

Research Reports
ISSN 2202-7432

**ENGAGING COMMUNITIES IN A PAYMENTS FOR
ENVIRONMENTAL SERVICES SCHEME FOR THE
GREEN PEAFOWL SPECIES CONSERVATION ZONE
OF THE PHOU KHAO KHOUAY NATIONAL
PROTECTED AREA**

Research Report No. 15

June 2017

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The project 'Effective Implementation of Payments for Environmental Services in Lao PDR' is funded by the Australian Centre for International Agricultural Research (ACIAR). The reports produced within this project are published by the Crawford School of Public Policy, Australian National University, Canberra, 0200 Australia.

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Table of Content

1.	Introduction.....	3
2.	Overview	4
3.	Village selection.....	5
4.	Resource overview	6
5.	Community Consultations (first round)	12
6.	Community Consultations (second round).....	15
7.	Conducting Conservation Auctions.....	17
8.	Conclusions.....	19
	Acknowledgements	21
	Annex	22

1. Introduction

This research report documents the community engagement process that was conducted to identify and recruit prospective suppliers of a Payments for Environmental Services (PES) scheme¹, which focusses on Green Peafowl (*Pavo muticus*) protection in the Green Peafowl Species Conservation Zone (GPSCZ) of the Phou Khao Khouay National Protected Area (PKK-NPA). The GPSCZ is one of the two remaining habitats of the Green Peafowl in Lao PDR. The community engagement process targeted six villages located in close proximity to the GPSCZ. This report draws on Research Report 3: Development of a ‘virtual’ PES scheme for the Nam Ngum River Basin (Scheufele et al. 2014), Research Report 6: The environmental and social economic condition of the Phou Khao Khouay National Protected Area’s Green Peafowl Species Conservation Zone (Tsechalicha et al. 2014), and Research Report 10: Providing incentives for biodiversity protection: anti-poaching patrolling in the in the Green Peafowl Species Conservation Zone of the Phou Khao Khouay National Protected Area (Scheufele et al. 2016a). The report feeds into Research Report 16: Costing biodiversity protection for PES schemes in Lao PDR (Scheufele and Bennett 2017).

¹ The scheme development is under the ACIAR-funded project on “Effective Implementation of Payments for Environmental Services in Lao PDR”.

2. Overview

The design of a PES scheme, which focusses on Green Peafowl protection in the PKK-NPA involved an extensive community engagement process to identify and recruit prospective suppliers. This process was first applied in the design of a PES scheme focussing on biodiversity protection in the Phou Chomvoy Provincial Protected Area (Tsechalicha 2017) and replicated for the scheme designed in the PKK-NPA.

The communities were invited to participate in the PES scheme in two ways:

- The community as a whole supports the anti-poaching patrol scheme and refrains from performing wildlife damaging actions within the PKK NPA, especially in the.
- Individual villagers organised in teams perform anti-poaching patrols within the Green Peafowl Species Conservation Zone (GPCZ).

The community engagement process consisted of five elements:

1. Village selection
2. Resource overview
3. Community consultations (first round: information and consultation)
4. Community consultations (second round: development of a community action plan and community conservation agreement)
5. Conducting conservation auctions

A detailed overview of the process is presented in Annex 1.

The community engagement process² was designed and implemented by the National University of Laos in close collaboration with the Department of Forest Resources Management (DFRM)³ and the Department of Forestry (DOF) within the Ministry of Agriculture and Forestry (MAF), the Vientiane Capital Province Agriculture and Forestry Department (PAFO), and the Xaythani District Agriculture and Forestry Office (DAFO).

² Project staff from the Australian National University assisted in the design of the consultation process.

³ Formerly under the Ministry of Natural Resources and Environment (MONRE). Similarly, the project was previously under the Provincial Office for Natural Resources and Environment (PONRE) and District Office for Natural Resources and Environment (DONRE) but was subsequently transferred to PAFO and DAFO respectively.

3. Village selection

The prospective suppliers are six villages in Xaythani District of Vientiane Capital Province (Figure 1). They are located on the plain along the road which runs parallel to the boundaries of the PKK-NPA in a north-south direction. The villages are generally accessible all year, are connected to the main power grid and have access to a reliable telecommunication network. Many households own pick-up cars and mini-vans as well as run small home-based shops. The village populations are all low-land Lao (Lao Loum).



Figure 1. Locations of the target PES scheme villages (Google Earth map, 2015) Embedded map: <http://www.ezilon.com/maps/asia/laos-maps.html>)

The villages were selected based on the following criteria:

- Nomination by the Government of Lao PDR (GoL)
- Proximity to the GPSCZ of the PKK-NPA
- General willingness to participate in the pilot PES scheme (assessed through initial village information and consultation sessions)
- Potential to become guardians of biodiversity, especially Green Peafowl and forest resources within the PKK-NPA

- Some village use of wildlife and forest resources within the PKK-NPA

Orientation workshops were held at the provincial level with relevant GoL authorities in attendance. These workshops served to orient and inform staff from relevant GoL authorities with the PES scheme objectives and the implementation process. MoUs (financial, technical and logistical cooperation) were signed between PONRE Vientiane Capital⁴ and the ACIAR funded project.

4. Resource overview

The ACIAR project team met with community leaders of target villages informing them about the PES scheme and its purpose as a first step in establishing broad community support (November 2014 – May 2015).

In the second step, the ACIAR project team conducted a community survey through household interviews regarding current demographics, social, and economic factors related to economic survival, living standards, and wildlife resources use in all target villages in proximity to GPSCZ in the PKK NPA (December 2015). The survey material consisted of interviewer instructions, a questionnaire, satellite images of the villages and the GPSCZ, images of wildlife species, and livelihood activity cards⁵.

