Darwin Initiative Main: 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

1. Darwin Initiative Project Information

Project reference	29-022
Project title	Community-led fisheries management in the Mara Wetlands, Tanzania
Country/ies	Tanzania
Lead Partner	WWF-UK
Project partner(s)	WWF-Tanzania, IHE Delft, Tanzania Fisheries Research Institute (TAFIRI), Victoria Farming and Fishing Organization (VIFAFIO), Lake Victoria Basin Water Board (LVBWB), Mara Regional Administration and Local Government Authorities
Darwin Initiative grant value	£517,303
Start/end dates of project	June 2022 - March 2025
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	April 2023 - March 2024 - Annual Report 2
Project Leader name	Katherine Elliott
Project website/blog/social media	https://www.wwf.org.uk/what-we-do/projects/sustainable-fisheries-mara-wetlands
Report author(s) and date	Katherine Elliott, Mae Tortajada-Suils, John Kimaro, Christian Chonya, Ken Irvine. 28 April 2024.

1. Project summary

The Mara wetlands (see map Annex 5), covering 387 km2, are among the largest tracts of intact papyrus swamp in sub-Saharan Africa. Located in Tanzania where the Mara River flows into Lake Victoria, the Wetlands host globally important biodiversity and provide important ecosystem services including fisheries that underpin local food security. Approximately 110,000 people living in 27 villages rely on the wetlands for their livelihoods and are vulnerable to deterioration in wetland conditions. Fish provide a major source of nutrition and income to households within the area.

However, overfishing and illegal fishing methods are causing declines in fish catches and average size of fish caught. An Integrated Management Plan (IMP) for the Mara Wetlands, published by the Tanzanian government in 2018, called for action to address this. The

inventory of flora and fauna that was undertaken to support the IMP revealed significant data gaps, especially on fish diversity, populations, behaviour and habitat use. These data gaps preclude design of effective management interventions to protect biodiversity while improving livelihoods. During initial community consultations with villages surrounding the wetlands, the use of illegal fishing methods and declining fish stocks were highlighted as key challenges to address.

Responding to the IMP and building on recent initiatives, this project aims to establish a monitoring approach and produce baseline data for fish habitats and biodiversity that will serve as a foundation for future management. Using the baseline data, the project will support communities and local authorities to design fisheries co-management plans that will encourage sustainable fishing practices, enhance livelihoods resilience and reduce threats to fish stocks and diversity. It will explore the potential for new income streams, especially for women, through adding value to fish products. Lastly, it will facilitate enabling conditions for sustainability and scale-up of impacts once Darwin funding ends.

2. Project stakeholders/ partners

WWF-UK has continued to work in close collaboration with all partners to develop and implement the second year of this project, including regular project working group calls. WWF-Tanzania remains responsible for in-country coordination and regular contact with TAFIRI, VIFAFIO, LVBWB and the Mara Regional Secretariat. WWF-Tanzania's Project Coordinator maintains regular contact with local partners and stakeholders through email, phone and in-person meetings. WWF-Tanzania continues to support these local partners with capacity building, training, mentoring, and resources for effective project implementation. Notably, during the last year, all partners have received training in developing high-quality financial reporting facilitated by WWF-Tanzania's grants and compliance staff.

The project continues to be supported by an international partnership with IHE Delft, who have contributed technical assistance and staff expertise to achieve the project's objectives. IHE Delft's support aims to build the capacity of TAFIRI, VIFAFIO and local fishers on aspects of situational analysis, ecological surveys, community fisheries monitoring, natural resource governance, value chain enhancement and gender issues. The research carried out by IHE and TAFIRI has informed conservation efforts and development of management plans which are informing community-led natural resources management of the wetlands.

From April 2023 - March 2024, several in-person collaborative activities have also taken place involving all project partners, including: (1) Ecological field work collaboration between TAFIRI, IHE Delft, VIFAFIO and WWF-Tanzania in December 2023, (2) a mid-term partner reflection meeting with 17 attendees in December 2023 (see annex 6); (3) Ongoing strong engagement and collaboration between all stakeholders including regular local government meetings and increased engagement with Community Management Units (CMUs) and Women's Groups.

