Process Framework on Involuntary Restrictions of Access to Natural Resources

BirdLife International

Project Title: Securing the long-term future for Vulture conservation in Cambodia

Under the nest protection scheme that forms part of this project, we will enlist the voluntary participation of villagers in the area, who receive an incentive for finding a nest and are often employed to monitor and protect the birds until the chicks successfully fledge. This component of the project will run for approximately 7 months (1st November 2014 - 30th May 2015) at seven project sites. CEPF have identified that the project may trigger the World Bank Safeguard Policy on Involuntary Resettlement (Operational Policy 4.1.2). This safeguard refers not only to physical resettlement of people, but also to restriction of access to resources. Only a small portion of the project involves protecting nests against human use, the other nest protection activity involves preventing natural predators (small carnivore species) from accessing nests. Those directly involved in the project do so voluntarily and benefit financially from it. People potentially utilising birds nests do so illegally and opportunistically and receive negligible benefit from this activity. We believe, therefore, that the project will have negligible, if any, negative impacts on people, and there will be do need for compensatory measures.

Project Background:

Populations of White-rumped Vulture *Gyps bengalensis*, Slender-billed Vulture *G. tenuirostris* and Red-headed Vulture *Sarcogyps calvus* have declined by 90-99% in South Asia since the early 1990s and are now facing potential extinction. BirdLife/IUCN lists all three species as Critically Endangered and all three are recognized as urgent priorities for species-focused action in the Indo-Burma biodiversity hotspot. Research has demonstrated that the declines across South Asia are caused by veterinary use of the drug diclofenac, which is highly toxic to vultures. This drug has very limited veterinary use in Cambodia and thus this country has possibly the largest remaining populations of these vulture species which are not currently affected by diclofenac. The Cambodian populations of all three species are therefore considered irreplaceable and globally significant and are threatened primarily by a paucity of food (owing first to a decline in wild ungulates and second to declines in numbers of free-ranging domestic cattle and buffalo arising from increasing agricultural mechanization, sale of stock into meat export trade, and increasing domestic consumption), low nesting success, natural predation, and felling of nesting trees for timber and incidental poisoning incidents.

Knowledge of what is preventing population recovery of Vultures in Cambodia is limited. Low nesting success is assumed to be a key factor but what conservation interventions are needed is unclear. A similar set of issues exists with supplemental feeding. Though it is widely, and correctly, acknowledged that depleted wild ungulate populations and declines in the number of free-ranging domestic cattle/buffalo are a threat to Vulture populations in Cambodia, the extent to which food availability is limiting population recovery and the relative importance of supplemental feeding at different sites in Cambodia is unknown. Additionally, the long-term future of this intervention is now under threat as market forces, beyond the control of the CVCP, have increased the price of cattle three-fold in the last 7 years. Identifying sustainable mechanisms that will allow supplemental feeding to continue are needed.

To secure the long-term future of Vulture conservation in Cambodia, and therefore Indochina, there is an urgent need to identify and involve more local and international partners in Vulture conservation, to strengthen local civil society capacity for Vulture conservation, to test some of the current assumptions surrounding vulture conservation

in Cambodia, and to identify sustainable mechanisms that can support ongoing and future conservation activities for these three Critically Endangered species.

This project was prepared following lengthy discussions between the project's lead implementers; WCS Cambodia, WWF Cambodia, BirdLife International Cambodia Programme (BirdLife) and Angkor Centre for Conservation of Biodiversity (ACCB). All organisations all have significant experience, both in Cambodia and regionally, in designing and implementing conservation interventions for threatened mammal and bird species that have strong community participation elements. WCS Cambodia in particular has been successfully running bird nest protection activities in Cambodia for approximately 10 years, and with significant and demonstrable success (see Clements et al. 2013).

This project will be implemented at several key sites for vulture conservation in North and East Cambodia. Project sites are; Preah Vihear province (Preah Vihear Protected Forest), Stung Treng province (Western Siem Pang IBA, Sesan, Mekong Flooded Forest – also in Kratie Province), Mondulkiri province (Mondulkiri Protected Forest, Phnom Prich Wildlife Sanctuary), and Ratanakiri province (Lumphat Wildlife Sanctuary). The design of this project has included extensive consultation with biodiversity monitoring and community outreach staff who are based full-time at these sites. The community outreach teams include representatives of the local communities where some project activities will take place.

