Progress Report On:

Status and Conservation of Himalayan Serow (*Capricornis sumatraensis. thar*) in Annapurna Conservation Area of Nepal.

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Summary:

Himalayan Serow *'Capricornis sumatraensis. Thar'* (hereafter Serow) is a threatened, solitary mammal of Asia. The project has able to collect baseline data on this species and able to change local people attitude towards the conservation of Serow in natural habitat. The research explored the population and habitat preference of Serow. The serow population is isolated in a small patched of the southern part of Annapurna Conservation Area (ACA) with a population density of 1.17 individual/km^2 and a population sex ratio of 1:1.6(Male: Female). A strong correlation was found between population (y) and pellets density (x) (Y=0.011x-0.2619, R^2-0.97). The altitude preference of the serow depended on disturbance but positive correlation was found with different altitude preference (R^2-0.5212): most preferred altitude was 2500 to 3500 meters (Ivlev's Value (IV)-0.44). The serow prefers gentle to steep slopes with the increasing Ivelv's value by 0.1 to 0.3 but weak correlations between them (R^2-0.16). The serow mostly prefers dense forest (IV- 0.27), with descending order of preference being rocky (IV-0.19), cliff (IV-0.17), and Cave (IV-0.09) with weak correlation (R^2-0.0096). There was significant difference in the use of different habitat parameters such as altitudes (F-0.0001, P<0.001), slopes (F-0.0013, P<0.001) covers (F-0.001, P<0.001), crown covers (F-0.001, P<0.001) and ground covers (F-0.001, P<0.001) proportional to available habitat parameters.

In total 23 tree species, 14 shurbs and 32 herbs were recorded on serow habitat. The serow showed preference for 11 trees species in its habitat which were used for feeding & cover (thermal & hiding) purposes and, of them *Michalia Champaca*, (IVI-36, I-0.17), *Rhododendron arborium* (IVI-40; IV 0.11), *Ilex dipyrena* (IVI-33; IV-0.16) were most important and preferable to the serow. Plants species were used in proportion to their availability {Trees (F-1.428, P-0.369), Shrubs species (F-88.869, P-0.083) and herb species *(F-0.459, P-0.895)}*.

The major problems in the serow habitat were habitat fragmentation & land use change, conflict between predator and villager, livestock grazing and poaching. Conservation education was an effective way to raise awareness of serow conservation among the local people. The project was successful in providing information on the present status of Himalayan Serow in the ACA.

Generally, Government and Researchers are focusing on wildlife like Tiger, Rhino, Bears, Snow leopards, etc, that have high economic and illegal market value. These species are easier to raise funds for from international sources. That's the reason behind lack of research on low illegal market value species like Serow, Hispid hare, etc. Therefore, concerned agencies (Government/NGOs, INGOs, Civil Society) and researchers must give equal emphasis in-situ conservation of low illegal market values species such as serow, which is a prey species for threatened species like leopards.