

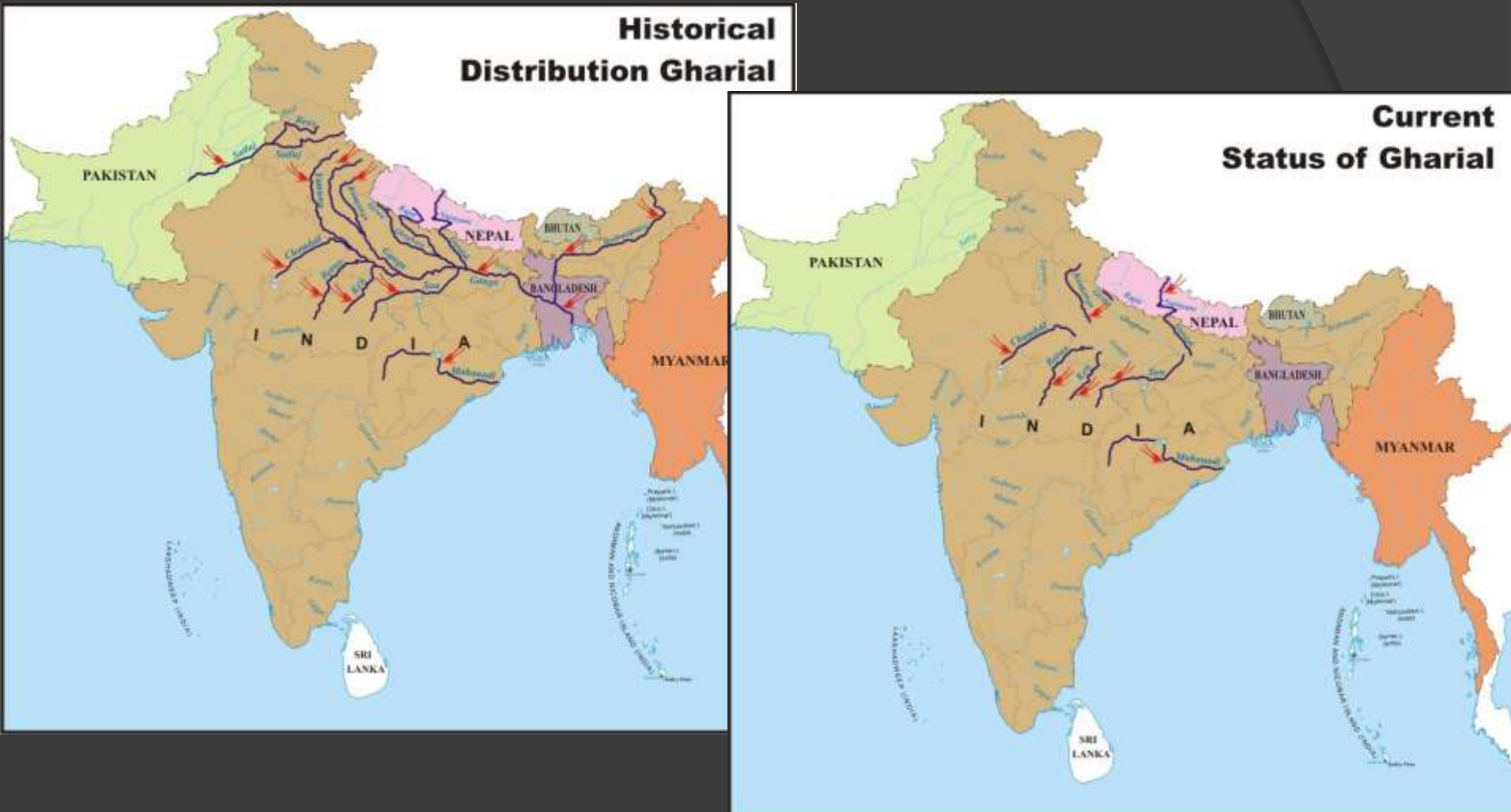


**Conservation of the Critically  
Endangered Gharials (*Gavialis  
gangeticus*) by Forest Department of  
Uttar Pradesh State in the National  
Chambal Wildlife Sanctuary, Uttar  
Pradesh, India**

