Dendrobium Lamyiae, endemic endangered specie from Phu Khao Khouay National park
Orchids trade study

Laos

2009

Vientiane Orchidées
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This modest report is the result, for a big part of our own experiences and investigations. This study would show the importance of the orchid harvesting and illegal trade all around the country.

I. Trade study

1. Introduction

NTFP play an important role in the livelihood, culture and traditions of Lao people. NTFP provide protein, calories, and material for construction, handicrafts, traditional medicine and cash income. NTFP also play an important role in National development. Lao PDR produce NTFP with a commercial value of 7-8 million dollars a year. The Gov of the Lao PDR recognises the potential of NTFP in contributing to poverty eradication and national development. The Lao Forestry Strategy to the year 2020 places great importance on the role of NTFP in rural and National economy.

Orchids are a commercial NTFP for direct income.

In Lao PDR, 85 genera and 397 species of Botanical Orchids have been identified so far. Economically, the most important orchid’s species in Lao PDR are:

- Three species of *Anoectochilus* (nha bai lai)
- Six species of *Aerides* (kou lab)
- More than 64 species of *Bulbophyllum* (sing to)
- 18 species of *Coelogyne* (euang tiane)
- 85 species of *Dendrobium* (euang vai)
- More than 3 species of *Eria* (euang tan)
- Two species of *Flickingeria* (mak pong peng)
- Four species of *Paphiopedilum* (bia lai)
- Four species of *Rhynchostylis* (chang ka)
- Two species of *Vanda* (khem khao)
- Two species of *Vanilla* (va ni la)
Legal concerning Orchids harvesting and trading rules are framing by national Law
- Wildlife Law (24 Dec 2007- N°7/NA
- NBCA Law
And international convention rules:
- CITES (Convention on International trade of endangered species)
Convention signed by Lao PDR the 01/March/2004, entrée en vigueur le 30/05/200

The export of wild and/or semi-cultivated orchids, in any form or otherwise semi-processed, is now illegal in Lao PDR unless CITES permits. However, there are many types of illegal activities in the orchid trade, for example, Wild Orchids are mainly exported to China for medicinal uses. For horticultural purposes, villagers or retailers sell plants directly harvested from the forest to local or foreign people without any reference to sustainable harvesting and, no CITES certification.
Due to the fast economic changes in Laos, some critical gaps have emerged now concerning the sustainable use of Botanical Orchids and their conservation.
CITES officer receive report of tons of wild orchids leaving the country illegally.

2. Methodology

Goal is to collect information about Orchid trade, and estimate the evolution and the consequences of not controlled harvesting.
A part of the study is to estimate the most harvested orchid species around the country and the purpose of the trade (ornamental, medicinal...).

We went in 80 villages all around the country during one year. Interviewing 212 Families and 3 companies.
After a brief introduction to the local authorities (Agricultural authorities and Chief of the village) we proceed by observation of the surrounding and interviewing different families involved in wild orchids harvesting and trading. will show a lot.
For the Small Enterprise we visit, it will be very difficult to get a production report and some are refusing the interview.

<table>
<thead>
<tr>
<th>Method</th>
<th>Data collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple family interview</td>
<td>Seasonal calendar, quantity, income generated, species, trading process,</td>
</tr>
<tr>
<td></td>
<td>evolution of plant’s diversity and quality, sustainability. Understand the</td>
</tr>
<tr>
<td></td>
<td>economical context</td>
</tr>
<tr>
<td>Group discussion</td>
<td>Harvesting area, plant quantity and quality evolution estimation, Sustainability, economical context</td>
</tr>
<tr>
<td>Local authorities meeting</td>
<td>Legal status, harvesting area, quantity estimation, tax, sustainability</td>
</tr>
<tr>
<td></td>
<td>Existing report</td>
</tr>
<tr>
<td>Forest walk</td>
<td>Observation, identification, putting a picture with the talk</td>
</tr>
<tr>
<td>Company visit</td>
<td>Observation, species, quantity, production method, legal, income</td>
</tr>
</tbody>
</table>
3. **Actual market chain for Orchids in Laos**

**Village Level**
- Or

**Small entreprise**
- Imports-wholesaler
  - Border trade

**Wild collecting orchids**
- Harvested from wild source
  - Drying process
    - Dried product (medicinal)
      - For export
  - Growing
    - Bare roots plants (ornamental)

**TRADE**
- ILLEGAL
  - Individuals-Small shop

Orchids stock harvesting from the wild -Phongsaly province 2009
4. **Illegal botanical Orchid trade estimation value in Laos**

