



## Cambodian Galliformes Conservation Programme

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# Monthly Report

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## Summary

Cambodia is home to 14 species of Galliformes of which four are considered to be globally threatened. The most important areas for Galliformes within Cambodia are the Eastern Plains, Northern Plains and Southwest Cambodia. Between 3<sup>rd</sup> and 9<sup>th</sup> January 2006, we undertook ornithological and questionnaire surveys to establish the status and threats to Galliformes, particular the Chestnut-headed Hill-partridge, in the Phnom Kravanh area, Pursat Province, North Cardamom Mountains, Southwest Cambodia. We established the presence of eight galliform species by the ornithological and questionnaire surveys and by a trapping survey. Between 23rd and 26th January 2006, we undertook ornithological and questionnaire surveys to establish the status and threats to Galliformes, in particular Green Peafowl in the Phnom Tbeng Mountains, Preah Vihea Provinces, in the Northern Plains of Cambodia. We established the presence of six Galliform species by the ornithological, direct observation and questionnaire surveys. All species occurred at low densities with Siamese Fireback, Silver Pheasant, Scaly-breasted Hill-partridge and Red Junglefowl being the most numerous.

## 1. Study areas

Between 3<sup>rd</sup> and 9<sup>th</sup> January 2006 the study was based in the Phnom Kravanh area which is located in Pursat province, within the North Cardamom Mountain ranges in Southwest Cambodia. Within this very large we conducted surveys within the two most important villages, namely Khset Borei Village, Santre Commune and Khsang Village, Rokart Commune both within Phnom Kravanh District, Pursat Province. The area around Khsetra Borei Village primarily consisted of rice fields surrounded by deciduous and Bamboo forests. The area is surrounded by mountains, which are mostly at low elevation. Khsang Village is centred on rice fields and surrounded by dense, deciduous forests on the high elevation mountains. At this study area we surveyed all galliforme species, but we were primarily concerned with collecting information on Chestnut-headed Partridge.

From 23<sup>rd</sup> to 26<sup>th</sup> January 2006 the study was undertaken in Laang Thmor Bei Dom situated in Phnom Village, Laang Commune, Sangkum Thmey District, Preah Vihea Province which is a part of Phnom Tbeng Mountains, in the Northern Plains of Cambodia. Most of the area is covered by dense and semi-dense forests interspersed with grass fields. The study area was situated at about 440 metre a.s.l elevation within the mountains. Information provided by local people indicated that there are plenty of Green Peafowl at the grass fields on the mountains, especially Thmor Chhath, Preah Bath, Taing You and Ba Prom. At this study area we surveyed all galliforme species, but we were primarily concerned with collecting information on Green Peafowl.

## 2. Methods

Three methods were used to record the presence of Galliformes, assess their numbers and establish their threats. These were ornithological and questionnaire surveys, and a trapping survey.

## 2.1 Ornithological surveys

Surveys were undertaken between 3<sup>rd</sup> and 9<sup>th</sup> January 2006 using a combination of transect surveys (to establish presence) and point-count surveys (to measure abundance). Each transect took about 2 hours to walk, started at 05:30 and 16:30 and finished at 07:30 and 18:30, respectively. When a bird was heard calling its direction and estimated distance from the observer was recorded. The location of record was recorded by a Geographical Positioning System (GPS). During the surveys, the presences of other important nongalliform bird species were also recorded.

Point-count methodology was used to record the wailing call of male Green Peafowl. Green Peafowl calls can by heard for up to 1km so point-count locations were situated at least 2 km apart along jungle trails. The location of each point count was recorded by a Geographical Positioning System (GPS). Each survey point was selected at random. The counting period lasted for two hours and was undertaken immediately after sunrise (05:30 to 07:30) and before sunset (16:30 to 18:30). When each call was heard, its direction and estimated distance from the observer was recorded. At each point-count location, a number of habitat variables were measured. These methods were developed by Nick Brickle and were successfully used to survey the species in Vietnam. During the point-count surveys, the presences of other galliform and important general bird species were recorded.

### 2.2 Direct observations

In addition to ornithological surveys, direct observations of the species (footprints and visual records) were also recorded. These surveys were conducted during the periods between the point-count surveys. For these surveys, we undertook searches along the trails and across fields. Care was taken to ensure that the footprints of Green Peafowl were not confused with those of large waterbirds, and they were usually separated by their location. Large waterbirds prefer to frequent and forage near ponds or waterway.