The survey was conducted 11-13 December 2015. A random household sample was drawn from the registers of the eight target villages⁶. Overall, a total of 516 households were surveyed. Participation in the survey was voluntary. The names of the respondents were not recorded to ensure anonymity and confidentiality. The survey effort was coordinated and managed by the Faculty of Economics and Business Management at National University of Laos (FEBM-NUOL). Forty FEBM-NUoL students were trained to conduct the survey following the developed protocols. The training additionally involved applying core research principles such as scientific rigour, transparency and research ethics.

⁴ With a subsequent transfer of the PES project implementation responsibility to the Provincial Agriculture and Forestry Office (PAFO).

⁵ The survey material is available on request.

⁶ Subsequently, two relatively distant villages were excluded from further engagement in the pilot scheme.

The sample data were extrapolated to the household population of each village and used to develop village-level community resource profiles (CRP)^{7,8}. The results of the community survey presented in this report are averaged across the six villages. The top three livelihood activities of the local communities are raising livestock, cropping, and fruit tree planting and vegetable growing. On average 67% of the households engage in collecting non-timber forest products (NTFP) while slightly more than half of the villagers engage in hired labour. In terms of farming, all communities cultivate rice paddy as a staple crop. Households rely to some extent on the PKK-NPA for livestock grazing (11%), agricultural production (9%), fruit trees and vegetable production (6%), and timber collection (21%).

Table 1. Household livelihood activities

Household livelihood activities	Engaged households
Livestock husbandry	89%
Cropping	82%
Fruit trees and vegetable production	68%
Handicraft production	29%
Hired labour	53%
Government employment	23%
Private employment	17%
Collection of non-timber forest products	67%
Hunting or catching wildlife	18%
Other livelihood activities	26%
Grazing livestock inside the PKK-NPA	11%
Agricultural cultivation inside the PKK-NPA	9%
Fruit trees and vegetables production inside the PKK NPA	6%
Timber collection inside the PKK-NPA (construction and fuel)	21%

Source: Project survey data, 2015.

The top three livelihood activities to which households allocate most of their time are livestock husbandry (24%), fruit trees and vegetable production (21%) and cropping (12%) (Figure 2). Time spent on engaging in hired labour and private employment accounts for ten and three percent among the villagers respectively. Only two percent of time was spent on activities dealing with wildlife while seven percent was spent on other livelihood activities.

⁷ Population data was not available to check sample representativeness.

⁸ The village-level community resource profiles were presented to the involved GoL officials and to each of the eight target villages. The village-level community resource profiles are available on request.

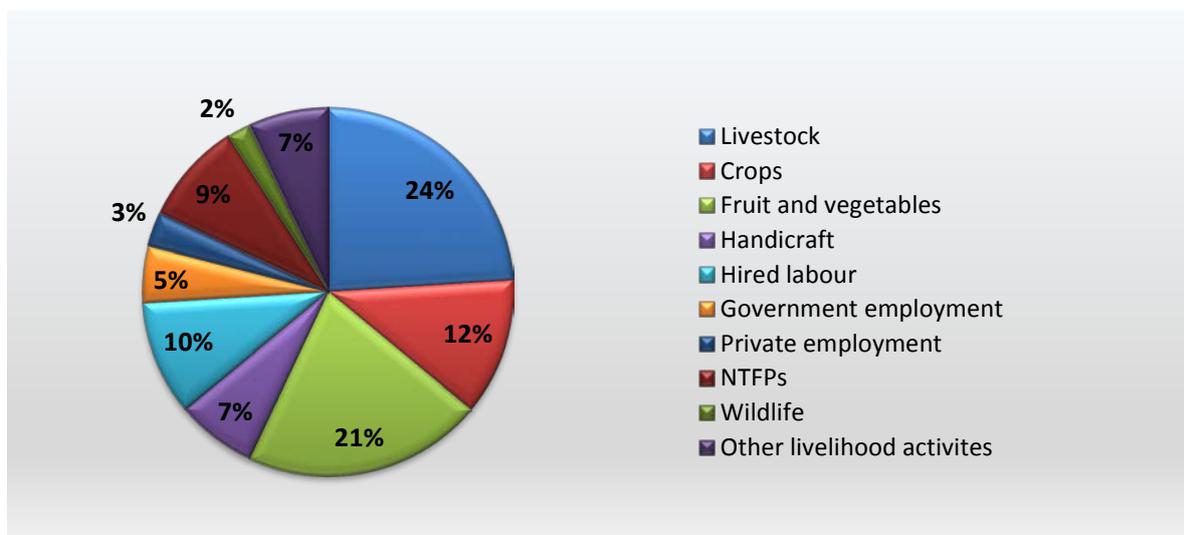


Figure 2. Average household time distributed across different livelihood activities