WWF-Tanzania has also developed a strong collaboration with the Mara Regional Office, which has led to a deeper understanding of the importance of wetlands and inland fisheries. Consequently, they have hired a Regional Fisheries Officer to serve as the focal person for fisheries in Mara region and this project.

Over the last year, further emphasis has been placed on a collaborative management approach for wetlands conservation, empowering communities as central decision-makers regarding wetlands resource conservation. WWF, Local Government Authorities (LGAs), VIFAFIO, and TAFIRI have served as facilitators during a total of 23 meetings, with decisions and solutions emerging primarily from grassroots resource users. This approach has facilitated the development of management plans and by-laws, which were then shared from regional management levels to the village and community levels, ensuring widespread participation and ownership.

3. Project progress

Following the independent Monitoring Review of the project (February 2024), we have updated the project's logframe in response to the recommendations outlined in the Monitoring Review Report (see annex 27). The updated logframe (see annex 7) was submitted through a Change

Request on 16 April 2024, however as we are awaiting formal approval of this we have reported on the original logframe in this annual report.

Progress in carrying out project Activities

The following activities took place to support the achievement of output 1.

1.1 Undertake a fisheries situation assessment adapting methods used in the Kafue Flats, Zambia:

IHE Delft has continued work on the consolidation and assembly of the mapping data for analysis of how the wetland extent and habitat have changed since previous research (see report in annex 8).

A follow-up ecological survey (from that which occurred in 2022) took place from 29 November - 3 December 2023 with TAFIRI and IHE Delft. Logistical support was provided by WWF-Tanzania and VIFAFIO. The survey covered five sites from the lower to the upper wetland area. A summary of site condition and field measurements are provided in annex 9. Four macroinvertebrate samples and five vegetation samples were collected from each site. Three sites were processed by TAFIRI, and two by IHE. A fewer number of zooplankton samples were collected for processing by IHE than anticipated. Low abundance suggested by field observations have been confirmed by processing in the lab by IHE. Results of samples processed by TAFIRI are completed with a draft report available in annex 10. Ecological survey results will be collated into a project database during year 3.

An Electronic Catch Assessment Survey (eCAS) conducted in the Mara Wetlands with support from CMUs provided an understanding of fish species abundance, diversity and distribution, vital for both local communities and regional biodiversity. See (see eCAS report annex 11). The surveys underscore the ecological and economic importance of the Mara river and wetlands fishery, emphasising the need for sustainable management practices to ensure long-term viability and benefit to local livelihoods and biodiversity.

In March 2024, TAFIRI conducted a fish larval survey (see report annex 12). The survey revealed a diverse composition of fish species and highlights the importance of understanding the distribution and composition of fish larvae and juveniles in different habitats within the Mara wetlands. Results will inform future conservation planning and sustainable fisheries management.

1.2 Support communities and local authorities to design co-management plans, drawing on the situation assessment:

In February 2024, TAFIRI collaborated with CMUs, BMUs, LGAs, and representatives from fishing villages across the five riparian districts of Mara to develop a co-management plan. Through a one-day workshop, stakeholders contributed to crafting the Mara River Wetland Fisheries Management Plan (MRWFMP) (see annex 13). This plan offers a comprehensive framework for sustainable wetland fisheries resource use and regulations.

Following year 1 activities on ecological and fisheries mapping, WWF-Tanzania facilitated the formation of four Community Management Units (CMUs); 2 in Butiama, 1 in Rorya, and 1 in Serengeti district councils. These CMUs, composed of 320 dedicated community members (27% female), are now operational and playing a pivotal role in spearheading local conservation efforts, assisting with data collection and sustainable fisheries management. With 65 individuals (28 female and 37 male) identified as executive committee members of the CMUs, these community governance structures will play an important role in empowering communities to participate in conserving the wetlands ecological and socio-economic values. Training was provided to CMU members on natural resources management (with a focus on sustainable fishing practices); governance and leadership, and conflict resolution. CMUs have developed by-laws for conserving the wetland resources, with two no-take zones established at Kukona landing site in Rorya, and Kirumi landing site Butiama. A boat engine has been procured to support two BMUs for surveillance and monitoring for sustainable fisheries. The BMUs will also help in mentoring the newly formed CMUs.