## 2.3 Questionnaire survey of local people and hunters

A questionnaire survey of local communities was also undertaken to collect information on their perceived status of Galliformes, their distribution and to ascertain their threats.

The village elders and senior hunters specifically and more generally other village people and hunters were shown pictures of Galliformes in the Guide to Birds of Southeast Asia, and the Guide to Birds of Cambodia and asked the following questions:

How many species of Galliformes are there in the area?

How many individuals of each species are there in the area?

How many individuals of each species are hunted in the area?

How many hunters are there in the area?

How many hunters come from outside area?

What hunting methods do they use?

How many traps are set in the area?

How many traps did each hunter set in the area?

Where did they sell hunted birds?

When did hunters always hunt green peafowl and collect its chicks?

How many days are traps set in the area?

Would they hunt if alternative food were provided?

What alternative food would they like?

Do you think it is important to protect the wildlife around their village?

Have you preferred Green Peafowl? Why?

### 2.4 Trapping surveys

A trapping survey, using lines of leg-hold snares, was undertaken. About 16 traps were set along trails and near water and were checked regularly.

### 3. Results

#### 3.1 Galliformes

## a. Khsetra Borei Village

The results from the ornithological and questionnaire surveys are summarised in Table 1 and 2. Between 3<sup>rd</sup> and 7<sup>th</sup> January 2006, we walked six transects and conducted two pointcounts, during which three species of Galliformes were heard calling at 44 locations and three individuals of Scaly-breasted Hill-partridge and Red Junglefowl were observed directly along the transects and around the point-counts. Information from the questionnaires revealed that Green Peafowl were present near the ricefields but they were not heard or observed during our surveys. The local population of Green Peafowl was thought to number around 30 individuals within many separate small groups. Chestnut-headed Partridge was not heard calling anywhere and was thought to be only present in small numbers on the high elevation mountains far from the village. Siamese Fireback was thought to be more numerous than Chestnut-headed Partridge and two individuals were observed feeding with domestic chickens within the village. Scaly-breasted Partridge were heard calling from nine points and seen at one point, occurring at elevations lower than 300 metre asl. It was thought that this species was widespread and common. Red Junglefowl was heard calling from 32 points and seen at three points along transects and around point-counts. It was thought that species is common throughout the area.





A male and female Siamese Fireback feeding with chickens at Khsetra Borei village.

Mr Chhum Samnang interviewing and raising awareness of galliformes in Khsetra Borei village, Santre commune.



**Table 1** Summary information from ornithological surveys undertaken in Khsetra Borei village, Santre commune, Phnom Kravanh district, Pursat province during 3<sup>rd</sup> to 7<sup>th</sup> January 2006

| Species   | Num      | ber of      | Number of birds | Number of birds |
|---|----------|-------------|-----------------|-----------------|
| Species   | Transect | Point-count | heard           | seen            |
| Chinese Francolin Francolinus pintadeanus           | 6        | 2           | 1               | 0               |
| Orange-necked Hill-partridge<br>Arborophila davidi  | 6        | 2           | 0               | 0               |
| Chestnut-headed Partridge<br>Arborophila cambodiana | 6        | 2           | 0               | 0               |
| Scaly-breasted Partridge  Arborophila chloropus     | 6        | 2           | 9               | 1               |
| Red Junglefowl Gallus gallus                        | 6        | 2           | 34              | 3               |
| Silver Pheasant Lophura nycthemera                  | 6        | 2           | 0               | 0               |
| Siamese Fireback<br>Lophura diardi                  | 6        | 2           | 0               | 0               |
| Germain's Peacock Pheasant Polyplectron germaini    | 6        | 2           | 0               | 0               |
| Grey Peacock Pheasant Polyplectron bicalcaratum     | 6        | 2           | 0               | 0               |
| Green Peafowl Pavo muticus                          | 6        | 2           | 0               | 0               |
| Bar-backed Partridge Arborophila brunneopectus      | 6        | 2           | 0               | 0               |
| Rain Quail Coturnix coromandelica                   | 6        | 2           | 0               | 0               |
| Japanese Quail Coturnix japonica                    | 6        | 2           | 0               | 0               |
| Blue-breasted Quail Coturnix chinensis              | 6        | 2           | 0               | 0               |



A bullet, used for illegal hunting and found along a transect in Khsetra Borei village, Santre commune, Phnom Kravanh district