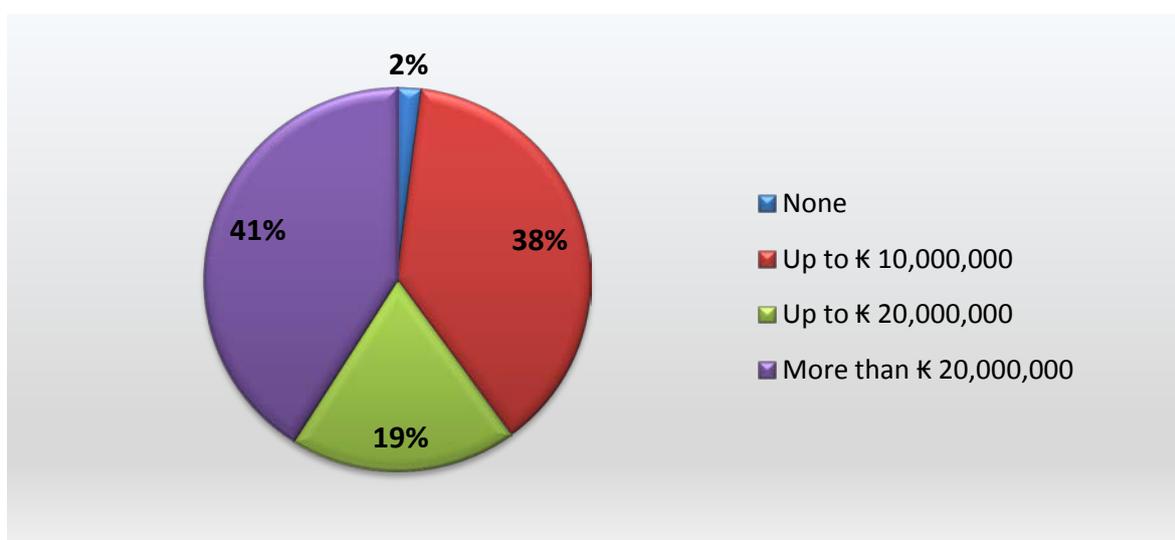


Figure 3. Distribution of annual cash income (K) across households

The data show that 98 percent of households earn a cash income (Figure 3). Only two percent reported no cash income at all⁹. The sources of the cash income are presented in Figure 4a and 4b. The top three sources of cash income are government employment (25%), private employment and other livelihood activities account for 15% each, while hired labour accounts for 11%. The least cash income is earned through the sales of NTFPs (2%) and less than one

⁹ This figure is based exclusively on cash income without taking account of other household products of subsistence nature that also have monetary values.

percent from wildlife sales. It is important to note that while a significant number of households (67%, Table 1) practice NTFP collection, obviously very little NTFPs are for sales.

