



Ramsar Information Sheet

Published on 14 April 2016

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Bhutan

Gangtey-Phobji



Designation date	2 May 2014
Site number	2264
Coordinates	27°26'46"N 90°11'08"E
Area	970,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a ' full ' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary (This field is limited to 2500 characters)

Gangtey-Phobji valley is a conservation area recognized primarily for its ecological richness. It is a prime winter habitat of the globally vulnerable black-necked cranes (*Grus nigricollis*), supporting approximately 300 cranes every winter.

Gangtey-Phobji is a wide glacial valley with meandering streams through open grasslands and thickets of dwarf bamboo. The Gangtey-Phobji wetland is one of the sources for the tributaries of the Puna-tsangchhu river (where there is a mega hydropower project being built downstream). The wetland serves as a water source for drinking and irrigation for the people living in the valley and also downstream. The water drains through the open grasslands to the Nakeychhu, Khewangchhu and other small annual and perennial streams. Most of the areas along the streams are marshy, covered by grass, bamboo, and several species of shrub and herbs including thick sphagnum moss. Those are an important ecosystem harboring various life forms. Besides providing water, Gangtey-Phobji wetland also serves as a sink for dust and has a cooling effect in the area. Vegetation cover in the wetland helps to prevent water from evaporation and prevents soil erosion.

The repeated grazing of bamboos by cattle and horses in summer prepares the ground for the wintering cranes. The globally vulnerable black-necked cranes heighten the breathtaking scenery of Gangtey-Phobji in the winter months (October to March). The cranes feed in the agriculture fields on grain residues and on shoots of dwarf bamboo, and on tubers and worms. The arrival of the cranes indicates the end of the harvesting season. This unpremeditated timing provides an excellent environment to the peace loving black-necked cranes. The cranes roost in several marshy areas with the primary roosting area being at the base of a small knoll.

There are 44 villages scattered throughout the valley with a population of 4740 people in 645 households dependent on the wetlands for water. Gangtey-Phobji population used to practice vertical transhumance. At present, some farmers have settled permanently in the valley. Sedentarization of the communities is attributed to the introduction of potato cultivation in the early 1980s. The livelihood of the community is not directly dependent on the wetlands. The major livelihood for the community is agriculture (potato) and livestock rearing (cows, horses, sheep, yaks, poultry and piggery).

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Name

Institution/agency

Postal address (This field is limited to 254 characters)

Department of Forests and Park Services
Ministry of Agriculture and Forests
Royal Government of Bhutan

Chhopel Lam, Kawang-Jangsa
Thimphu, Bhutan 11001

E-mail

Phone

Fax

2.1.2 - Period of collection of data and information used to compile the RIS

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Boundaries description (optional) (This field is limited to 2500 characters)

General delineation of the Gangtey-Phobji Ramsar site follows the boundaries of private land and settlements. The Ramsar Site includes the core wetland area and the riverine area that were identified as a critical wetland zone in the previous management plan developed for the area. Below Amann-Kora Resort starts the northern border. The suspension bridge, Zizi Zam, downstream is the southern border. The western border is primarily below the feeder road but excludes all private land. The eastern border is the edges of the private land. The decision to exclude the private lands was made by the local communities.

2.2.2 - General location

a) In which large administrative region does the site lie?

Wangdue Phodrang District; within Phobji and Gangtey geogs/blocks

b) What is the nearest town or population centre?

Wangdiphodrang (Bajo town)

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha): 970

Area, in hectares (ha) as calculated from GIS boundaries 979.72

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Himalayan highlands

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification (This field is limited to 3000 characters)

100 species of bird such as the globally threatened or near-threatened black-necked crane (*Grus nigricollis*) (VU), Himalayan griffon (*Gyps himalayensis*) (NT), and Satyr Tragopan (NT) are found in Gangtey-Phobji wetland area during different periods of the year.

The core wetland area is encircled by endemic rhododendrons (e.g *Rhododendron kesangiae*); there are 24 species of mammals which visit the wetland area for food and water such as the tiger (*Panthera tigris*) (EN), red panda (*Ailurus fulgens*) (EN), sambar (*Cervus unicolor*) (VU), and leopard (*Panthera pardus*) (NT) etc.

A total of 103 species belonging to 38 families of plant are recorded in the core wetland area. A few endemic herb species such as *Eriocaulon bhutanicum* and *Euphrasia bhutanica* are also recorded.


