**Table 2** Summary information from the questionnaire survey undertaken in Khsetra Borei village, Santre commune, Phnom Kravanh district, Pursat province during 3<sup>rd</sup> to 7<sup>th</sup> January 2006

| Species   | Numbers thought to occur | Numbers hunted |  |
|---|--------------------------|----------------|--|
| Chinese Francolin                                   | 3000                     | 50             |  |
| Francolinus pintadeanus                             | 3000                     |                |  |
| Chestnut-headed Partridge<br>Arborophila cambodiana | 100                      | 10             |  |
| Orange-necked Hill-partridge<br>Arborophila davidi  | 0                        | 0              |  |
| Scaly-breasted Partridge<br>Arborophila chloropus   | 1000                     | 500            |  |
| Red Junglefowl Gallus gallus                        | 1000                     | 5              |  |
| Silver Pheasant Lophura nycthemera                  | -                        | -              |  |
| Siamese Fireback <i>Lophura diardi</i>              | 200                      | 40             |  |
| Germain's Peacock Pheasant Polyplectron germaini    | 0                        | 0              |  |
| Grey Peacock Pheasant Polyplectron bicalcaratum     | 0                        | 0              |  |
| Green Peafowl Pavo muticus                          | 30                       | 0              |  |
| Bar-backed Partridge Arborophila brunneopectus      | 0                        | 0              |  |
| Rain Quail<br>Coturnix coromandelica                | 0                        | 0              |  |
| Japanese Quail Coturnix japonica                    | 0                        | 0              |  |
| Blue-breasted Quail Coturnix chinensis              | 500                      | 0              |  |

## b. Khsang Village

The results from the ornithological, questionnaire and trapping surveys are summarised in Table 3 and 4. Between 7<sup>th</sup> and 9<sup>th</sup> January 2006, we walked two transects and conducted two point-counts, during which two species of Galliformes were heard calling at 6 locations and three individual Green Peafowl were observed directly during the point-counts. Information from the questionnaires revealed that Green Peafowl were present near the ricefields and was often heard and observed at their ricefields near the village. Its population was thought to number around 25 individuals within three separate groups. Chestnut-headed Partridge was not heard calling anywhere and was thought to only being present in relatively large numbers on the higher elevations in mountains far from the village. Siamese Fireback was thought to be as numerous as Chestnut-headed Partridge and the species had been caught by local people. Scaly-breasted Partridge was heard calling from one point, ranging at elevations lower than 300 metres asl. It was thought that this species was lesser numerous than Chestnut-headed Hill-partridge. Red Junglefowl was not heard calling along transects and around point-counts. Although it was thought that species is common throughout the area. No birds were caught during the trapping survey.

**Table 3** Summary information from the ornithological surveys undertaken in Khsang village, Rokart commune, Phnom Kravanh district, Pursat province during 7<sup>th</sup> to 9<sup>th</sup> January 2006

| C   | Num      | ber of      | Number of birds | Number of birds |
|---|----------|-------------|-----------------|-----------------|
| Species   | Transect | Point-count | heard           | seen            |
| Chinese Francolin Francolinus pintadeanus           | 2        | 2           | 0               | 0               |
| Orange-necked Hill-partridge<br>Arborophila davidi  | 2        | 2           | 0               | 0               |
| Chestnut-headed Partridge<br>Arborophila cambodiana | 2        | 2           | 5               | 1               |
| Scaly-breasted Partridge  Arborophila chloropus     | 2        | 2           | 1               | 0               |
| Red Junglefowl  Gallus gallus                       | 2        | 2           | 3               | 0               |
| Silver Pheasant Lophura nycthemera                  | 2        | 2           | 0               | 0               |
| Siamese Fireback<br>Lophura diardi                  | 2        | 2           | 0               | 0               |
| Germain's Peacock Pheasant Polyplectron germaini    | 2        | 2           | 0               | 0               |
| Grey Peacock Pheasant Polyplectron bicalcaratum     | 2        | 2           | 0               | 0               |
| Green Peafowl Pavo muticus                          | 2        | 2           | 5               | 3               |
| Bar-backed Partridge Arborophila brunneopectus      | 2        | 2           | 0               | 0               |
| Rain Quail Coturnix coromandelica                   | 2        | 2           | 0               | 0               |
| Japanese Quail<br>Coturnix japonica                 | 2        | 2           | 0               | 0               |
| Blue-breasted Quail Coturnix chinensis              | 2        | 2           | 0               | 0               |

