UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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The applicability of traceability systems for CITES ornamental plants with a focus on the Andean and other Latin American countries

Preliminary results

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BIOTRADE III
FACILITATION PROGRAMME

Content

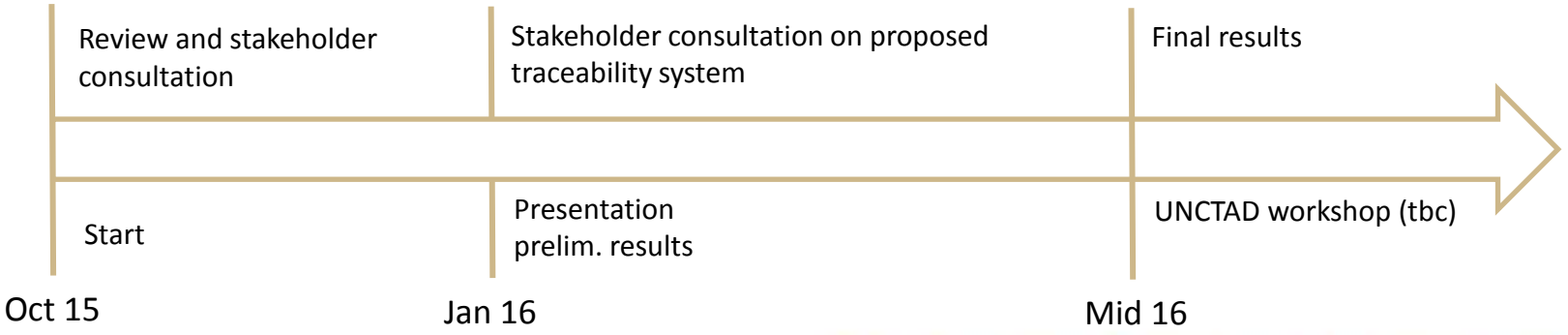
1. Methodology and timeline of the study
2. The market chain
3. Tracing ornamental plants

METHODOLOGY AND TIMELINE

Analysis of the use of traceability to strengthen the CITES processes for ornamental plants under Appendices II and III

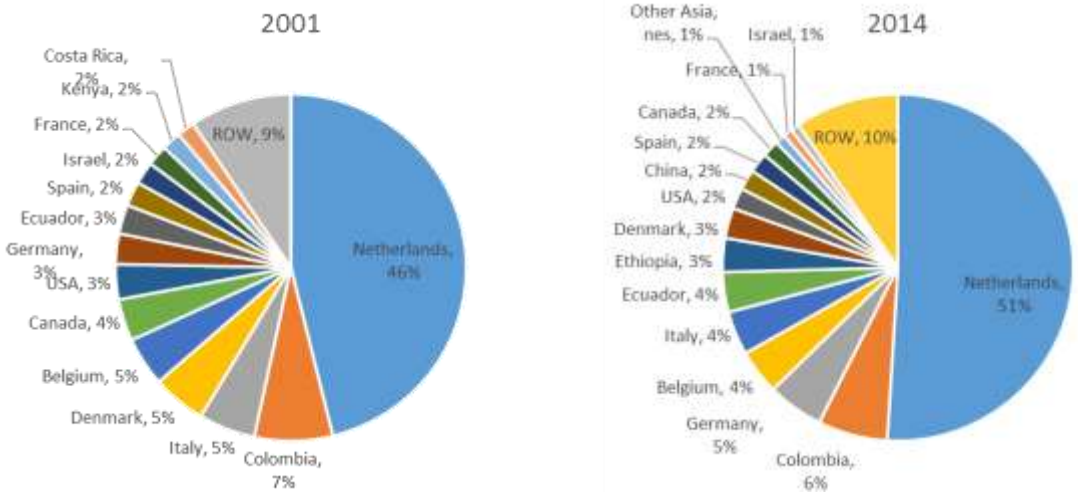
- The varying technical capabilities of supply chain partners, in particular small-scale growers
- The varying availability of technologies used in traceability, in particular related to automated identification and data capture (AIDC) technologies and data exchange technologies
- The wild or artificially propagated origin of the materials as well as its applicability to derivatives
- The robustness of the system with respect to fraudulent activities involving CITES-listed species of ornamental plants
- The impact on supply chain players, in order to mitigate the risk of undue barriers to trade.

