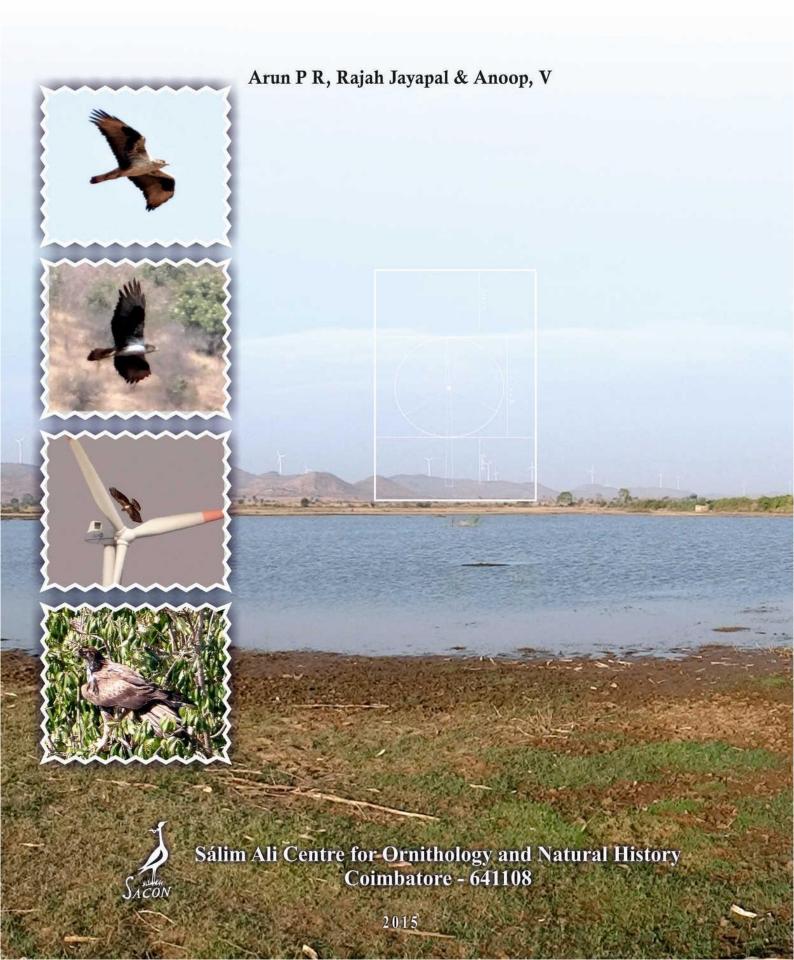
IMPACT OF HARA WIND POWER PROJECT OF C L P WIND FARMS (INDIA) LTD. ON WILDLIFE INCLUDING MIGRATORY BIRDS AND RAPTORS AT HARAPANAHALLI, DAVANGERE, KARNATAKA



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Final Report

by

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Submitted to CLP Wind Farms (India) Pvt. Lltd.



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Executive summary

The impact of Hara Wind farm was monitored for one year period from Jan 2014. Compared to other reported bird mortality rates from wind farms across the world, the mortality rate reported from wind farms of India so far is generally quite low. In the present case of Hara wind farm, the estimated annual mortality rate of birds was 0.47 birds/turbine and that of bats was 12 bats/turbine. It was also recorded that in comparison, every 02 km of the road stretch monitored caused comparable mortality risk for birds (0.25/km) to that of a wind turbine. Comparatively higher rates of bat mortalities recorded during certain seasons and correspondingly higher annual bat mortality rate estimate of 12 bats per turbine during the present study period is of some concern, and might require further long term monitoring studies.

Overall the bird abundance was slightly lower in the wind farm compared to the surroundings. Interestingly, it was also found that the density of the Indian hare (*Lepus nigricolis*, also known as the Black-naped Hare), population in the wind turbine areas was higher than the surrounding non-turbine forest areas during the study period. Various factors such as presence/ absence of predators or other natural regulating agents such as competitors and forest fire regimes are responsible for the same.

Despite extensive field surveys in multiple seasons, only seven potentially wind turbine related bird mortalities (five common resident birds and two passerines) were recorded from the farm. This included no threatened species or long-distance migratory species and hence it is concluded that the Hara wind farm does not form part of any avian migratory route. Further, the study could not find any evidence of significant direct impacts on the birds from the operations of CLP Hara wind farm.