**Table 4** Summary information from the questionnaire survey undertaken in Khsang village, Rokat commune, Phnom Kravanh district, Pursat province during 7<sup>th</sup> to 9<sup>th</sup> January 2006

| Species                      | Numbers thought to occur | Numbers hunted |  |
|------------------------------|--------------------------|----------------|--|
| Chinese Francolin            | 2                        | 2              |  |
| Francolinus pintadeanus      | 2                        | <u> </u>       |  |
| Orange-necked Hill-partridge | 0                        | 0              |  |
| Arborophila davidi           | Ŭ                        | 0              |  |
| Chestnut-headed Partridge    | 1000                     | 100            |  |
| Arborophila cambodiana       | 1000                     | 100            |  |
| Scaly-breasted Partridge     | 500                      | 30             |  |
| Arborophila chloropus        | 300                      | 30             |  |
| Red Junglefowl               | 10000                    | 400            |  |
| Gallus gallus                | 10000                    | <del></del>    |  |
| Silver Pheasant              | 0                        | 0              |  |
| Lophura nycthemera           | Ŭ                        | 0              |  |
| Siamese Fireback             | 300                      | 10             |  |
| Lophura diardi               | 300                      | 10             |  |
| Germain's Peacock Pheasant   | ?                        | 0              |  |
| Polyplectron germaini        | ·                        | 0              |  |
| Grey Peacock Pheasant        | 0                        | 0              |  |
| Polyplectron bicalcaratum    | Ů                        |                |  |
| Green Peafowl                | 25                       | 2              |  |
| Pavo muticus                 | 23                       |                |  |
| Bar-backed Partridge         | 0                        | 0              |  |
| Arborophila brunneopectus    | Ů                        |                |  |
| Rain Quail                   | 10                       | 0              |  |
| Coturnix coromandelica       | 10                       |                |  |
| Japanese Quail               | 0                        | 0              |  |
| Coturnix japonica            | Ŭ                        |                |  |
| Blue-breasted Quail          | 0                        | 0              |  |
| Coturnix chinensis           | Ĭ                        | U              |  |

## c. Phnom Tbeng Mountain

The results from the ornithological, direct observation and questionnaire surveys are summarised in Tables 5, 6 and 7. Point count surveys were undertaken at seven locations and a total of 11 Green Peafowl were heard calling. At four further locations footprints of the species were recorded.



Jungle base camp during surveys in the Phnom Tbeng Mountains



Mr. Chhum Samnang undertaking a point-count survey in the Phnom Tbeng Mountains

**Table 5** Summary information from the ornithological (point count) surveys undertaken within the Laang Thmor Bei Dom in Phnom Tbeng Mountains, Northern Plains of Cambodia during 23<sup>rd</sup> to 26<sup>th</sup> January 2006

| Species   | Number of Survey<br>Points | Number of birds<br>heard | Number of birds<br>seen |
|---|----------------------------|--------------------------|-------------------------|
| Chinese Francolin                                       | 7                          | 0                        | 0                       |
| Francolinus pintadeanus                                 | 1                          | U                        | U                       |
| Chestnut-headed Partridge <i>Arborophila cambodiana</i> | 7                          | 0                        | 0                       |
| Scaly-breasted Partridge Arborophila chloropus          | 7                          | 2                        | 0                       |
| Red Junglefowl  Gallus gallus                           | 7                          | 50                       | 0                       |
| Silver Pheasant Lophura nycthemera                      | 7                          | 0                        | 0                       |
| Siamese Fireback <i>Lophura diardi</i>                  | 7                          | 0                        | 0                       |
| Germain's Peacock Pheasant Polyplectron germaini        | 7                          | 0                        | 0                       |
| Green Peafowl Pavo muticus                              | 7                          | 11                       | 0                       |
| Bar-backed Partridge Arborophila brunneopectus          | 7                          | 0                        | 0                       |
| Rain Quail<br>Coturnix coromandelica                    | 7                          | 0                        | 0                       |
| Japanese Quail Coturnix japonica                        | 7                          | 0                        | 0                       |
| Blue-breasted Quail <i>Coturnix chinensis</i>           | 7                          | 0                        | 0                       |
| Grey Peacock Pheasant Polyplectron bicalcaratum         | 7                          | 0                        | 0                       |
| Orange-necked Hill-partridge<br>Arborophila davidi      | 7                          | 0                        | 0                       |



Footprints of Green Peafowl along trails and observed by Mr. Chhum Samnang in the Laang Thmor Bei Dom in Phnom Tbeng Mountains

