Interim report

Project title: Community-Based *Cuon alpinus* (Dhole) Research and Conservation Project in Kangchenjunga Conservation Area, Nepal

Project head: Ambika Prasad Khatiwada

Institute: Alumni Association for Conservation and Development

Country project is based in: Nepal

Project start and end date: July 2013-April 2016

Date of report: February 2015

Species/ habitat: Asiatic wild dog or Dhole (*Cuon alpinus*)

IUCN conservation action/ research action being undertaken:

Species management, Training, Awareness & communications, Livelihood, economic & other incentives - Conservation payments

What activities have you undertaken to date:

Based on KCAMC’s 40th board meeting decision, we established three Community Managed Livestock Insurance Scheme (CMLIS) for dholes in Lelep, Tapethok and Yamphudin Village Development Committees (VDCs) of KCA. Tapethok CMLIS also included snow leopard along with dhole in the scheme. Directives of all three CMLISs were prepared, discussed at the meetings and endorsed by KCAMC. We are facilitating respective CMLISs to collect the details of herders and their livestock to be included in insurance scheme. Up to now, 88 households/herders included their 575 livestock in Tapethok CMLIS and 49 households/herders included their 226 livestock in Yamphudin CMLIS. Herders and livestock data collection is in process in Lelep, Tapethok and Yamphudin. Basic training to all three CMLIS is provided for record keeping and effective administration of CMLIS.

Start-up funding is provided to all newly established CMLIS. Local herders started to pay a premium into that fund to include their livestock into the scheme. Each CMLIS made provision that the fund earns interest to be used for compensation and loans can be taken from the fund for community investments.

A community-based verification mechanism for assessing any claims is established. The CMLIS is responsible for monitoring of livestock loss, decision making and collection of premiums, verification of claims as well as compensation, conservation awareness to herders, dhole and prey monitoring, and has the right to change directives if needed with consultation of KCAMC.

The CMLIS are established simultaneously with various types of mitigation measures. These
measures include the establishment of a community-based snow leopard/dhole monitoring system, institutionalization of CMLIS, campaigns of conservation awareness and works to reduce livestock losses by providing better herding, use of corrals, scare devices, and establishment of veterinary services. All these measures have potential for income generating activities. As newly established CMLIS, all above mentioned mitigation measures needed to be strengthened in coming days in KCA.

In 2014 we have collected 65 putative dhole scats which are now under process of genetic test at laboratory. After completion of genetic test, we do diet analysis of dhole scats to understand feeding ecology of dholes so that we can focus specific conflict reduction strategies to conserve dholes in KCA.

We have conducted 13 community meetings, five school teaching programs and several non-formal education discussions with community members.

19th wildlife week was celebrated at Institute of Forestry (IoF) with the theme of "wildlife and water: from the mountain to the rivers to the oceans" organizing different programmes (conservation rally, flash mob, street drama, sanitation programme, community teaching, speech competition, quiz contest programme, bird watching and documentary show). We have supported IoF students to organise 7-day programme where most of the students, lecturers and professors took active participation.

**Are you on target – e.g. achieving sample size, reaching target audience:**

We are in line on our planned activities and reaching the targeted communities. According to the plan we have completed- project inception meeting with KCAMC/KCAP, conducted community meetings, established three CMLIS (we had planned to establish two CMLIS but KCAMC suggested us to establish three CMLIS in priority areas instead of inclusion of dholes into existing snow leopard CMLIS), provided initial start-up funding to newly established CMLIS, trained CMLIS members on record keeping and effective implementation of CMLIS and collected dhole scats which are now at laboratory for genetic test.

**Have you achieved any outcomes to date? What are they?:**

We have conducted 13 community meetings and established three CMLIS in Lelep, Tapethok and Yamphudin. Directives of all CMLIS prepared and endorsed by KCAMC. Initial start up funding is provided to all three CMLIS. 88 households/herders included their 575 livestock in Tapethok and 49 households/herders included their 226 livestock in Yamphudin. Herders started get relief fund if their livestock is killed by dholes and snow leopard. A total of 46 members were trained, who are now working for effective management of CMLIS.
Is your project on target to achieve the sustainable measures outlined in your application?

