



# INDICATOR BIRD MONITORING TRAINING IN INTEGRATED PROTECTED AREA CO-MANAGEMENT (IPAC) SITES



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#### **COVER PHOTO:**

The cover photo was taken by resource person Dr. M. Monirul H. Khan. This year it was decided that volunteers from local communities, local Forest Department offices and Bangladesh Bird Club would be trained so that the participants could voluntarily conduct the survey, especially after the tenure of IPAC. The birds were taken as bio-indicators of the 'health' trend of the PAs in response to the management interventions, so the birds were systematically monitored by a technical team.

# INTEGRATED PROTECTED AREA CO-MANAGEMENT (IPAC)

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#### I. INTRODUCTION

Management of Protected Areas (PAs) with active participation of local communities is a new concept in Bangladesh that is being introduced by USAID-funded projects entitled Nishorgo Support Project (NSP) and Integrated Protected Area Co-management (IPAC) Project. Knowing the impacts of this new management approach is crucial. Therefore, the birds were taken as bio-indicators of the 'health' trend of the PAs in response to the management interventions, so the birds were systematically monitored by a technical team. In this year (2011), however, it was decided that volunteers from local communities, local Forest Department offices and Bangladesh Bird Club would be trained so that the participants could voluntarily conduct the survey, especially after the tenure of IPAC.

Birds are very good indicators of the ecological changes (Johnston 1956, Morrison 1986, Canterbury *et al.* 2000, Browder 2002), because they are relatively more visible, fast-breeder and more responsive to any change in their habitat. Systematic monitoring of the trend of change in the population density of habitat-specific birds reveals the trend of health of their habitats. The primary assumption was that the population density of a habitat-specific bird will increase, remain unchanged or decrease depending on the improvement, unchanged or degradation of that particular habitat. The indicator species of birds must be habitat-specific, i.e. the species that will not survive outside a particular habitat type. It is advised that several species of indicators should be taken so that they represent different strata and different ecological niches. Determination of the extent to which ecological systems are experiencing changes is critical for long-term conservation of biotic diversity in the face of changing landscapes and land use (Canterbury *et al.* 2000).

#### 2. TRAINING PROGRAM

A total of four training programs were conducted in four different areas, viz. in Madhupur, Dulahazara, Kaptai and Sylhet, but the participants were from different PAs of the regions. In Madhupur the participants were the stakeholders of Madhupur NP. In Dulahazara the participants were the stakeholders of Fasiakhali WS, Meda-Kacchapia NP, Himchari NP, Teknaf WS and Chunati WS. In Kaptai the participants were the stakeholders of Kaptai NP and Dudhpukuria-Dhopachari WS. In Sylhet the participants were the stakeholders of Khadimnagar NP, Lawachara NP, Satchari NP and Rema-Kalenga WS.

Most of the participants were from local communities (CMCs, CPGs, Ecotour Guides, etc.), but there were participants from the Forest Department, Bangladesh Bird Club, partner NGOs and IPAC. The grand total number of participants of four training programs was 77 (Table 1).

Each of the training programs had two parts: theoretical and practical. In theoretical part the background, methods, indicator bird identification, bird density calculation, etc. were discussed in a room. A laptop computer was used during the lecture and printed copy of training material was given to all the participants. In practical part the participants were taken to the nearby PA(s) where the indicator bird counting along the transects were demonstrated. The participants had gathered data and completed the data sheets for bird counts, which were given to IPAC at the end of the program. A total of five PAs were covered in practical demonstration, viz. Madhupur NP, Fasiakhali WS, Meda-Kacchapia NP, Kaptai NP and Khadimnagar NP (Table 2, Figure 1). Although most of the transects were covered (i.e., actual count conducted), some could not be covered due to time constraint and only the locations of transects were shown to the participants (Table 2).

There was only one resource person (Dr M. Monirul H. Khan) in all the training programs, but the participants were often participated in the discussion and field activities. The programs were managed by the local IPAC staffs. The program has got good media coverage (Appendix I).

| Training Venue   |  | Date                         | No. of Participants                                      |                |                         |                 |      |       |  |
|------------------|--|------------------------------|--|----------------|-------------------------|-----------------|------|-------|--|
| Theoretical      | Practical                                  | (program<br>plus<br>journey) | Local Community<br>(CMCs, CPGs,<br>Ecotour Guides, etc.) | Forest<br>Dept | Bangladesh<br>Bird Club | Partner<br>NGOs | IPAC | Total |  |
| Madhupur<br>NP   | Madhupur NP                                | 11-13 May<br>2011            | 10   | 4              | 2                       | 2               | 2    | 20    |  |
| Dulahazara<br>SP | Fasiakhali WS<br>and Meda-<br>Kacchapia NP | 17-19 May<br>2011            | 16   | 5              | 2                       | 0               | 6    | 29    |  |
| Kaptai NP        | Kaptai NP                                  | 19-21 May<br>2011            | 6  | 5              | 2                       | 0               | 4    | 17    |  |
| Sylhet           | Khadimnagar<br>NP                          | 07-10 Jun<br>2011            | 12   | 4              | 2                       | 0               | 3    | 21    |  |