Country	
Argentina	AR
Plurinational State of Bolivia	BO
Brazil	BR
Chile	CL
Colombia	CO
Costa Rica	CR
Ecuador	EC
Guatemala	GT
Mexico	MX
Panama	PA
Peru	PE
Bolivarian Republic of Venezuela	VE



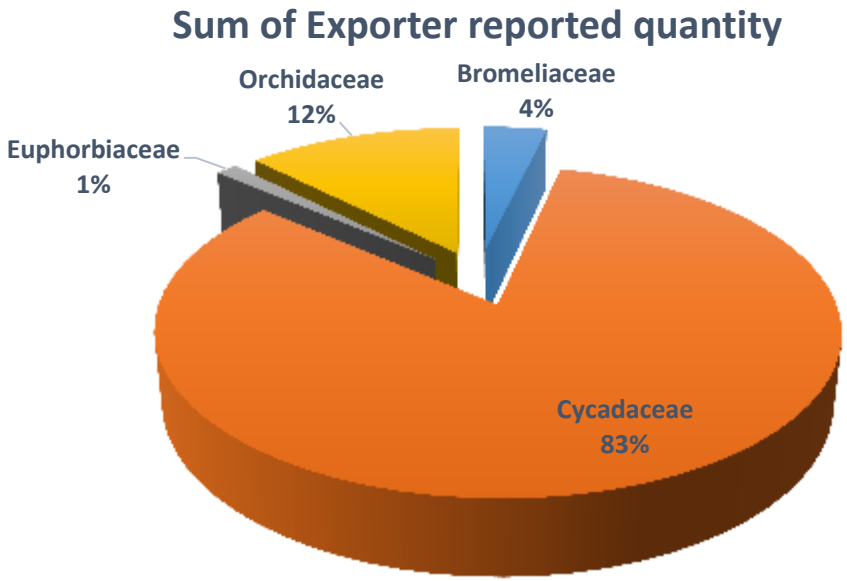
THE MARKET CHAIN

- The worldwide demand for floricultural products has grown significantly in recent years.
- The commercial trade of wild-collected and also artificially propagated plants is regulated in most countries in order to guarantee the sustainability of species.
- Latin America and Andean countries are among the most important regions producing CITES-listed plants species.



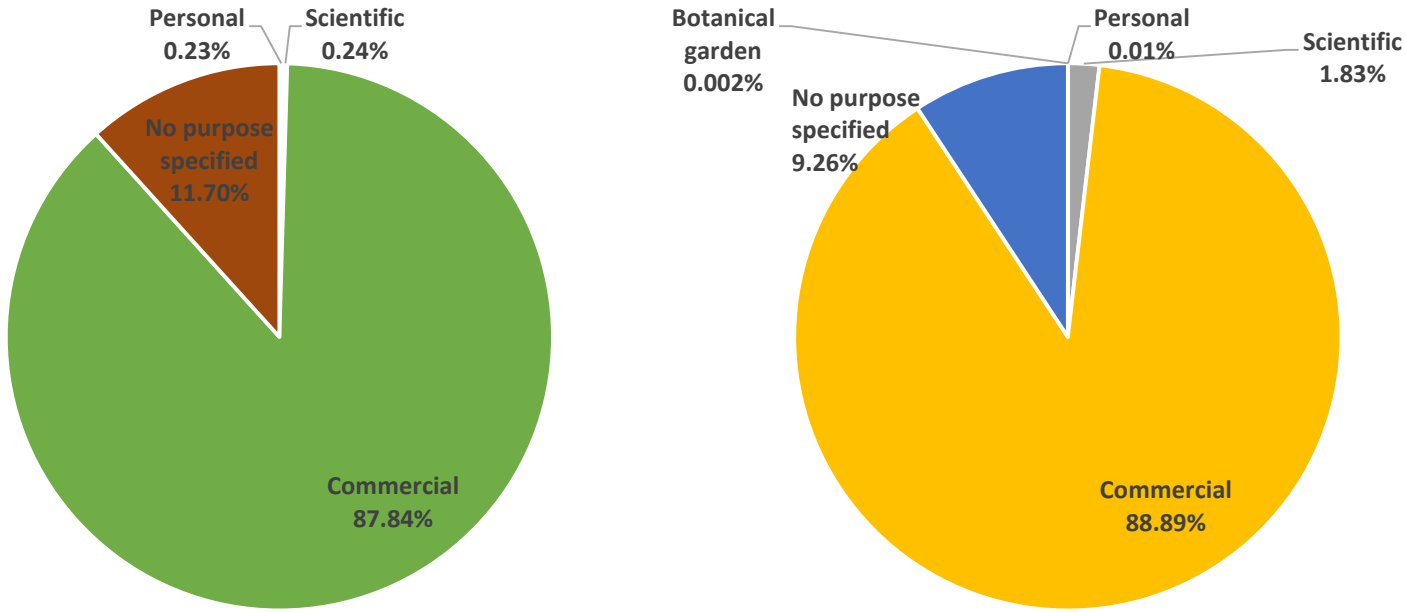
World export of cut flowers, cut foliage, living plants and flower bulbs, 2001 and 2014. Please note that the total market in 2014 is 2.5 times larger than in 2001. Source: UN Comtrade

