# **WORKSHOP PROCEEDING**

ILLEGAL TRADE AND SUSTAINABLE USE OF MEDICINAL ORCHIDS OF NEPAL



Kathmandu, Nepal 30 March 2021













Proceedings of a stakeholder workshop
Illegal trade and sustainable use of medicinal orchids of Nepal

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## Background



Orchids are among the most traded wildlife in the world and represent >70% of CITES-listed species. Many species are also used medicinally, including in Ayurvedic and Chinese pharmacopeia--important to health, culture, livelihoods, and commerce. This includes many rural communities in Nepal. However, there is little understanding about this trade (e.g., its scale, species targeted, economic importance), and its implication for the long-term conservation of Nepal's >500 orchid species. We know that many orchids are highly sensitive to overharvest and that illegal trade has led to concerns globally. This is detrimental not only to biodiversity but also to the livelihoods of rural communities and local involvement in resource management.

Nepal and Mexico are the only known countries that are attempting to formally manage a legal, sustainable trade of wild orchids by local communities. This faces many challenges: there are legal ambiguities in Nepal's shifting legislations; there is scientific uncertainty about the sustainability of different harvest regimes; species identification is challenging, and illegal trade is hard to manage. In response, with the support of the Illegal Wildlife Trade (IWT) Challenge Fund, Greenhood Nepal and its partners Lancaster University, University of Oxford, IUCN SSC Orchid Specialist Group, University of Hawaii are exploring the trade and conservation of wild orchids in Nepal with the financial support of the UK government.

A half-day workshop on "Illegal trade and sustainable use of medicinal orchids of Nepal" was organized on 30 March 2021 at Hotel Everest, in Kathmandu, Nepal. The workshop aimed to bring together a small but diverse group of stakeholders (academe, government, civil society, private sector, orchid enthusiasts, media) to help inform efforts in controlling illegal trade and sustainable use of wild medicinal orchids in Nepal.

## Welcome remarks

Miss Phurpa Sherpa, Program Associate, Greenhood Nepal welcomed the event participants and explained the overall objective of the inception workshop. Dr. Jacob Phelps, Professor at Lancaster University, UK and Chair of IUCN SCC OSG IUCN Orchid Specialist Group who is also the advisor and principal lead of the project, remotely welcomed all the event participants through a short video.

Following this, all the event participants introduced themselves.







Key challenges and clarification of laws

# **Orchid Conservation Challenges in Nepal**

Dr. Bijaya Pant, Central Department of Botany, Tribhuvan University





Professor Bijaya Pant thanked the organizers and said that the workshop was timely as it would help the key stakeholders to prioritize orchid conservation. Orchids have been used from time immemorial, yet they receive very little attention -- the legal ambiguities and lack of support for researchers add complexity.

Orchids are very sensitive to stress and hard to germinate. In nature, orchid seeds germinate only after infection by mycorrhizal fungi. In this scenario, any form of habitat degradation either due to overgrazing or improper harvesting can be harmful to orchids. Normally, it is hyped that almost all the parts of orchids are used. This may be true in some species but not for all. This provokes the harvesters to uproot the whole plant even for those species whose roots and rhizomes are only useful -- also note that roots and rhizomes are the most used parts in orchids, hence lack of awareness about proper harvesting techniques is leading to the decline.

Researchers are trying hard to promote the tissue culture to preserve orchids in the wild but there are legal hurdles-- even when we need materials for research purposes, it is hard to get permission from the government. Besides legal challenges, the seedlings grown from tissue culture are very delicate and when they are relocated to the communities, they need regular monitoring and proper care. Moreover, there is also a challenge of illegal trade which needs timely attention.

# Challenges faced by plant traders Mr. Devendra Dhakal, Senior Advisor, Herbal Entrepreneurs Association of Nepal

Mr. Devendra Dhakal said that there is a weak understanding of the law particularly in differentiating legal and illegal trade. The bureaucrats, as well as traders, need authentic information to clarify these legal ambiguities. This is also applicable to the locals who are still unaware of the punishments and legal obligations of the species they have been handling all their life. Moreover, local-focused rules and action plans must be made.

There are issues with the species identification -due to lack of expertise, the
valuable species are traded as invaluable
ones. Similarly, there is no regular monitoring-trade comes in the limelight only after some
country demands a huge quantity.



# Clarification of legal ambiguities

# Mr. Balram Paudyal, CITES Authority, Department of Forest and Soil Conservation Nepal

Mr. Balram Paudyal agreed that the shifting legislations have created problems for the researchers and traders. However, such problems are never reported, "I urge researchers to promptly report their difficulties to respected authorities so that we can find solutions and facilitate research". The researchers and traders should trust the government -- lack of trust can motivate illegal traders.

Mr. Paudyal further added that the trade of all the species of orchids is banned for now following the CITES Act 2017. The respective authorities are considering lifting the ban after careful study.



