

## Meeting Report of UNCTAD side event "Traceability Systems for Ornamental Plants"

13th January 2016, 12:45 – 13:45

Room 13, Centre International de Conférences Genève (CICG), Geneva – Switzerland

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During the 66<sup>th</sup> Meeting of the Standing Committee (SC66) of CITES, UNCTAD's BioTrade Initiative held a side event on " Traceability Systems for Ornamental Plants" on Wednesday 13 January 2016, from 12.45 p.m. to 1.45 p.m. in Room 13 of the Centre International de Conférences Genève (CICG), Geneva.

This event is organized in connection with the third phase of the BioTrade Facilitation Programme (BTFP III) in respect to addressing the current challenges of limited dialogue, knowledge and coherence among stakeholders on BioTrade issues, especially when devising policies, regulations and incentives in the field of BioTrade. The BTFP III is implemented with the support of the Swiss State Secretariat for Economic Affairs (SECO).

The briefing was attended by 29 participants that expressed interested in being informed of the development of the UNCTAD's work on traceability systems for non-timber forest products. This report summarizes the main issues discussed. The list of participants is included in Annex 1.

### I. Objective of the event

This side event aimed to present UNCTAD's work in assessing the applicability of traceability systems that are under review (or applied) to CITES-listed non-timber forest plant species, focusing on ornamental and medicinal plants.

Particularly, the event presented the preliminary finding of the ornamental plants study for the Latin American region, with emphasis in the Andean subregion. This study has been developed in consultation with the CITES Secretariat, CITES Management and/or Scientific Authorities in Colombia, Ecuador, Peru, Switzerland as well as UNEP-WCMC, Traffic, ornamental plants experts and private stakeholders (Orquivalle, Colombia; Centro de Rescate de la Flora Amazónica, Ecuador; and Agro Oriente Viveros S.A.C., Peru), among others.

### II. Organization of the event

The event started with a brief introduction made by the chairman on the session and the work undertaken; it was followed by presentations of and comments from experts as follows:

- **Chair:** Bonapas Onguglo, Head *a.i.*, Trade, Environment, Climate Change and Sustainable Development Branch (TED), Division on International Trade in Goods and Services, and Commodities (DITC), UNCTAD
- **Haruko Okusu, Chief, Knowledge Management and Outreach Services, CITES Secretariat**  
**Presentation: Introduction to traceability issues under CITES:** CITES is adopting many decisions on traceability, targeting individual species. This may result in the use of a myriad of different protocols and

standards for the different CITES-listed species. The intervention provided an overview of CITES work and progress on traceability issues and how UNCTAD's study contributes to it.

- **Lorena Jaramillo, Economic Affairs Officer, TED, DITC, UNCTAD**  
*Presentation: UNCTAD's project on traceability systems for CITES-listed non-timber forest plant species:* UNCTAD's BioTrade Initiative has been working on traceability issues, in coordination and collaboration with CITES as well with its BioTrade partners, for a number of years. The intervention provided an overview of such work and discuss its current project under the BTFP III on traceability systems for CITES Appendices II and III-listed species of non-timber forest plant species.
- **Heiner Lehr, UNCTAD Consultant**  
*Presentation: Preliminary findings of the traceability study for ornamental plants under CITES Appendices II and III:* As part of the BTFP III, UNCTAD commissioned the study to assess the applicability of traceability systems that are under review or applied by CITES and BioTrade partners to CITES ornamental plants in Latin America (with emphasis in the Andean region). This intervention provided an overview of the preliminary findings of the work undertaken, including a presentation of the market chain, examples of existing traceability systems available for CITES-listed species, ornamental plants and other relevant trade goods, as well as the initial recommendations for a traceability system for ornamental plants.
- **Ursula Moser, CITES Management Authority, FSVO, Switzerland**  
*Commentator:* The intervention focused on the perspective of Switzerland in traceability issues for flora species. It provided comments and recommendations to the initial findings of UNCTAD's study on traceability systems for CITES-listed ornamental plants in the Andean region and how it can contribute to the Inter-sessional Working Group on the Exemption of Trade in Finished Products Packaged and Ready for Retail Containing Components of Appendix II-listed Ornamental Plants.
- **Mirbel Epiquin Rivera, CITES Management Authority, SERFOR, Peru**  
*Commentator:* The intervention focused on the perspective of a range country for CITES-listed plants species. It provided comments and recommendations to the initial findings of UNCTAD's study on traceability systems for CITES-listed ornamental plants in the Andean region and Colombia/Peru in particular. It is suggested to connect with the Instituto Nacional de Innovacin Agraria y el Instituto de Investigacin de la Amazonia Peruana for consideration of advanced identification methods, such as DNA barcoding.