Between 2010 and 2014, the exports reported quantity of CITES-listed plants was over 32 million specimens from which 26 million were from the *Cycas* and 4 million from orchids



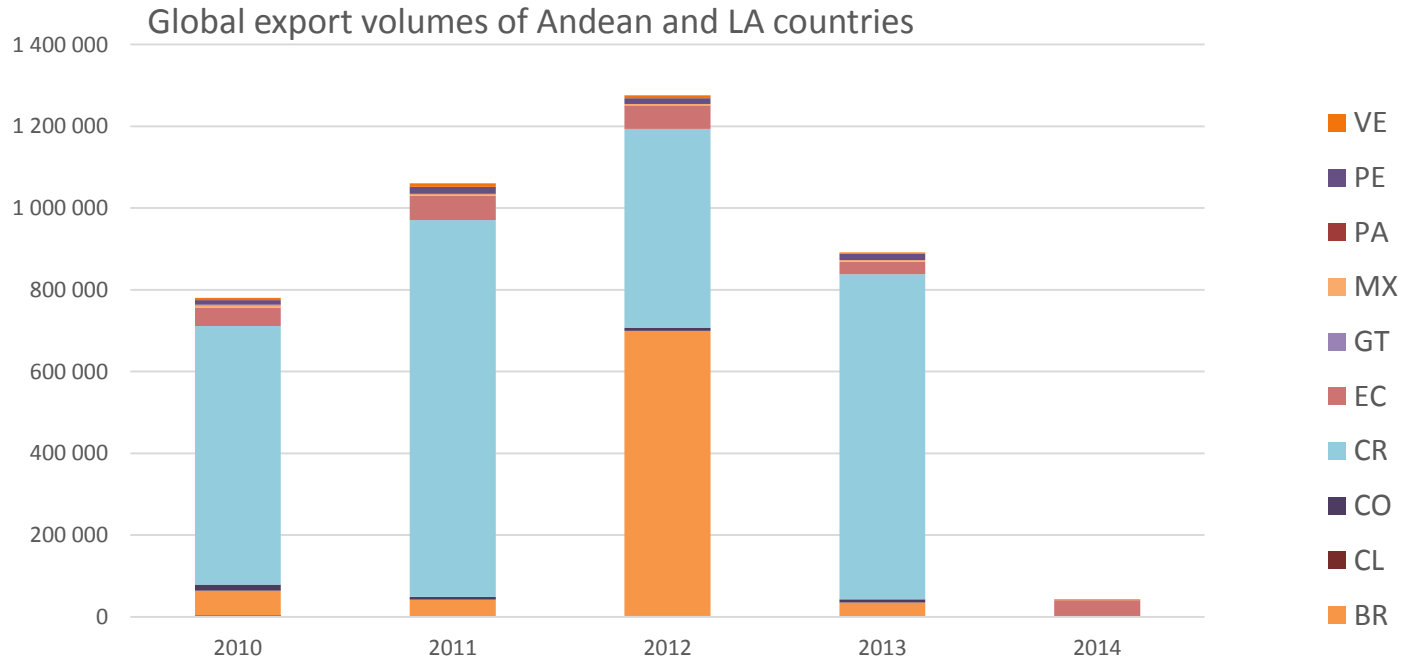
Bromeliaceae, Cycadaceae, Euphorbiaceae and Orchidaceae exports from selected Latin American countries between 2010-2014. Source: CITES database

