



Darwin Initiative Capability & Capacity Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://www.darwininitiative.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2024

Submit to: BCF-Reports@niras.com including your project ref in the subject line

Darwin Initiative Project Information

Project reference	DARCC020
Project title	Improved decision making through citizen science data
Country/ies	Kenya, Nigeria (but also include participation from Ethiopia, Rwanda, Somalia, Uganda, Nigeria, Gambia, Ghana, Senegal, Liberia, Cameroon and Sierra Leone
Lead Partner	Tropical Biology Association
Project partner(s)	Kenya Bird Map and Nigerian Bird Atlas Project
Darwin Initiative grant value	UKP199,339
Start/end dates of project	1 Apr 2023/31 March 2025
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	Apr 2023 – Mar 2024 and Annual Report 1
Project Leader name	Rosie Trevelyan
Project website/blog/social media	https://tropical-biology.org/using-citizen-science-data-for-decision-making/
Report author(s) and date	Anthony Kuria, 8 April 2024

1. Project summary

The project seeks to unlock the use of citizen science biodiversity data for evidence-based decision, starting with Kenya and Nigeria, and scaling to other East and West Africa countries. To achieve this, the project leverages on the Kenya Bird Map (KBM) and Nigerian Bird Atlas Project (NiBA)- two long-term citizen science bird mapping projects- to:

1) Build capacity of managers of citizen science projects and decision makers (drawn from civil society and government) on how citizen science data can be used effectively in decision making. Through two practical training courses, the project helps to address a) the lack of capacity in analysing citizen science data and interpreting results to demonstrate how biodiversity - and birds - respond to environmental threats such as changes in land use and climate, and b) weakness in advocacy and communication on how to demonstrate and report environment changes, and on interpreting biological trends correctly. Both capacity gaps were identified by stakeholders working with KBM and NiBA as hampering the use of citizen science data and evidence for conservation management, across Africa.

2) Develop an online platform through which users can access citizen science data and information, and use it to generate their own outputs, and make informed decision. The platform has been identified as a key barrier hampering the linking of citizen science data and its impact on decisions.

3) Bridge science and policy for informed decision-making through “in-situ meeting and engagements” targeting decision makers in Kenya, but also in Nigeria, to synthesize project results and agree on a road map on integrating citizen science data into management and decision guidelines of government agencies. Limited collaboration between citizen science managers and decision makers, and working in silos continues to hinder transfer of expertise and knowledge between these sectors. These weaknesses were highlighted by the stakeholders and partners during project formulation and are well-documented in scientific literature.

Beyond Kenya and Nigeria, the project is engaging and building capacity of citizen science managers from Ethiopia, Rwanda, Somalia, Uganda, Gambia, Ghana, Senegal, Liberia, Cameroon and Sierra Leone. This regional scope is strategic for the ultimate scaling of project results and outcomes.

2. Project stakeholders/ partners

Our project involves the Kenya Bird Map (KBM), and the Nigerian Bird Atlas Project (NiBAP) as the in-country formal partners. Because both partners are institutional projects, it was necessary to engage their affiliate institutions (as key stakeholders) to legalise project operations. The project’s 3 key stakeholders are:

- A Rocha Kenya. KBM founding member appointed for legal purposes to represent KBM and administer project funds. A Rocha Kenya and KBM signed a formal tripartite contract with Tropical Biology Association (TBA, Project Lead Partner).
- National Museums of Kenya (NMK). The museum hosts the KBM project, and through the head of ornithology section, provides day-to-day supervision of the KBM manager.
- A.P. Leventis Ornithological Research Institute (APLORI). Manages the NiBAP, and through NiBAP manager has signed a formal contract with TBA to administer project funds allocated to NiBAP.

Other stakeholders also engaged informally include Nature Kenya (representing the Bird Committee of the East Africa Natural History Society, a KBM implementing partner), BirdLife Africa Partnership, Kenya’s National Environment Management Authority (NEMA), and the Wildlife Research and Training Institute (WRTI). A further, 30+ institutions working in research or conservation in Kenya were surveyed for information on current, and potential use of decision tools for conservation management in Kenya. Their feedback and inputs are guiding the development of the project’s online platform (See Annex 11: Survey report). A few experts (on birds) have also been identified, and they will be invited (in project year 2) to review results published in the online platform, plus a scientific paper (in preparation) on the same.

The project partners and key stakeholders, especially, attended/engaged/participated in:

- the project launch zoom meeting held on 19 April 2023 that discussed and agreed project roles and responsibilities, and reviewed project budget. At least 8 project meetings (See Annex5) ensured the partners/stakeholders remained engaged throughout the reporting year.
- procuring trainees and trainers for the project’s course1. They helped ID potential trainees and institutions, and review training applications. BirdLife Africa, in particular, provided contacts of likely trainees within its networks of partners in East and West Africa, enhancing the project reach.
- planning and teaching on course1 that was held in Kenya. NMK helped identify the trainer for the online R training bootcamp (new component linked to course1); the trainer had trained NMK staff on waterbird count data analyses making him suitable for the bootcamp. (Training reports are attached as Annex 10).