#### Everyone to write key concerns and priorities in orchid conservation

#### Some key concerns raised by the event participants:

- Lack of knowledge on the conservation importance of orchids and their use
- Unstable rules and regulations -- legal confusions
- Very little research focusing on trade and hard to access the available research
- Lack of knowledge on cultivation of orchids, orchid harvesting, and poor access to market
- Negligence of local government on controlling illegal collection and trade
- Challenges in species identification leading to unsustainable harvest and trade
- Gaps in the exchange of information between government, academicians, traders, and harvesters. The harvesters lack authentic information on which parts are traded and used for what purpose
- Ultimate regulatory and facilitative agency, DFO hardly prioritizes orchids in their five-year plans and they lack the capacity for strong enforcement



### Everyone to write key priorities in orchid conservation

# Some identified key priorities for orchid conservation

- Awareness programs targeting local people regarding the conservation importance of orchids and their legal management status at the local, provincial, and national level
- Regular monitoring of the orchid trade and promotion of research including identifying the priorities for orchid conservation
- Orchid hotspot areas should be identified including the introduction of the concept of establishing the orchid parks
- Awareness of tissue culture for its mass production -- training on cultivation and nursery practice. While in-situ conservation is important ex-situ conservation should be equally prioritized
- A separate task force including local representative to identify the priority species for conservation and trade
- Greenhood Nepal should lead National level dialogues promoting research and development, government authorities for creating a master plan for orchid conservation
- There should be an immediate collective effort to plan, act, and talk on orchid conservation
- "Jadibuti Development Board" should be established to solve the challenges the herbal sector is facing
  - Traded species should be prioritized for cultivation and collaboration should be done to explore potential market institutions
- There should be a positive collaboration between traders, private sectors, and government authorities. Government organizations should not be a barrier for real researchers
- There should be appropriate rules and regulations for orchid conservation Orchid checklists for orchid habitats should be prepared
- Need of Food Supplement Act, Cosmetic product Act, and the establishment of the governing body for their rules and regulations
- Orchid processing industries should be given national priority (leaning from Sikkim)

Note: This is the list of key concerns and priorities noted by the event participants.

# Key priority species for conservation and trade





## Priority \*species for conservation and trade Scientific name

Ania penangiana (Hook.f.) Summerh.

Brachycorythis obcordata (Lindl.) Summerh.

Bulbophyllum careyanum (Hook.) Sprengel

Calanthe griffithii Lindl.

Calanthe plantaginea Lindl.

Coelogyne cristata Lindl.

Coelogyne fimbriata Lindl.

Cymbidium iridioides D. Don

Dactylorhiza hatagirea (D. Don) Soo

Dendrobium spp.

Eulophia dabia (D. Don) Hochr.

Eulophia dabia (D. Don) Hochr.

Flickingeria fugax (Rchb.f.) Seidenf.

Habenaria intermedia D. Don

Habenaria pectinata D. Don

Pholidota articulata Lindl.

Pleione humilis (Sm.) D. Don

Thunia alba (Lindl.) Rchb.f.

#### Local name

Gamdol

Banharchul, Thuur, Parajivi

Ban aduwa

Chandigava, Bankera

Jiwanti

Thuur

Panchaule

Hatti paila

Jewel orchid

Jiwanti

Riddhi

Seto musli

Hadjor

Shaktigumba

Golaino

\*Note: The enlisted species are "some" of the priority species identified by the event participants. This is not a complete list of all the species identified. Greenhood Nepal is working on the complete list -- we will finalize the list based on inputs from orchid experts/taxonomists and circulate it to anyone interested.

# Jointly map out trade chains for orchid harvest and trade

The trade chain mapping exercise was done in four different groups. Each group involved a group of participants with specific expertise/designation: government stakeholders, academicians, plant traders, and media. This way we prepared four different maps—these will be compiled to prepare one map towards the end of this research.



Photo: Participants during the trade-chain mapping exercise



Photo: Some glimpse from the trade-chain mapping exercise

#### **SECTION 6**

### **Closing remarks**

#### Dr. Krishna Chandra Paudel

Former Secretary, Ministry of Forest and Environment

Dr. Krishna Chandra Paudel said that it is important to conserve orchids and other wildlife. Political decisions should not impact the conservation activities they should rather facilitate securing funds for researchers. We have all the required assets: resources, researchers, experienced traders, media, and the existing laws. The only thing we lack is trust – we must trust each other and work together. "We need to VISIT and REVISIT; visit our farms and forests and, revisit our laws and guidelines."



#### Mr. Govinda Pokharel

Chairperson, Nepal Herbs and Herbal Products Association

Mr. Govinda Pokharel said that the private sectors are eager to support researchers. They are ready to fund the projects that support better cultivation practices/ideas because that work adds value to their work. He requested the organizing committee to organize some similar national-level dialogue targeting the private sectors and parliament members. He also insisted on collective efforts. "There are challenges in trade due to individual attempts. We have to collectively trade the natural resources to add their values -- this will also help the government to get the right royalties".



#### Mr. Kumar Paudel

Co-Founder & Director, Greenhood Nepal

"Today we all realized that there are many questions about the conservation and use of wild orchid species in Nepal. Continuously changing regulations and limited information about the species-wise orchid distribution, population, and sustainable harvest techniques are adding more challenges," Mr. Paudel said. He also said that working together there will be some answers to the questions raised today in the workshop by the end of the project.



#### **SECTION 7**

#### Summary and way forward

#### Miss Reshu Bashyal, Project Manager at Greenhood Nepal

We have formally introduced our attempt to save the orchids of Nepal through this half-day inception workshop. It was fruitful in the way that it received active participation from all the targeted groups of over 40 key participants (academe, government, traders, media), and was able to reach a consensus for raising the profile of orchids.

We believe that the event acted as a stepping stone to support future interventions to manage illegal trade and explore the possibilities for sustainable harvest in the future. It was impressive to see that the representatives of the government and the traders insisted on the collective effort for the conservation of wild orchids and agreed to facilitate the researchers.

We are eager to explore the opportunities for collaboration with all the stakeholders for addressing the issues of illegal trade and harnessing opportunities for sustainable harvesting and conservation.

Thank you!