The main purpose for international trade of orchids and *Cycas* from 2010 to 2014 was commercial; a much lower percentage of trade was related to other aims



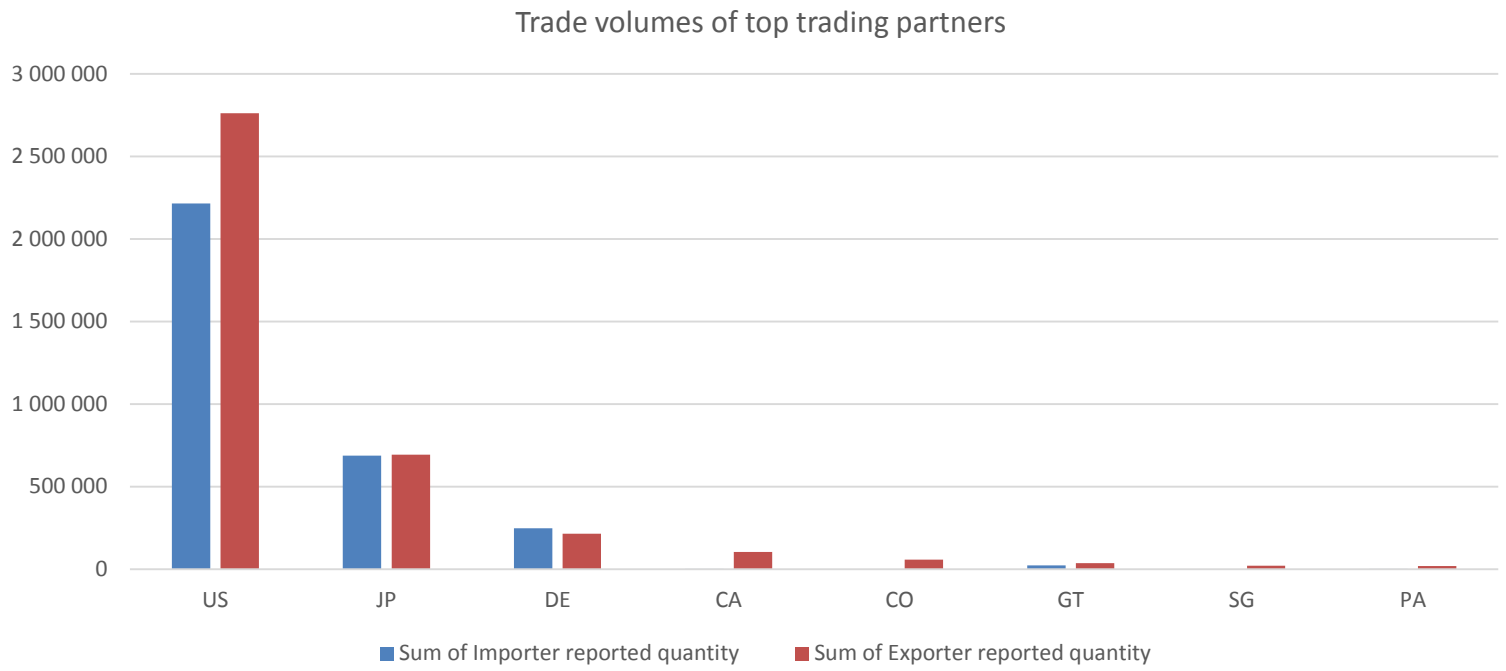
Share of the main purposes of international trade of orchids (right) and Cycas *(left), 2010-2014, Source: CITES trade database*