- recruiting data analysts (2 for Kenya and 2 for Nigeria), and a developer for the online platform.

Partnership strengths. The partners/stakeholders'

- experience and network of experts (on birds, statistics) is a strength. A Rocha Kenya, NMK, and APLORI/NiBAP past engagement with the project's platform developer and data analysts greatly reduced recruitment time; and ensured contracted individuals were committed and had the expertise to deliver the results the project needed.
- commitment has been invaluable. They have remained fully engaged in project activities and planning meetings, and actively participated in the contracting and supervision project's service providers (See Annex 7: bird hub reports for year 1 by NiBA and KBM (and also Nature Rwanda)).

Challenges

- Coordinating a diverse number of partners and stakeholders was time consuming. However, having several structured meetings helped.
- The very low capacity in environmental statistics in Africa, and citizen science being relatively new. The project had very limited options of qualified Africans to take up online platform design and data analysis assignments. Only nine data analysts (4 Kenyans (incl. the only women applicant) and 5 Nigerians) applied for the project's data analyses assignments. The only platform developer we found was non-African but highly qualified and committed to partner with us.

3. Project progress

3.1 Progress in carrying out project Activities

Activity 1.1: Training course1 happened face-to-face from 4th to 7th December 2023 (against the initial 2023Q3 timeline).

We integrated a NEW component to course1: an online R programme training bootcamp between 22 February to 2 March 2024. The bootcamp involved a cumulative 30 hours of live teaching (on Zoom). 6 zoom sessions were held, lasting between 2 and 6 hours each. (See Annex 10. Training reports for both course1 and the bootcamp)

The need for the bootcamp was informed by the low level of knowledge in data analyses in R among trainees on the face-to-face training, yet R programme is crucially important in analysing citizen science type data. The training was delivered by an external trainer-cum- R expert contracted by the project. A second R expert was contracted to deliver a resource booklet of worked examples of analyses of citizen science data for use by the citizen science managers on course1 & bootcamp, and participants of course2 (activity 2.1). The resource was due 31st March 2024, which could not be met, and a new deadline was set for 30 June 2024.

Activity 1.2: Follow up support and mentoring of trainees on the course1 is on-going, with actions targeting 10 course1 trainees (against a target of 4). Trainees are reporting good progress in generating results from their citizen science data (see Annex 6(b) and (c)).

Activity 2.1. Planning on-going and course2 will happen in project year2 (Q1).

Activity 2.2. Follow up engagement, and will be intensified in second half, year2. Further, a survey of Kenyan biodiversity agencies and institutions on the tools they use to access biodiversity data was designed in 2023Q3 and undertaken in 2023Q4, providing valuable ideas for future engagements (under Activity 2.2), and improving the online platform (Activity 3.1)

Activity 3.1. A technician for the online platform was contract on time (early 2023Q3), following zoom meetings (on 10 Aug 2023 and 11 Oct 2023) and email engagement with the technician in 2023Q2 that finalised the assignment of work. A face-to-face update meeting with the technician happened in Nairobi on 23 March 2024. These engagements and meetings are on-going, allowing project partners and key stakeholders to provide inputs on the online platform. More details on the meetings are in Annex2.

Activity 3.2. Progress on the online platform is good; a website domain for the platform was registered in 2023Q4 under the name “Kenya Bird Trends”, and will to be launched in 2024Q2 once final set up tweaks and uploading of results is complete (see platform screenshot in Annex 6(a)).

Further, a scientific paper on results associated with online platform has been drafted. The paper involves Kenyan co-authors (representing project partners and stakeholders, government wildlife authorities e.g. Kenya Wildlife Service, and several Kenyan conservation organisations, so as increase Kenyan ownership and uptake of the work and project outcome. A reviewer of the draft paper recently wrote saying *“this is a very important paper for Kenya and for KBM that has potential implications more broadly, i.e. for countries with old atlas data”*

Activity 3.3: To be delivered in year 2. At the face-to-face meeting (activity 3.1), it was agreed that the developer consider providing publicity resources (PowerPoint presentations and a video demo of the tool) for marketing purposes.

Activity 4.1: To be delivered in year 2. The project partners have proposed to replace the ‘symposium’ with ‘in situ meetings and engagement’, as those will be more effective. A change request is being finalised.

Activity 4.2: To be delivered in year 2.

3.2 Progress towards project Outputs

Progress for output 1 and output 3 is above 50% completed, while output 2 and 4 – both associated with year 2 activities, – at around 25%. Overall, we are confident we will fully deliver on all the project outputs.

Output 1.

The project has enhanced the capacity of citizen science managers (both male and female) to analyse and communicate citizen science data and evidence. This includes building the managers’ understanding of how to link their results to policy and management, and to inspire mappers they work with. Before this project, there were limited efforts to specifically train managers of citizen science bird mapping projects on how to interrogate citizen science data, and generate good questions and analyses that lead to reliable results. Further, this project represents the first attempt to bring together managers from different countries who share similar interests to learn from each other’s experiences. This, the contacts made, and ongoing mentoring and support from the project, are a rich recipe for catalysing a lasting community of practice.