**Table 6** Summary information from direct observation surveys undertaken within the Laang Thmor Bei Dom in Phnom Tbeng Mountains, Northern Plains of Cambodia during 23<sup>rd</sup> to 26<sup>th</sup> January 2006

| Species                      | Number of locations observed | Indications of birds presence | Number of birds<br>seen |
|------------------------------|------------------------------|-------------------------------|-------------------------|
| Chinese Francolin            | 0                            |                               | 0                       |
| Francolinus pintadeanus      | U                            | -                             | U                       |
| Chestnut-headed Partridge    | 0                            | _                             | 0                       |
| Arborophila cambodiana       | U                            |                               | <u> </u>                |
| Scaly-breasted Partridge     | 0                            |                               | 0                       |
| Arborophila chloropus        | U                            | -                             | U                       |
| Red Junglefowl               | every where                  | call, seen and                | plenty                  |
| Gallus gallus                | every where                  | footprints                    | picity                  |
| Silver Pheasant              | 0                            |                               | 0                       |
| Lophura nycthemera           | U                            |                               | <u> </u>                |
| Siamese Fireback             | 0                            | _                             | 0                       |
| Lophura diardi               | V                            | _                             | U                       |
| Germain's Peacock Pheasant   | 0                            | _                             | 0                       |
| Polyplectron germaini        | V                            | _                             | <u> </u>                |
| Green Peafowl                | 4                            | footprints                    | 0                       |
| Pavo muticus                 | ı                            | Tootprints                    | 0                       |
| Bar-backed Partridge         | 0                            | _                             | 0                       |
| Arborophila brunneopectus    | Ů                            |                               | •                       |
| Rain Quail                   | 0                            | _                             | 0                       |
| Coturnix coromandelica       | Ů                            |                               | •                       |
| Japanese Quail               | 0                            | _                             | 0                       |
| Coturnix japonica            | Ů                            |                               | •                       |
| Blue-breasted Quail          | 0                            | _                             | 0                       |
| Coturnix chinensis           | Ŭ .                          |                               | •                       |
| Grey Peacock Pheasant        | 0                            | _                             | 0                       |
| Polyplectron bicalcaratum    | V V                          |                               | •                       |
| Orange-necked Hill-partridge | 0                            | _                             | 0                       |
| Arborophila davidi           | <u> </u>                     |                               | Ŭ                       |



Open grass fields adjacent to forest provide important foraging areas for Green Peafowl.



Mr. Chhum Samnang undertaking a transect survey in the Laang Thmor Bei Dom in Phnom Tbeng Mountains

Table 7 Summary information from the questionnaire survey undertaken within the Laang Thmor Bei Dom in Phnom Tbeng Mountains, Northern Plains of Cambodia during 23<sup>rd</sup> to 26<sup>th</sup> January 2006

| Species                      | Numbers thought to occur | Numbers hunted                        |  |
|------------------------------|--------------------------|---------------------------------------|--|
| Chinese Francolin            | 10                       | 0                                     |  |
| Francolinus pintadeanus      | 10                       | U                                     |  |
| Chestnut-headed Partridge    | 0                        | 0                                     |  |
| Arborophila cambodiana       | Ŭ                        | 0                                     |  |
| Orange-necked Hill-partridge | 0                        | 0                                     |  |
| Arborophila davidi           | Ŭ                        | U                                     |  |
| Scaly-breasted Partridge     | 10000+                   | 0                                     |  |
| Arborophila chloropus        | 10000                    | U                                     |  |
| Red Junglefowl               | 10000++                  | 60                                    |  |
| Gallus gallus                | 10000++                  | 00                                    |  |
| Silver Pheasant              | 10000+                   | 200                                   |  |
| Lophura nycthemera           | 10000                    | 200                                   |  |
| Siamese Fireback             | 10000                    | 0                                     |  |
| Lophura diardi               | 10000                    | 0                                     |  |
| Germain's Peacock Pheasant   | 0                        | 0                                     |  |
| Polyplectron germaini        | Ŭ                        | · · · · · · · · · · · · · · · · · · · |  |
| Green Peafowl                | 300                      | 10                                    |  |
| Pavo muticus                 | 300                      | 10                                    |  |
| Bar-backed Partridge         | 0                        | 0                                     |  |
| Arborophila brunneopectus    | Ŭ                        | 0                                     |  |
| Rain Quail                   | 0                        | 0                                     |  |
| Coturnix coromandelica       | Ŭ                        | 0                                     |  |
| Japanese Quail               | 0                        | 0                                     |  |
| Coturnix japonica            | V                        | <b>V</b>                              |  |
| Blue-breasted Quail          | 0                        | 0                                     |  |
| Coturnix chinensis           | Ŭ                        | <b>V</b>                              |  |
| Grey Peacock Pheasant        | 0                        | 0                                     |  |
| Polyplectron bicalcaratum    | l                        | U                                     |  |