**By**

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# DISTRIBUTION OF GHARIAL POPULATION



**Chambal river accounts for about half (48%) of the world's Gharial population (IUCN, 2008)**



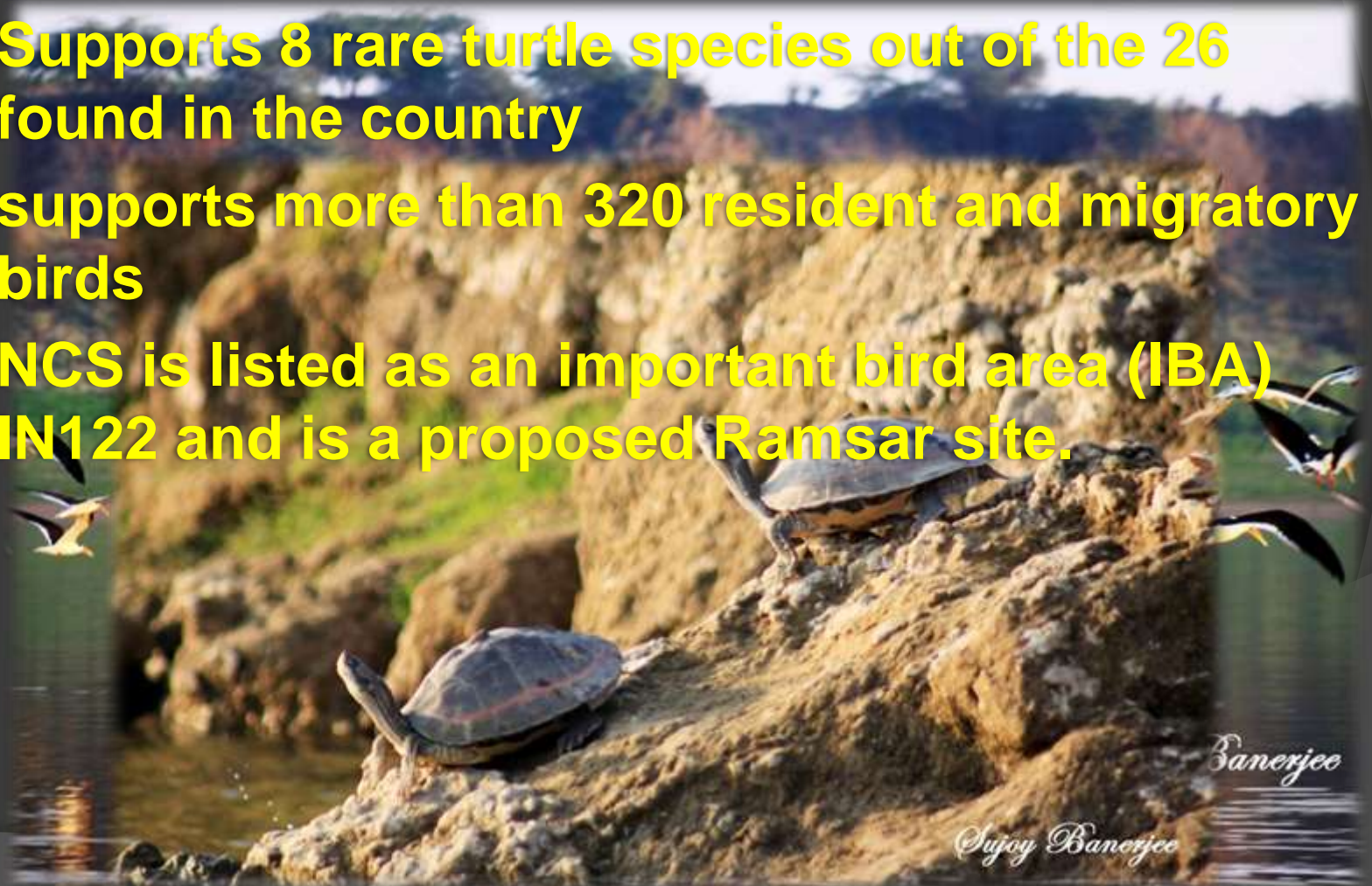
# NATIONAL CHAMBAL SANCTUARY (NCS)