Further information on the presentations made and the event, can be seen at: <http://unctad.org/en/Pages/MeetingDetails.aspx?meetingid=1009>

## II. Main issues discussed

### 2.1. What is BioTrade and its relation to CITES and traceability

UNCTAD is the United Nations focal point for trade and development, and for interrelated issues in the areas of finance, technology, investment and sustainable development. Its objective is to assist developing countries to integrate beneficially into the global economy. The BioTrade Initiative of UNCTAD is a practical programme that aims to promote the conservation of biodiversity to further sustainable development through its sustainable commercial use in a variety of sectors (see Table 1). UNCTAD, in close cooperation and collaboration with partners, is implementing BioTrade<sup>1</sup> in Africa, Asia and Latin America.

*BioTrade refers to those activities of production, transformation and commercialization of products and services derived from native biodiversity (species and ecosystems) under social, economic and environmental sustainability criteria.*

<sup>1</sup> For further information, see [www.biotrade.org](http://www.biotrade.org)

**Table 1. BioTrade sectors prioritized by countries and partners in Africa, Asia and Latin America**

| Sector                               | Type of product  |
|--------------------------------------|--|
| <b>Personal care</b>                 | Essential oils, natural dyes, soaps, cream and butters, cosmetics, etc.  |
| <b>Pharmaceutical (Phyto-pharma)</b> | Extracts, capsules and infusions from medicinal plants, etc.   |
| <b>Food</b>                          | fruits pulps, juices, jams, cookies and sauces, spices, nuts, tuberous, snacks food supplements, meat from caiman and fish, etc. |
| <b>Fashion</b>                       | Skin and belts, purses from <i>Caiman yacare</i> , etc.  |
| <b>Ornamental flora and fauna</b>    | Heliconias, orchids, butterflies, etc.   |
| <b>Handicrafts</b>                   | Jewelry, decoration objects based on native species, garments, etc.  |
| <b>Textiles and natural fibers</b>   | Furniture and decoration objects based on natural fibers, purses, shoes, etc.  |
| <b>Sustainable tourism</b>           | Ecotourism, nature-based tourism, community-based tourism, etc.  |

UNCTAD and the CITES Secretariat have a long standing partnership defined by their MoU signed in 2010, that commits both organizations to ensure the conservation of species, enhance the livelihoods of the poor in remote and marginal areas and promote business opportunities for entrepreneurs that comply with CITES requirements and national legislation. Particular attention is paid to economic incentives for the sustainable management of CITES Appendices II and III-listed species and benefit sharing with resource owners. This collaboration was enhanced by a second MoU signed in 2014 with a view to enhance cooperation to promote the automation of customs control and monitoring of trade specimens of CITES-listed species, in particular within the UNCTAD ASYCUDA automated system.

At the 15<sup>th</sup> and 16<sup>th</sup> meetings of the Conference of the Parties (COP) to CITES, it was decided to consider traceability as a key issue for the sustainable management of CITES-listed species.<sup>2</sup> In response, UNCTAD's BioTrade Initiative and the CITES Secretariat have been collaborating with technical documents and workshops on traceability issues, aiming to track the species through the supply chain, from the origin to the final consumers.