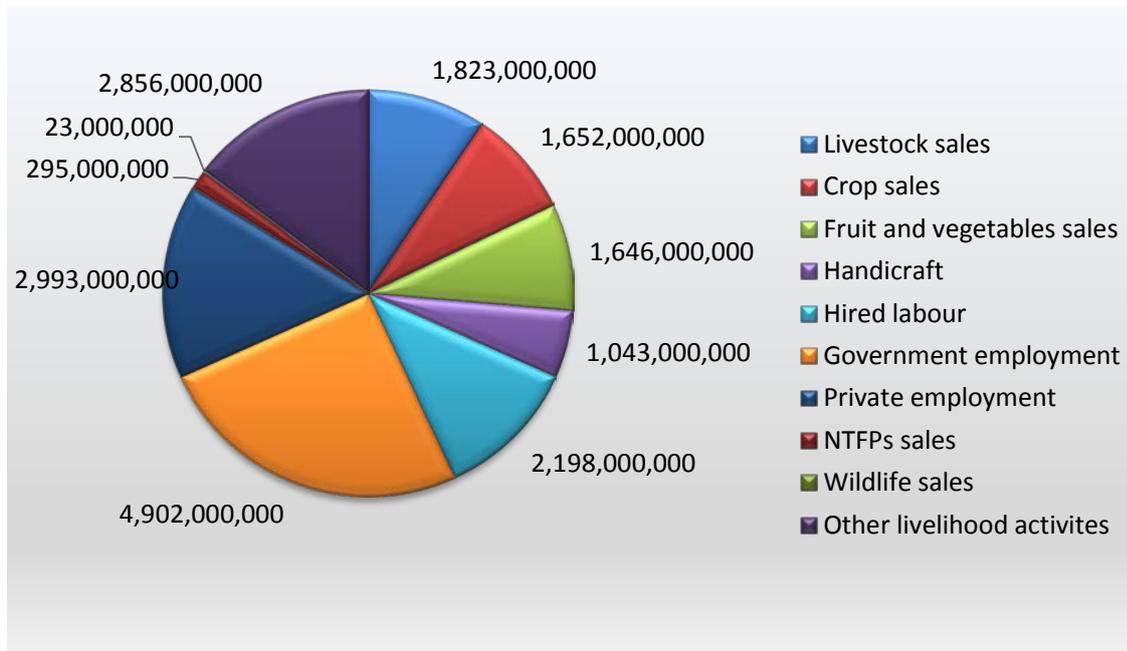


Figure 4a. Annual cash income (K) by livelihood activities

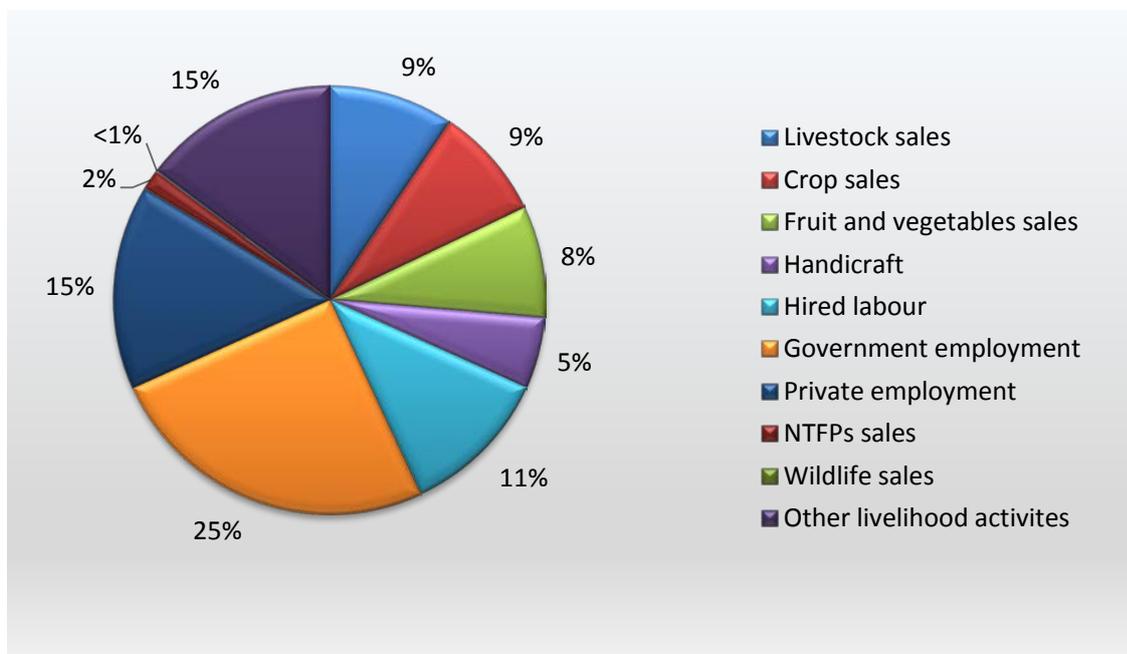


Figure 4b. Annual cash income (%) by livelihood activities

The survey results suggest that over one fifth of the households are engaged in wildlife hunting. Eleven percent hunt exclusively for subsistence, less than one percent hunt exclusively for sale, and six percent hunt for both subsistence and sale (Figure 5). Correspondingly, eighty-five percent of households have no income from wildlife sales at all, while fifteen percent earn an annual cash income of up to K1,000,000, and less than one percent earn a cash income of up to K5,000,000 (Figure 6).

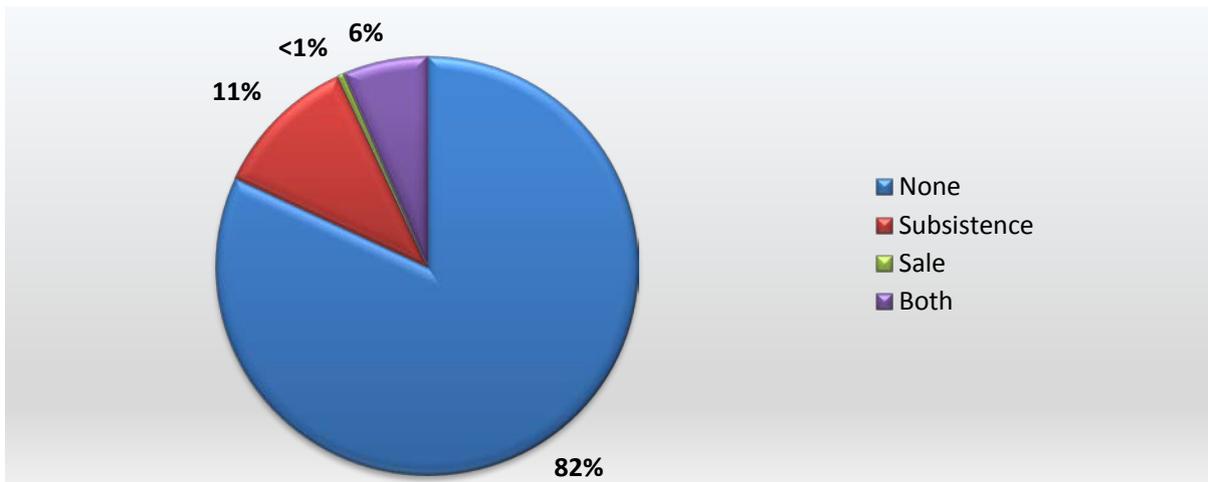


Figure 5. Households engaged in wildlife hunting

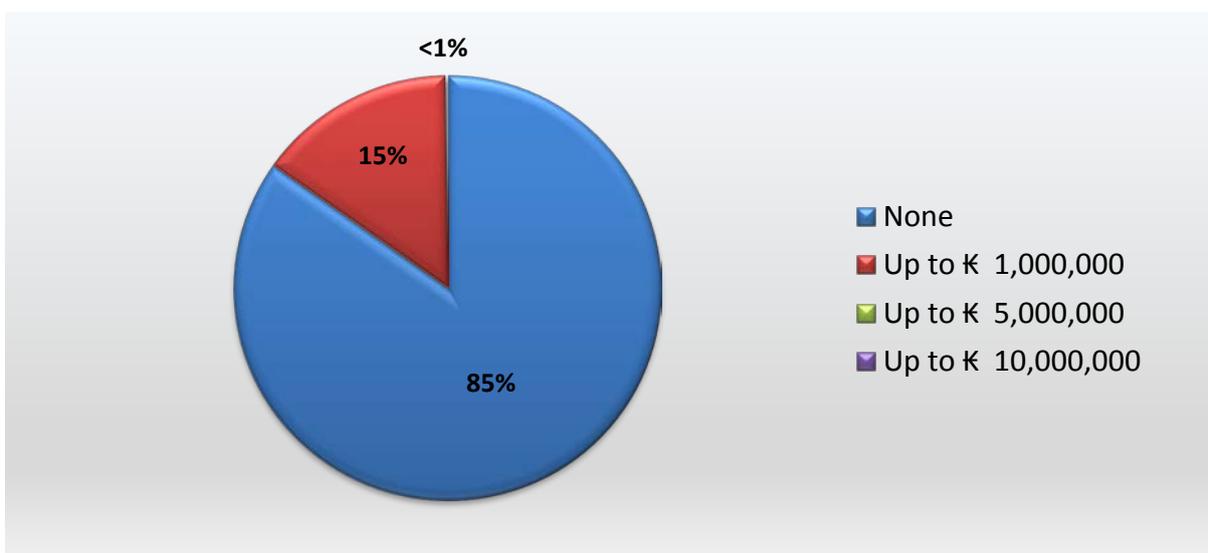


Figure 6. Annual cash income (K) earned from wildlife sales

Respondents were also asked about their intake of animal protein. Households most frequently consume fish (on average, once a day), followed by domestic meat (on average, three times per week) and wildlife (on average, one time per week). The most preferred type of animal protein is, however, fish (ranked most preferred by sixty-two percent of households), followed by domestic animals and wildlife (ranked most preferred by twenty-five percent and thirteen percent respectively) (Figure 7).

