



Healthy wetlands for the cranes and people of Rukiga, Uganda

Funded by the UK Government through Darwin Initiative



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Elephant grass stems, used to combat soil erosion and as livestock fodder, are distributed to households for planting across a hillslope, above the wetland.

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Background

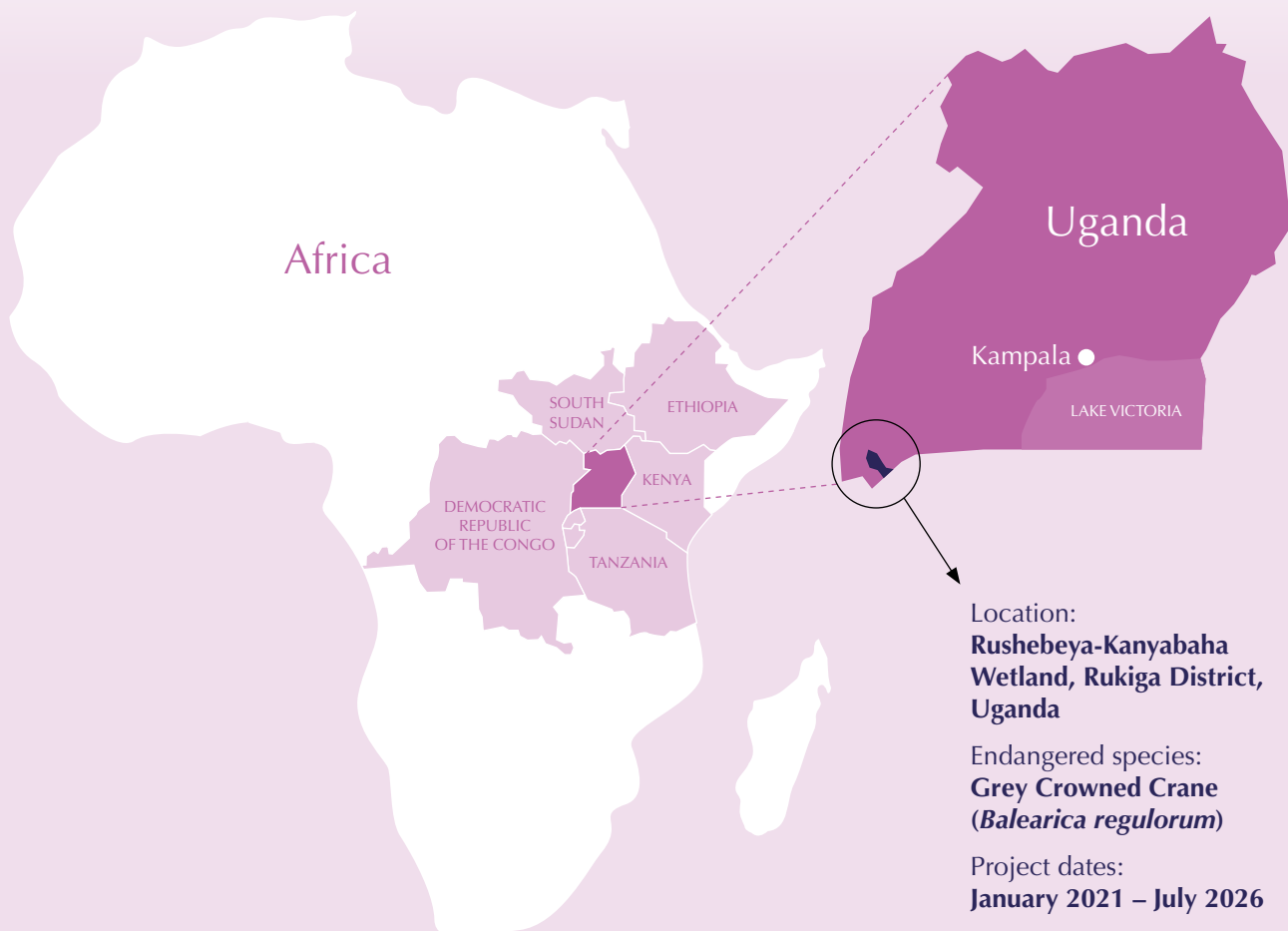
Between 1986 and 2020, the Rushebeya-Kanyabaha Wetland, in South-West Uganda, has reduced in size by 33%, largely driven by expanding subsistence agriculture in an area with extremely limited livelihood alternatives. The remaining wetland and its catchment are rich in biodiversity, notably the Endangered Grey Crowned Crane, for which the wetlands are a critical nesting habitat. The c. 30,000 people of Rukiga also depend on the health of the wetland for their food and water security, livelihoods and health, including the ability of wetlands to slow the increasingly common floods, a result of climate change.