1.3 Co-design a method for future management and monitoring of regulations with local authorities (MRFRU-Mara Regional Fisheries Resources Protection Unit & TAFIRI) and communities (BMUs, CMUs WUAs):
Two sub-catchment Management Plans have been finalised (see annex 14 and 15) and are now being implemented with WUAs in respective sub-catchment (North and South Mara WUAs). Water User Association guidelines have been shared with 2 Water User Associations.

WWF-Tanzania and LVBWB have provided training and equipment for 39 citizens (18 female, 21 male) from two Water Users Associations (WUAs) in North Mara and South Mara areas, to collect citizen science monitoring data on wetland and river health (see training report annex 16). Water quality data is being collected using the citizen science River Health Assessment (RHA) once per month across 18 points, to monitor the health of the Mara river catchment (see data in annex 17). The citizen science data is shared with the Musoma water lab / LVBWB on a monthly basis, and provides early detection and response to pollution incidents, reducing the risk of harm to flora, fauna and human-health in the Mara river and wetlands. LVBWB provides feedback to the WUAs on the water quality analysis.

The following activities took place to support the achievement of output 2.

2. Build capacity for sustainable fishing practices, to help implement the co-management plan:

2.1 Capacity building on sustainable fishing practices and monitoring methods/citizen science for fish catch and biodiversity for fisherfolk through BMUs:
27 enumerators from CMUs and BMUs were identified from the Mara Wetlands communities and provided training on fish species identification using indigenous names (see annex 18). From this group, 14 enumerators representing seven landing sites were trained on how to collect catch and effort data using the mobile application Electronic Catch Assessment Survey (eCAS). They were provided with smartphones that are being used to deliver fish data to the TAFIRI database. Data collection commenced on 4 September 2023. Following training by TAFIRI, four Community Management Units (CMUs) are implementing eCAS. Fisheries catch data is uploaded daily to the TAFIRI server. The project team continuously communicates with stakeholders from LGAs, Mara Regional Administrative Secretary (RAS) office and MRFRU on the TAFIRI findings. A new fisheries officer is in place in the Regional Administrative Secretary office to support communication.

Training has also been provided by TAFIRI, LVBWB and VIFAFIO to 12 CMU/BMU members using a ToT model, on natural resources management (with a focus on sustainable fishing practices); governance and leadership, and conflict resolution. The 12 ToTs have cascaded the training to a further 310 participants across 9 villages.

2.2 Co-creation of a system for the implementation and engagement of fisherfolk on sustainable fishing practices including the use of legal nets, off seasons and no take zones:
During August-September 2023, TAFIRI led on campaign activities to engage communities on the impact of improper fishing gear on community livelihoods and biodiversity (see report annex 19). Steps included mapping of fishing villages based on fishing intensity and accessibility, engagement with respective district and municipal councils and updating the District Executive Director. At each village a Public Address System (PA) was used to invite fisheries stakeholders to participate in an open meeting, with presentations and discussion from community members about sustainable fishing practices. The TAFIRI team engaged approximately 504 individuals (30% women), including fishers, traders and processors and consumers, to raise awareness on fisheries regulations and the impacts of illegal fishing gear. In total 10 riparian villages were reached, and 160 brochures, 51 posters and 4 signboards were installed/published.