- The National Chambal Sanctuary was set up in 1979 as a riverine sanctuary along 425 km length of the Chambal River and its ravines of three states of India.
- Has an area of 635 sq. kms across 175 kms river stretch in Uttar Pradesh state spread over Agra and Etawah districts.
- One of the few places to spot Gangetic Dolphins (*Platanista gangetica*)



# NATIONAL CHAMBAL SANCTUARY (NCS)

- Only known place where nesting of Indian Skimmers is recorded in large numbers
- Supports 8 rare turtle species out of the 26 found in the country
- supports more than 320 resident and migratory birds
- NCS is listed as an important bird area (IBA) IN122 and is a proposed Ramsar site.



*Banerjee*

*Sujoy Banerjee*





# THREATS TO GHARIAL IN NCS

## DIRECT

- ⦿ Illegal fishing (breaking of snout, death due to drowning)
- ⦿ Nest destruction due to illegal sand mining
- ⦿ Depredation of nests

## INDIRECT

- ⦿ Habitat alteration due to illegal mining & riverside agriculture
- ⦿ Depletion of fish stock due to illegal fishing
- ⦿ Depletion of water level in river in pinch period due to upstream dams & siltation



*Sujoy Banerjee*





# PROTECTING GHARIALS IN NCS

- Intensive foot patrolling along the Chambal river to check illegal sand mining.
- River patrolling to check illegal fishing
- Identification and protection of gharial nests
- Developing local intelligence and informers to pre-empt illegal fishing and sand mining
- Conducting raids and arresting persons involved in illegal fishing and mining & invoking action under Wildlife (Protection) Act, 1972
- Preparation and implementation of winter patrolling plan
- Preventing and combating forest fires