- 99% of the traded orchids are from App II, mainly from artificially propagated plants
- Costa Rica is the largest exporter with 70% of the total volume, followed by Brazil (20.6%) and Ecuador (5.7%)



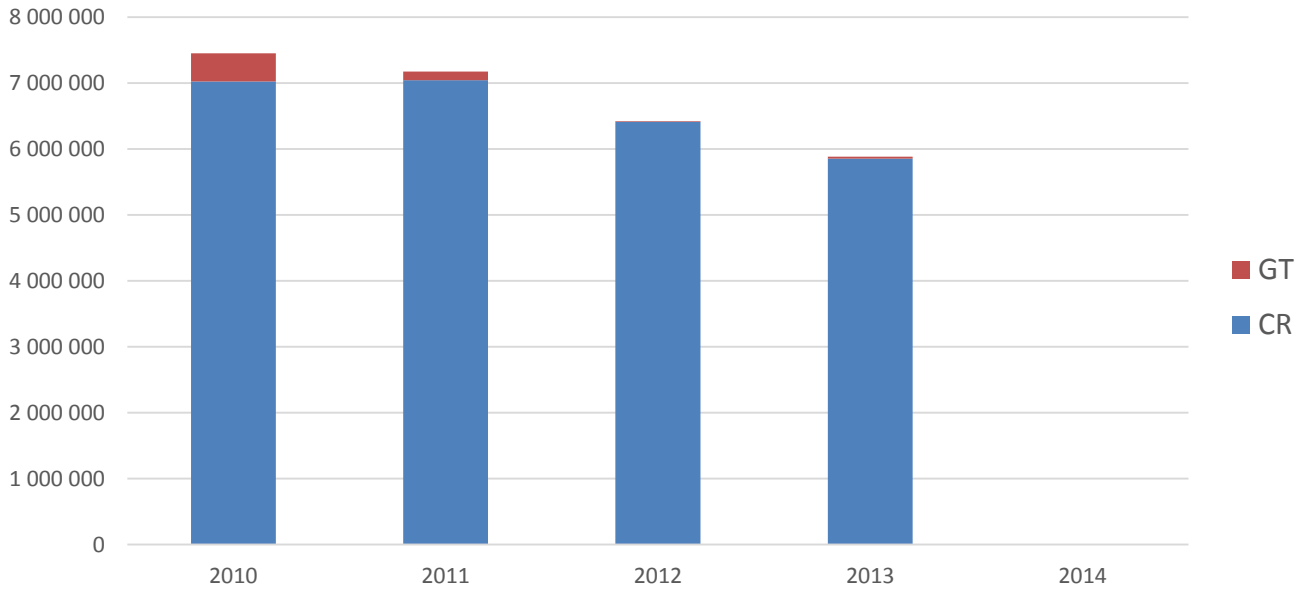
Quantities of exported orchids as reported by the exporter, source: CITES trade database

The main importers of Andean and Latin American orchids –as reported by exporters- are the United States of America followed by Japan, Germany and Canada