<table>
<thead>
<tr>
<th>Especies</th>
<th>Province</th>
<th>Quantity en Kg</th>
<th>Quantity equivalent plants</th>
<th>Value in $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dendrobium spé</td>
<td>All round country</td>
<td>10700</td>
<td>20 000</td>
<td>160500</td>
</tr>
<tr>
<td>Paphiopedilum spé</td>
<td>All round country</td>
<td>1250</td>
<td>2000</td>
<td>68750</td>
</tr>
<tr>
<td>Anoectochilus</td>
<td>North</td>
<td>160</td>
<td>200 000</td>
<td>16000</td>
</tr>
<tr>
<td>Arachnis &amp; Aerides spé</td>
<td>South</td>
<td>10000</td>
<td>11 000</td>
<td>60000</td>
</tr>
<tr>
<td>Dendrobium officinale</td>
<td>All round country</td>
<td>3500</td>
<td>4200</td>
<td>52500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>25610</strong></td>
<td><strong>285 200</strong></td>
<td><strong>305250</strong></td>
</tr>
</tbody>
</table>

Sources 2008 CITES/TRAFC/IUCN estimations

Illegal orchid trade is estimate for last year at around 305 000 $, No taxes are collected on this 305 000$ at any level.

5. **Orchid trade description in different province**

4.1 Xiengkhouang province

Mr M, orchid farmer in Phonsavan town, Paek district
Mr Ming is a Chinese citizen from Fujan province.
He has been cultivating several orchids species in Xiengkhouang province since 2004.
The installations are simple shade house, water pump and long tables to grow orchids on.
He gets a formal agreement from the province.
He never use a CITES certificate form to export.
In one working year he declares to produce 700Kg of dry stems from 2500Kg raw materiel.
2500Kg represent around 3000 adult plants. To have a one kilo specimen it’s need around 5 years growing.
We can suspect that orchids are coming from the wild.

Ms. C, NTFP trader in Khoun district

It’s a family business since 10 years. Now they are trading the following products: Cardamon, “Kheua hem” vines, “Mak tao” and orchids stems and since few years, Orchids Paphiopedilum genus, very protected and endangered, depleting very soon all around SEA. She declares 15 ton dry orchid’s stem in 2006 and 150kg of dry Paphiopedilum with no quota. She told easily that every orchids are coming from the wild. Nobody start orchid culture in the district. She is buying raw materials from remote villages by placing order.

Mr K, NTFP trader, Khoun district

Same as Ms. C, trading in different NTFP, whose orchids Paphiopedilum genus, 60 Kg in 2006, no quota, just harvesting in the forest and sell to Vietnamese buyers. The buyers are coming regularly to the village.

Mr P, orchid dryer, Kham district
Buyer and dryer of orchids. A Chinese trader will buy the production for medicine. He buy the orchids (*Dendrobium* genus mostly) to different villages. The orchids are harvested in the forest without any control. The resources deplete very soon and the orchid price increase fast. He declare that he be able to produce around 10 tons per year.

**4.2 Champassak Province**

Various orchids sailors, ban lak 38, Paxxong district

Mr K goes in different parts of Laos to meet villagers and buy orchids. He goes to Kasi, Vangvieng, Atapeu, and Savannakhet to buy orchids to sell in “Tad Fan orchid market” where around 10 families are selling wild orchids. He sell around 500 Kg fresh orchids per month. Clients are mainly Thai tourist and Vietnamese retailer.

4.3 Vientiane Province

Villagers from ban Sappa Kanon, Km18, Vientiane capital.

Since few years, some villagers harvest wild orchids in the Phu Khao Kwai NBCA and Phu Phanang. They sell plants around the city on bicycle and weekly in Thailand, in front of Thabok. There is a orchid market every week end in the city in front of Thabok. Villagers declare that they sell One plant around 20 000 kip, they declare earning more than 100$ per month with this business.

It’s seems that each family sell around 50 plants per month, 10 families take parts in this activity, at least around 500 plants per month are selling every month, majority are coming from Phu Khao Kwai National Park.
Villagers selling orchids in front of French Embassy are coming from the same village. Since two years, variety of orchid species trade at this place increase a lot, all orchids and other plants selling here are coming from Phu Khao Khouay National Park and are illegally harvested. It seems that the forestry guards doesn’t care or take money to allow villagers to harvest orchids. **From August 2009 villagers are selling the only endemic Lao orchids know at this date, *Dendrobium lamyaiae*, very rare specie only found in Phu Khao Khouay National Park. This wild orchid market gets biggest & biggest.**

