Process Framework for Involuntary Restrictions

CEPF small grant to SVC: Stakeholder-based conservation of three large waterbirds in the dry forest of Cambodia

Under the nest protection scheme we 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. The project runs for 11 months (1st November 2012 - 30th September 2013). CEPF have identified one World Bank Safeguard Policy which appears to be relevant to the project, namely 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. Those directly involved in the project do so voluntarily and benefit significantly financially from it. People potentially utilising birds nests do so illegally and opportunistically and receive negligible benefit from this activity. Only a small portion of the project involves protecting nests against human use, two of three activities involve preventing small carnivores from accessing nests.

Project background

The dry forests of Cambodia once supported an abundance of large and spectacular species. Although large swaths of habitat persist and almost all of the megafauna remains, populations are much reduced as a result of hunting. A suite of highly threatened charismatic large waterbirds characterize this habitat, three of those species are the subject of the project. Because the habitat in which these species lives covers both protected and unprotected areas, and is of high social and economic importance to local communities as a source of valuable NTFPs (such as resin), cattle grazing and firewood, the fortunes of these species are to a large extent dependent on patterns of human land and resource use.

The project area supports c.50% of the region's population of White-shouldered Ibis, c.90% of the global population of Giant Ibis and most of Cambodia's population of Sarus Crane. Of these species the latter is Vulnerable and the former two are Critically Endangered. The primary immediate threat to these species is economic land concessions. However chicks and eggs are opportunistically collected by local people, either for local consumption (Giant and White-shouldered Ibis) or for sale to markets as food or for trade (Sarus Crane). Because the species concerned have extremely small populations, even in the absence of organized poaching these range-wide local-level threats can cause major declines in populations, particularly of Sarus Crane, because this is the most heavily exploited species. The primary threat to Giant Ibis nests is predation by civets and Yellow-throated Marten; there is some evidence that White-shouldered Ibis nests also suffer from high levels of natural predation by small carnivores.

In response to these threats, stakeholder-led caretaking initiatives have been developed in KPWS and PVPF to locate, monitor and protect bird nests. In KPWS the ecotourism committee at Tmatboey SVC ecotourism site manages the Program under joint supervision from WCS and SVC. The current project will pilot innovative changes to these conservation interventions, and expand their geographic field of operation to Western Siem Pang (WSP).

Recent studies have shown that the level of incidental collection of eggs and chicks is so low on species whose nests have negligible economic value that paying people to guard nests of species such as White-shouldered Ibis does not have a statistically significant effect on nesting success (Sok *et al.* 2012). Because nest protection using paid nest guards is expensive, it is therefore prudent to test alternative methods of increasing nest success, specifically those already developed and used for Giant Ibis. Giant Ibis nests are protected using only a plastic anti-predator device (baffle), and periodically checked to determine outcome. This method has been shown to increase nesting success to 87% (Clements *et al.* 2013). In contrast, Clements *et al* (2013) showed that for some species, such as Sarus Crane employing nest guards is a worthwhile conservation investment because it has a statistically significant effect on nesting success (between 2009 and 2011 the success rate of Sarus Crane nests protected by local community members was 88.5% in comparison with 36.9% for unprotected nests of the same species).

Project activities are:

1. Improve nesting success of Sarus Crane using protection teams composed of community members;
2. Assist community members to collect data in order to evaluate the impacts of a novel conservation initiative: using predator exclusion devices to protect the nests of White-shouldered Ibis;
3. Provide financial incentives to local people to locate and monitor nests of Giant Ibis which are fitted with predator exclusion devices.

Participation in all of these activities is voluntary.

Social and threat analyses

This project seeks to expand a pre-existing activity that has run for several years across the Northern and Plains of Cambodia in Kulen Promtip Wildlife Sanctuary and Preah Vihear Protected Forest to Western Siem Pang Important Bird Area. Only activity 1 (protection of Sarus Crane nests by nest protection teams) is likely to have any impact on access to resources (i.e. birds nests) for local people. Participation in all aspects of this activity is entirely voluntary. Village meetings are used to inform local people about the scheme and the payments available. Local people who find nests report them (or don't report them) voluntarily, and receive $5 if they do so. They then have the opportunity to become a nest guard; if they chose not to then another volunteer is sought. All known nests of Sarus Crane are located in Kulen Promtip Wildlife Sanctuary and Preah Vihear Protected Forest, it is therefore unlikely that more than one or two Sarus Crane nests will be found and protected under the project at Western Siem Pang.

The social impact of birds nest protection was evaluated during four seasons, from 2005 until 2009, in Kulen Promtip Wildlife Sanctuary and Preah Vihear Protected Forest. It should be noted that this evaluation assessed the wider Birds' Nest Protection Program which involves the protection of hundreds of birds nests each year, whilst this project directly protects only nests of Sarus Crane. Results are likely to be applicable to Western Siem Pang because that site is similar in geography and social situation.

The distribution of payments to local people between and within villages was

investigated during four seasons, from 2005 until 2009. 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, note that Sarus Crane has a relatively long breeding period). 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 WCS, commonly provide services usually provided by the state and tend to be viewed positively as service providers (Malena and Chhim, 2009).

Activities 2 and 3 aim to maintain, expand and evaluate the use of metal baffles as predator exclusion devices for trees containing Giant and White-shouldered Ibis nests. Local people can receive an income from the project by finding nests and by taking part in weekly checking of those nests. The baffles themselves will not restrict people's access to birds' nests and only prevent predation by civets and Yellow-throated Martin. Weekly checking is not analogous to protection and is intended only to track the progress of the nest and evaluate the effectiveness of the baffles.

Criteria for eligibility of affected persons

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

Those individuals directly involved in the project do so voluntarily, a fact understood by all 315 households involved in the project (Clements *et al.* 2013). Income from the project to those households is significant (see above) whilst the economic value of a Sarus Crane egg is no more than a few dollars. Because the incentives provided to participants are received on a voluntary basis the Process Framework does not apply to these persons.

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 Sarus Crane 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 Sarus Crane nests. Eggs and chicks are collected opportunistically, and there are no individuals who obtain all, most or a significant portion of their income from collection of Sarus Crane 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.

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 Sarus Crane nests do so illegally and opportunistically and receive negligible benefit from it.

References

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