

Supplementary Material A

Legislative policies in Nepal regulating caterpillar fungus management, harvest and trade

The supporting policies for the species management harvest and trade in Himalayan region protected areas are Himalayan National Park Rule 1979 and Yarsagumba Management (harvest and trade) Directives 2017. The major policy favourable to the caterpillar fungus management, harvest and trade outside protected areas is Forest Act 2019 and Rule 1995. Similarly, policies favourable to caterpillar fungus management inside protected areas are the National Park and Wildlife Conservation Act 1973 and Rule 1974. Furthermore, at district level the caterpillar fungus harvest quota/quantity/amount on the caterpillar fungus is directly linked with Environment protection act 2019 and rule 2020. The detail on the legal provisions and its legal status in Nepal is tabled as follows.

Table 2 Key legislative policies on caterpillar fungus

S. No.	Act/Rule/Directives	Legal Status
1	Forest act 1993	Totally banned for the caterpillar fungus harvesting.
2	Nepal Gazette 2001	Banned for export in crude form and royalty rate NRs 20000/kg fixed.
3	Nepal Gazette 2004	No requirement of processing and royalty rate NRs 20000/Kg of the species.
4	Nepal Gazette 2006	Royalty rate reduced to 10000/Kg
5	Himalayan National Park Rule 1979 (first amendment 2014)	Defined Rara, Shey-Phokshundo and Malaku-Barun National Parks under this rule and regulate harvesting permits, harvesting time periods and trade on Yarsagumba and other Non-timber forest products (NTFPs) inside Himalayan protected areas.
6	Nepal Gazette 2016	Royalty rate increased to 25000/Kg
7	Yarsagumba Management (harvest and trade) Directives 2017	Ensure the caterpillar fungus harvesters age, harvesting time duration prohibited actions under range lands. trader should take last 60 days of the caterpillar fungus transfer permit for more 30 days of maximum time periods.
8	Nepal Gazette 2018	Royalty rate increased to 30000/Kg

The figure below specifies governmental role on caterpillar fungus conservation, trade and management (Figure 8).

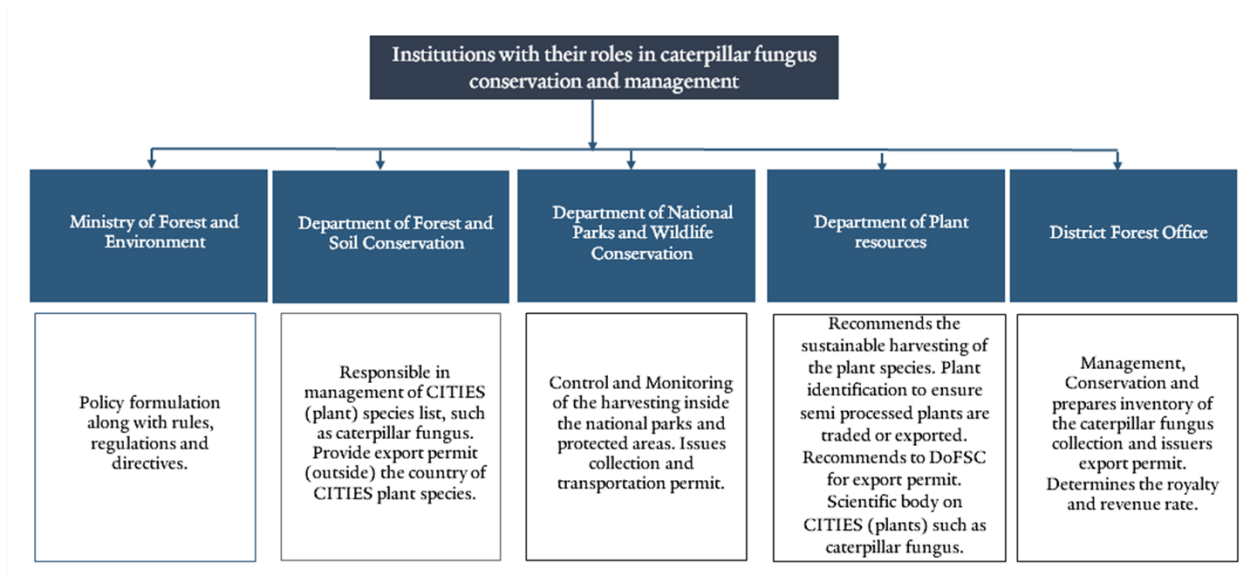


Figure 8 Institutional role in species conservation and management

Resource based conflicts on caterpillar fungus:

A classic example of resource access conflict is from Darchula, where Shauka and Non-Shauka communities (trans-boundary communities in Nepal and India) have issues with accessing the caterpillar fungus pasture area for collection. The Shauka community argue their customary rights in the pasture, whereas communities (non-Shauka) living in lower part claim an open access to natural resources. To mitigate these conflicts, management guidelines to address conflicts by clearly defining rights and roles/responsibilities is recommended by Pant et. al, (2017) (see Supplementary Document A)

PANT, B., RAI, R. K., WALLRAPP, C., GHATE, R., SHRESTHA, U. B. & RAM, A. 2017. Horizontal integration of multiple institutions: Solution for yarsagumba related conflicts in the himalayan region of nepal? *International Journal of the Commons*, 11, 464-486.

Community based management practices to prevent overharvesting

Community management practices to prevent overharvesting include price differentiation of entry fees to the caterpillar fungus collectors, with higher fees charged for outsiders, i.e., those not belonging to the

districts where the pasture is located. Another community-based rule is to prohibit installing collection camps in natural habitats of the caterpillar fungus (Poudel, 2020). To regulate these rules, in some places like Maikot, Rukum, the locals reach the pasture one month before harvest to prevent illegal harvesting. This has resulted in a reduced number of collectors coming from outside the districts by diverting them to different pastures (Poudel 2020).