Project activities are;

- Develop and train a Cambodian coordinator for vulture conservation in Cambodia
- Form a working group for vulture conservation in Cambodia
- Develop an updated action plan for vulture conservation that addresses the sustainability of a range of conservation activities and proposes site-specific solutions for maintaining these activities for the long-term
- Re-assess the threat of poisoning (organochemicals) to vultures
- Obtain up-to-date information on the availability and use of diclofenac
- Surveys to establish carcass availability at project sites
- Investigate what conservation interventions are need to improve nesting success by evaluating the effectiveness of locally-hired 'nest guardians' and predator exclusion devices

Project Implementation

A key component of this project will be to investigate what, if any, conservation interventions are needed to improve nesting success in three vulture species. This is the only activity that could potentially restrict local people's access to natural resources, though it should be made clear that local participation in all of the project's activities are completely voluntary.

The first stage of this project component will be to establish networks within each site's local communities to report any known vulture nests. A reward (between 4-8 USD per report, depending on the site) will be paid to informants for vulture nests, and verified by project field staff. Similar reporting networks are well established for other threatened bird species at sites engaged in bird nest protection activities in Cambodia (e.g. the Northern Plains; Clements et al. 2013, Western Siem Pang IBA; BirdLife 2012).

Once nests have been found and confirmed to be vulture nests, nests will be monitored and conservation interventions trialled to establish what, if any, measures are need to improved nesting success. One intervention that will be evaluated is to use locally hired 'nest guardians' to prevent human disturbances. Human disturbances include the opportunistic collection of eggs/chicks, which is completely illegal under Cambodian law. 'Nest guardians' will be selected by their own communities during regular village meetings (or ideally as soon as a vulture nest is found). This will ensure that the selection of these nest guardians is being driven by the local communities.

Nest guardians will be given support and training in how to monitor nesting birds and will be paid a per diem of 5 USD/day.

The project will also evaluate the use of metal baffles as predator exclusion devices for trees containing vulture nests. Local people can receive an income from the project by finding nests. The baffles themselves will not restrict people's access to birds' nests and only prevent predation by civets and Yellow-throated Martin.

The project is unlikely to significantly negatively affect access to natural resources, either to those directly involved in the project or to potential opportunistic egg or chick collectors.

Social Impacts

The social impacts of bird nest protection were evaluated during four seasons (2005 until 2009) in the Northern Plains (Kulen Promtep Wildlife Sanctuary and Preah Vihear Protected Forest). The socio-economic situation in all project sites is similar (rural poor, highly dependent on low-intensity rice agriculture supplemented by natural resources) so the results of this evaluation are relevant to all project sites. Though the exact social makeup of each site is different (e.g. Mondulikiri province has a large proportion of ethnic Puong), there are no known differences in natural resource use between different ethnicities in Cambodia with regards to vultures and their eggs/chicks i.e. 'use' is limited to opportunistic collection and there is little, if any, local or international trade value associated with vulture species.

The distribution of payments to local people between and within villages was investigated during four seasons, from 2005 until 2009 in the Northern Plains. For each village participating in the program, data were recorded on the total number of households, the number of households with nest protectors, the identity and occupation of nest protectors and all payments made. These data were used to determine the percentage of households engaged in the program, the distribution of the payments made between villages, and the distribution of payments made to individual nest protectors. The payments received by protectors were compared to standard estimates of household consumption in rural forested regions of Cambodia, available from the 2007 Cambodia Socio-Economic Survey (World Bank, 2009). Local attitudes to the program were investigated by conducting semi-structured interviews with 467 households from 8 villages where the program operated between December 2009 and January 2010. The questionnaire design was informed by focus group discussions conducted during 2007–2009. Questions focused on respondents' knowledge of the program, how they thought it operated and who benefited, and whether they considered the rules fair. Interviews lasted about 50min, and were conducted by trained Cambodian social researchers. Anecdotal information on local conflicts over the program were collected from WCS staff and discussions with other organisations that had replicated the program in Cambodia.

Results of the investigation showed that the wider Birds Nest Protection program benefits about 100 households each year, of the approximately 4000 households across the 24 villages where the program operates. In the majority of villages, <5% of households were engaged in the program, although in a few villages up to 33% of households were involved. The majority of villages received <$750 per year, but with some villages earning >$2000 per year. Total payments varied depending upon the number of key species present, or species with particularly long breeding periods. The average payment per nest protector was $80–$160, but there was considerable variation in the payments made, depending upon the species protected (as different species needed protecting for different periods of time). Some individuals were specialist protectors, switching species depending on the season and receiving continual employment for several months. Community rangers received significantly more, averaging $500–$800 per year with a maximum of >$1200. The distribution of payments is therefore quite uneven both between and within the villages, with only a small number of people generating high incomes from nest protection. The average

payment per protector is significant in comparison with the 2009 estimate of household consumption in rural forested regions from the 2007 Cambodia Socio-Economic-Survey of $329 ± 16 (World Bank, 2009).