This project, as detailed in training register (Annex 8) and training assessment (annex 9), both of which are also contained Annex 10 (training reports), has

- Trained 19 citizen science managers (against a target of 20), including 8 women (or 42% of the trainees exceeding project target of 33%). The managers came from 9 African countries and 19 institutions.

12 trainees represented 6 national bird mapping projects (against a target of 4): Viz Kenya, Nigeria, Ghana, Tanzania, Liberia and Sierra Leone, while four were from citizen science waterbird counts/common bird monitoring programmes in Kenya, Rwanda and Uganda. See Annex 8(a) for those trained and their project/institutional affiliation.

Based on training assessment (annex 9a), all course1 trainees reported that their “abilities” as citizen science managers increased as a result of the training. They also reported marked improvement in their level of knowledge based on knowledge scores (before and after training) and a scale of 1 (lowest knowledge) to 5 (highest knowledge). From these scores, trainees’ average knowledge level increased as a result of course1 by.

- 15% (from 3.9 (average score before) to 4.5 (average score after)) in generating questions from citizen science data
- 34% (from 2.9 to 3.9) in analysing citizen science data and
- by 35% (from 3.4 to 4.6) in communicating citizen science results.

Nine of the 19 managers on course1, (against a target of 10) attended the online R training Bootcamp (annex 8b). Before and after bootcamp assessments indicate the participants gained the most skills and knowledge in r markdown (237.5% increase) followed by mapping with R (95%), Bayesian modelling (93%) and PCA & factor analysis (88%). (more details in annex 9b).

- Catalysed new connections and created a sense of belonging (community of practice) among like-minded managers from different countries. In their training assessment, all the managers said they gained knowledge from peer-to-peer learning. This is likely to last beyond the funding period as the managers continue to share their results and help each other.
- Strengthened the managers commitment in producing results from their citizen science projects as evident from the targets they set to deliver, applying their new skills (as detailed in the course reports, Annex 10). This include advocacy and communication pieces (in project year 2 second half or once the managers are through with data analysis).

As detailed in Annex 6b, the project has

- Enabled the managers to draft at least 7 papers for scientific publication including one containing threat hotspot maps for Kenya and Nigeria, and two that have been accepted for publication. These papers will help inspire citizen science mappers, and inform conservation and management in Kenya and Nigeria, in particular.

The trainees are working on data analyses for c.5 trend analysis ideas.

Annex 6(c) shows 3 popular communication pieces (reports/popular articles), in preparation; the final version will integrate results from analyses indicated above.

Output 2.

The main progress has been connections made with potential decision makers (to be invited for course2, Activity2.1). These include Nigerian National Parks, Nigerian Conservation Foundation (both applied to attend course1), and Kenya’s NEMA, WRTI and Kenya Wildlife Service who have been reached with project information (see details in Annex 7- Bird Hub reports). A further 30+ institutions were engaged through the decision tools survey (Annex11).

Output 3.

The Kenya Bird Trends online platform contains downloadable distribution maps for 1068 Kenyan birds (see Annex 6(a)). It will be made freely accessible to users in 2024Q2. Meanwhile, the project has created an opportunity for decision makers to interact with some results the platform will publish. This is through a scientific paper associated with the online

platform; diverse stakeholders in Kenya have been invited as co-authors, in a strategy aimed at deepening local ownership and validating the project results. This will ultimately catalyse wider use of the platform for decision making.

Draft threat hotspot maps for Kenya and Nigeria, by trainees on course1 are being finalised and will be uploaded and made accessible to decision makers on the online platform (see screenshots in Annex 6b).

Output 4.

The project has made little progress here. However, our proposal is to replace the symposium with in-situ meetings and engagements, creating more meaningful opportunities to market project results to targeted stakeholders. Such meetings are better at catalysing new alliances and strengthening existing one. A change of approach request will be submitted in year2Q1.

3.3 Progress towards the project Outcome

The project has increased understanding of citizen science data, and how it can be used to guide management among African citizen science managers. This was Yr 1 focus (to build capacity of managers and support them in generating outputs from their citizen science projects). These will be made accessible to decision makers through the online platform.

Feedback (email engagements) from 11 (27% being women) citizen science managers we trained show they are using their new knowledge to produce management-relevant results from their citizen science projects (see Annex 6b). Their results, together with the “new” online platform, - and its associated outputs (annex6a) -, demonstrate the improved capability and capacity created by this project, in generating citizen science evidence, and making it accessible for management. Much of the results are associated with the Nigeria Bird Atlas Project , and the Kenya Bird Map (see annex 7. Bird hubs reports). We expect more results (in year 2) from the 6 national bird mapping projects, and the 3 institutions involved in national citizen science waterbirds count and common birds monitoring, as a result of new skills and confidence build by the project.