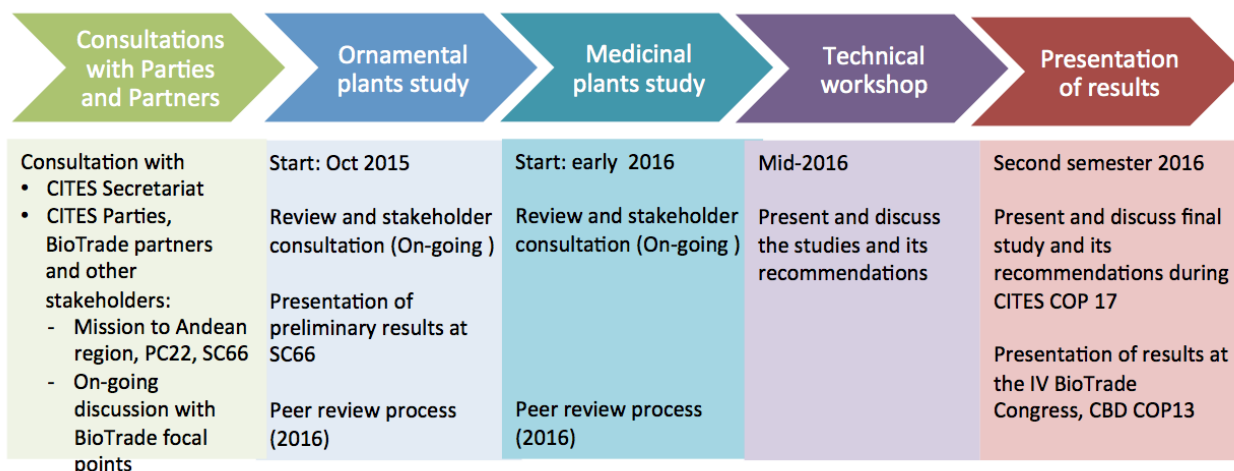
Within non-timber forest plant species, CITES Parties and BioTrade partners have been considering traceability systems, but no comprehensive study has yet been undertaken. In view of this, UNCTAD is preparing, in consultation with the CITES Secretariat, CITES Management and Scientific Authorities in selected countries, and its BioTrade focal points, a comprehensive study to facilitate the tracing of sustainable trade of CITES-listed non-timber forest plant species, focusing on ornamental plants in the Andean/Latin American region, and medicinal plants in the Mekong region. This event organized during SC66 focused on the first part of this comprehensive study i.e ornamental plants in Latin America, with emphasis on the Andean subregion.

The comprehensive study aims to provide the following (see Table 2 for detailed overview of activities involved):

1. A technical summary of traceability systems available and recommendations on how it could be implemented in line with global standards and norms;
2. An assessment of the socio-economic implications and benefits of the systems, as well as define capacity-building requirements for the stakeholders involved; and
3. A roadmap for taking the outputs and recommendations of this study forward.

<sup>2</sup> SC66 Doc. 34.1, available at <https://cites.org/sites/default/files/eng/com/pc/22/E-PC22-22-01.pdf>

**Table 2: Next steps for comprehensive study**



## 2.2. Traceability issues and relevance of the ornamentals study

Parties to CITES increasingly recognize the importance of traceability in many of the CITES-listed species. In this regard, an umbrella mechanism might be needed to oversee different types of traceability discussions undertaken in different CITES-related fora<sup>3</sup>. For this, the partnerships that CITES has had over the past years with other UN agencies and other international organizations for developing and implementing different traceability systems, guidelines, protocols and case studies will be very important.

Having traceability systems in place to ensure sustainable sourcing will help trade transactions while also helping improve the livelihoods of local communities, who may be the custodians of the species traced.

In light of ongoing traceability discussions within the CITES Secretariat, this side event is of particular relevance for two different reasons. First of all, because it highlights the cross section between how sustainable sourcing and traceability are intimately linked to each other, linking two apparently separate CITES agenda items more closely. Finally, the relevance of this side event and UNCTAD study is of particular importance because it focuses on an area that hasn't been discussed much in the CITES fora, which is the non-timber forest products.

## 2.3 Traceability systems for ornamental plants in Latin America – the study

### 2.3.1. Methodology and timeline of the study

In order to find a viable solution or recommendation of a traceability system, it is crucial to strike the right balance between strengthening CITES processes and not posing a barrier to trade. In other words, it is key to have strong processes that don't disrupt trade. In this light, the study involved all stakeholders in the value chain to develop its findings and recommendations.

Although the study involves several countries in the Latin American region, its main focus is on four Andean countries, mainly Colombia, Ecuador, Peru and the Plurinational State of Bolivia.