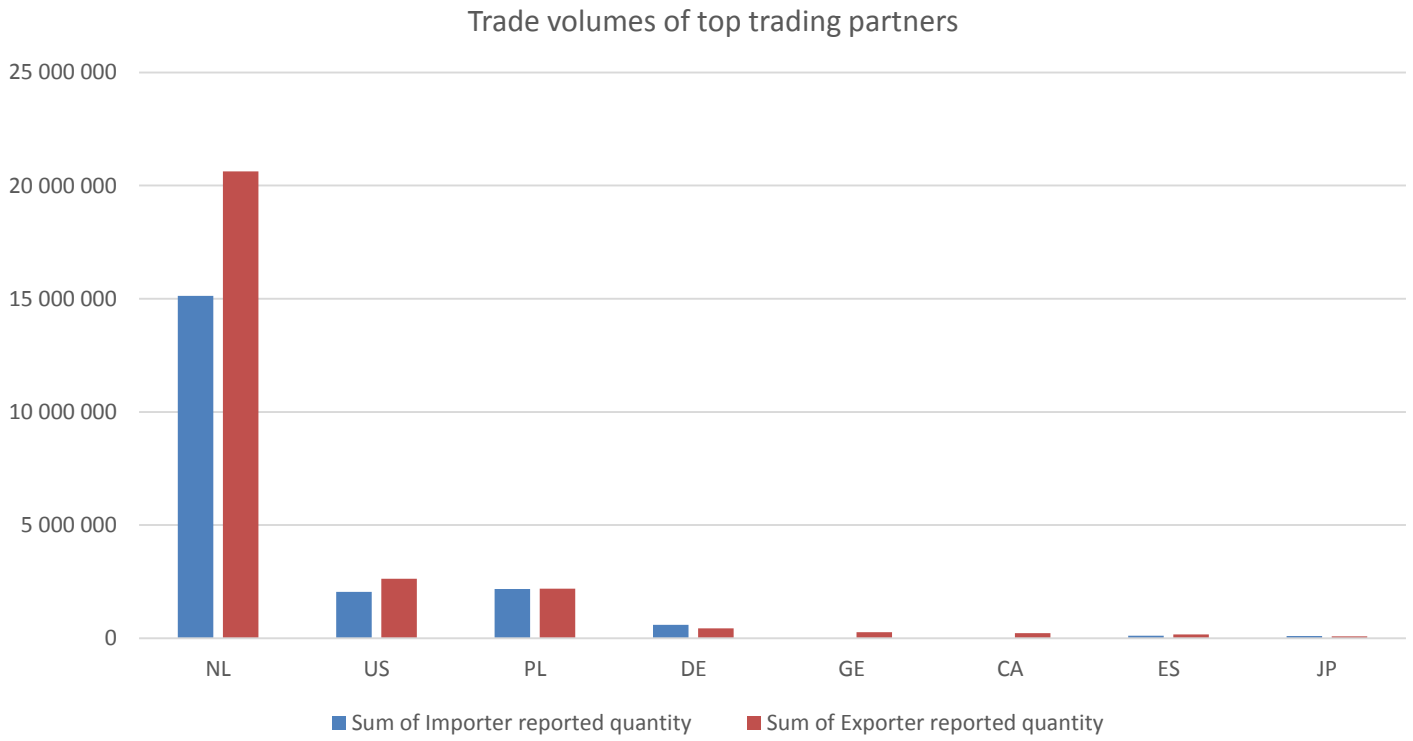
Cumulative trade volumes of orchids in Andean and Latin American regions, 2010-2014, source: CITES trade database, (Countries: United States, Japan, Germany, Canada, Colombia, Guatemala, Singapore and Panama, in order).

- 90% of trade in cycads belongs to *Cycas revoluta.* Zamiaceae represent only 1.5 per cent of the *Cycas* trade volume.
- Largest exporter of *Cycas* products is Costa Rica followed by Guatemala. From 2010 to 2014 they were the only exporters of the products among the countries of interest.



Quantities of exported Cycas as reported by the exporter, Source: CITES trade database

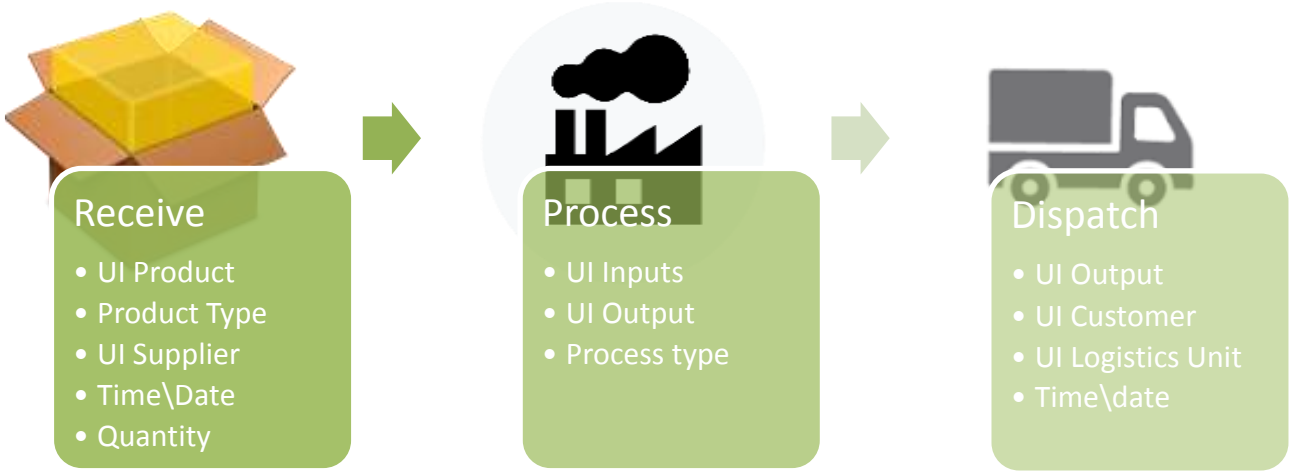
The main importers of *Cycas* from this region –as reported by exporters- are Netherland, USA, Poland and Germany.



