

# OFFICE OF THE DEAN, INTERNAL QUALITY ASSURANCE CELL, KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY DEEMED TO BE UNIVERSITY, BHUBANESWAR-24

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# Guidelines and Monitoring for IUCN-Listed and Other Conservation Species

**Background:** The number of globally threatened species continues to rise due to increasing developmental pressures and human dependence on forests for livelihoods. In India alone:

- 150+ species of plants and animals are critically endangered.
- Nearly 500 additional species are classified as endangered, requiring urgent conservation action.

## Major threats include:

- Destructive extraction of plant species from forests
- Spread of invasive species
- Impacts of climate change

In response, KIIT University prioritizes species recovery programs to prevent extinction and restore vulnerable populations.

Strategies for Species Restoration: Recovery of critically endangered species requires a coordinated set of actions:

- Protective Measures: Implement safeguards to halt further decline or extinction.
- Consultations & Mitigation: Assess and minimize adverse impacts of human activities.
- Habitat Restoration: Acquire, rehabilitate, and manage critical habitats.
- Field-Based Management: Monitor and manage endangered and threatened species in their natural ecosystems.

### Scales of Recovery Efforts:

- Landscape level for ecosystem-wide conservation.
- · Species level focused interventions for high-risk species.
- · Population level localized recovery within specific habitats.

#### **Key Strategies:**

- Individual Species Management tailored conservation measures.
- Reintroduction release into natural habitats to rebuild populations.
- Genetic Enrichment strengthen diversity for resilience.
- Rehabilitation relocation into suitable new habitats.

Recovery depends on systematically removing external threats so that species populations can stabilize, regenerate, and sustain themselves naturally—an approach that KIIT University is committed to integrating into its conservation guidelines.

Dean, QA

Assurance