Criterion 4 : Support during critical life cycle stage or in adverse conditions

Criterion 6 : >1% waterbird population

3.2 - Plant species whose presence relates to the international importance of the site

<no data available>

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / MAMMALIA	 <i>Ailurus fulgens</i>	Red Panda	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / MAMMALIA	 <i>Cervus unicolor</i>	Sambar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / AVES	 <i>Grus nigricollis</i>	Black-necked Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	368	2010-2014	3.6	VU 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Crit 4: Roosting area in winter Crit 6: 347 in 2010-2011; 335 in 2011-2012; 368 in 2012-2013; 422 in 2013-2014	
CHORDATA / AVES	 <i>Gyps himalayensis</i>	Himalayan Griffon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>		Resting site	
CHORDATA / AVES	 <i>Ithaginis cruentus</i>	Blood Pheasant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Resting site	
CHORDATA / AVES	 <i>Lophophorus impejanus</i>	Himalayan Monal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Resting site	
CHORDATA / AVES	 <i>Lophura leucomelanos</i>	Kalij Pheasant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Resting site	
CHORDATA / MAMMALIA	 <i>Muntiacus muntjak</i>	Indian muntjac	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / MAMMALIA	 <i>Naemorhedus goral goral</i>	Himalayan Goral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / MAMMALIA	 <i>Panthera pardus</i>	Leopard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / MAMMALIA	 <i>Panthera tigris</i>	Tiger	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / MAMMALIA	 <i>Sus scrofa</i>	Wild boar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>			
CHORDATA / AVES	 <i>Tragopan satyra</i>	Satyr Tragopan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>			

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

(This field is limited to 2500 characters)

Gangtey-Phobji is a beautiful highland valley with diverse species of flora and fauna. Slopes adjacent to the valley floor in the north are dominated by blue pine (*Pinus wallichiana*) with understory hard woods such as birch (*Betula utilis*), several species of rhododendron and maple (*Acer* spp.). As the altitude increases, the species composition changes to spruce-fir with suppressed hemlock (*Tsuga dumosa*) and rhododendron in the mid-story. The areas of sparse canopy are dominated by hemlock (*Tsuga dumosa*). Forests in the southern valley regions are richer in hardwoods and are dominated by birch, maple and rhododendron. The understory regeneration comprises of blue pine, bamboo (*Thamnocalamus spathiflorus*), ferns and herbaceous species such as *Primula* spp., *Rubus* spp. and *Fragaria nubicola*. A total of 55 tree, 73 shrub, and 254 herb species have been recorded within the catchment area.

The core wetland area is encircled by moderate to steep slopes of agriculture lands and forests with pure stands of blue pine (*Pinus wallichiana*), juniper (*Juniperus recurva* and *Juniperus pseudo sabina*), and endemic rhododendrons (e.g *Rhododendron kesangiae*). Shrubs such as *Rhododendron thomsonii* grow mainly along the seasonal streams. *Berberis* and *artemesia* grow along the edge of the agricultural fields while *Cotoneaster microphyllus* grows along the nature trails.

Floristically, the wetland vegetation is composed of bamboo (one species), grasses and sedges (25 species), perennials herbs (48 species), annuals herbs (20 species), shrubs (four species) and two ground orchid and fern species. Ninety percent (90%) of the marsh is covered by the bamboo *Yushania microphylla* and ten percent (10%) by other species.

The water table depth varies across the wetland and there are micro-topographical changes. Water is at the surface in some places while deeper than 1 m at other places. In areas where there is surface water, there are puddles made by cattle hooves, which provide microhabitat for several insects such as dragon fly nymphs, mosquito larvae and gnats. Cattle appear to influence the micro-drainage in these areas. Wet areas with grass (without surface water) have balls of small reddish earthworms in the root zone. This has strong relevance to the availability of different soil types that sustain the kind of natural biomass and agricultural produce in the valley.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
M: Permanent rivers/ streams/ creeks		0		
N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0		
Tp: Permanent freshwater marshes/ pools		0		
U: Permanent Non-forested peatlands		1		
Xp: Permanent Forested peatlands		0		
Y: Permanent Freshwater springs; oases		4		

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Betula utilis</i>	Birch	
<i>Eriocaulon bhutanicum</i>		Endemic
<i>Euphrasia bhutanica</i>		Endemic
<i>Juniperus pseudosabina</i>		
<i>Juniperus recurva recurva</i>		
<i>Pinus wallichiana</i>	Blue pine	
<i>Rhododendron kesangiae</i>		Endemic
<i>Thamnocalamus spathiflorus</i>	Bamboo species	
<i>Tsuga dumosa</i>	Hemlock	
<i>Yushania microphylla</i>	Dwarf bamboo	

