper, sisal and coir in floor coverings and abaca and coir in ropes. In no case do any of the three fibres share a major end-use with another.

5. Nor, for the most part, does any single country produce any significant quantity of more than one fibre, and modes of production differ significantly between fibres. In African countries, which account for a quarter of the world's production, sisal is produced essentially on single crop holdings. Brazil, which accounts for nearly 50 percent of the world's production, produces sisal as part of a mixed agricultural system so far as the climate permits. Abaca is grown largely in the Philippines as a secondary crop, while coir is produced by processors as a by-product of coconut oil, desiccated coconut and other coconut products almost entirely in India and Sri Lanka.

6. In cases where synthetics duplicate the technical characteristics of hard fibres and have a utilitarian function, they compete largely on price. Displacement has been fastest, for example, in cordage and twine applications. On the other hand, where hard fibres have properties which cannot be copied easily by synthetics or where they have a special consumer appeal, inroads into their market have been contained, with natural fibre products often enjoying a price premium. Such is the case for papers made from abaca and, in some cases, matting made from coir.

7. The aim of the development Strategy for hard fibres is to strengthen the economic viability of the fibres industries in the face of a considerable loss of market in recent years. Measures which would lead to increased total production of fibre would, in the absence of a significant strengthening of demand, not be appropriate. A major part of the strategy is to expand consumption in non-traditional products having market potential and to check erosion of end-product markets.

8. New and improved products should be developed, especially in applications where natural fibres have advantages over synthetics and where they can compete more successfully than those existing products which have been losing market share. Among these products are buffing cloths, geotextiles, carpeting, wall coverings, wire rope cores, non-woven products, handmade papers, composite for panelling in the automobile industry and building and packaging materials. At the same time, action is needed to promote the use of fibre products currently on the market in competition with synthetics.

9. One element to be featured in the promotion strategies for all natural fibres is their superior environmental friendliness vis-à-vis synthetics. Members of the Intergovernmental Group on Hard Fibres and a growing number of environmentally-conscious consumers have recognized that the damage to the environment and the associated costs to the society, from disposing of synthetic end-products are considerably greater than those accruing from biodegradable products, such as hard fibres. The environmental advantage of hard fibres will not only be highlighted in promotion messages, but will also constitute an integral component of any research undertaken to improve the characteristics of traditional products or of the search for new ones within the overall strategy.

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<sup>3</sup> Members of the Group may wish to examine the information contained in this background section to verify its relevance in the light of changing market conditions, for example as regards major end-uses (paragraph 4), potential new uses (paragraph 8) and alternative uses of waste and biomass (paragraph 9).

10. The Strategy emphasises the need to improve efficiencies of production and processing so as to reduce costs and improve product quality, thereby enhancing incomes, while it also aims at improving conditions of workers in fibre production, extraction and processing. In addition, focus is being increasingly given to exploiting plant material for products other than fibre, and by utilizing waste material for purposes such as biogas, animal feed, etc, with the additional benefit, in many cases, of reducing environmental damage.

## **B. ELEMENTS OF THE STRATEGY<sup>4</sup>**

### **1. EXPAND MARKETS AND IMPROVE RETURNS**

#### *a) Develop new outlets for fibre, particularly through the development of new products*

11. Faced with the contraction in many traditional uses for fibre, one obvious way to recover aggregate sales is to find and develop new applications which can absorb increasing quantities of fibre.

12. Progress: The Group's efforts to expand demand for fibres have concentrated on the development of new uses for fibre, including paper, building boards, geotextiles, etc, seen as potential areas where natural fibres might have an advantage over other materials. The potential use of natural fibres as reinforcement in plastic composites in particular has attracted attention in recent years as has the use of fibre in various building materials. The Group's efforts have included a project in East Africa aimed largely at exploring the potential for using sisal for paper pulp; a seminar on Alternative Uses for Sisal and Henequen; a project on the development of building and packaging materials from coir; a fast-track project on the use of coir in composites; a first phase of a project on the use of sisal in building materials; and a review of the potential use of natural fibres in geotextiles.

13. These efforts have had a moderate degree of success, particularly the development of appropriate cost-reducing technologies aimed at providing competitively priced fibre supplies for innovative applications as well as the laboratory assessment of performance of fibre composites for various uses. However, there is a need to bridge the gap between research advances and commercial exploitation through enhanced dissemination of the results obtained, and in particular through strengthened interaction with potential users.