Despite the uneven distribution of benefits and the small number of people involved, 67% of 467 households interviewed were familiar with the program and could accurately describe how it worked. Of these, the vast majority thought that the distribution of benefits was fair (95%), and understood that the primary beneficiaries were individual households (93%). There was no suggestion that traditional rules existed regarding the management of birds, or that these might have been crowded out by the initiation of the program. In villages where a moderate percentage of people (c.10%) were engaged in the program, respondents thought that it benefited the village as a whole (67%), whereas in villages with limited involvement in the program fewer respondents thought the village benefited (28%). It was universally understood that anyone could participate (100%). Participating households were similar to non- participants in most characteristics, with the exception of a slight bias towards male-headed households.

Despite the uneven distribution of payments, however, the program had broad support across all the villages, was generally seen to benefit the village as a whole, and was overwhelmingly viewed as fair. This is probably explained by three observations. Firstly, protectors were generally chosen from local forest users or farmers, who had the strongest claims to ownership of the area in the absence of property rights. Secondly, the payment levels were based on the number of days worked, with the daily rate based on an acceptable local wage. Differential payments are seen as fair so long as the payment level is commensurate with effort (Konow, 2003). Thirdly, in Cambodia international non-government organisations, such as the implementing organisations in this project, commonly provide services usually provided by the state and tend to be viewed positively as service providers (Malena & Chhim, 2009).

Bird nest protection schemes have been previously established at the project sites (though to varying intensities) and there is as much as 10 years' experience with implementation within the consortium of NGOs. Local communities are therefore aware of how this method is implemented, the conditions of being hired as a nest guardian, and the restrictions to natural resources that this is entails. As with nest protection schemes used for other species in Cambodia; village meetings will be held prior to implementation to ensure that all local participants are fully aware of the project's aims and the conditions attached to nest protection. Minutes will be taken and Khmer and English versions produced. Because of the familiarity these communities already have with this type of conservation intervention, it is not envisaged that there will be any new issues, other than those described in 'potential sources of grievance and local conflict'.

Roles and responsibilities during project implementation

WCS Cambodia – all project activities in the Northern Plains

WWF Cambodia – all project activities in Phnom Prich Wildlife Sanctuary, Mondulkiri Protected Forest and the Mekong Flooded Forest (this area is part of WWF's "Siphnandone-Stung Treng-Kratie" (SSK) programme focussed on the channels of the Mekong River and surrounding landscape).

BirdLife International Cambodia Programme will take the lead on all project activities in Lomphat Wildlife Sanctuary (LWS) and Western Siem Pang IBA (WSP).

ACCB – all project activities in Sesan district

All project partners have on-site full-time project staff, both Cambodian and international Technical Advisers. The full-time project staff includes community outreach officers responsible for liaising with local communities. The role

of community outreach officers will include assisting community groups to select nest guardians and facilitating any meetings to resolve local conflicts. Field staff will assist in providing technical support to locally-hired 'nest guardians', and will be responsible for recording nest outcomes, and for managing the monitoring data. Locally hired 'nest guardians' will be responsible for monitoring vulture nests and for preventing human disturbance, this latter responsibility will require the nest guardian to camp near the vulture nest during the day for the majority of the nesting period.

The vulture conservation coordinator will be a full-time member of staff based at the BirdLife office in the capital, Phnom Penh and will provide technical support to all project partners, ensuring that activities are coordinated and following standardised protocols.

Restriction to natural resources and mitigation measures

Employment of a locally-hired 'nest guardian' to protect a nesting vulture could potentially restrict others from within the same community from harvesting eggs/chicks or even adult vultures. However, as noted before collection of vulture eggs/chicks/adults is completely illegal under Cambodian law. Additionally, there are no records of vulture eggs or chicks being opportunistically collected; Clements et al. 2012 did not trace a single record, and there are no records from the last two breeding seasons (Mahood 2013). The only causes of nest failure recorded to date have been raids by Long-tailed Macaques *Macaca fascicularis* and disturbances such as fire (Clements et al. 2012) and illegal logging near nesting birds (Mahood 2013).