### 2.3.2. The market chain

Floricultural trade has grown significantly in recent years. Between 2010 and 2014, the market more than doubled.<sup>4</sup> Likewise, trade of ornamental plants is also growing. Latin American and Andean countries are among the most important regions exporting CITES-listed plant species.<sup>5</sup>

<sup>3</sup> Umbrella model for developing traceability systems for CITES-listed species (SC66 Doc. 34.1).

<sup>4</sup> This figures include plant species other than those listed in CITES Appendixes. Information based on CITES Trade Database.

From 2010 to 2014, the reported quantity of exported CITES-listed plant species considered in the study was of 32 million specimens. Out of these, 26 million were *Cycas* and 4 million were orchids. These exports were mainly for commercial purposes.

### 2.3.2.1 Trade in orchids

Most of the orchids traded in the region are listed in CITES Appendix II and are mostly artificially propagated. With 70% of the total volume from 2010-2014, Costa Rica is the largest exporter with Brazil and Ecuador following in numbers.

According to exporter's data,<sup>6</sup> the main importer countries for such orchids are the US, Japan, Germany and Canada.

### 2.3.2.2. Trade in *Cycas*:

Costa Rica and Guatemala were the only exporters of *Cycas* between 2010 and 2014 from the selected countries for the study. Main importer, according to exporter's data, are the Netherlands, the US, Poland and Germany.

### **2.3.3. Tracing ornamental plants**

There is no official definition for traceability, but we can define it as "the ability to access any or all the information relating to that which is under consideration, throughout its entire life cycle, by means of recorded identification."<sup>7</sup> In other words, the history of the element has been continuously recorded so it can later come to life again.

Therefore, traceability systems are usually constructed using three different elements:

- 1) Unique identification → use to identify the elements (usually both the product unit and the business operator) and can be looked at wherever you are in the value chain.
- 2) Critical Tracking Events (CTE) → define the actions that trigger data recording. They are critical points in time when something happens to the product that, if it is not recorded, will be difficult to understand its history afterwards. Typically, there are three categories of CTE per entity: reception, processing and dispatch.
- 3) Key Data Elements (KDE) → are the information that is stored at each CTE. In general, KDEs might include basic description elements, origin and destination, processes applied to the product or legal status. A traceability system will have to define specific KDEs for each CTE.

Within the CITES processes, a traceability system can make concrete contributions to:

- a) Legal Acquisition Findings → traceability can provide the link to the production source. This would then allow CITES to make a stronger legal acquisition finding.
- b) Non-Detriment Findings → the use of a traceability system could be beneficial for providing much better trade statistics. In this regard, such a system could also contribute to achieving consistent global trade volumes.

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<sup>5</sup> Study to assess the applicability of "track and trace" systems for CITES ornamental plants with a focus on the Andean and other Latin American countries; UNCTAD 2016.

<sup>6</sup> It should be noted that importer and exporter volumes rarely coincide, even reaching significant differences in reported quantities.

<sup>7</sup> Olsen, P., & Borit, M. (2013). How to define traceability. *Trends in Food Science & Technology*, 29(2), 142–150. <http://doi.org/10.1016/j.tifs.2012.10.003>

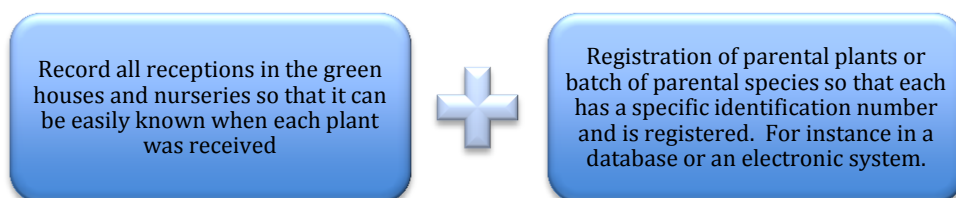
### 2.3.3.1. Traceability in the different markets:

Markets can be defined into three categories: white, grey and black. White markets are those where all transactions are legal. In such markets, a traceability system could provide positive discrimination, by demonstrating compliance with rules and be used for marketing purposes. Black markets are those where a buyer and seller agree on an illegal transaction. Although traceability could be used to support law enforcement thanks to its database, it is not the correct tool without enforcement mechanisms.