“We are already seeing the benefits of working with health partners and early indications show there are quicker and more substantial results. The level of support from community members is huge, and we attribute that to responding to a diverse range of issues they have identified. By sharing transport and other costs, we are also able to deliver more work more efficiently.”

Dr. Adalbert Aine-omucunguzi
International Crane Foundation/
Endangered Wildlife
Trust Partnership

*The Grey Crowned Crane (*Balearica regulorum*) is Uganda's national bird and listed as Endangered in the IUCN Red List of Threatened Species. They mate for life and can often be seen dancing, bowing and jumping with their partner.*



Location:
**Rushebeya-Kanyabaha
Wetland, Rukiga District,
Uganda**

Endangered species:
**Grey Crowned Crane
(*Balearica regulorum*)**

Project dates:
January 2021 – July 2026

“We are now providing clinical services in 10 additional locations, reaching the most marginalised in our community, something we have wanted and needed to do for many years but have lacked the funding. Last mile rural communities are a priority for the health sector and they often live in areas which are also priority areas for conservation. We see many opportunities for the long term.”

Dr. Rutaremwa Esther
Rugarama Hospital

Community Views

Research¹ undertaken within the project communities highlighted that the people living in the area have a deep understanding of the connections between their own health and that of their local environment. They spoke about how wetlands slow floods, provide food, like mudfish, and provide materials needed for handicrafts, such as baskets and mats. We heard how, due to climate change, unpredictable seasons and rainfall patterns are leading to crop failures and how floods and heavy rains destroy crops, leading to malnutrition. Relatedly, many people spoke about the challenges of large families, which diminish available farmland over time as parents subdivide land for their children’s inheritance, making it harder to feed everyone. This is exacerbated by the lack of quality family planning information and services, leading to larger families than desired. Alongside this, soil erosion, tree felling and a lack of anti-erosion measures further reduce soil quality and crop yields, increasing the need to convert remaining fragments of the wetland into agricultural land. Communities also told us how low incomes and poverty lead to gender-based violence (which puts women at greater risk of unintended pregnancy).

¹ Including 28 focus-group discussions and 40 key informant interviews.



Senior Field Officer, Orishaba Phionah, briefing community members in the wetland about the benefits of wetland health for human health.

“In Uganda, we train community peer educators as Village Health Teams (VHTs) to mobilise neighbours to use health services. This is working better in Rukiga than elsewhere. Our approach in Rukiga is to train not only about health, but also the connections with family planning, nutrition, livelihoods, climate and environmental change. It just makes sense to the VHTs and they tell me they find it easier to mobilise by having more connections to speak about.”

Uwimbabazi Sarah
Margaret Pyke Trust

Our response

Given the connected human health, livelihood and environmental challenges community members told us they are facing, we are implementing an integrated programme of climate-smart agricultural livelihoods, healthcare training and service provision, wetland, upland and crane conservation and public education, directly responding to the calls of the community. To build resilient landscapes and communities for Rukiga’s cranes and wetlands, we have:

- Brought 200 hectares of wetland and 300 hectares of upland farmland under Community Conservation Agreements, leading to habitat restoration and management;
- Reached 8,469 people with interactive education on human health, environmental health, sustainable livelihoods, and the links between them;
- Trained healthcare workers and provided 10,000 health consultations (2,700 for family planning);
- Provided healthcare services at 10 previously un-used or under-used clinics;
- Trained 324 households on sustainable agricultural practices and market access (and supplied tools, seeds, and elephant grass stems);
- Provided an additional 1,950 people with elephant grass stems, trained them in its use and coordinated community-wide actions to stabilise hill slopes; and
- Commenced training of local council leaders as part of project sustainability.