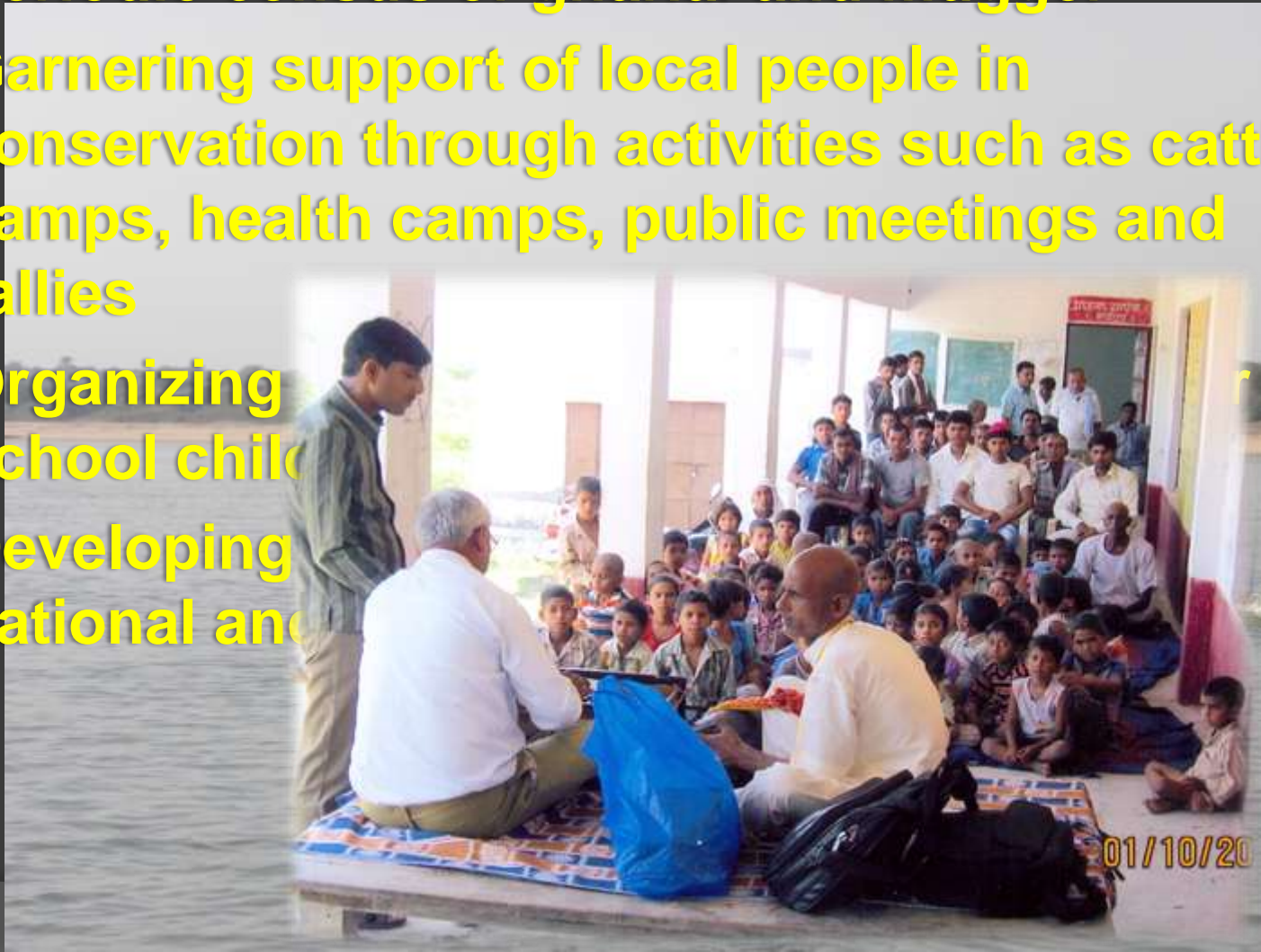
# CONTROL OF ILLEGAL FISHING AND SAND MINING BY FOREST DEPARTMENT, UTTAR PRADESH

YEAR	No. OF CASES BOOKED	VEHICLES/ BOATS IMPOUNDED	OTHER MATERIAL CONFISCATED	FINE REALIZED (Indian Rupees*)
2008-09	109	6 boats	13 fishing nets, 1 tyre, 1 oar	3,04,595
2009-10	127	1 boat	17 fishing nets, 3 tyre tubes	4,49,400
2010-11	84	2 boats	7 nets	2,64,050
2011-12	75	2 boats	9 nets, 1 tyre tube, 2 impalers, 6 traps	1,85,150
2012-13	116	2 four wheelers, 1 motorcycle, 6 boats, 1 rifle	13 nets, 6 oars, 5 tyre tubes, 1 large bamboo oar, 3 impalers	3,61,130

