codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 13 (a) **CX/FAC 06/38/20**
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES AND CONTAMINANTS

Thirty-eighth Session
The Hague, the Netherlands, 24 -28 April 2006

PROPOSED DRAFT APPENDIX TO THE CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF AFLATOXIN CONTAMINATION IN TREE NUTS ADDITIONAL MEASURES FOR THE PREVENTION AND REDUCTION OF AFLATOXIN CONTAMINATION IN BRAZIL NUTS

(N08-2005)

(At step 3)

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments at Step 3 on the following subject matter are invited to do so **no later than 31 January 2006** as follows: Netherlands Codex Contact Point, Ministry of Agriculture, Nature and Food Quality, P.O. Box 20401, 2500 E.K., The Hague, The Netherlands (Telefax: +31.70.378.6141; E-mail: info@codexalimentarius.nl - ***preferably***), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00100 Rome, Italy (Telefax: +39.06.5705.4593; E-mail: Codex@fao.org - ***preferably***).

BACKGROUND

1. The 27th Session of the Codex Alimentarius Commission adopted the proposed draft Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Tree Nuts at Step 5 and advanced it to Step 6 as proposed. It noted that the comments of the Delegation of Brazil regarding the inclusion of a section to address the particular aspects of Brazil nuts which were not grown on a farm base but collected in the forest would be referred to and further considered by the Committee on Food Additives and Contaminants at its 37th session (ALINORM 04/27/41, para. 69).

2. The 37th Session of the Committee decided to elaborate an Appendix to the draft Code of Practice to cover the specific aspect of Brazil Nuts and, for this purpose, to submit a project document for new work to the 28th Session of the Commission. It further agreed that, subject to the approval of the Commission, an electronic Working Group, led by Brazil, with the assistance of China, United States, FAO and INC, would prepare a proposed draft Appendix for circulation, comments at Step 3 and consideration at its next session (ALINORM 05/28/12, para. 131).

3. The 28th Session of the Codex Alimentarius Commission approved the elaboration of an Appendix to the Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Tree Nuts to address additional measures for the prevention and reduction of Aflatoxins in Brazil Nuts as new work for the Committee (ALINORM 05/28/41, para. 93 and App. VIII).

INTRODUCTION

4. The proposed additional measures for the Prevention and Reduction of Aflatoxin Contamination in Brazil Nut consider that the crop is extractive and has very peculiar features, such as tree height, fruit size and weight, low density of trees per unit of area, geographical area of occurrence, region's infra structure, and climate condition.

5. The Brazil nut is the only extractive crop among the main traded tree nuts, while all the others are cultivated in regular orchards. Its trees are very tall, ranging from 30 to 60 meters in height, which makes it impossible to apply the same ordinary agricultural practices indicated for cultivated trees with much lower height than that of the Brazil nut.

6. The Brazil nut fruit (pod) is the largest and heaviest of all tree nuts, with an average diameter of 15 cm and 1 kg weight, round shape and a thick, hard and woody skin, and seeds (nuts) regularly distributed inside the pod. Each tree produces around 500 pods per crop. For safety reasons, it is compulsory to wait until all the pods fall down before collecting them.

7. As there are no cultivated orchards of Brazil nuts, there is a natural low density of trees per unit of area, from 1 to 5 trees/hectare (10,000 sq.m), in its natural environment of occurrence.

8. The Brazil nut is native of and occurs throughout the Amazon region, with major occurrence in Brazil. During the crop season (from November to April), the collection is manual and done under adverse conditions typical of a tropical rain forest (high levels of air humidity and temperature, risk of snake bites, attack of wild animals, and presence of mosquitoes and other insects).

9. Due to the large extension of the Amazon region, distances can be very long and the rivers are the major and easiest way of transport for people and cargo, with few paved and ground roads. The Brazil nuts are collected from thousands of spots and shipped from hundreds of points to reach the processing plants in the main cities of the region.

10. High levels of air humidity and temperatures during the year increase the risk of fungi growth, which may lead to aflatoxin contamination of the Brazil nuts when appropriate control measures are not carried out.