14. Action: Identify new alternatives with most potential, particularly in composite materials. Seek and apply funding for further R&D and for market development as needed. Identify and work with partners in industry to promote the use of fibres in new applications. Create a database for the collection and dissemination of data for fibres where data does exist such as fiberglass replacement, nano technology and chemical energy.

#### *b) Check erosion of the market for traditional fibre products*

15. Some traditional outlets for fibre have contracted markedly since the introduction of synthetic materials in the 1960s and 1970s. Sisal baler twine is among the most affected. As a result, the total global trade in sisal fibre and products shrank from 450 000 tonnes in 1980 to below 200 000 tonnes in recent years. Aggregate levels of coir and of abaca traded have held up rather better during this period, although these markets have often provided limited remuneration to producers and exporters. The diverse range of coir products, including mats and matting, continues to find a market, while abaca lost most of its traditional market for cordage long ago and now finds a steady outlet mainly in a range of applications for pulp.

16. Progress: The promotion of traditional products has not, in practice, been given a high priority by the Group, which has felt that focussing on non-traditional applications was likely to be a more

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<sup>4</sup> The Secretariat has provided some information on progress in implementing the various elements of the strategy. On the contrary, the indications of required action are solely those agreed by the Group. Aside from giving closer scrutiny to the overall elements of the Strategy, the Group may wish to review the various sections reporting on progress and proposed areas of action so as to focus on specific areas where tangible and beneficial results might be envisaged. Also, narratives may require adjustment to fully illustrate the problems being tackled, for example in the case of Item 2(b) concerning the utilization of waste material.

effective way to increase sales of fibre. Nevertheless, certain components of recent development activities may be expected to have positive effects on the competitive position of fibres even in traditional uses. In particular, work to improve agricultural productivity and fibre extraction rates can help to improve competitiveness and stem market losses based solely on price considerations. In addition, efforts to promote the environmental friendliness of natural fibres, such as through the International Year of Natural Fibres 2009 and the establishment of a dedicated Fibres Website, could contribute to stronger markets.

17. Action: While the promotion of traditional applications will have a lower priority than development of new applications, the Group will take any opportunity available to reduce or halt the decline in these markets.

18. In seeking to develop new markets and to strengthen old ones under strategies 1(a) and 1 (b) above, the Group will seek to maximise the advantages provided by the environmentally friendly attributes of these fibres.<sup>5</sup> In order to capitalize on any advantage that exists, it may be necessary to ensure that this environmental friendliness is not compromised, and to ensure that it is adequately demonstrated to the consumer. Action may be taken where necessary to improve the environmental attributes of hard fibres. (See Strategy 3 below.)

c) *Increase the flow of market information*

19. Information on market conditions for fibres in international markets is important for producers, exporters and policy makers. One of the primary functions of the IGG is to facilitate the sharing of market information among its members. The FAO Secretariat has regularly provided market information and analysis to meetings as well as at various times between meetings in both printed bulletins and on the FAO website.

20. Progress: The Secretariat collects statistical information which it disseminates together with market analyses. In recent years this information has become more readily available through electronic means, thus being more accessible to many Members, while printed information continues to be circulated. In addition to regular dissemination, work is underway to establish a dedicated Fibres website that will also give higher visibility to innovative products and the environmental friendliness of natural fibre.

21. Action: The Secretariat will continue to improve its collection and dissemination of market and trade information and analyses. In doing so, the Group will provide the Secretariat with information.

d) *Trade issues*

22. Raw fibre is generally traded free of tariffs or other barriers, but imports of manufactured fibre products into some countries are taxed at high levels. Domestic support to fibre producers in some developed countries distorts the market by expanding supply in those countries. This reduces market prospects and depresses prices facing producers in other countries not only for those fibres but for competing fibres as well. Such measures, together with shipping and other costs associated with exporting fibre and products from one country to another, inhibit trade and significantly reduce the returns to the industry. While recognising that neither the IGG nor FAO have a direct role in the negotiation of trade policies, the Group will nevertheless monitor trade barriers and take what steps it can to encourage their reduction.