Cumulative trade volumes of Cycas of Andean and Latin American origin (as reported by exporter), Source: CITES database.

TRACING ORNAMENTAL PLANTS

- **Traceability is "the ability to access any or all information** relating to that which is under consideration, throughout its **entire life cycle, by means of recorded identifications"**
- Traceability systems are often constructed using:
  - Unique Identification (UI)
  - Critical Tracking Events (CTEs)
  - Key Data Elements (KDEs)
- Globally unique identification is one of the key principles of traceability



Legal Acquisition Finding

- Link to production source
- Additional information for better enforcement

Non-detriment Finding

- Trade statistics linked to catch areas
- Consistent global trade volumes

- **WHITE MARKET**
  - Minimum disturbance
  - Positive discrimination by market or authority (e.g. risk-based certification)
- **GREY MARKET**
  - Avoid illegal entry to legal chain
  - Supporting role for law enforcement
- **BLACK MARKET**
  - Traceability unlikely to be implemented by business partners
  - Traceability supporting role for law enforcement
  - Signatories might consider supporting conversion to legal trade

Main technical challenges:

- Smuggling
- Lack of law enforcement
- Mixing of sources
- Informal market
- Unclear legal situation

A legal origination process for ornamental plants will consist of the following steps:

- All receptions of CITES-listed ornamental plants, plant parts and seeds are recorded with:
  - Date
  - Supplier (name, business registration number or similar)
  - CITES permit information (if applicable)
  - Species
  - Number of specimens
  - Identification codes (see point 2)
- Registration of parental plants, i.e. specimens collected from the wild and plants purchased for propagation.
  - Plants of the same species can be registered as a batch if their origin is the same (i.e. they come from the same supplier under the same CITES permit).
  - This also applies to seeds and plants parts.
  - Preferentially, however, whole plants are individually identified.
  - All identifiers should to be globally unique and must be unique within the context of the operator.
- The inventory of parental plans, seeds and plant parts will be registered, ideally in an electronic system.