However, traceability systems could be an interesting incentive for “whitening” grey markets. There are at least three types of grey markets: unregulated, informal economy and those where many producers are doing things legally but don’t have a way to prove it. Some countries like Peru are already addressing this need and challenges posed by such a market, providing incentives and opportunities for orchids producers’ legalization under the new Forestry Law.

Traceability can assist in addressing the following challenges: smuggling, lack of law enforcement, mixing of sources of the plants from the wild and artificially propagated, informal market and an unclear legal situation of a user.

### **2.3.4. Recommendations from the study**



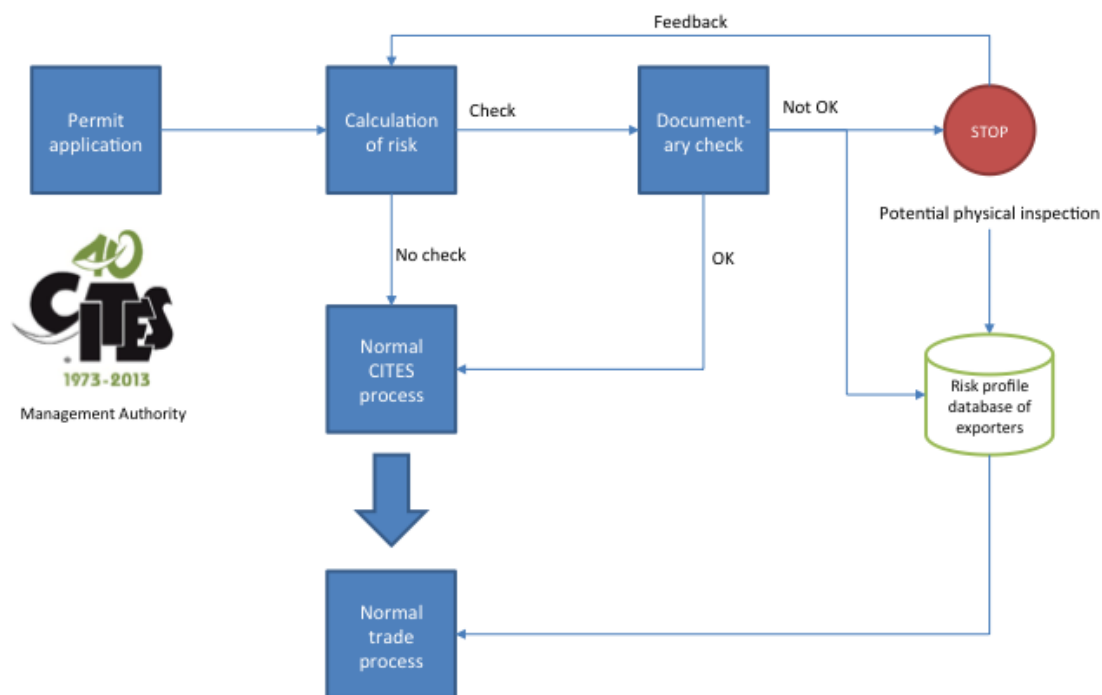
It is recommended that parental stock at each nursery is registered. Ideally parental plants are identified uniquely; alternatively batches of parental plants can be grouped together. All additions to the parental stock must be recorded together with the source of the material. Ideally, this register is available online.

In a CITES permit application for the export process, a link will have to be established between the exported specimen(s) to the parental plants stock. For whole plants, it would be expected on an individual level. Alternatively, batches of plants from the same parental plant can be grouped together. For other products, such as plants parts, multiple source parental plants are possible. The corresponding CITES Management Authority (MA) can then run consistency checks to support the Legal Acquisition Finding. Since species identification is difficult, adding pictures to the registry would further help ensuring that the material going through the export process is indeed the species for which the permit is valid.

It is technically possible to identify these plants by using a plastic tag or printable label on the plant’s cup. This tag or label then contains all relevant information either explicitly or through an identification code that links to an entry in the online registry.