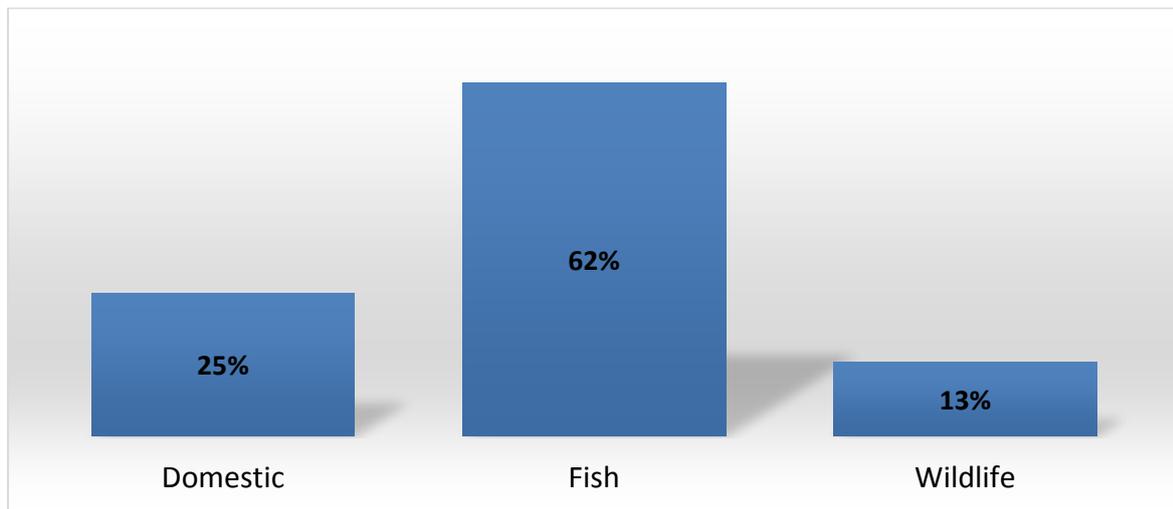


Figure 7. Animal protein preferences

Over 90% of the households acknowledged that there are hunters coming from outside the area to hunt. Two percent of the households stated they have experienced problems with the Green Peafowl. Over 60% consider wildlife protection very important, 30% think it is moderately important, while six and two percent consider it is moderately and little important respectively; only one percent consider wildlife protection is unimportant (Figure 8).

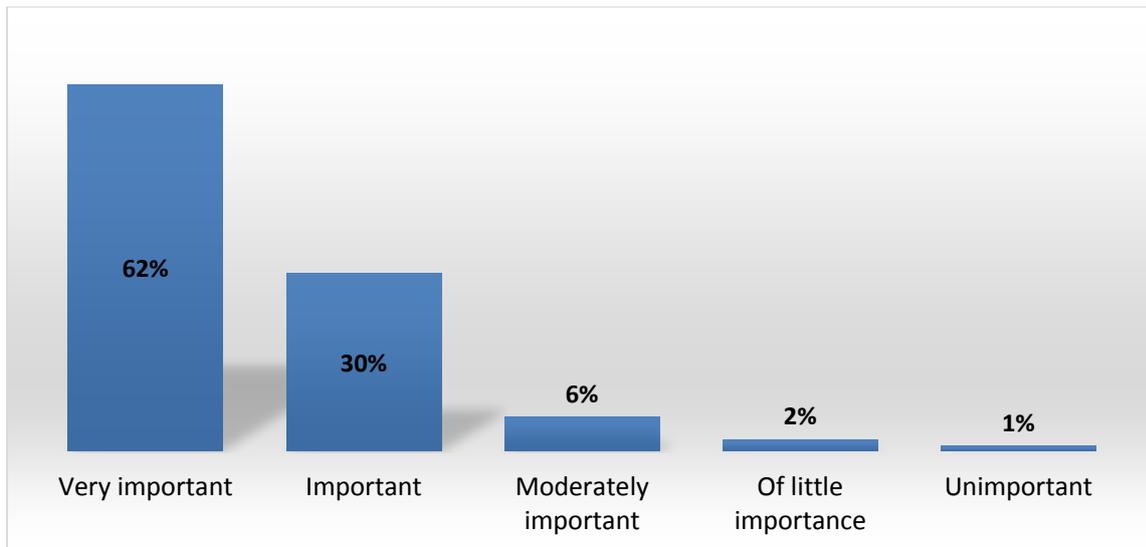


Figure 8: Importance of wildlife protection

5. Community Consultations (first round)

The first round of the community consultations perused the following goals:

- Inform the communities about the concept of the pilot PES scheme and the associated opportunities of participation.
- Consult with the communities about the elements of the PES scheme design and the proposed process of implementation.

In preparation of the community consultations selected staff of the GoL as well as selected villagers were trained as facilitators to assist the community consultation¹⁰. Two separate training sessions were conducted by project staff in early September 2016: one at the Faculty of Economics and Business Management, National University of Laos (FEBM-NUoL) for facilitators from the Vientiane Capital Provincial Office of Agriculture and Forestry (PAFO) and from the Xaythani District Agriculture and Forestry Officer (DAFO)¹¹; and one for the selected villager facilitators, which was conducted in a village (Nakhay) of the PKK NPA.

¹⁰ The training manual is available in English and Lao on request.

¹¹ Participants from DFRM and DoF of MAF were informed and invited but could not attend, however training materials were shared with them. These officers are the same people involved in the PES scheme consultation process in the PCV-PPA pilot PES scheme.

The comments and suggestions provided by the partner agencies and village facilitators were taken into the revised PES scheme community consultation material¹².