23. Progress: Work is underway to strengthen the information base on longer term market conditions and on policies affecting international trade in fibre and products, as evidenced by documentation presented to the current Joint Meeting.<sup>6</sup>

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<sup>5</sup> The Group may wish to consider specifying that it is also essential to establish and publicize the technical characteristics of the fibre in different uses, for example geotextiles, composites, building materials, etc.

<sup>6</sup> In the light of its consideration of policy developments affecting hard fibres, the Group may wish to provide a closer definition of the issues affecting the sector

24. Action: The Secretariat will continue to undertake analyses and provide information to the Group on the impact of developments in trade policies, domestic subsidies and other support and the evolution of international markets for fibre and fibre products.

## **2. IMPROVE PRODUCTION AND PROCESSING EFFICIENCIES, REDUCE COSTS**

*a) Improve efficiencies of production and processing, including the development of improved agronomic practices and new or modified plant species, so as to reduce costs and improve product quality*

25. While the primary focus of the Group's activities has been to strengthen demand for fibre, improving processing and reducing production costs remain an important part of the Group's efforts to improve the viability of the fibre industries. Improved fibre processing remains a priority especially for the coir industry which, in addition to reducing costs, seeks to improve product quality and thus strengthen demand. Improvement of agricultural productivity, particularly for sisal and abaca, is also a high priority.

26. Progress: Project work, particularly on coir but also on sisal, has addressed processing technologies. In addition, some progress has been made with agronomic practices in the East African sisal project and with plant species in the Abaca project. However, intensified efforts are needed to strengthen extension services and to transfer laboratory advances into viable commercial operations meeting farmer needs for improved planting materials so as to reduce costs.

27. Action: Resources will be sought for further efforts to reduce production and processing costs and increased productivity. The Secretariat will support research institutions and other bodies seeking funding to improve the efficiency of production and processing particularly for sisal and abaca and short fibres.

*b) Investigate ways to exploit these plants for products other than fibre, and utilize material which would otherwise go to waste*

28. Progress: The CFC-financed project on sisal in East Africa included a component to improve the utilisation of sisal waste material as flume tow and as animal feed, and a follow-on project in Tanzania for utilising sisal waste for the production of biogas. There is also potential to exploit the sisal plant for certain chemicals, but this has not been explored by the Group under this strategy. In the case of coir, the Group's concern does not cover the many products of the coconut, but only of the husk. Here, however, there are also by-products with economic value and an early project promoted the market for coir pith, a material that formerly went to waste. The R&D that has established the technical feasibility of utilizing waste in various products, particularly biogas, needs to be applied on a commercial basis, and detailed feasibility studies are needed to allow appropriate replication of the technology.

29. Action: The Secretariat will continue to support the Group in its endeavours to obtain support for activities to increase the saleable material produced from these plants.

*c) Strengthen the institutional capabilities of the developing countries so as to be able to undertake their own research and development*

30. Progress: While no project has been proposed specifically to strengthen institutional capabilities, facilities have been established and upgraded and training undertaken in various projects – including those on sisal, abaca, coir building boards. However, there is a need to examine approaches to strengthening the dissemination of R&D results to users in the countries concerned.

31. Action: Continue to seek to include capacity-building elements within commodity development projects and improve networking among the Group.

### **3. SOCIAL AND ENVIRONMENTAL ISSUES**

32. The strategy now calls for additional efforts to improve the conditions of workers in the fibre industries, particularly towards ensuring that children are not exploited; and for strengthening efforts to minimise any environmental degradation which results from the production and processing of these fibres. Such efforts would be made in accordance with national legislation and available resources, reflecting the reality of normal practices within each country.

33. Progress: Research has been undertaken to reduce the disposal of waste from sisal, particularly through the production of biogas, and to make economic use of coir pith, which have the double impact of reducing environmental damage while at the same time improving returns to producers. In addition, sisal improvement efforts in Tanzania have succeeded in strengthening smallholder participation in the production value-chain.

34. Action: Concern for these issues will be shown primarily through the manner in which other strategic priorities are promoted, rather than as high-priority areas for action in their own right. The Group will ensure that all its efforts to promote the viability of hard fibre production are consistent with the maintenance of high environmental and social standards. Efforts will continue to establish the environmental credentials of natural fibres, and to identify areas where any action is needed to “clean up” production and processing. The Group will seek to promote natural fibre products on the basis of their environmental friendliness and, where appropriate, to encourage the use and assist in the development of pro-environment legislation which would favour the use of natural fibres.