

## Threats to wetlands

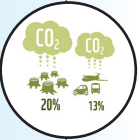
### Increasing use of chemical fertilizer and pesticides

As potato farming is main source of income for community in Gangtey and Phobjikha, increasing use of chemical fertilizer and pesticides to increase production can soil and water may contamination in the long run. This may further pose risk to the quality of wetland and human health in long run.



### Forest Degradation and Deforestation

Forests in Gangtey and Phobjikha are declining over the years due to population growth, leading to over usage of fuelwoods, fodders and other non-wood forest products. Health of the forest is important for maintaining the ecological integrity of the wetlands.



### Increasing waste and effluence

Gangtey and Phobjikha is a popular tourism destination in Bhutan. With the increase in tourism and population, there is an increase in garbage and effluence from the hotels/resorts and households, which can lead to wetland, pollution and health problems.



### Land use change

Unplanned development activities such as road, tourism, hotels and commercial farming will result to drying of water sources, encroachment of wetlands, fragmentation of agriculture land and loss of soil fertility leading to decrease in wetland ecosystem services. Unless there is proper zonation and management prescription regulating the use of land, the wetlands may be vulnerable to increasing anthropogenic stressors.



## About RSPN

Royal Society for Protection of Nature (RSPN) is Bhutan's only non-governmental organization dedicated to the conservation of the environment. Established in 1987 under the Royal command of His Majesty the Fourth King of Bhutan, RSPN has been blessed with Royal Patronage of their Majesties. Currently, Her Majesty the Queen of Bhutan, Gyalsuen Jetsun Pema Wangchuck is the Royal Patron of RSPN.

RSPN's area of focus includes environmental education and advocacy, community-based sustainable livelihoods, conservation of endangered species, and emerging issues that threaten the environment.

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## WETLAND OF GANGTEY- PHOBJIKHA

Situated at an altitude of 2900m above sea level, Gangtey-Phobjikha valley has a large area under wetland. The rich vegetation and water sources make-up the critical watershed for the valley. The wetland has created ideal conditions for wildlife and in particular a good roosting and feeding ground for the Black-necked Cranes.

Gangtey-Phobjikha wetlands area in Wangduephodrang has been included in the list of wetlands of International Importance and has been declared, as the third Ramsar Site of Bhutan in 2016. The total area of the Gangtey-Phobjikha Ramsar site is 961.55 ha and is the largest Ramsar site in Bhutan.



# Benefits of wetlands to the community

Wetlands are the natural sources and reservoir for water. They are also represented as a transitional ecosystem. The general type of wetlands in Bhutan includes lakes, rivers, springs, ponds, vernal pools, marshes, peat bogs, fens and predominantly water-logged areas.

Wetlands are known for their natural beauty and wildlife habitat values. It provides water quality improvement and management services. Protecting wetlands contributes to the economic health, public safety, and quality of life.

Slow down and filter runoff from storms, snowmelt, sediment, and other pollutants to settle out before reaching our lakes, rivers, streams, and drinking water aquifers.

Helps slow water flow and prevent floods.

An abundance of protected/scenic landscape attracts tourist.

Provides open space and enhances property values.

The sources of plants and grass, which are rich in nutrients and grazed by animals and livestock.

Sponge-like quality allows water to be released to the ground during dry-periods.

Supports diverse wildlife.