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
ARTHROPODA/INSECTA	<i>Apis cerana</i>	Common bees				
ARTHROPODA/INSECTA	<i>Apis dorsata</i>	Rock bees				
CHORDATA/MAMMALIA	<i>Martes foina foina</i>	Stone martens				
CHORDATA/MAMMALIA	<i>Naemorhedus goral</i>	goral				
CHORDATA/MAMMALIA	<i>Ochotona himalayana</i>	Himalayan Pika				
CHORDATA/MAMMALIA	<i>Semnopithecus entellus</i>	Grey langur				
CHORDATA/MAMMALIA	<i>Ursus thibetanus</i>	Asiatic black bear				
ARTHROPODA/INSECTA	<i>Vespa mandarina</i>	Asian giant hornet				
CHORDATA/MAMMALIA	<i>Vulpes vulpes</i>	Red Fox				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
H: Highland	H: Highland (-)

(This field is limited to 1000 characters)

Gangtey-Phobji valley falls in the temperate regions of the inner Bhutan Himalayas. Gangtey-Phobji valley has cold and relatively dry, clear winters and wet summers. The annual mean temperature of Gangtey-Phobji valley is 8.3 ° C with a

maximum temperature of 15.3 ° C in July and a minimum of -0.3 ° C in January (HOBO ONSET logger 2001-2010).

Because of complex topography of inner-lying valleys, precipitation is much influenced by elevation, aspect and topography. Average monthly rainfall rises from March till October with June, July, and August having most of the annual precipitation under the influence of the summer monsoon, experienced throughout Bhutan. Annual rainfall ranges from 1100 – 2200 mm annually. The mean total annual rainfall of Gangtey-Phobji between 1992 and 2003 was 1411.4 mm with a maximum rain fall in July (323.3 mm). The seasonal rainfall pattern clearly showed arrival of monsoon from June to August and decreased rainfall from autumn to spring.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Lower part of river basin

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.
(This field is limited to 1000 characters)

4.4.3 - Soil

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional) (This field is limited to 1000 characters)

Gangtey-Phobji is a U-shaped glacial valley. About 10-15 m thick lower layer of the kame terrace is sandy silt (48% silt, 52% sand) saturated with water that seeps out at the contact zone with the underlying clayey glacial ground moraine. The glacier carved valley is left with an impervious layer of clay rich ground moraine causing the valley bottom to be marshy. It was formed by glacial movement in the Pleistocene era.

4.4.4 - Water regime

Water permanence

Presence?
Usually permanent water present
Usually seasonal, ephemeral or intermittent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Water inputs from rainfall	<input checked="" type="checkbox"/>

Water destination

Presence?

To downstream catchment

Stability of water regime

Presence?

Water levels largely stable

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology: (This field is limited to 1000 characters)

The Gangtey-Phobji wetland is one of the biggest wetlands in Bhutan. All the streams and other water sources drain into the valley and contributes to Nakeychhu. Nakeychhu meanders in the middle of valley.

4.4.5 - Sediment regime

Please provide further information on sediment (optional): (This field is limited to 1000 characters)

The local geology is dominated by low grade crystalline sediments of Precambrian age (Chekha formation); remnants of fossiliferous marine sediments occur close to Taphu. The soil in Gangtey-Phobji have low bulk densities (often below 0.7 g cm⁻³), low pH and CEC, reflecting the acid nature of the underlying granitic and phyllitic schists. The soil has shallow A horizons but high Carbon contents often down to more than 1 m depth with bright orange subsoil colors. Human activities such as deforestation, grazing and agriculture together with strong valley winds, frequent freeze-thaw cycles, extensive dry periods and sparse vegetation cover have given rise to the silty-clayey and stone-free texture of the soil in the Gangtey-Phobji valley.

4.4.6 - Water pH

Please provide further information on pH (optional): (This field is limited to 1000 characters)

The soil in Phobjikha have low bulk densities (often below 0.7 g cm⁻³), low pH and CEC, reflecting the acid nature of the underlying granitic and phyllitic schists, shallow A horizons but high Carbon contents often down to more than 1 m depth with bright orange subsoil colors.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

4.4.8 - Dissolved or suspended nutrients in water

Mesotrophic

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ii) significantly different

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	High
Fresh water	Water for irrigated agriculture	Medium
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Pollution control and detoxification	Water purification/waste treatment or dilution	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Spiritual and inspirational	Spiritual and religious values	High
Spiritual and inspirational	Aesthetic and sense of place values	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium

Other ecosystem service(s) not included above: (This field is limited to 1000 characters)

The Gangtey-Phobji wetland is a nutrient sink and brings cooling effect to the environment. The wetland plays a significant role in filtering the nutrient and pollutant entering the streams from farmlands. The Alpine meadows are the fresh water reservoir. Yushania and Spagnum mosses covering the wetland regulate water cycle by controlling the evaporation processes and retaining ground moisture.