Moreover, in order to further strengthen the CITES process, the traceability system could be combined with a risk management methodology to define whether to check or not a particular shipment or exporter (see Figure 1). This means that authorities would need to calculate the risk for the export processes considering different factors, as for example the exporting history of that particular exporter (see Table 3). This could foster exporters to be legal and, at the same time, uses control resources efficiently. This could also contribute to creating a risk profile database for exporters that can be shared with border controls for their own risk management and control processes.

**Figure 1: Risk management-based process to decide verification level. Source: UNCTAD study on traceability for ornamental plants**



**Table 3. Example of quality assurance using a risk-based control methodology**

| Factor   | Inspection | Documentary check | Control frequency |       |
|--|------------|-------------------|-------------------|-------|
|  |            |                   | Higher            | Lower |
| Total number of exported plants higher than expected | Yes        | Yes               |                   |       |
| Number of plants inconsistent with inventory         | Yes        | Yes               | X                 |       |
| High number of imported plants                       | No         | Yes               |                   |       |
| Main exported species of exporter                    | No         | No                | X                 |       |
| Any certificate issues in last 12 months             | No         | No                | X                 |       |
| Last control favourable                              | No         | No                |                   | X     |
| Parent plants identified individually                | No         | No                |                   | X     |
| ...  |            |                   |                   |       |

**2.3.5. Recommendations made to enhanced UNCTAD's study**

The study and its recommendations could contribute to the definition and implementation of an “umbrella” CITES traceability methodology or even a system for different CITES-listed species. In order to achieve that, (a) a flexible methodology needs to be found to for all kinds of specificities of the different species and products thereof; (b) a suitable governance structure identified; and (c) compatibility with other adjacent processes also requiring traceability (such as the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity).

When developing the study recommendations, is particularly important to continue consulting with private and public stakeholders in the respective value chains to ensure that the results provide a balance between the promotion of trade and the control and traceability of traded products.

A remaining challenge might be found in the trade of plant parts such as extracts used in finished products for the personal care industry. The CITES “Inter-sessional Working Group on the Exemption of Trade in Finished Products Packaged and Ready for Retail Containing Components of Appendix II-listed Ornamental Plants” will be looking into this.



**ANNEX I: List of Participants****LIST OF PARTICIPANTS**

|    | <b>Name</b>            | <b>Organization</b>  |
|----|------------------------|--|
| 1  | Agnieszka Figiel       | UNEP-WCMC  |
| 2  | Kelly Malsch           | UNEP-WCMC  |
| 3  | Jacob Phelps           | Lancaster Environment Centre   |
| 4  | Ljubica Vuckovic       | Canada CITES Management Authority  |
| 5  | Roberto V, Ilardi      | Italy CITES Management Authority   |
| 6  | John Veremis           | USPA-APHIS   |
| 7  | Markus Pikard          | UNECE  |
| 8  | Alexander Kasterine    | ITC  |
| 9  | Clara Sierra           | Asocaiman  |
| 10 | Giovanni Ulloa         | Asocaiman  |
| 11 | Karen Van Dartel       | Netherlands CITES Management Authority   |
| 12 | Paweena Taraksa        | Thailand CITES Management Authority  |
| 13 | Alexander Borg         | Malta CITES Management Authority   |
| 14 | Karen Gaynor           | SA Ireland   |
| 15 | Haruko Okusu           | CITES Secretariat  |
| 16 | Heiner Lehr            | UNCTAD Consultant  |
| 17 | Ursula Moser           | Swiss CITES Management Authority, Federal Food Safety and Veterinarian Office (FSVO) |
| 18 | Mirbel Epiquién Rivera | Peru CITES Management Authority, SEFOR   |
| 19 | Noeleen Smyth          | Senior Science Officer (Policy - CITES), Royal Botanic Gardens - KEW, UK             |
| 20 | Marietta Angeli        | Student  |
| 21 | Bonapas Onguglo        | UNCTAD   |
| 22 | Lorena Jaramilo        | UNCTAD   |
| 23 | Ivonne Paredes         | UNCTAD   |
| 24 | Mariona Cusi           | UNCTAD   |
| 25 | Malick Kane            | UNCTAD   |
| 26 | Rafe Dent              | UNCTAD   |
| 27 | David Vivas            | UNCTAD   |
| 28 | Henrique Pacini        | UNCTAD   |
| 29 | Veronica Rivera        | UNCTAD   |