The first round of the community consultations was conducted in September 2016. Each community was approached in the spirit of honest and constructive collaboration. They were engaged in an inclusive and culturally relevant manner on the basis of a free, prior and informed consent aimed at establishing broad-based and sustainable community support for the PES scheme. Villagers were given the opportunity to participate in the PES scheme as well as to take on the responsibility to protect biodiversity, with a particular focus on Green Peafowl. Participation rates varied from village to village, but generally the consultations were well attended with many female participants; in some villages female participants were even the majority. According to the local officials, one major reason for the high female participation rate was the timing of the consultations during the rice harvest season. Many males were either busy with agricultural work or were collecting non-timber forest products¹³.

The community consultations were conducted over a one-day period per village and structured along eleven topics:

- PES scheme concept (What are PES schemes and how do they work?)
- Opportunities of participation (Who can be part of the PES scheme?)
- Anti-poaching patrol scheme design (What will the patrol scheme look like?)
- Community benefits (What will your community get?)
- Conservation auctions (How will the price per patrol be determined?)
- Payment transfer (How will the money get to your community?)
- Penalty system (What happens if your community does not honour the commitments?)
- Mechanism for grievance, conflict resolution and redress (How can your community file a complaint?)
- Contracting (How will we formalize the commitments?)
- Invitation to register an expression of interest (How can your community register an expression of interest?)
- Process of community engagement (What are the next steps?)

¹² The Community Consultation material is available on request.

¹³ It was also reported that in some villages men had been engaging in some off-farm employment, including in Thailand.

Each topic was first introduced by the project team to the full audience using a power point presentation. The presentation included photographs, illustrations, maps, satellite images and examples to help explaining the more complex topics. The amount of text was reduced to a minimum reach both literate and illiterate villagers. Exercises were included to help explain complex topics and to keep the audience interested and engaged. Copies of an information booklet containing the core information and most of the materials was distributed among the villagers at the beginning of the consultations. These booklets supported the discussions of the proposed PES scheme among the villagers during and after the completion of the community consultations. After the introduction of each topic the facilitators encouraged questions, comments, suggestions and concerns. Depending on the topic the discussions were either facilitated in the plenum or in small sub-groups. The facilitators explained to the villagers that the discussions were confidential and that no names would be recorded. The discussions of each sub-group were summarized and presented to the plenum¹⁴.

At the end of the consultations the villagers were given the opportunity to ask questions and voice comments, suggestions and concerns to any of the material presented during the consultations. The villagers were also invited to submit anonymous feedback as well as an expression of interest to engage in the PES scheme¹⁵. Both the village as a whole and individual villagers had the opportunity to express their interest. Village interest to negotiate a community conservation agreement was expressed by the village administration. The interest of individual villager to participate in the conservation auctions for anti-poaching patrols was expressed by village teams. Expressions of interest were accepted after completion of the consultations to allow communities to discuss internally.

Overall, the PES scheme concept and design were well received by the communities. Villagers and village authorities thought that the proposed PES scheme was as a good way to protect biodiversity including and Green Peafowl. The majority of questions, comments, suggestions and concerns raised by the villagers were concerned with the following:

- Payment amounts;
- Payment transfer mechanism;

¹⁴ The material used in the community consultations is available on request.

¹⁵ Expression of interest and feedback form together with envelopes were provided. The villagers were instructed to not provide their names and seal the envelopes before submission. The envelopes were collected through labelled, closed boxes, which were collected by the project team after a set number of days.

- Payment schedule;
- Insurance cover;
- Restrictions on the use of wildlife;
- Penalties for non-compliance; and
- Seasonal differences with respect to opportunity costs of time.

The project received an expression of interest from all six villages represented by the respective village heads or deputy heads. A total of 34 interested patrol teams submitted their expressions of interest, ranging from two teams in one village to as many as 9 teams in others. However, only twenty-six percent of groups satisfied the requirements with respect to group size and composition as well as the provision of signatures. In a follow-up, the project team provided assistance in organising groups resulting in thirty valid group submissions.

Providing the opportunity to provide feedback through anonymous feedback forms was effective. The project received fifty feedback forms, some of which containing questions, comments, suggestions, and concerns that were not voiced during the two-day community consultations. The feedback was assessed and used to adjust the PES scheme design. A summary of the feedback, the project response and any adjustments made were presented during the second round of the community consultations and the implementation of the conservation auctions.

6. Community Consultations (second round)

The second round of community consultations perused the following goals:

- Present the community resource profile.
- Respond to the feedback received during the community consultations and discuss corresponding adjustments made to the PES scheme design and the proposed process of implantation.
- Engage the communities in the development of a community action plan and community conservation agreement.

As in the preparation of the first round of the community consultations, selected staff of the GoL as well as selected villagers were trained by project staff as facilitators in separate training

sessions to assist the second round¹⁶. The training sessions additionally aimed to seek feedback on a draft community action plan and community conservation agreement that was developed based on inputs from the project and the feedback received during the first round of community consultations. The training was conducted in October 2016 in Na Ngom Kao village. The comments and suggestions provided by the participants of the training were used to revise the community consultation material (including the draft community action plan and community conservation agreement) that was prepared for the second round¹⁷.

The second round of community consultations was conducted in from end of October-November 2016. Community participation level was generally lower than the participation in the first round, which could be partly explained by the fact that individual villagers who have no interest in the scheme would opt not to attend further.

The community consultations were conducted within one day per village and structured along seven topics:

- Recap of suggested PES scheme
- Response to feedback received during the first round of community consultations
- Discussion of the community resource profile
- Legal restrictions on wildlife use
- Development of a community action plan
- Development of a community conservation agreement
- Next steps

As in the first round of community consultations, each topic was first introduced by the project team to the full audience using power point presentations. Copies of the village-specific community resource profiles and the community resource profile averaged across the eight villages were distributed among the villagers. After the introduction of each topic the facilitators initiated discussions to encourage questions, comments, suggestions and concerns. Depending on the topic, these discussions were conducted either in plenary format or in smaller sub-groups. The participants were encouraged to forward any other feedback within a few days after the completion of the second round of consultations to the project team. This allowed the communities to discuss internally in the absence of the project staff and facilitators.

