

Andhra Pradesh Irrigation and Livelihood Improvement Project

**Biodiversity Assessment for Environmental Monitoring of  
Medium/Minor Irrigation Schemes in Andhra Pradesh**

P.Balasubramanian  
S.Narendra Prasad  
Chiranjibi Pattanaik  
Y.V.B.Charan  
G.Yadagiri  
B.Narendar  
C.Anbarasu

Final Report  
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9/7/12



**Irrigation and CAD Department  
Government of Andhra Pradesh**

Project Funded by



**Salim Ali Centre for Ornithology & Natural History  
Coimbatore - 641108**

April 2012



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**Project Report  
to  
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Government of Andhra Pradesh***



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The irrigation and CAD Department of Government of Andhra Pradesh entrusted a project to SACON to carry out an inventory in 100 selected tanks that spread across 23 districts of Andhra Pradesh. The inventory of flora and fauna was carried out in 28 medium irrigation projects, 28 minor irrigation projects and 44 minor irrigation tanks. The selection of tanks was done by considering biogeographic zones, spread area and year of construction. Some tanks were also selected based on their location in different ecosystems such as forest, coast, and agricultural field. While maximum number of 25 tanks was surveyed in Adilabad district, minimum number of tanks i.e., only one was studied in Guntur district. In all, 100 tanks spreading across 23 districts were surveyed.

A total number of 373 plant species belonging to 96 families were recorded. Asteraceae formed the dominant family (30 species) followed by 21 species Papilionaceae, Malvaceae and others. A total of 118 bird species belonging to 45 families were recorded in the 100 wetlands. Ardeidae, Phasianidae, Muscicapidae, Rallidae, Charadriidae and Sturnidae constituted the predominant families. Some common mammal species recorded here include Black-naped Hare, Wild Boar, Bonnet Macaque, Hanuman Langur, Rhesus Macaque, Common Mongoose etc. Indian Rat Snake, Common Sand Boa, Common cobra, Indian Chameleon are the common reptiles found in the study area. *Catla catla*, *Labeo rohita*, *Notopterus notopterus*, *Wallago attu*, *Channa marulius* are the common fishes found in the wetlands. A total of 31 butterfly species was recorded. Indian Skipper, Common Indian Crow, Plain Tiger, Lemon Pansy, Tawny coster, Common Rose and Crimson Rose constituted the common species.

Anthropogenic disturbances are quite common in the wetlands. Tree cutting, pollution, poaching of water birds and several other impacts were observed. The exotic *Prosopis juliflora*, a dominant invasive tree species was found in all the tanks. Due to high pollution in the river water, Asifnagar medium

irrigation project area has been choked with Water Hyacinth *Eichhornia crassipes*. The tanks located nearer to the human settlements are polluted by domestic sewage, dumping of waste material etc. The canal system in all projects has been revived through JICA funding. The avifaunal diversity is likely to increase due to increase in the water level in the tanks effected by maintenance works.

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