The early results have exceeded our hopes and expectations. Between the 2020/21 and 2021/22 breeding seasons, there was a 200% increase in breeding pairs of Grey Crowned Cranes (11 to 33), and a 146% increase in the number of juveniles that fledged (13 to 32). Agricultural output has increased by 122% in some sites, allowing women to reinvest surplus income into village savings and loan schemes. Data shows 300 unintended pregnancies have been averted², helping women to plan their families around their income generating activities and other life plans.

² Calculated using “Impact 2” a socio-demographic mathematical model that allows us to estimate the impact of our healthcare provision.

Sustainable Development Goals advanced by our project



Community Conservation Groups weigh their climbing bean harvests ahead of market day. Climbing beans are an excellent source of dietary fiber and protein, they can survive in limited space, are quick growing and have high crop yields.

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“Using integrated health and conservation messages helps people to understand the relationships between human health, livelihoods and environment. Digging trenches and terracing slopes stops the most fertile soil washing away, helping crops, and the wetland and cranes below. Integrated messages [have] enabled women to use family planning without interference from their husbands [as] they have [heard] project messages on health, livelihoods and environment in community meetings and churches.”

Orishaba Allen
Project Peer Educator
and Rukiga resident

Project design

One of several unique aspects of our project is its design. Our hypothesis is that an integrated approach to health, livelihoods and environmental activity will generate greater health and conservation outcomes than if actions in each of these sectors are delivered alongside each other but separately, as they ordinarily are. We designed the project to allow for comparative analysis between these two approaches. We have two types of project community, ‘parallel’ and ‘integrated’. In both areas, community members benefit from the same health, livelihood and environmental actions but the way in which the activities are undertaken is different. In the ‘parallel’ areas, health actions are undertaken separately from the climate-smart agricultural livelihood and environmental actions, as if two projects were happening in parallel. In the ‘integrated’ areas every health, livelihood and environmental activity has been adapted, using the connections between the way the community see their interrelated challenges, with project partners working together, to provide services and support in an integrated way.

Early results indicate our hypothesis was correct. There are even greater results in the ‘integrated’ areas. We are seeing that, in the ‘integrated’ areas:

- The community is even more supportive of project actions;
- Peer educators are more motivated and significantly more active and engaged, undertaking twice as many home visits, reaching more than five times as many people;
- Attendance by men and women at community talks on both health education and conservation increased by more than 50%, exposing more men to health messages and more women to conservation messages;
- More women attended health services and also heard conservation and livelihoods messages; and
- Community Conservation Groups grew in size by 20% more participants.



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Orishaba Allen, a peer educator in Rukiga District, is well-known in her community. She shares information to people about the connections between human health and environmental health.

“We have a detailed monitoring and evaluation framework which means, over time, we can judge whether the project partners’ hypothesis that improved conservation and health outcomes are possible because of integration, holds true. Research evidence remains limited on how best to design programmes for delivering integrated responses and so our project data have the potential to influence programme development far beyond the project site.”

Professor Susannah Mayhew
London School of Hygiene
& Tropical Medicine

The future

We are now scaling our approach, to landscape level, strengthening human and ecosystem resilience against climate shocks, building the resilience of 30,000 people who live in the wetland and its catchment, with further livelihood, health and wetland conservation actions.