¹⁶ The training manual is available in on request.

¹⁷ The material used in the negotiations of the Community Conservation Agreements is available on request.

The community consultations were successful in involving the village administration and the villagers in a productive discussion of the draft community action plan and community conservation agreement. After the second round of village consultations, the draft community action plan and community conservation agreement were revised based in the community feedback. Few substantive feedback was concerned with the document content but with their format, use of terminology, and clarifications of some legal terms. The revised community action plan and community conservation agreement were shared with project stakeholders in early 2017 for final comments. The community action plan and community conservation agreements were signed in July 2017 by all six villages.

7. Conducting Conservation Auctions

Conducting the conservation auctions perused the following goals:

- Select prospective suppliers of anti-poaching patrols.
- Estimate the marginal costs of anti-poaching patrolling.

In late October 2016, facilitators of the second round of community consultations were additionally trained to assist the training of village teams who registered interest in participating in the conservation auctions¹⁸.

The participants of the conservation auctions received training before the actual conservation auctions were carried out. The training and actual auctions were conducted successively during late November 2016 such that the actual auctions could be conducted simultaneously in all villages. The training was structured along five topics:

- Recap of suggested anti-poaching patrol scheme (including a response to the community feedback)
- Environmental code of conduct
- Physical and cultural resources chance-find procedures
- Patrol contracts
- Bidding training

¹⁸ The training manual is available in on request.

The aim of the training was to explain in detail the content of the patrol contract (Scheufele et al. 2016b)¹⁹ and the bidding process including procedures and forms (Scheufele and Bennett 2017)²⁰. The teams were trained to state the number of patrol they would each be willing to do per year given a sequence of prices per patrol, disaggregated by the busy and quiet seasons. The training included mock auctions through which the teams gained bidding experience through ‘learning-by-doing’. The mock auctions were customised to the context of the eight villages and used examples villagers were familiar with. Exercises included, for example, bidding for purchase orders and for construction contracts. A fundamental aspect of the training was to explain the concept of opportunity costs as a basis for formulating their bids. In the local context, a relatively easy way of explaining the concept of opportunity cost is a comparison between a daily wage one can earn in doing casual work and the payment offered per patrol²¹. In order to account for differences in opportunity costs across seasons, teams were trained to submit a separate bid for each season.

In the actual auctions all teams had to fulfil the following requirements:

- All bidding teams submitted a valid ‘register of interest’ from and thus consist of 5 or 6 members, of whom 2 or 3 members are village militia.
- A team was allowed to participate in the bidding even though not all team members were present. However, the members who were present needed to have the authority to represent the whole team.
- Only team members who completed the bidding training were allowed to participate in the bidding.
- All team members (or their representatives) understood the tasks, responsibilities, obligations and benefits of participating in the patrol scheme as stated in the patrol contract, which was explained in detail during the training.
- Bids were only valid if all team members signed the bidding forms.

To minimise potential collusion among teams. Additionally, the following rules were applied:

- Teams were placed apart from each other.

¹⁹ The facilitators presented the patrol contract and explained it line by line.

²⁰ The conservation auction material is available on request.

²¹ It must be stressed that benefits include not only payments for patrolling but also bonus payments for dismantling snare lines and poacher camps, insurance, training, personal equipment, and formal recognitions for good performance.

- Discussions across teams were prohibited.
- To complete the bidding, the bidding forms had to be put into an envelope and handed over to a facilitator.

Having auctions conducted in one day in all villages minimised potential collusion, despite the fact that possible personal communications could not be fully excluded because of the physical proximity and good access among the villages. In addition, the project team tried to minimise any potential collusion by stressing the competitive nature of the auctions.

The conservation auctions were conducted successfully despite the fact that the concept of bidding was a novelty to almost all villagers. Explaining concepts by means of familiar examples and mock auctions proved to be of value in teaching novel and complex topics (such as the concept of opportunity costs). In general, most prospective patrol teams had a reasonably good sense of their opportunity costs of time. This may be explained by their education levels and exposure to markets. However even though every effort was made to encourage all team members to be present at the training and the actual auctions, this was not achieved. Some teams submitted bids that were not signed by all team members²². In these cases, the bidding forms were left with teams to get all the required signatures. To prevent possible alteration of the bids and associated conflicts, the project team took photographs of the original forms. Teams that lost team members after the auctions were allowed to replace them with individuals from the same village. In total, thirty teams²³ from all six target villages submitted valid bids, of which seventeen were offered patrol contracts at the determined 'market' price following the auctions²⁴. Subsequently, three additional teams were offered patrol contracts. As a result, twenty teams signed patrol contracts.

8. Conclusions

PES schemes offer the potential of achieving environmental improvement goals alongside providing livelihoods for rural people. This scheme provides benefits to both the engaging

²² It was not uncommon to observe situations where one team member tended to sign the bidding sheet on other members' behalf who did not present at the auction but which was not acceptable.

²³ These are original valid teams, however after the auction some changes in teams occurred including both number of teams and team member movements.