#### Table I. Participants in four training programs on indicator bird monitoring

#### Table 2. Bird monitoring transects in five sites of IPAC, indicating whether

#### birds were counted or locations were shown to the participants

| Name of<br>Project Site             | Name of Transect       | Location in<br>Project Site | Geographic Locations of Two<br>Ends                       | Length<br>(km) | Counted Birds (CB) /<br>Shown Location (SL)<br>of Transect During<br>Training |
|-------------------------------------|------------------------|-----------------------------|---|----------------|---|
|                                     | Rasulpur               | East                        | 24°41.342′ N, 90°08.350′ E;                               | 2.30           | CB  |
| Madhupur<br>National Park           | Jalui                  | East                        | 24°41.342′ N, 90°08.350′ E;<br>24°40.779′ N, 90°07.683′ E | 1.50           | СВ  |
|                                     | Lahoria                | Centre                      | 24°41.730′ N, 90°06.283′ E;<br>24°41.631′ N, 90°05.760′ E | 0.90           | SL  |
|                                     | Monar Bide             | West                        | 24°40.211′ N, 90°06.287′ E;<br>24°40.811′ N, 90°06.137′ E | 1.10           | СВ  |
| Fasiakhali                          | Lama Road              | Centre                      | 21°43.090′ N, 92°05.516′ E;<br>21°42.761′ N, 92°06.408′ E | 1.70           | SL  |
| Wildlife<br>Sanctuary               | Natunpahar<br>East     | West                        | 21°42.338′ N, 92°04.765′ E;<br>21°42.369′ N, 92°05.315′ E | 0.95           | СВ  |
|                                     | Meda-Kacchapia<br>East | East                        | 21°38.484' N, 92°04.402' E;<br>21°38.329' N, 92°05.080' E | 1.20           | SL  |
| Meda-<br>Kacchapia<br>National Park | Meda-Kacchapia<br>West | West                        | 21°38.632′ N, 92°04.392′ E;<br>21°38.783′ N, 92°03.592′ E | 1.40           | СВ  |
| Kaptai<br>National Park             | Rampahar Stream        | Northwest                   | 22°29.709′ N, 92°11.123′ E;<br>22°30.469′ N, 92°10.440′ E | 1.80           | СВ  |
|                                     | Rampahar Hill          | West                        | 22°30.469′ N, 92°10.440′ E;<br>22°29.880′ N, 92°10.583′ E | 1.10           | СВ  |
|                                     | Jamaichara             | Southwest                   | 22°29.668' N, 92°10.683' E;<br>22°29.345' N, 92°10.752' E | 0.61           | SL  |
|                                     | Rangamati Road         | Centre                      | 22°30.663′ N, 92°12.451′ E;<br>22°30.937′ N, 92°12.182′ E | 0.69           | СВ  |
|                                     | Bangchari              | Centre                      | 22°30.040′ N, 92°11.697′ E;<br>22°31.576′ N, 92°11.138′ E | 3.00           | СВ  |
|                                     | Kalagool Road          | West                        | 24°57.248′ N, 91°56.311′ E;<br>24°56.673′ N, 91°55.689′ E | 1.50           | СВ  |
| Khadimnagar<br>National Park        | Khadimnagar<br>Central | Centre                      | 24°56.677′ N, 91°56.391′ E;<br>24°57.248′ N, 91°56.311′ E | 1.10           | SL  |
|                                     | Choragang Road         | East                        | 24°57.248′ N, 91°56.311′ E;<br>24°56.975′ N, 91°57.198′ E | 1.91           | СВ  |

### 3. CONCLUSION

The training programs were conducted in relatively short period of time, but the participants were sufficiently trained to monitor indicator birds on their own. Identifying birds, however, requires practice and the participants should get guide books on birds and binoculars so that they can improve their skills. Some incentives should be given to the volunteers. Otherwise they might not take interest on bird monitoring.

## Figure 1. Five sites of IPAC where the practical demonstration of bird monitoring training took place.



Kaptai National Park







Khadimnagar National Park



Fasiakhali Wildlife Sanctuary



Madhupur National Park



Photographs of the training program on IPAC indicator bird monitoring: a) theoretical lecture in Madhupur NP, b) theoretical lecture in Dulahazara SP, c) theoretical lecture in Kaptai NP, d) theoretical lecture in Sylhet, e) group photo during practical demonstration in Fasiakhali WS, f) practical demonstration in Kaptai NP, and g) practical demonstration in Khadimnagar NP.

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Appendix I. Newspaper reports on IPAC indicator bird monitoring trainings





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