100 yen = 65 Indian Rupees

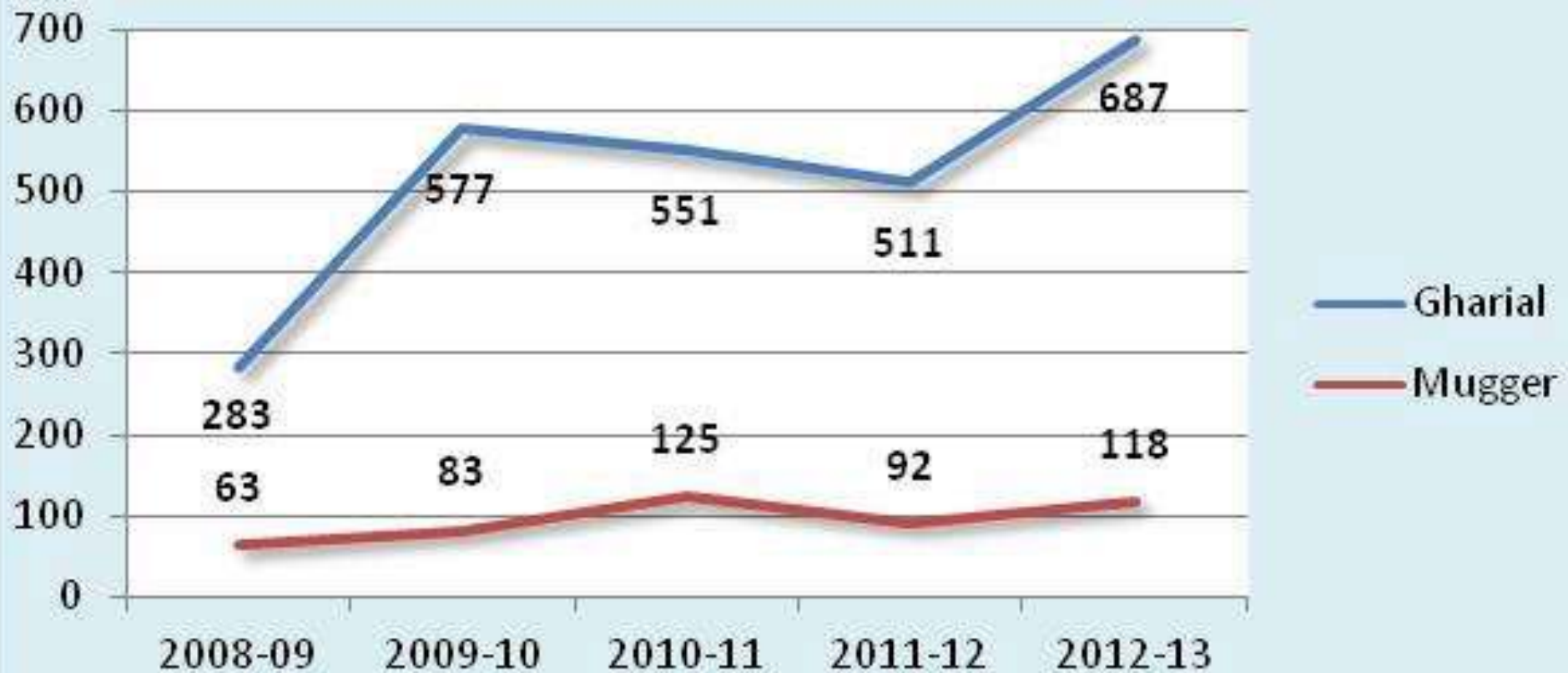
# OTHER ACTIVITIES FOR GHARIAL CONSERVATION IN NCS

- Periodic census of gharial and mugger
- Garnering support of local people in conservation through activities such as cattle camps, health camps, public meetings and rallies
- Organizing school children
- Developing national and





## STATUS OF GHARIAL AND MUGGER POPULATIONS IN NCS, U.P.



**Above data represents "MINIMUM" Gharial & Mugger population established through direct sightings**

# **IN-SITU PROTECTION OF ENDANGERED SPECIES IN THE YEAR 2013**

- ⦿ **Protected 55 nests of Critically endangered Gharial**
- ⦿ **Protected nests of “Vulnerable” Indian Skimmer Bird (*Rynchops albicollis*) housing 82 eggs. 60 chicks were counted**
- ⦿ **Protected 74 nests of “Critically Endangered” Red Crowned Roof Turtle (*Batagur kachuga*)**
- ⦿ **Protected 126 nests of “Threatened” Three Striped Roof Turtles (*Batagur dhongoka*)**



