Project Update: June 2019

The team secured an introductory letter from the head of Ornithology section, a section of Zoology Department, National Museums of Kenya, then introduce to farmers and stakeholders, which involved local administrators (Chiefs), Kenya Forestry Research Institute (KEFRI), Kenya Agricultural Research Organisation (KALRO), National Irrigation Board (NIB) and farmers. We recruited locals who are also farmers to work with the team in all the activities, which includes ground logistics and entire provision of local transportation using their motorbikes and monitoring birds. We also have four interns based at the Ornithology section of Zoology Department of the National Museums of Kenya participating in the project.

Activity 1: Reconnaissance

After the introduction of the project, we conducted reconnaissance to identify transect lines, orient the locals on the chosen methods of surveying birds; point count (PC), time species count (TSC) and opportunistic observation.

Activity 2: Bird Surveys

We have had successful birds survey and monitoring since the start of the project local have been part and they have so far played a very important role on the same as well as learning names of some of the common species. Team conducting point counts, timed species counts (TSCs), opportunistic observations and absolute counts. The survey covered Perkerra irrigated farmlands, riparian woodlands of Perkerra River and the surrounding environment that includes farmers' settlement areas. We recorded birds species among them; Migratory species, resident species including over 80 individuals in a single flock of endangered Grey Crowned Crane and one Madagascar pond-heron (Ardeola idea).



Figure 1: Figure 1: Team conducting point count at different sides of the farm that had Maize for Kenya seed days before the survey began.



Figure 2: Survey team encounter young boys with killed birds while conducting Time species count (TSC), they were happy for their successful hunting. **Figure 3:** little did the young boys know that the strange person they encounter was a bird expert and the talk about birds start, with the help of illustrations on bird guidebook, they learned, appreciate and agree to help in conservation of birds.



Figure 4: Learning continues; what is a pair of binoculars? What is it for? And after explaining all that they got a chance to use and they really enjoy and understand birds in a different way. **Figure 5:** One of the young and hardworking farmers we talked to filling a questionnaire.



Figure 6: To the left are Sunflowers that are almost ready for harvest, farmers had many challenges keeping off birds from the crops, and to the right is Rüppell's starling (*Lamprotornis purpuroptera*) feeding on ripe Tomatoes.

Activity 3: Farmers and agro-vet dealers, and experiences on pesticide availability and use

Farmer experience on pesticides and application, agro-vet dealers share information on chemicals locally found, chemical application and farmer education. We have managed to get questionnaire feedback from over 45 farmers on crops commonly grown, challenges facing their agricultural production, pest invasion and the possible solution they apply to manage, the intensity of chemical application and experience on bird poisoning. Moreover, over 10 agro-vet dealers' questionnaire feedback on operation success, farmers access to chemicals and farmers sensitisation on chemical application safety into a target pest while protecting themselves, wildlife and environment when purchasing the products.

Activity 4: Exchanging professional experience on birds with pupils of primary schools within the Perkerra irrigation scheme

We have successfully reached out to pupils both at school and at home during holiday and training them on importance of birds, avian conservation techniques through research and monitoring using a various methodology which includes observation using binoculars/telescopes and catching them with mist nets through conducting mistnetting. These are part of our program to exchange professional experience on birds to trigger future conservation through sustainable agriculture and responsible and safe use of the chemical.



Figure 5: At Perkerra primary school with pupils. From top left, project leader unwrapping banner with the Rufford foundation logo, photos of past work of the project. Top right explaining the message on the banner to pupils; bottom left extraction of birds caught with mist-net while explaining how it's done, why we do mist netting and bottom right, holding a bird for pupils to see, ask questions and appreciate birds.



Figure 6: At Labos primary school with teachers and pupils. Top left Newly refurbished school gate, top right two boys who really got fascinated about birds; bottom left displaying some of the plates of birds found in Perkerra especially those stunning readily available to most of them and a target to this project like Grey Crowned Crane (interestingly, all the pupils we interacted knew about the species, since they are common in the farms) and bottom right Labos Head teacher with group of pupils who needed to know more about birds.