**4.4 Oudomxai province**

A Chinese drying factory is born few years ago. See the picture below. We don’t know exactly the production procedure, they declare to have local agreement for export orchids in China. They don’t want to say how much quantity they export per years. Acute observation show that It seems that the orchids are coming from the forest, to be grow in basic shade house. The nursery is believed to be based on wild collected plants

**4.5 Savannakhet province**

Some families are selling wild orchids in small shops near the road 9 (Ban Xeno to muang Phin) Different species are selling by Kilo, to 10 000 kip to 35 000 kip, depend the specie.
Owners are wholesalers. They place order to remote villages near the NBCA. Main buyers are Vietnamese. Trade happen round year. In Nong and Sepone district, a huge market exist, many villages are involved in harvesting orchids in the NBCA Dong Phou Vieng and Phou Xang Hé. Sometimes, Vietnamese retailers are going directly in villages to place order. No quota, no control, no tax.

4.6 Thakek province
Retailers along the road 13 in Xe Bang Fay district
Mr X place order to villagers to sell to Thai and Vietnamese. In his shop, we can observe around 20 different species and some in huge quantity.

6. Conclusion:
We don’t get enough time to go in every provinces in Laos, but there is orchid’s trade in many provinces, for example, in Sanyaboury province, a huge market of Paphiopedilum concolor specie to Thailand, Phongsaly & Samneua are famous for Anoectochilus specie. This orchids are quite rare and listed in CITES appendix I. We know that in many parts of Laos, orchids are depleting very fast. With this overview and interview, we can observe a very important wild orchid market in Laos.
Many collectors explain that they note a constant depletion of different species. They have to go far and far to collect the same quantity of orchids and more days in the forest. Some species are very rare now, like *Dendrobium parishii*, all *Paphiopedilum genus* or *Anoectochilus* and *Chiloschista* sp...

All orchids activities observed around the country seems illegal in regards of Lao Law & regulation and International Law.

Orchid shops along the road 9 (Phin district)

**II. Impact**

<table>
<thead>
<tr>
<th>Specie</th>
<th>Province</th>
<th>Quantity Kg</th>
<th>Plants equivalent</th>
<th>Value in USD</th>
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<tr>
<td>Dendrobium spé</td>
<td>All around country</td>
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</table>

We observe a very quick depletion all around the country of the Wild Orchids population. Plants observed are small (Young plant).

Every orchid’s trade actors are agree, wild orchid plants are more and more small and harvesting more and more difficult. Every sign observed show an over harvesting.

Reasons for this over harvesting are:

- the economic changes in the rural area, traditional cultivator are forced to rely on more intensive orchids collection. More and more families are forced to compensate their income by orchid trade activity
- unsustainable or illegal practices in orchid marketing *Around 10 registered companies work with orchids in Laos, but only a few respect the Law and regulations of the Laos PDR and international convention.*
- Low awareness in conservation
- Inconsistent knowledge of law and regulations, lack of documentation means that rules and regulations are not implemented
- No assessments of the resource
- Source depleting increase the price
- Deforestation, destruction of the habitat.

**Impacts of this illegal trade are:**

- Lost of biodiversity
- Lost of tax income for all the country administrative level
- Impossibility to legal company to practice competitive prices
- Threat of traditional livelihood and knowledge
- Bad image of the country
- Corruption

**III. Proposal**

Vientiane Orchidees Company requests that the GOL consider taking urgent measure among these illegal activities:

1. Implement relevant laws and regulations especially Forestry Law N/6NA from the 24 December 2007 and Wild life law No 07/NA 24 December 2007

2. Train forestry guard and custom officer in species recognition (cf ORCHIS project) and create a efficient task force to control illegal orchids marketing.  
**Any quota couldn’t be allowed for wild orchids trade because the CITES regulation**  
All orchids species are CITES appendix I or II, so every export need certificate.

3. Involve all relevant actors like CITES officer, STEA, IUCN, Ministry of Agriculture and Forest and private sector

4. Close illegal market and companies that function with no respect of the rules and regulations of Laos PDR and International Law.

5. More severe with illegal poachers, illegal traders and illegal companies

6. Advertise in NBCA concerning rules and penalties.

7. Promote information among the Lao public to raise awareness in the importance of the biodiversity conservation.

Thanks for your comprehension
We warmly hope that you will take in consideration this problem.
The same problems happen with wildlife trade in general all around the country.

**Author:**        **Collaboration with**
Mr Pascal Lovera        Mr Bertrand Laville
Director                Technical director
Vientiane Orchidees Company        Vientiane Orchidees Company
Special Thanks for the villagers for their collaboration, all agriculture & forestry authorities support.

REFERENCES


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Non identified Bulbophyllum-new specie