REQUEST FOR COMMENTS

11. Attached at Annex 1 is the proposed draft Appendix on "Measures for the Prevention and Reduction of Aflatoxins Contamination in Brazil Nuts" to the Codex Code for the Prevention and Reduction of Aflatoxins Contamination in Tree Nuts, prepared by the Working Group.

12. Governments and international organizations wishing to submit comments at Step 3 on **Annex 1,** should do so in writing, preferably by email, to the above addresses **before 31 January 2006.**

Annex I

CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF AFLATOXIN CONTAMINATION IN TREE NUTS

PROPOSED DRAFT APPENDIX ON MEASURES FOR THE PREVENTION AND REDUCTION OF AFLATOXINS CONTAMINATION IN BRAZIL NUTS

(N08-2005)

(At step 3)

INTRODUCTION

1. The formulation and acceptance of an appendix to the Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Tree Nuts will provide uniform guidelines for producing countries to consider in attempting to control and manage contamination by aflatoxins of Brazil Nuts. In order for these measures to be effective, it will be necessary for collectors, processors and other members of the productive chain to consider the general principles established by the Code, while taking into account the extractivistic practices associated with the Brazil nuts *(Bertholletia excelsa)*. This specie exists all over the Amazon Region, however the largest concentrations are in Brazilian Amazon.

2. This appendix applies only to Brazil nuts, given the very specific conditions related to their collection and processing.

RECOMMENDED PRACTICES BASED ON GOOD EXTRACTIVISTIC PRACTICES (GEP)

PRE-COLLECTING

3. Before the starting of the crop season extractivists should clear the area under the Brazil nut trees, removing residual pods and nuts from the former crop. Pods left from the last crop season must never be mixed with pods from the present crop season, as they represent a focus of contamination with *Aspergillus.*

COLLECTION

4. Collection of Brazil nuts should begin as soon as most of the pods have fallen from the trees to minimize problems involving *Aspergillus* contamination. A certain delay in the collection is expected because during the crop season remaining pods may fall from up to 60m height trees, posing a risk to the lives of the collectors.

POST-COLLECTION

5. The pods should be sorted to remove broken and damaged ones, and gathered in piles or preferentially in thin layers, for the only a short period of time.

6. Pods should be opened as soon as possible after collection, with the nuts being removed from the pods and placed in clean flooring or plastic canvas in good condition, avoiding contact with the soil. The nuts should be sorted to remove damaged, rotten, empty, and rancid ones.

7. First transportation of the nuts, from the forest to a storage facility, should occur as soon as possible, using containers that are clean, dry and protected against rain and insects, to the greatest extent possible.

8. At the location of the primary storage, nuts must be submitted to a reduction of their original/primary humidity. For this purpose nuts should be spread out in thin layers, in open air, on clean surfaces, above ground level, and exposed to sun drying and/or a natural air circulation, with a regular revolving. The nuts should be protected against rain and animals, such as birds, rodents and insects.

9. After primary drying, the nuts should be placed in a storage facility that has floors that are at least 50 cm above ground level; protected against rain and animals and allow good air circulation. For the purpose of identification and traceability nuts from different origins and/or days of collection, in bulk or in bags, should be handled and kept separated until the final processing and packaging.

10. Second transportation (ground or water) of the nuts, should be in bulk or in bags, either to an intermediary location or to a processing facility, should be done separated from other goods, in containers that are clean, dry, protected against humidity and free of insects and visible fungal growth. Conveyances for transporting nuts should be made of material that will permit thorough cleaning and maintenance so as not to constitute a source of contamination for the Brazil nuts.

11. If the nuts are stored at an intermediary location, before reaching the processing facility, the warehouses should have the following characteristics: protected from rain and animals; washable and impermeable floor; allow drainage of ground water; good air circulation; enough area and proper divisions to keep lots separated.

GENERAL RECOMMENDATIONS

12. National, State and local governments, as well as Non Governmental Organizations –NGOs and trade associations or cooperatives should provide basic education and update information on the hazards associated with aflatoxin contamination to the extractivists and other agents involved in the Brazil nuts productive chain.

13. Personnel involved in collecting pods should be regularly trained in personal hygienic and sanitary practices that must be implemented in the pre-collecting, collecting, post-collecting and in processing facilities throughout the crop season.