Local communities are supportive to this project. They are actively participating in CMLIS formation and working for its better implementation. We have supported one undergraduate student to undertake a study on effectiveness of CMLIS in KCA. Questions regarding contribution of CMLIS on snow leopard and dhole conservation, snow leopard/dhole retaliatory killings situations after implementation of CMLIS, dhole and snow leopard population trend etc. were asked to local farmers and herders. A total of 120 households and 40 key informants were interviewed during the study. In Tapethok and Yamphudin CMLIS, 74% respondents reported that CMLIS has contributed to conserve snow leopard and dhales while 23% reported as same as before and 3% reported that the CMLIS did not have any contribution towards snow leopard/dhole conservation (fig 1).
A question on dhole and snow leopard retaliatory killing after implementation of CMLIS was asked in all CMLIS implemented villages. In average 62.5% respondents reported that retaliatory killing of dhole and snow leopard is reduced after implementation of CMLIS. 27.5% respondents did not have any idea and 10% respondents said that the retaliatory killing is still happening (fig 2).

Fig 2. Dhole and snow leopard retaliatory killing reduced after implementation of CMLIS in KCA
Interview survey indicates increasing trend of snow leopard and dhole population. 49% respondents reported increased population, 30% reported as same and 21% reported decreased population of dholes and snow leopards in last ten years (fig 3).

![Population trend of snow leopard and dholes in last 10 years](image)

**Fig 3.** Dhole and snow leopard population trend in last ten years

Respondents reported that livestock depredation is primary threat of dholes and snow leopards (63.5%). Encounter with humans and livestock are secondary threats.

![Threats of dholes and snow leopards](image)

**Fig 4.** Threats of dholes and snow leopards to local community

The study finding indicates that we are on target to achieve the sustainable measures outlined in our application.
Have you started disseminating any results – e.g. giving talks, preparing papers, producing management guidelines, submitting evidence to change government policy, getting media interest?

We have given three presentations in Nepal during the months of October, November and December 2013 to environmental science related national and international university students. Approximately 85 students were able to learn about dhole conservation endeavours in KCA through the presentations. We are working on paper to publish in journals.

Have you encountered any difficulties or setbacks and how have you overcome them?

Difficulties/Issues:
Remoteness of KCA and busy schedule of local communities for their daily subsistence were challenging to accomplish project activities which have demanded more time and efforts. Snow leopards and dholes are not the only species causing damage to livestock but also other predators (wolf, common leopard, clouded leopard, leopard cat, black bear etc.) are causing damage to small and large livestock in pasture land and in the settlements areas as well in KCA. Wolf depredation is considered high at higher altitudes since last year.

One adult Yak/Chouri cost minimum $600 but the livestock owner gets only $30 - $40 from the CMLIS relief fund if livestock are killed by snow leopards or dholes. Livestock owners/herders are demanding higher amounts (not only relief fund but compensation) of their livestock for losses by predators. Herders are also demanding relief/compensation fund if their livestock is killed by any predator.

We realized proper record keeping of CMLIS (applications, relief fund distribution and financial transaction of CMLIS etc.) is important and needs increased local capacity for effective administration of CMLIS.

Solutions:

We have given more time and efforts to reach more herders and still are in process of reaching them to collect their livestock details to be included in CMLIS. At the same time we are talking more about Snow leopard/ dhole conservation, CMLIS and improved husbandry practice (caring of livestock in pastureland to protect from predators).

We are holding discussions with CMLIS and KCAMC to provide relief fund if insured livestock is killed by any predator (dhole, snow leopard, wolf, common leopard, clouded leopard, leopard cat, black bear etc.) and there should be provision of insurance to all type of livestock (small and large size livestock). Proper record keeping and monitoring can be maintained employing a trained local individual for few years to smoothly run the CMLIS activities in long run. Herders are not losing livestock from predators only but also from livestock diseases which is causing significant economic loss. Herders are requesting livestock vaccination program to overcome losses from diseases. A livestock vaccination programme would be helpful to include in the CMLIS in the future.
Regular monitoring of species and illegal activities in KCA is crucial and needs unified effort of KCAMC, government authority, community based organizations and local individuals. KCAMC and local elite people are supporting herders for effective implementation of CMLISs. Herders themselves are realizing that some compensation is better than none. They were not getting any relief fund for their livestock losses in the past if killed by snow leopards/dholes in Tapethok village of KCA. We still need to guide and build local capacity a few more years to make the CMLIS locally managed and self-sustaining. It is important that conservation authorities are now showing concern for their losses. Herders are positive towards CMLISs, so are asking for other carnivore schemes as well. Herders and communities from outside KCA are also requesting for CMLIS work where snow leopards, dholes and other predators are causing damage to livestock.

**Please indicate if the income or expenditure for your project differs significantly from that stated in your original application.**

We had planned two but actually established three CMLIS. KCAMC suggested to establish three new CMLIS in priority areas instead of dhole integration into existing snow leopard CMLIS. We are working to achieve best results through optimum utilization of available resources. We are managing the project expenses based on our plan.