# Project Updates February 2025

**Title of the Project:** *Ecology, anthropogenic threats, people's perception and Conservation status of Grey Crowned Crane (Balearica regulorum) in Lutembe Bay Wetland, Wakiso district.* 

# Activity 1: Pre-visit Evaluation (December 2024): Engaging local community members above 50 years old to share their experiences and historical knowledge

As part of our commitment to preserving the Lutembe wetland and its wildlife, particularly the Grey Crowned Crane (*Balearica regulorum*), the project team conducted a pre-visit evaluation in December 2024. This initiative focused on engaging local community members aged 50 years and above to share their invaluable historical knowledge and experiences regarding the wetland.

# Engaging Local Voices

We invited 20 local community members (10 men and 10 women) from villages surrounding Lutembe wetland to participate in focused discussions. These individuals, all above 50 years of age, provided insights into the historical conditions, changes, and challenges associated with Lutembe wetland from as far back as the 1970s to the present day. The discussions were framed around key themes, including:

- The abundance of wildlife and ecological richness of the wetland in the past.
- The benefits derived from the wetland over the decades.
- The causes of its degradation.
- Observed changes from 1995 (the year Uganda gazetted its wetlands) to 2024.

This engagement provided critical context for understanding how the socio-economic activities of surrounding communities and broader developmental changes have shaped the wetland's current state.

## Historical Timeline of Lutembe Wetland

The narratives gathered during the pre-visit evaluation revealed the following timeline of key events:

• 1970s

The Lutembe wetland was rich in biodiversity, hosting species such as crocodiles, hippos, and an abundance of fish. The Grey Crowned Crane, locally known as "Ngali," was a common sight, symbolizing the wetland's vitality.

 Significant Event: The shooting of Lutembe's only known crocodile marked a turning point in the wetland's wildlife history. The crocodile had been a popular local attraction and its loss symbolized the beginning of wildlife decline in the area.

• 1980s

Economic hardships led to increased exploitation of wildlife. Some villagers resorted to

capturing and selling rare birds, including the Grey Crowned Crane and the Shoebill Stork (*Balaeniceps rex*), for food or financial gain. However, interventions from conservationists, including the Uganda Wildlife Education Center (formerly Entebbe Zoo), rescued some species and underscored their importance as national symbols.

• 1990s

The introduction of flower farming in the wetland marked a shift toward commercial land use. Initially occupying about two acres, flower farms expanded to over ten acres, encroaching significantly on wetland areas.

 1995: In response to the growing degradation of wetlands nationwide, the Uganda government gazetted all wetlands, including Lutembe, as protected areas to ensure their sustainable use.

# • 2000s to Present (2005–2024)

The Lutembe wetland experienced further challenges, including:

- Increasing settlement and agricultural activities.
- Sand mining and waste dumping.
- Continued expansion of flower farms.
- A steady decline in the population of the Grey Crowned Crane, now considered a species under threat in this area.
- 2006: Lutembe wetland was designated a Ramsar site, recognizing it as a wetland of international importance. Despite this status, challenges to its sustainability persist.

# Key Observations from the Evaluation

The insights gathered during this activity highlighted significant changes in the ecological health and socio-economic dynamics of Lutembe wetland over the past five decades. While the wetland has historically served as a critical habitat for wildlife and a source of livelihood for surrounding communities, it now faces considerable threats, including habitat loss, pollution, and biodiversity decline.

The participants' narratives emphasized the importance of concerted conservation efforts, particularly for flagship species like the Grey Crowned Crane, which holds cultural, ecological, and symbolic significance.



Photo 1: Elders Share Historical Knowledge: Community members aged 50 and above recount their experiences and the rich history of Lutembe Wetland, providing invaluable insights for conservation efforts. © Byron Ssemambo.

## Outcome of the Pre-Visit Evaluation at Lutembe Wetland:

The pre-visit evaluation at Lutembe wetland proved to be a profoundly insightful activity that strengthened the project's foundation for conservation efforts. By engaging 20 local community members aged 50 years and above, the project team gained invaluable perspectives on the historical, cultural, and ecological significance of the wetland.

During the discussions, community members vividly recalled the vibrant biodiversity of Lutembe wetland in past decades. They described a landscape teeming with life in the 1970s, featuring crocodiles, hippos, abundant fish, and a rich variety of birds, including the Grey Crowned Crane, locally known as "Ngali." This species, once a common sight, was a source of pride and a symbol of ecological harmony in the region.

However, the narratives also underscored the gradual degradation of the wetland over time. Participants recounted critical turning points, such as the shooting of the iconic Lutembe crocodile, which marked the beginning of wildlife decline in the area. They reflected on the socioeconomic challenges of the 1980s, which led to the exploitation of key species like the Grey Crowned Crane and the Shoebill Stork for food and trade, despite these birds' symbolic significance as national treasures.

The establishment of flower farms in the 1990s was identified as a major contributor to habitat loss. Initially occupying small portions of the wetland, these farms expanded significantly, encroaching on critical habitats. Participants expressed concerns about the increasing pressure on the wetland due to settlement, sand mining, agricultural activities, and waste dumping, which have escalated over the years.

Despite the Uganda government's efforts to gazette wetlands in 1995 and the designation of Lutembe as a Ramsar site in 2006, the participants observed that these measures have not sufficiently curbed degradation. The expansion of commercial activities and inadequate enforcement of conservation regulations were highlighted as ongoing challenges.