# GHARIAL NEST PROTECTION

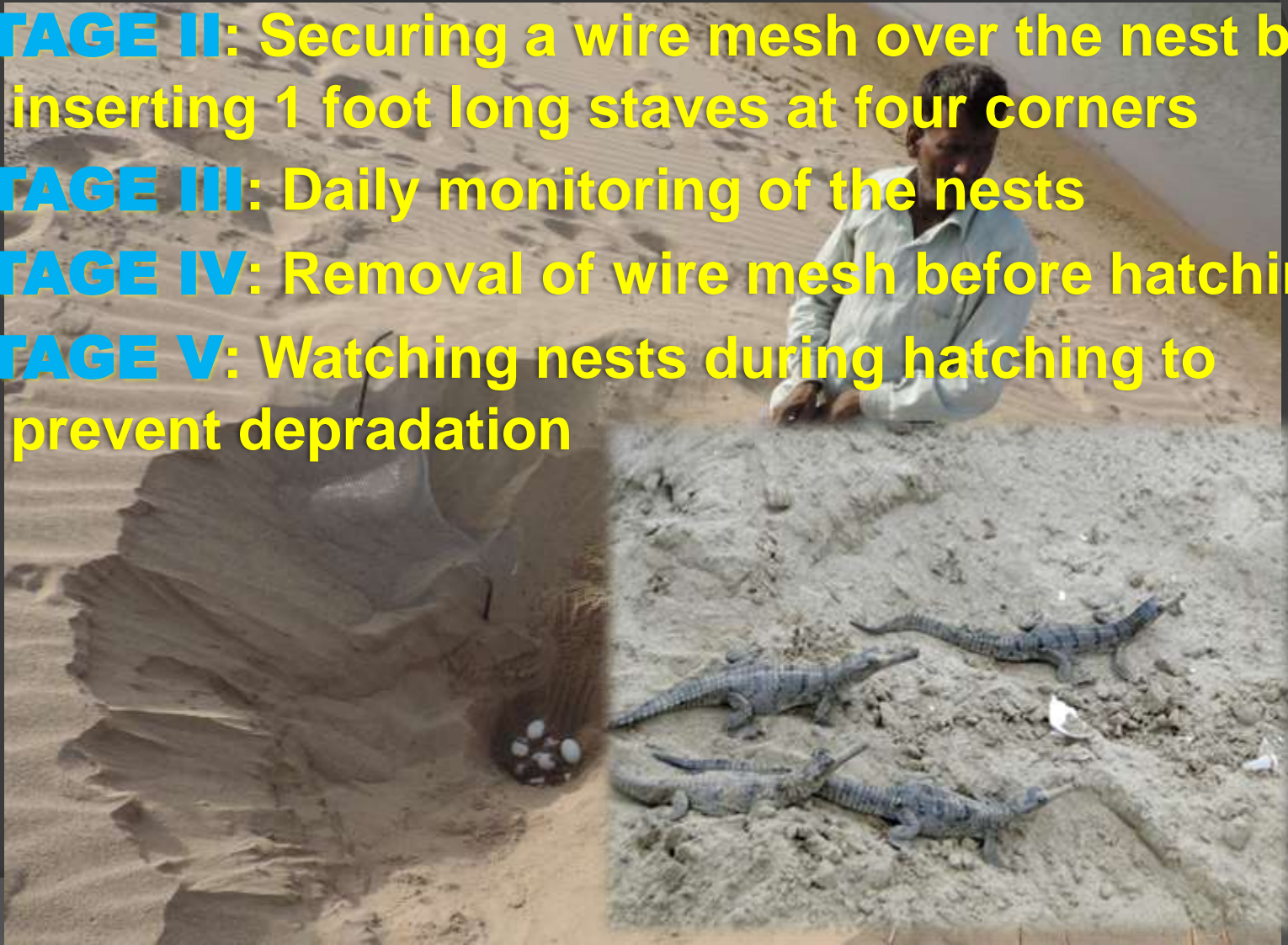
**STAGE I:** Identification of Gharial nests

**STAGE II:** Securing a wire mesh over the nest by inserting 1 foot long staves at four corners

**STAGE III:** Daily monitoring of the nests

**STAGE IV:** Removal of wire mesh before hatching

**STAGE V:** Watching nests during hatching to prevent depradation







**THANK YOU!**



*Sujoy Banerjee*