²⁴ For details on the results of the conservation auctions see (Scheufele and Bennett 2017; Scheufele et al. 2017).

communities as a whole and individual villagers who are engaged in the patrol teams through a set of incentives both monetary and non-monetary. GoL has indicated an interest in applying such schemes. The PES project has received substantive support and cooperation from all six target communities and all levels of the GoL²⁵. This indicates a strong interest in the development and implementation of PES schemes in Lao PDR. Implementation practicalities, however, presented a challenge, in particular the design of a PES scheme requires an extensive community engagement process to identify and recruit prospective suppliers. A challenging aspect of the conservation auctions was getting rural communities to understand how to determine their opportunity costs of patrolling during the bidding process. Underestimating these costs could make suppliers engaging in the PES scheme worse-off. Nevertheless PES schemes such as this one can create a new opportunity for rural communities in ES supply based on its voluntary nature. The villagers' enthusiasm for the PES scheme might have been supported by the importance they attach to wildlife protection as suggested by the household survey with over sixty percent of the households, on average, considering wildlife conservation as very important. Nevertheless, the extent to which other specific non-monetary motivation might have influenced community interest in the PES scheme remains to be further explored and tested, which is beyond the scope of the current scheme design consideration.

²⁵ Examples of this include the expressions of interest in the scheme by all target village authorities, and the Ban Xang cluster authority who have expressed strong interest in the scheme, evidenced from their speeches during the consultations.

Acknowledgements

I wish to acknowledge Gabriela Scheufele, Jeff Bennett and Phouphet Kyophilavong for their leadership and advice in the conduct of the community consultation process.

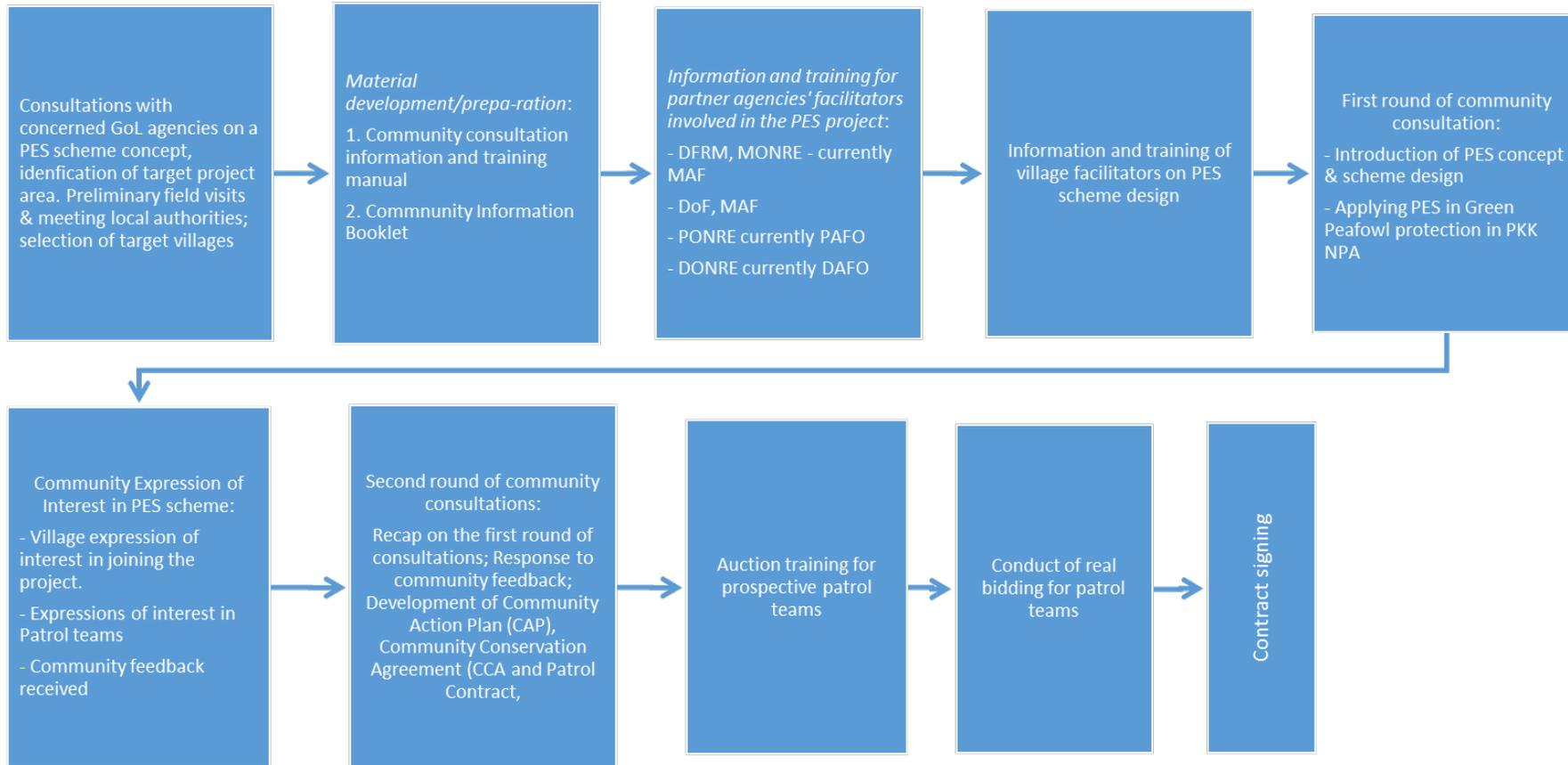
Special thanks go to Saysamone Phoydouangsy, Sonesana Mixayboua and Yiakhang Pangxang for their assistance in the conduct of the community consultation process.

This report is based on the data from the community consultation process which involves partner agencies' cooperation and inputs. Thanks go to the following individual partner facilitators for their support and contributions: Nouanchanh Souvannasy and Peter Thavone from the Ministry of Agriculture and Forestry; Chittaphone Vilayhane and Akhat Intanouvong from the Vientiane Capital Province Agriculture and Forestry Office; and Mr. Boualet Sibounheuang from the Xaythani District Agriculture and Forestry Office.

The community consultations would not have been possible without the active cooperation of all concerned local authorities, especially the six village administrations and officials of the Ban Xang cluster. Finally I wish to thank all village level facilitators who are numerous to mention individually for their contributions to this process.

Annex

Community engagement process



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