Gangtey-Phobji valley is both culturally and aesthetically important. The scenic beauty of the landscape is enhanced by the revered 16th century Gangtey Monastery, which makes Gangtey-Phobji valley also a popular destination for both domestic and international tourists. Gangtey Lhakhang is an important religious centre overlooking the wetlands area and people believe cranes fly around Gangtey Lhakhang when they arrive and leave for Tibet. Crane festival is held every year within the premises of the Gangtey Lhakhang on 12th November to welcome the cranes, which start arriving late October.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: (This field is limited to 1000 characters)

Territorial Divisional Forest Office
 Department of Forests and Park Services
 Ministry of Agriculture and Forests
 Royal Government of Bhutan
 Phone number: +975-2-481413
 Fax number: +975-2-481671/ +975-2-481380

Postal address: (This field is limited to 254 characters)

Territorial Divisional Forest Office
 Department of Forests and Park Services
 Ministry of Agriculture and Forests
 Royal Government of Bhutan

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site ' s ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Tourism and recreation areas	Low impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unspecified development			<input type="checkbox"/>	<input checked="" type="checkbox"/>

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Logging and wood harvesting	Low impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.2.2 - Legal conservation status

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	PhobjikaandKhatekhavalleys		whole

5.2.3 - IUCN protected areas categories (2008)

<no data available>

5.2.4 - Key conservation measures

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented

Other: (This field is limited to 2500 characters)

Royal Society for Protection of Nature (RSPN) has been involved in black-necked crane conservation work since its inception in 1987. Since 1999 RSPN initiated a series of integrated conservation and development programs (ICDP) mainly keeping in view local community ' s participation and support in conservation. Gangtey-Phobji landscape area management plan 2006-2010 was developed by RSPN and endorsed by the Ministry of Agriculture and Forests which has been already implemented. A new management plan for the site will be drafted after the site has been declared as Ramsar site.

Apart from the key conservation activities, a variety of community development programs (alternative energy, community-based sustainable tourism, community capacity development, women in environment, environment education, environment and health) has been initiated in the valley. The Department of Forests and Park Services in collaboration with RSPN established eight Community forests in the catchment area. The Royal Government of Bhutan and the Austrian government have jointly supported an initiative to provide underground grid electrification in the valley.

In order to encourage environmentally viable tourism and also to help people benefit from conservation, RSPN has been promoting Community-Based Sustainable Tourism (CBST) in Gangtey-Phobji. RSPN has also been working with the communities to develop their capacity in catering to tourism needs, developing local tourism products and activities such as home-stays, local guides, cultural programs, campsite, local souvenir products, etc. The black-necked crane festival that takes place since the year 1998 is an important part of the CBST program. However, RSPN has voluntarily withdrawn its activities in Phobjikha and are concentrating its efforts in other parts of Bhutan.

Transboundary migration study: In Feb 1998, RSPN and the International Crane Foundation for the first time embarked on a project to study the migration route and locate the summer breeding areas of the black-necked Cranes wintering in Bhutan by using a technique called Satellite telemetry. Later, similar projects were conducted in 2005-06 by JICA and RSPN and 2012 by Ugyen Wangchuck Institute for Conservation and Environment, Department of Forests and Park Services (DoFPS). In future, research study will be undertaken on the threats, transboundary conservation, habitat identification and migratory routes of the black-necked cranes by RSPN.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site: (This field is limited to 1000 characters)

The area has been leased by the Royal Government to RSPN for conservation and protection. The main goal of the RSPN is to meet the aspirations of local communities as well as to conserve the ecological significance of the area.

The Gangtey-Phobji area is a popular tourism destination with increasing population of tourists each year. RSPN has helped set up basic ecotourism facilities like the Information Centre (black-necked crane Information centre, BNCIC) and nature trails. The BNCIC provides adequate information about the valley, cranes and people of Phobjikha. It also provides locally made souvenirs at reasonable prices.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Animal species (please specify)	Implemented

(This field is limited to 2500 characters)

Black-necked crane

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

(This field is limited to 2500 characters)

Caspari, T., Bäumlner, R., Norbu, C., Tshering, K., Baillie, I.2009. Soil formation in Gangtey-Phobji Valley, Central Bhutan with special regard to the redistribution of loessic sediments. *Journal of Asian Earth Sciences*, 34, 403–417.

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www.cites.org: CITES website, CITES Appendices I, II, III

www.iucnredlist.org: IUCN website on red list of globally threatened species.

www.wetlands.org: Wetlands International (2014). "Waterbird Population Estimates"

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<1 file(s) uploaded>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Landscape (Lew Young,
01-07-2010)



Landscape (Lew Young,
01-07-2010)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Transboundary Designation letter

<no file available>

Date of Designation