#### 3.2 Threats to Galliformes

The information we collected on the numbers of Galliformes hunted in all three study areas clearly show that illegal trapping is a major threat to the status and conservation of many species. Trapping is undertaken by some villagers living around the area in order to provide supplementary food. This usually involves setting up to 60 traps per hunter along old trails and near water to opportunistically trap any ground dwelling animals or birds. Not all species are equally affected by hunting, with those that are easy to catch (Chestnut-headed Hill-partridge, Scaly-breasted Hill-partridge and Red Junglefowl), or are desirable for meat, eggs and feathers (Green Peafowl) being especially targeted by hunters. The main purpose of this trapping is to provide food for the hunter and his family, the village and occasionally (especially in the case of Green Peafowl) for the pet trade. Recently, in October 2005, one Green Peafowl was hunted, an army officer stationed in the village. During the rice harvesting season Green Peafowl always fly down from the mountains to the foothill in order to feed on the rice fields and this provides villagers with a good opportunity to shoot the birds.

Another threat to Galliformes in the area we surveyed is habitat degradation by illegal logging to provide wood for house construction by local people and neighbour villagers or to generate income, and forest clearance to provide area for cultivation. Possibly of more

concern is that not only does logging destroy habitats, but it also opens up access to the forest, causes disturbance and loggers also hunt Galliformes for food and start cooking fires, which may spread and cause further forest damage. The collection of non-timber products (bamboos, resins, fruits) and food (plants, fish, etc) principally causes disturbance but in addition these foraging parties hunt Galliformes for food whilst in the forest and start cooking fires. They are usually accompanied by dogs into the forest. This adds to the disturbance problems, may spread disease to wildlife.

## 3.3. Other Bird Species

In addition to recording galliform species, other important non-galliform bird species were also recorded and are summarised in Tables 7 & 8.

**Table 7** Summary information of important general species observed within the Phnom Kravanh area in the Cardamom Mountains, Southwest Cambodia, during 3<sup>rd</sup> to 9<sup>th</sup> January 2006

| Species                      | Scientific Names           | Status |
|------------------------------|----------------------------|--------|
| Great Hornbill               | Buceros bicornus           | Common |
| Greater Racket-tailed Drongo | Dicrurus paradiseus        | Common |
| Coppersmite Barbet           | Megalaima haemacephala     | Common |
| Asian Emerald Cuckoo         | Chrysococcyx maculatus     | Rare   |
| Little Egret                 |                            | Common |
| Ashy Minivet                 | Pericrocotus divaricatus   | Rare   |
| Asian Barred Owlet           | Glaucidium cuculoides      | Rare   |
| Tawny-breasted Parrotfinch   |                            | Common |
| Red-vented Barbet            | Megalaima lagrandieri      | Common |
| Bronzed Drongo               | Dicrurus aeneus            | Common |
| Chestnut-tailed Staring      | Sturnus malabaricus        | Common |
| White-crested Laughingthrush | Garrulax leucolophus       | Common |
| Red-wattled Lapwing          | Vanellus indicus           | Rare   |
| Red-collared Dove            | Streptopelia tranquebarica | Common |
| Rock Pigeon                  | Columba livia              | Common |
| Spotted Dove                 | Streptopelia chinensis     | Common |
| Green-billed Malkoha         | Phaenicophaeus tristis     | Rare   |
| Black Drongo                 | Dicrurus macrocercus       | Common |
| White-rumped Shama           | Copsychus malabaricus      | Rare   |
| Red-breasted Parakeet        | Psittacula alexandri       | Common |
| Mountain Imperial Pigeon     | Ducula badia               | Common |
| White-billed Woodpecker      | Dryocopus javensis         | Common |
| Blue-tailed Bee-eater        | Merops philippinus         | Common |
| Lesser Coucal                | Centropus bengalensis      | Rare   |
| Greater Coucal               | Centropus sinensis         | Common |
| Common Hoopoe                | Upupa epops                | Common |
| Oriental Bay Owl             | Phodilus badius            | Rare   |
| Chinese Sparrowhawk          | Accipiter soloensis        | Rare   |
| Dollarbird                   | Eurystomus orientalis      | Common |
| Great-eared Nightjar         | Eurostopodus macrotis      | Common |
| Large-tailed Nightjar        | Caprimulgus macrurus       | Common |
| Savanna Nightjar             | Caprimulgus affinis        | Common |
| Wreath Hornbill              | Aceros undulatus           | Rare   |
| Greater Flameback            | Chrysocolaptes lucidus     | Common |