Import
with permit

Wild harvest
with permit

Other purchase
In country

Reception

Despatch

Export

Management Authority

Registry of parental plants/batches

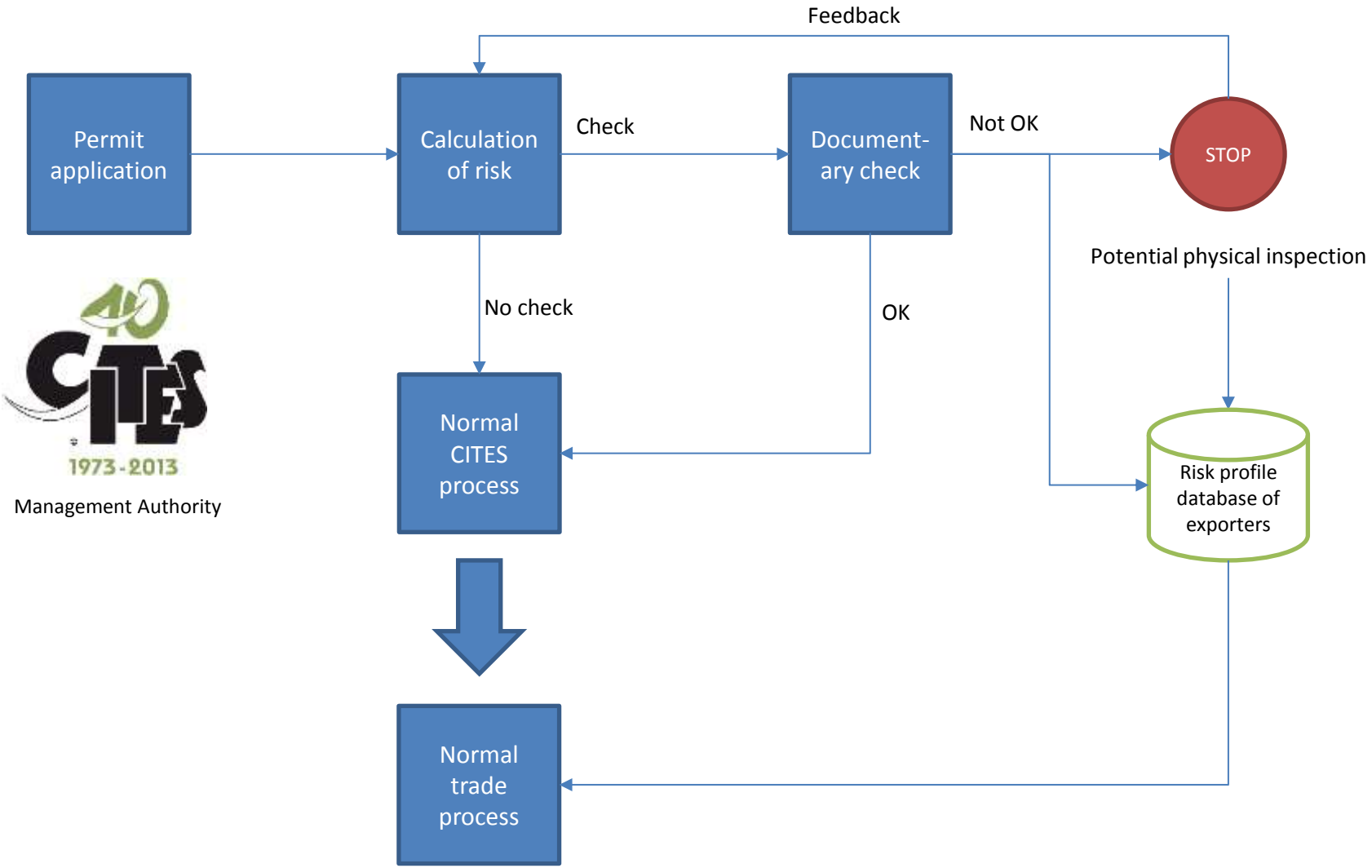
ID	Species	#	Origin
1256471	*Peristeria elata*	1	XYZ importers
1256472	*Dracula lotax*	12	Wild harvested
1256473	*Acineta superba*	1	Purchased
1256474	*Ada glumacea*	1	Purchased

Export permit application

Species *Ada glumacea*
№ of specimens 25
Parental plant 1256474

Consistency check

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	●	
High number of imported plants	No	Yes		
Main exported species of exporter	No	No	●	
Any certificate issues in last 12 months	No	No	●	
Last control favourable	No	No		●
Parent plants identified individually	No	No		●
…				


Feedback
Permit application
Calculation of risk
Check
Document-ary check
Not OK
STOP
Potential physical inspection
No check
OK
Normal CITES process
Risk profile database of exporters
Normal trade process
Management Authority

Strengths

- Simple to use
- Several levels of complexity available, depending on technical capacity
- Step-wise improvement possible
- Applicable to other CITES-listed species

Weaknesses

- Replacement of species still possible
- Like other documentation systems, addresses only white and grey market
- Works best when supported by an electronic system

Traceability as a tool for strengthening CITES

Opportunities

- Strengthens the Legal Acquisition and to some extent the Non-Detriment Finding
- Allows faster control by Management Authority
- Allows for integration with Approved Trader and similar schemes

Threats

- Lack of capacity, especially in developing nations
- Does not address the black market, which is a sizeable portion of the trade in ornamental plants

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