For most of the national bird mapping projects (with the excepting of Nigeria), this is the first time they have produced real results from their projects; previous focus was on keeping volunteer mappers inspired, and sharing data in near-raw form. Similarly, waterbird count and common bird monitoring programmes have mainly generated popular articles with limited integration of scientific analyses and evidence.

How much the above feed and contribute to achieving the project outcome will be assessed in year 2. Meanwhile, we are confident of delivering on the project’s intended outcome by end of funding. Towards this, targeted follow up support and surveys, and marketing of project outputs, particularly during the decision makers training (Activity 2.1), and proposed in situ meetings and engagements, will greatly help.

Overall, the current indicators are sufficient in measuring project outcome. However, MoV for indicator 0.3 can be improved by including ‘citations of project results (published papers, online platform)’.

3.4 Monitoring of assumptions

While all the listed projects assumptions still hold true, we have identified a new assumption necessary for the delivery on the project output 1 and output 2, i.e.:

- Project outputs (scientific papers) that require peer-review are accepted and published on time.

This will be included in a project change request to Darwin Initiative

3.5 Achievement of positive impact on biodiversity and poverty reduction

The project is unlocking the potential of citizen science data by strengthening Africa's capacity to

- i) generate management-relevant results as outlined in Annex 6b. These include, for the first time,
 - provide ecological sound conservation recommendations. At least 3 studies are looking at impacts of environmental variables and human footprint on avian communities based on bird citizen science data. Recommendations from these studies will be invaluable in the conservation of urban environments, and in planning developments. Similarly, the paper on raptors susceptibility to electrocution offers great insights to guide siting of power lines in Kenya, and this will greatly benefit from the policy brief (in preparation) as a result of the paper.
 - At least 2 papers using citizen science data to predict i) grassland bird distribution and abundance in Kenya, and ii) suitable habitats for range restricted species in Nigeria. These papers highlight the importance of species-based habitat management in addressing species population decline.
- ii) communicate citizen science results for conservation. The project's Kenya Bird Trends (online platform) is the first online tool dedicated to providing managers and decision makers access to citizen science results in Kenya. The platform once launched will make available key information on all Kenyan birds (e.g. migration and threat status) making it easier for subject non-experts, eg EIA consultants and planners, to pick out species of concerns when planning for development, or designing actions, for instance, to mitigate climate change and human footprint on biodiversity.

4. Project support to the Conventions, Treaties or Agreements

Project's contribution to national and international convention, treaties or agreements will become more apparent in year 2.

5. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board ¹ .	42% (at start or 3 out of 7) but dropped to 29% due to normal staff changes (departure)
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ² .	75% (TBA and the Nigerian partner are women-led)

¹ A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

² Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	x
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

Our assessment is based on institutional representation of key project staff – which is a result of processes beyond the project. The project has 7 key decision makers including 2 women (Director of TBA (lead partner) and Nigeria Bird Atlas (Partners)); and 5 men (KBM manager, representatives of the National Museums of Kenya and A Rocha Kenya, the project's Financial Manager and Coordinator). At the beginning, the project coordinator was female, who left TBA six months after project start. Efforts by TBA to replace her with another female failed to work.

At project level, our approach is guided by the TBA's gender policy; the TBA strongly believes in gender equality and social inclusion and has committed to ensuring gender balance of all participants on all its training activities. During the course, this way applied at different levels:

- Procuring trainees for training. When scouting for potential project trainees (for course1), we sent the course announcement to as many women working on birds as possible, and encouraged our partners to do the same. As a results, 36% of the 45 of the course applicants were women. During selection we prioritised women (as they are often discriminated when opportunities arise) offering a higher proportion (42%) of course places to women.
- We hosted course1 in a secure environment and arranged accommodation for women in individual secure rooms.
- The venue for course1 was picked particularly because it was disability-friendly, which enabled the project's financial manager to fully participate and contribute to the training programme.

6. Monitoring and evaluation

The systems and processes to monitor and evaluate project are driven by the output/outcome.

For outputs with training as core action

- pre- and post- training assessments with anonymous responses, and combining both qualitative and quantitative measures. This together with asking the same questions "before" and "after" the training events for some of the aspects of the assessment gives "valid measurements" of training outcomes. For instance, an increase in scores on levels of

knowledge (comparing before and after scores) can indicate improved understanding of a concept as a result of the training.

- individual targets (set by participants at the end of their training), to provide follow up support and mentoring, and track trainees' outputs. This is effective in assessing skills applications.

For online platform-based output, we

- combine desktop review, and online survey (survey monkey). We used this approach effectively in year to collate information on current decision tools in use in Kenya, and insights for the proposed tool.
- Data forms – to be integrated into the online platform to gather users' information, and how they interact with the platform.

The major change in our M&E process, was contracting a consultant to undertake the desktop review and online survey of the decision tools in use in Kenya. This allowed for an independent market survey. However, the project partners with input from the online platform developer, lead in formulating the survey questions. The final report (Annex 11) was shared with all the project partners.

TBA (lead partner) is responsible for the project M&E, but partners contributed during project coordination meeting, and partners are invited to provide input via email.