| Hill Myna                     | Gracula religiosa         | Rare   |
|-------------------------------|---------------------------|--------|
| Orange-backed Woodpecker      |                           | Common |
| Red-billed Blue Mapie         | Urocissa erythrorhyncha   | Common |
| Black-throated Sunbird        | Aethopyga saturata        | Common |
| Crimson Sunbird               | Aethopyga siparaja        | Rare   |
| Blyth's Kingfisher            |                           | Rare   |
| Chestnut-headed Bee-eater     | Merops leschenaulti       | Common |
| Grey-rumped Treeswift         |                           | Common |
| Crested Myna                  |                           | Rare   |
| Oriental Pie Hornbill         | Anthracoceros albirostris | Common |
| Black-rumped Woodpcker        |                           | Common |
| Black-headed Woodpecker       | Picus erythropygius       | Common |
| Grey-headed Woodpecker        | Picus canus               | Common |
| Grey-headed canary Flycatcher | Culicicapa ceylonensis    | Rare   |
| Dusky Warbler                 | Phylloscopus fuscatus     | Rare   |
| Lineated Barbet               | Megalaima lineata         | Rare   |
| Black-hooded Oriole           | Oriolus xanthornus        | Common |
| Black-winged Cuckooshrike     | Coracina melaschistos     | Common |
| Ashy Drongo                   | Dicrurus leucophaeus      | Common |
| Black-crested Bulbul          | Pycnonotus melanicterus   | Common |

**Table 8** Summary information of important non-galliform bird species observed within the Laang Thmor Bei Dom in Phnom Tbeng Mountains, Northern Plains of Cambodia during 22<sup>nd</sup> to 27<sup>th</sup> January 2006

| Species                      | Scientific Names          | Status      |
|------------------------------|---------------------------|-------------|
| Black-hooded Oriole          | Oriolus xanthornus        | Common      |
| Greater Racket-tailed Drongo | Dicrurus paradiseus       | Rare        |
| Red-billed Makoha            | Phaenicophaeus javanicus  | Rare        |
| Oriental-pied Hornbill       | Anthracoceros albirostris | Very common |
| Red-billed Blue Mapie        | Urocissa erythrorhyncha   | Common      |
| Black Drongo                 | Dicrurus macrocercus      | Common      |
| Puff-throated Bulbul         | Alophoixus ochraceus      | Common      |
| Black-headed Bulbul          | Pycnonotus atriceps       | Common      |
| Rufous Woodpecker            | Celeus brachyurus         | Common      |
| Red-wattled Lapwing          | Vanellus indicus          | Rare        |
| Asian Emerald Cuckoo         | Chrysococcyx maculatus    | Rare        |
| Asian Barred Owlet           | Glaucidium cuculoides     | Rare        |
| Black Baza                   | Aviceda leuphotes         | Rare        |
| Mountain Imperial Pigeon     | Ducula badia              | Common      |
| Edible-nest Swiftlet         | Collocalia fuciphaga      | Common      |
| Emerald Dove                 | Chalcophaps indicus       | Common      |
| Crested Serpent Eagle        | Spilornis cheela          | Rare        |
| Olive-backed Sunbird         | Nectarinia jugularis      | Rare        |
| Ochraceous Bulbul            | Alophoxus pallidus        | Common      |
| Black-crested Bulbul         | Pycnonotus melanicterus   | Common      |
| Sooty-headed Bulbul          | Pycnonotus aurigaster     | Rare        |
| Black-naped Oriole           | Oriolus chinensis         | Rare        |
| Brown-backed Needletail      | Hirundapus giganteus      | Very common |
| Common Flameback             | Dinopium javanense        | Common      |
| Large-billed Crow            | Corvus macrohynchos       | Common      |









A flock of Red-breasted Parakeet





Black Baza was photographed by Mr. Chhum Samnang in the Laang Thmor Bei Dom in Phnom Tbeng Mountains