A poignant outcome of the discussions was the collective acknowledgment of the decline in the Grey Crowned Crane population. Once abundant and an integral part of the wetland's identity, the species has become increasingly rare. Community members expressed a deep sense of loss and a desire to see the cranes and other wildlife restored to their former abundance.

#### Key Outcomes

- 1. The evaluation fostered an enhanced understanding among participants of the link between their historical experiences and the current state of the wetland. It also reinforced the importance of collective action to protect this critical ecosystem.
- 2. The rich historical narratives provided a timeline of ecological changes and socioeconomic pressures affecting Lutembe wetland over five decades, offering a valuable foundation for designing targeted conservation strategies.
- 3. The activity deepened trust and collaboration between the project team and the local community. Participants expressed willingness to be involved in future conservation initiatives and to advocate for sustainable practices.
- 4. The evaluation highlighted key areas for immediate intervention, including:
  - Restoration of Grey Crowned Crane habitats.
  - Establishment of community livelihood initiatives (like, alternative sources of food and income generating activities)

## Activity 2: Data Collection through Field Surveys (October-December 2024)

Between October and December 2024, the Rufford-funded project undertook extensive data collection to study the behaviors, habitat use, and distribution of the Grey Crowned Crane (*Balearica regulorum*) within Lutembe Wetland. This activity involved direct field surveys and participatory engagement with local communities to gather both scientific and anecdotal data critical to conservation planning.

#### Field Survey Methods

The trained community monitor conducted field surveys utilizing a combination of direct observations, acoustic detections, and participatory methods to maximize data accuracy and reliability. Specific approaches included:

- 1. Transect Walks and Point Counts
  - Field surveys were conducted twice in a week during peak activity periods for the Grey Crowned Cranes: early morning (6:00–9:00 AM) and late afternoon (4:30– 6:30 PM).
  - Transect walks covered three defined paths extending up to a 1-kilometer radius from the wetland edges, chosen based on local residents' reports of frequent Crane sightings.
  - Five-minute point counts were performed at regular intervals along each transect to document direct sightings and acoustic detections of Grey Crowned Cranes.
  - Additional vegetation assessments were conducted, counting tree species within 10-meter radius circular plots along the transects. Indicators such as tree density, dominant species, and signs of habitat disturbance were noted to evaluate habitat quality.
- 2. Boat Surveys
  - Weekly round trips around the wetland were conducted using a motorized boat, enabling access to less traversable areas. This approach allowed for broader spatial coverage and observations of nesting sites, roosting behaviors, and habitat conditions.
- 3. Recording Habitat Variables
  - Data was collected on nesting sites and critical habitat variables such as vegetation type, ground cover, and disturbances. Observations also included human activities and other potential threats to the Grey Crowned Cranes, such as illegal land use, waste dumping, and encroachment by flower farms.
- 4. Community Engagement through Participatory Rural Appraisal (PRA)
  - Structured questionnaires and interviews were administered to community members, allowing the integration of local knowledge into the study.
  - Community members shared their perceptions of Grey Crowned Crane numbers, behaviors, breeding, and roosting patterns. These insights supplemented field data and provided historical context to observed trends.

#### Preliminary Findings from the Data Collection

- 1. Behavior and Habitat Use
  - The Grey Crowned Cranes were most active during the early morning and late afternoon hours, often observed foraging near wetland edges and roosting within patches of undisturbed vegetation.
  - Preferred nesting sites were identified in areas with dense ground cover and minimal human disturbance, although such habitats were found to be increasingly rare.
- 2. Habitat Quality and Disturbance Indicators
  - Transect walks revealed evidence of habitat degradation, including reduced tree densities in some areas and the encroachment of agricultural and settlement activities.
  - Flower farm expansions and waste dumping were significant contributors to habitat disturbances, particularly near the wetland edges.
- 3. Threats to the Grey Crowned Cranes
  - Human activities such as sand mining, agricultural expansion, hunting for food, destruction of their eggs, stoning and the construction of informal settlements were identified as key threats to the cranes' habitat.
  - Some respondents reported instances of Crane egg collection for food or trade, further endangering the species' already dwindling population.
- 4. Community Perceptions
  - While some community members expressed pride in the Grey Crowned Crane as a cultural and ecological symbol, others viewed it as a competitor for agricultural resources.
  - Participants highlighted declining Crane numbers over the years, attributing this to habitat loss, pollution, and the disturbance caused by human activities.

#### Key Outcomes of the Activity

- 1. The combination of scientific methods and community input provided a holistic understanding of the Grey Crowned Cranes' habitat requirements, behaviors, and threats.
- 2. By involving local residents in both data collection and discussions, the project deepened community ownership of conservation efforts.

3. The surveys highlighted critical areas for intervention, including habitat restoration, reduction of human disturbances, and community education on the ecological and cultural importance of the Grey Crowned Crane.



Photo 2: Shows Community monitors conduct field surveys along a 1 km transect walk, gathering crucial data on Grey Crowned Cranes and their habitat. © Byron Ssemambo.

## **Upcoming activities**

- 1. Data Analysis and Expert Consultation (Analysis and Recommendation March-April 2025).
- 2. Awareness workshops and Communication of the results (May 2025).