7. Lessons learnt

We learnt several lessons that required us to adapt the project accordingly in year1.

- The citizen science projects managers' understanding of their data, and the analysis they can do on their citizen science data, was much lower than envisaged when formulating the project. This forced us to target course1 at a lower level, and give more focus on asking questions from citizen science data. Our other response was to organise a follow up R training online bootcamp for some of the managers (due to budgetary constraints).
- The R training online bootcamp really helped. Trainees had more specialised training and one-on-one mentoring from contracted trainer engaged under this project.
- Bringing citizen science managers from different bird projects and countries to learn together is very effective in strengthening collaboration, especially among those working on similar projects.
- There is a gap and an opportunity for a tool based on citizen science bird data and evidence in Kenya. While Kenyan decision makers use different tools to guide their work, they have little experience with citizen science-based tools and a majority considers them less effective.
- International travel in peak season can impact event budget substantially. Course1 happened in the December peak season and airfare prices shot up by nearly 40%. However, the project benefitted from the weakening of the Kenya shilling against the UK pound.
- There is an immense gap in citizen science data analyses, and data science generally, in Africa, and plugging it is urgent, and will require more investment of resources than available in this project.

For year 2, we expect to change project delivery plan – replacing proposed symposium with several in-situ meetings and engagements. This will help market the project's results more effectively to decision makers in Kenya and Nigerian, while enabling the project team to explain

how users can access results from the online platform. We feel this approach will be more productive in catalysing new alliances especially between the project partners and stakeholders, and the institutions of the decision makers they meet. Because we plan to meet decision makers in their own offices, the approach will also be more cost-effective due to a reduced number of people needing to travel.

8. Actions taken in response to previous reviews (if applicable)

See Annex12 for response to feedback received when your project was funded. This was shared in project half year report.

9. Risk Management

A case of delayed delivery of contracted assignment emerged; a training resource associated with the online bootcamp under course1 (activity 1.1)) and also course2 could not be delivered by 31 Mar 2024 due to its heavy R programme expertise requirement. The delivery timeline for the output has been extended to 31 June 2024.

An updated risk register is attached (Annex13). However, as reported to Niras in 2023Q3, the 'Risk Response Type' column is not accepting all available options

10. Sustainability and legacy

Year 1 project emphasis was on generating evidence from citizen science data, and profiling the project in Kenya and Nigeria, especially. While project outputs are yet to be shared widely – as most are still in preparation - we identified opportunities for collaboration:

Wildlife Research and Training Institute (WRTI), National Environment Management Authority (NEMA) and Kenya Wildlife Service (KWS), Nigeria National Parks and the Nigeria Conservation Foundation. From our engagement with WRTI, for instance, we learnt of institute's on-going efforts to create a centralized database to curate biodiversity data, and streamline data/ information sharing within the conservation community in Kenya. WRTI acknowledged they lacked comprehensive data on birds and recognized the proposed tool (online platform) as a valuable resource for establishing a baseline on avian biodiversity. Integrating the online platform within WRTI data management environment will be a lasting legacy from the project.

To further grow interest in the project, we will invite the above institutions to the launch of the online platform – to hear and synthesis project results. We have also invited the Director of the KWS, as a co-author to the paper associated with the online platform, and secured a meeting with the Director to showcase the project in year2Q1.

11. Darwin Initiative identity

Project activities were publicised through the TBA website and social media. We also following Darwin Initiative/Biodiversity Challenge Funds on Facebook and X (twitter). The project also produced a publicity flier that was approved by NIRAs as suitable for use.

12. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been reported in the past 12 months	No
Does your project have a Safeguarding focal point?	No
Has the focal point attended any formal training in the last 12 months?	No

What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 0% Planned: 0%
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.	
Nothing to report	
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants.	
Nothing to report	
Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved.	
No	

13. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				Two project staff resigned and procurement of new staff took a few months
Consultancy costs				We did not create a new online platform as initially planned. Instead we build on shared ideas with a developer which costs slightly less. However, year2 budget will be used up in engaging (bird) experts to review final species distribution maps
Overhead Costs				the need to design a new website was dropped in the new arrangement with the online platform developer. However, part of the budget was used to support the existing KBM website
Travel and subsistence				Overspent due to a Christmas season surge in flights costs. However, the effective variance is 7%, as a trainee on course1 made a UKP700 airfare cost contribution. A second trainee failed to honour their obligation meaning the variance would be much lower
Operating Costs				we found a cheaper venue plus there were savings from a weakening Kenya shilling. Also some UKP759 committed but not receipted.
Capital items (see below)				
Others (see below)				Underspent: the project's M&E demands were less than planned
TOTAL	77,124	85,237.00	10%	

Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	██████████	██████████	Project partners waived rent/bench fees, use of institutional equipment, staff time on project not covered by the Darwin grant, & travel cost contribution by trainees.
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

14. Other comments on progress not covered elsewhere

We had difficulties arranging flights within the budget, forcing us to ask trainees to contribution to their training participation costs. The trainees on course1 committed to raise UKP1369 but only UKP780 was realised (UKP700 was refunded directly to TBA).

15. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1: Report of progress and achievements against Indicators of Success for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Outcome Increased capacity among African citizen science managers and government agencies to use citizen science data for understanding and managing threats to bird biodiversity		
Outcome indicator 0.1 By March 2025, at least 8 African citizen science projects, and environment/conservation government agencies have improved capability and capacity in using citizen science evidence as their staff apply capacity from the project	9 African citizen science projects (6 on bird mapping, and 3 on waterbirds count/common bird monitoring) improved their understating of citizen science data and their staff are applying this capacity to generate evidence they can use to inform conservation and management. Evidence provided in section 3.3 of report and Annex 6b, and annex 7	Collate reports from all the 9 citizen science projects showing how they are using their results to benefit conservation
Outcome indicator 0.2 By March 2025, 30 individuals working in citizen science projects, and environment/conservation government agencies in East and West Africa are using citizen science results for conservation management and decisions as a result of the project.	11 individuals (incl. 3 women) from East and West Africa are actively engaged in generating conservation management relevant outputs as a result of the project, and their birds hubs also confirm this. Evidence provided in section 3.3 of report and annex 6b,6c, and annex7	Undertake regular follow up surveys for evidence on how the individuals and their organisations are applying their new capacities, and results
Outcome indicator 0.3 By October 2024, a new public Online Platform enabling access to citizen science data and analyses is being used by at least 50 citizen scientists and decision-makers across at least 5 African countries	to take place in the next reporting period	Finalise and launch online platform, ensuring its design to gather information on usage, visits and downloads
Output 1 National citizen science managers with enhanced capacity to analyse and communicate citizen science data and produce guidance and enhance commitment of citizen science mappers		
Output indicator 1.1 (20 managers of at least 4 African national bird mapping projects (a third being women) trained on citizen science data analysis and on advocacy and communication for policy influence)	19 managers from 6 African national bird mapping projects (a 42% being women) trained. Evidence provided in section 3.2 of report and Annex 8 & 9.	Get hub report from the 6 national bird mapping projects
Output indicator 1.2, At least 4 advocacy pieces based on citizen science data analyses produced by the trained managers by Sep 2024	to take place in the next reporting period	Follow up on advocacy pieces once data analyses are complete

Output indicator 1.3, At least 4 communications pieces on the analyses of priority species by the trained managers and shared with at least 5,000 African citizen science volunteers	3 draft popular communication prepared Evidence provided in section 3.2 of report and Annex6c	Follow up on draft and new communication pieces as data analyses are completed
Output indicator 1.4, 4 conservation priority species trends' analyses against likely causal threats with recommendations for conservation decisions produced and published by Sep 2024	At least 5 draft priority species trend analyses produced Evidence provided in section 3.2 of report and Annex6b	Follow up on final publications & report published abstracts in ext reporting period
Output 2. (Decision makers with increased capacity on use of citizen science data for policy and management decisions)		
Output indicator 2.1. At least 8 decision makers from at least 8 government agencies from East and West Africa trained on how to interpret citizen science analyses and use them to inform decisions and policy on biodiversity conservation by March 2025	to take place in the next reporting period	Plan and execute course2 (activity 2.1)
Output indicator 2.2. At least 2 new action plans produced by government environmental agencies showing how citizen science data will be integrated into management or policy decisions by January 2025.	to take place in the next reporting period	Follow up engagements with WRTI, KWS and NEMA, and also Kenya Forest service
Output 3. An open-access online platform enables bird citizen science data to be accessed and communicated to guide decisions.		
Output indicator 3.1, At least 50 individuals working in citizen science, and conservation are using the open access Online Platform by Feb 2025.	to take place in the next reporting period	Launch online platform and widely market its usage within Kenya's conservation community
Output indicator 3.2, Final Online Platform guidelines in data analysis are published online, and helping platform users access information they need for decision by Dec 2024	to take place in the next reporting period	Finalise and publish guidelines
Output indicator 3.3, Threats hotspots mapped (by trainees from course 1) in Kenya, and Nigeria and results made accessible on the online platform by February 2025	2 draft threats hotspots mapped produced Evidence provided in section 3.2 of report and annex 6b	Follow up on final threat maps, and upload on the online platform
Output 4. "In-situ meetings and engagements" brings together scientists and policy and management community		
Output indicator 4.1 By project end, 20 decision makers, and citizen science managers from East and West Africa (and at least 5 environment/conservation government agencies) have improved awareness of citizen science data's potential in environmental management and decision	to take place in the next reporting period	Agreed target audience, and hold in-situ meetings and engagements
Output indicator 4.2 By Mar 2025, 2 new alliances formed between citizen science hubs, and government agencies on	to take place in the next reporting period	Prioritise alliances especially with NEMA and WRTI, and KBM

integration of citizen science data in management, and reporting processes and guidelines		
Output indicator 4.3 A roadmap for scaling out online platform and future use of citizen science data for Africa, by end of project	to take place in the next reporting period	Review ideas for scaling project, starting with Nigeria, including resources needed to do so

Annex 2: Project’s full current Indicators of Success as presented in the application form (unless changes have been agreed)

Please present your latest agreed simplified logframe in this format and make **all** suggested changes in tracked changes. If the simplified logframe has gone through multiple rounds of internal review, please create a new version with final changes marked as clearly as possible.