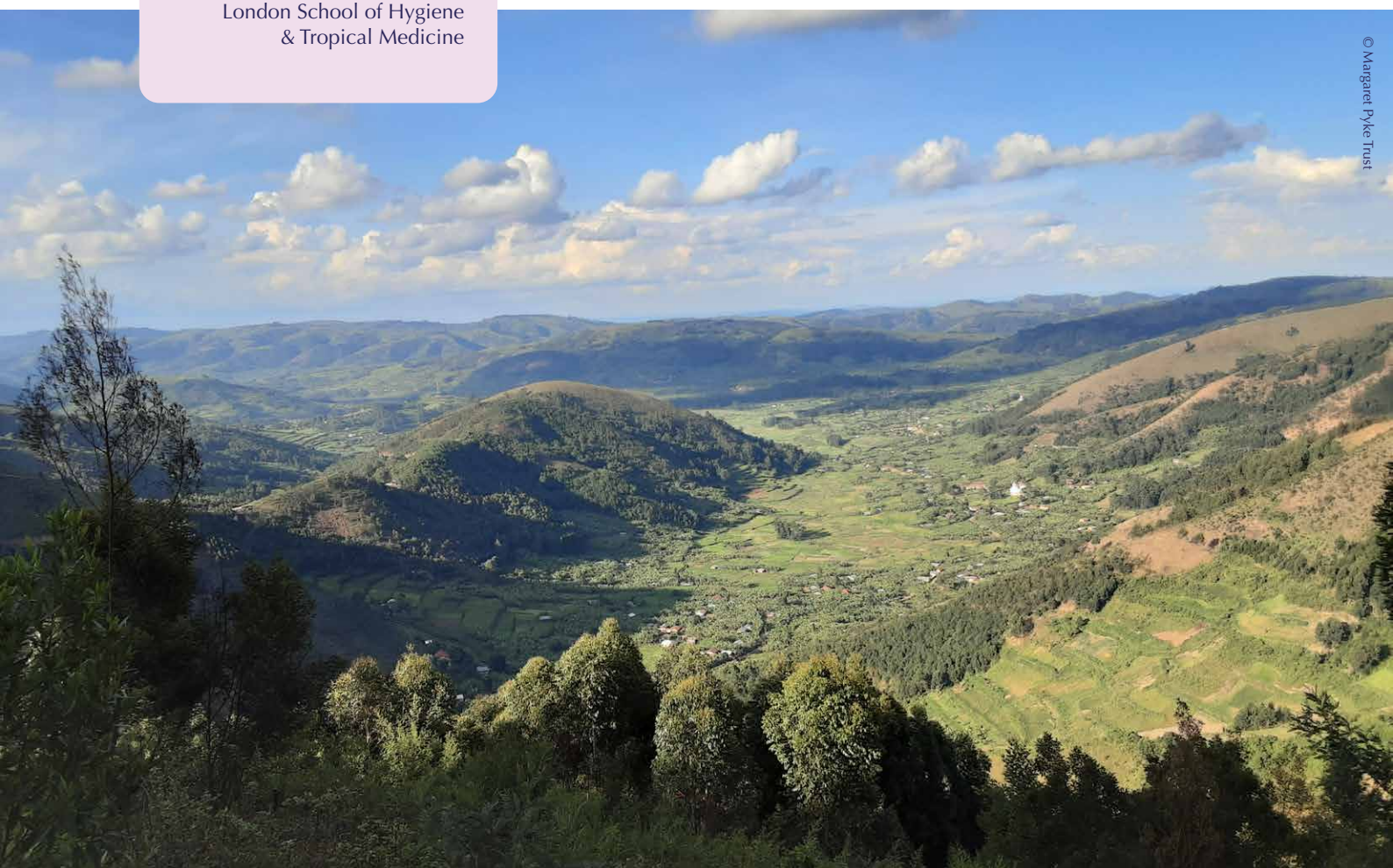
We are also undertaking a household survey and further analysing and comparing ‘parallel’ and ‘integrated’ data. We believe this analysis will help decision makers to design better projects and policies, as well as donors to support successful and sustainable projects.

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Rukiga District has steep slopes on which smallholder farmers grow crops, and narrow wetland valleys, which are the predominant source of drinking water for communities.