Eggs and chicks of wild birds are sparsely distributed across the forest landscape. They are occasionally opportunistically encountered and taken by people visiting the forest for other reasons, such as resin collecting, hunting or logging. The taking of eggs or chicks of Vulture species is illegal, but the law is rarely enforced because incidents are difficult to detect. The project provides funding for protection of a maximum of 30 vulture nests. Eggs and chicks are collected opportunistically, and there are no individuals who obtain all, most or a significant portion of their income from the collection of vulture eggs. Because of the low value of eggs and chicks, opportunistic collection events make a negligible contribution to incomes of any one person. In addition, because of the dispersed and illegal nature of nest robbery, it is not possible to identify those persons who might have benefitted even in a very small way from the taking of eggs and chicks. Within the last 12 years (i.e. since conservation NGOs began working in Cambodia), there has been no evidence to suggest that vultures or their eggs/chicks are a significant source of subsistence for local communities, or that they are sold into the wildlife trade to generate income.

<u>All restrictions to access are completely voluntary.</u> If local communities show no interest or desire to protect a vulture nest, or consider it a restriction to a natural resource that they need, then it will simply go unguarded. Monitoring of the nest by project field staff will continue though so that outcomes i.e. nesting success/failure, can be recorded.

The impacts therefore from restricting access to this natural resource are likely to be extremely small, and there is no need for a one-for-one mitigation measure. In fact, the per diem offered to community selected 'nest guardians' has development benefits; it is above the average daily wage and offers an alternative source of income in communities where employment opportunities are extremely limited.

We conclude that no groups or persons are eligible for assistance and mitigation measures as a result of the project. People directly involved in the project do so voluntarily and benefit significantly financially. All those people potentially utilising Vulture nests do so illegally and opportunistically and receive negligible benefit from it.

Potential Sources of Grievance and Local Conflict

One potential source of grievance within local communities are perceptions of unfairness over who received payments for reporting nests or who was selected as nest guardians. Incidents of jealousy have been reported at one of the project sites (Mondulkiri Flooded Forest; Kok et al. 2013), and this resulted in a White-shouldered Ibis nest being vandalised, however, such incidents are on the whole very rare (Clements et al. 2013). Nest protection schemes have been running at the project sites for between 2 and 10 years and fair processes for selecting nest guardians and mechanisms for dealing with conflicts regarding payments are well established. All but one of project partners (the Angkor Centre for the Conservation of Biodiversity – ACCB) have significant experience in setting up and running nest reporting and protection schemes at their respective sites. Technical support will be given to ACCB by the other project partners and a significant proportion of the vulture project coordinator's time will be given to supporting activities at ACCB's site in Sesan district, Stung Treng province.

Selection of nest guardians is community driven, ensuring local participation in this conservation intervention and reducing the potential for perceptions of unfairness over who receives payments. The exact mechanism varies depending on the project site but the principle is the same; once nests are reported and have been verified by project field staff, a village committee/local conservation group meets to decide who should be hired as a nest guardian. The selected member of the local community is then given training by the project staff in how to monitor nesting birds effectively, and is given regular technical support over the entire nesting period. Management of the 'nest guardian' during the project is largely by the community outreach officer or full-time field staff who are from the same local community.

Grievance mechanisms and conflict resolution

The main mechanism for dealing with grievances is through local community groups. Illiteracy levels are high in Cambodia, especially in the rural communities were nest protection activities will take place. Nearly all communication between NGOs and the local community and any conflict/grievance resolution therefore has to be verbal. Community groups are well established at or near all project sites, as many other conservation interventions e.g. nest protection for other species, bird censuses, awareness campaigns, are dependent on the voluntary involvement of people from the local community. The local community groups/village committees are the main liaising body with NGOs based at each respective site, and will facilitate any conflict/grievance resolution with disaffected members of the local communities they represent. Minutes will be taken during meetings, with both Khmer and English language versions made. Copies of the Khmer version will be given to a suitable local authority, most likely a village chief and signed off by the village chief and a member of project staff from the NGO working at the respective site. Scanned copies of all signed minutes will be stored on a project database, and English copies will be made available to CEPF if requested. Site-based community outreach officers and/or full-time field staff from the local communities will have the responsibility for working with individuals from local communities and/or local authorities and for resolving any complaints or local conflicts.

Conclusion

Vulture eggs/chicks are collected opportunistically and there is no evidence from any of the project sites that this natural resource is an important form of subsistence either directly or through local/international trade. Vulture eggs/chicks have negligible, if any, trade value. Furthermore, the collection of vulture eggs/chicks is completely illegal under Cambodian law. The nest protection activities that form a small part of this project will provide significant benefits to some members of the local communities. All communities have a familiarity with nest protection schemes and it is felt that there is no need to provide any compensatory benefits to effected groups or

individuals. Already established grievance mechanisms will be clearly communicated to project participants in the unlikely event that this project results in any local conflict either within the communities or with the implementing NGO.

References

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