Project Summary	SMART Indicators	Means of Verification
<p>Outcome: Increased capacity among African citizen science managers and government agencies to use citizen science data for understanding and managing threats to bird biodiversity</p>	<p>0.1 By March 2025, 30 individuals working in at least 8 African citizen science projects, and environment/conservation government agencies <u>have improved capability and capacity in</u> are using citizen science <u>evidence as their staff results for conservation decisions</u> by applying the capacity <u>from the project</u></p> <p><u>0.2 By March 2025, 30 individuals working in citizen science projects, and environment/conservation government agencies in East and West Africa are using citizen science results for conservation management and decisions as a result of the project.</u></p> <p><u>0.3</u> By October 2024, a new <u>public online platform decision support tool</u> enabling access to citizen science data and analyses is being used by at least 50 citizen scientists and decision-makers across at least 5 African countries</p>	<p><u>Follow up surveys of citizen science projects</u></p> <p><u>Follow up surveys and reports from bird map hubs and from government agencies</u><u>Download requests</u></p> <p>User registrations Number of downloads and Visits to the online platform</p>
<p>Output 1: National citizen science managers with enhanced capacity to analyse and communicate citizen science data and produce policy-relevant and management</p>	<p>1.1. 20 managers of at least 4 African national bird mapping projects (a third being women) trained on citizen science data analysis and on advocacy and communication for policy influence (by Dec 2023)</p>	<p>Training registers; and training assessment</p>

<p>guidance and enhance commitment of citizen science mappers</p>	<p>1.2. At least 4 advocacy pieces based on citizen science data analyses produced by the trained managers by Sep 2024.</p> <p>1.3. At least 4 communications pieces on the analyses of priority species by the trained managers and shared with at least 5,000 African citizen science volunteers</p> <p>1.4. 4 conservation priority species trends' analyses against likely causal threats with recommendations for conservation decisions produced and published by Sep 2024</p>	<p>Advocacy pieces published</p> <p>Communication pieces published</p> <p>Published trends analysis reports and threat hotspot maps</p>
<p>Output 2: Decision makers with increased capacity on use of citizen science data for policy and management decisions</p>	<p>2.1. At least 8 decision makers from at least 8 government agencies from East and West Africa trained on how to interpret citizen science analyses and use them to inform decisions and policy on biodiversity conservation by March 2025.</p> <p>2.2. At least 2 new action plans produced by government environmental agencies showing how citizen science data will be integrated into management or policy decisions by January 2025</p>	<p>Training registers; Knowledge assessment before and after training</p> <p>Copies of action plans</p>
<p>Output 3: An open-access online platform/ decision support tool enables bird citizen science data to be accessed and communicated to guide decisions</p>	<p>3.1. At least 50 individuals working in citizen science, and conservation are using the <u>open access online platform</u>new decision support tool by Feb 2025</p> <p>3.2. Final <u>online platform</u>decision support tool guidelines <u>in data analysis are</u> published online, and helping platform users access</p>	<p>Register of users and visits to the platform</p> <p>final guidelines as pdf and on website</p>

	<p>information they need for decision by Dec 2024.</p> <p>3.3. Threats hotspots mapped (by trainees from course 1) in Kenya, and Nigeria and results made accessible on the online platform by February 2025</p>	<p>Screenshots of reports being shared and uploaded on online platform</p>
<p>Output 4: <u>Symposium-“in-situ meetings and engagements”</u> brings together scientists and policy and management community.</p>	<p>4.1. By project end, <u>230</u> decision makers, and citizen science managers from East and West Africa <u>(and at least 5 environmental/conservation government agencies)</u> have improved awareness of citizen science data’s potential in environmental management and decision</p> <p>4.2. By Mar 2025, 2 new alliances formed between citizen science hubs, and government agencies on integration of citizen science data in management, and reporting processes and guidelines.</p> <p>4.3. A roadmap for scaling out online platform and future use of citizen science data for Africa, by end of project</p>	<p>Knowledge assessment before and after <u>training in-situ meetings</u>; attendance reports</p> <p>Reports from bird map hubs and from government agencies</p> <p>Copies of roadmap; End of project report</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Organise training course1 on analysis, interpretation and presentation of citizen science data and results in December 2023</p> <p>1.2 Follow up support and mentoring for four of the trainees from course1 (1.1)</p> <p>2.1 Organise training course2 for decision makers on how to use and interpret citizen science outputs, and how to use the <u>online platform decision support tool</u>.</p> <p>2.2 Follow up engagement with national agencies on using biodiversity data in decisions</p> <p>3.1 Contract a technician for the online platform and hold an online meeting with technician and selected end users to agree design, layout and content of platform</p> <p>3.2 Online platform is developed with guidance from all project partners and launched</p> <p>3.3 Users’ guidelines finalised and published (online) for online platform</p>		