Mountain Imperial Pigeon was photographed by Mr. Chhum Samnang in the Laang Thmor Bei Dom in Phnom Tbeng Mountains

## 4. Budget

## Expenditure for the Phnom Kravanh field work

| Item                 | Number of personnel | Quantity  | Unit | Total (US\$) |
|----------------------|---------------------|-----------|------|--------------|
| Travel               |                     |           |      |              |
| Taxi (PP to Pursat)  | 2                   | 2         | 7    | 28.00        |
| Motorbike rental     | 2                   | 8 days    | 5    | 80.00        |
| Petrol               |                     | 15 liters | 0.95 | 14.25        |
| Motorbike repairs    | 2                   |           |      | 8.64         |
| Subtotal             |                     |           |      | 130.89       |
| Subsistence          |                     |           |      |              |
| Accommodation        | 2                   | 2         | 10   | 40.00        |
| Food & water         | 3                   | 10 days   |      | 81.29        |
| Subtotal             |                     |           |      | 121.29       |
| Equipment            |                     |           |      |              |
| Map                  |                     | 1         | 3    | 3.00         |
| Plastics for map     |                     |           |      | 3.00         |
| Small Batteries      |                     | 5 pieces  | 1.80 | 10.80        |
| Very Small Batteries |                     | 3 pieces  | 1.80 | 5.40         |
| Subtotal             |                     |           |      | 22.20        |
| Staff costs          |                     |           |      |              |
| Programme Leader     | 1                   | 1 month   | 435  | 435.00       |
| Programme Assistant  | 1                   | 1 month   | 250  | 250.00       |
| Local Guide          | 1                   | 07 days   | 5    | 35.00        |
| Subtotal             |                     |           |      | 720.00       |
| Communications       |                     |           |      |              |
| Internet             |                     |           |      |              |
| Phone Card           |                     | 1 month   | 10   | 10.00        |
| Subtotal             |                     |           |      | 10.00        |
| Medicines            |                     |           |      | 6.29         |
| Miscellaneous        |                     |           |      |              |
| Administration       |                     |           |      | 5.00         |
| Subtotal             |                     |           |      | 5.00         |
| TOTAL                |                     |           |      | US\$ 1015.67 |

## Expenditure for Phnom Tbeng Trip

| Item                        | Quantity | Unit  | Total (US\$) |
|-----------------------------|----------|-------|--------------|
| Travel                      |          |       |              |
| Phnom Penh to Preah Vihea   | 1 person | 8.75  | 8.75         |
| Carrier up to the mountain  | 2 times  | 12.50 | 25.00        |
| Motorbikes in the field (1) | 2 times  | 5.00  | 10.00        |
| Preah Vihea to Phnom Penh   | 1 person | 11.25 | 11.25        |
| Subtotal                    | •        |       | 55.00        |
|                             |          |       |              |
| Subsistence                 |          |       |              |
| Accommodation (1 person)    | 2 nights | 10    | 20.00        |
| Food & water (3 persons)    | 6 days   |       | 77.63        |
| Cooking equipment           | j        |       | 0.00         |
| Subtotal                    |          |       | 97.63        |
|                             |          |       |              |
| Equipment                   |          |       |              |
| Backpack                    | 0        | 0     | 0.00         |
| Small Batteries             | 4        | 1.80  | 7.20         |
| Very Small Batteries        | 3        | 1.80  | 5.40         |
| Raincoat                    | 0        | 0     | 0.00         |
| Plastic sheets              | 0        | 0     | 0.00         |
| Plastic map                 | 0        | 0     | 0.00         |
| Subtotal                    |          |       | 12.60        |
|                             |          |       |              |
| Staff costs                 |          |       |              |
| Programme Leader            | -        | 435   | 0.00         |
| Programme Assistant         | -        | 250   | 0.00         |
| Local Guide (2)             | 5 days   | 5     | 50.00        |
| Subtotal                    |          |       | 50.00        |
|                             |          |       |              |
| Communications              |          |       |              |
| Internet                    | -        |       | 0.00         |
| Phone Card                  | -        | 10    | 0.00         |
| Subtotal                    |          |       | 0.00         |
|                             |          |       |              |
| Medicines                   |          |       | 0.00         |
|                             |          |       |              |
| Miscellaneous               |          |       |              |
| Administration              |          |       | 0.00         |
| Cabinet                     | 1        | 113   | 113.00       |
| Subtotal                    |          |       | 113.00       |
|                             |          |       |              |
| TOTAL                       |          |       | 328.23       |