4.1 ~~Symposium~~ “In situ meetings and engagements” on way forward for citizen science data happens and brings together citizen scientists and policy communities from East and West Africa. Outputs from 1,2 and 3 presented

4.2 Road map on way forward is outlined at “in situ meetings and engagements” ~~symposium~~ and finalised by TBA

Important

Assumptions: Please describe up to 6 key assumptions that, if held true, will enable you to deliver your Outputs and Outcome

- 1) Political/health crises do not stop citizen scientists continuing to collect citizen science data to update database
- 2) Participating government agencies remain open to using citizen science data and liaising with citizen science hubs (they've indicated they wish to use this data going forward).
- 3) Citizen science managers in target project countries and staff of government agencies are released from their duties, and are able to attend training events.
- 4) Partners continue to support open data-access, and free-sharing of results on the online platform
- 5) Online platform does not throw up technical barriers that slow down its creation and adoption

Annex 3: Standard Indicators

The Biodiversity Challenge Funds (BCFs) use high quality and accessible Monitoring, Evaluation and Learning (MEL) to enable scaling, replication and increase the impact of the funds and the projects we support.

By asking project teams to report against a minimum of three Darwin Initiative Standard Indicators, we aim to increase our contribution to the global evidence base for activities that support biodiversity conservation, poverty reduction and capability & capacity.

The tables below are provided to assist project teams in reporting against Standard Indicators. Please report against the Standard Indicators that you have selected specifically for your project in Table 1 below. Refer to the Standard Indicator Guidance & Menu available on the [Darwin Initiative](#) website for guidance on how to select indicators, as well as how to disaggregate reporting within your chosen indicators.

For projects submitting their first Annual Report, you should complete the Y1 column and also indicate the number planned during the project lifetime. Older projects should copy and paste the information from previous years and add in data for the most recent reporting period.

We recognise that the Standard Indicators in our menu are by nature general. We also ask you to develop your own Project Indicators. These should be more specific and relevant to your project. See our BCF MEL guidance on best practices for selecting and developing Project Indicators.

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	Number of people in eligible countries who have completed structured and relevant training	People	Men	11			11	18
DI-A01	Number of people in eligible countries who have completed structured and relevant training	People	Women	8			8	10
DI-A03	Number of local/national organisations with improved capability and capacity as a result of project.	Number	Local/national citizen science bird mapping projects	6			6	4
DI-A03	Number of local/national organisations with improved capability and capacity as a result of project.	Number	Local/national Organisations active in citizen science	3			3	4
DI-A04	Number of people reporting that they are applying new capabilities (skills and knowledge) 6(or more) months after training.	People	Men	8				20
DI-A04	Number of people reporting that they are applying new capabilities (skills and knowledge) 6(or more) months after training.	People	Women	3				10
DI-A07	Number of government institutions/departments with enhanced awareness and understanding of biodiversity and associated poverty issues	Number	government institutions/departments	0				5
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement)	People	Men	0				33
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement)	People	Women	0				17
DI-B12	Number of policies developed or formally contributed to by projects and being implemented by appropriate authorities	Number	Advocacy pieces	0				4

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-B12	Number of policies developed or formally contributed to by projects and being implemented by appropriate authorities	Number	New Action plans	0				2
DI-B12	Number of policies developed or formally contributed to by projects and being implemented by appropriate authorities	Number	New alliances	0				2
CI-C01	Number of best practice guides and knowledge products published and endorsed	Number	New online platform guidelines	0				1
CI-C05	Number of projects contributing data, insights, and case studies to national Multilateral Environmental Agreements (MEAs) related reporting processes and calls for evidence.	Number	Species trend analysis	0				4
DI-C15	Number of Media related activities	Number	Communication pieces	0				4
DI-C19	Number of other publications produced	Number	Threat hotspot maps	0				2
DI-C19	Number of other publications produced	Number	Roadmap for online platform scale out	0				1

In addition to reporting any information on publications under relevant standard indicators, in Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. You should include publications as supporting materials with your report. Mark with an asterisk (*) all publications and other material that you have included with this report.

Table 2 Publications

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, questionnaires, reports etc.) and you should ensure you include some of these materials to support the Annual Report text.

If you are attaching separate documents, please list them here with an Annex reference number so that we can clearly identify the correct documents.

Annexes attached separately

Annex 10a: Course 1 training report with training registers, training assessment/ before and after training knowledge assessments

Annex 10b: Online R training bootcamp report with training registers, training assessment/ before and after training knowledge assessments

Annex 11: A survey report on decision tools in Kenya

Annex 12: Project review response

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	yes
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	N/A
Have you involved your partners in preparation of the report and named the main contributors	yes
Have you completed the Project Expenditure table fully?	yes
Do not include claim forms or other communications with this report.	