Through a TAFIRI led gear exchange, 51 fishers across 4 villages voluntarily surrendered 242 illegal gears (91 undersized nets, 125 monofilament nets, 1 beach seine, 2 traps, 18 hooks and 5 mosquito nets). These were exchanged with 229 legal gears (165 gillnets and 64 other legal sized nets). After the TAFIRI gear exchange scheme, 52 fishers in Kwibuse CMU voluntarily surrendered an additional 306 illegal fishing gears. The group also formed a fishers saving group, *Umoja wa Wavuvi Kwibuse*, (UWAKWI) to assist with the development of sustainable fisheries livelihoods.

In March 2024, WWF supported CMUs to establish a control and surveillance system over use of illegal fishing gear within the CMUs (see activity report annex 20). This included the mapping of landing sites, identification of fishing hotspots for the CMUs, and support for CMUs to develop by-laws as guidelines for sustainable use of the wetlands fisheries resources. The four operational CMUs are now enforcing sustainable fishing practice through community involvement, monitoring and surveillance. This will be ongoing throughout year 3.

The following activities took place to support the achievement of output 3.

3.1 Value chain analysis to identify key opportunities for diversifying/increasing incomes.
VIFAFIO has continued work on strengthening fishery value chains, particularly engaging women to diversify and increase their incomes. During this reporting timeframe, 8 villages were visited to identify a further 60 women from marginalised households to receive training.

To assist with the value chain analysis and specifically how it relates to gender, a consultant under the supervision of IHE Delft has led a series of activities to:

- Map the main value-generating activities of subsistence communities in the Mara wetlands (fishing, farming, livestock keeping) to prepare a livelihood-based value chain analysis.
- Develop adapted research instruments for a comprehensive survey of the value-generating activities, capturing economic and non-economic livelihood aspects, gender dynamics and environmental dynamics.
- Conduct an analysis of livelihood, gender and environmental outcomes of Mara wetlands fisheries, focusing on identifying aspects with the potential to improve women's livelihoods.

A first consultant visit occurred from 6-15 August 2023 for partner engagement, familiarisation with the project, and meetings with local communities. During a second visit (18 Sep - 8 Oct 2023) a more thorough assessment and development of the methodology was conducted. This mission mapped the major value generating activities in one community in Kwisaro that identified actors and flow of products and information along the value chain. The value chain map was useful to guide the research in Q3/4.

A further mission took place from 8-28 February 2024. It started with preparatory meetings with VIFAFIO, WWF and a local organisation known as the Mara Women Empowerment Assistance (MWEA) to identify groups of people for detailed interviews. WWF assisted with introductions to people undertaking varied trades within the fish value chains and contacts to aid the identification of interviewees, especially in Buswahili and Kongoto. MWEA provided critical insights about some of the groups they have for detailed interviews. A total of 33 detailed interviews were done with 9 people in Buswahili, 11 in Kongoto and 13 in Wegero. These included fish and non-fish traders, fishermen, farmers, livestock keepers, transporters, processors, and intermediaries and service providers along the value-chain.

Research instruments have been completed (see annex 21) and the resulting dataset is currently being analysed. Key initial insights include how women rely on fisheries as a back-up/safety net for food and income when other activities are performing poorly, and how many women with non-fishing income source use self-caught fish as source of nutrition. With regard to policy-relevant findings, the data suggests that the distribution of activities of male and female actors is structurally biased, with female activities more time-consuming, more impacted by role conflicts, carrying higher economic risk (e.g. post-harvest loss), and more dependent on available cash to pay men for inputs.

3.2 Capacity building for 730 women and 10 persons with disability (PWD) fishmongers and entrepreneurs on value chain enhancement, post-harvest technologies and financial management:
60 women fishmongers (TOTs) were provided training on fisheries livelihoods, particularly on post-harvest strategies to reduce fish spoilage. Through the Training of Trainers approach, the women were provided with training materials, which will be used to build the capacity of other women in their respective villages. During year 2, VIFAFIO has helped engage 321 women fishmongers and 6 people with disabilities through training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain (see training report annex 22 and photos in annex 23).

3.3 Support strengthening of women-based village community banks (VICOBA) to support loans, savings and business investment, seed funding and cooperatives:
There has been good support from Local Government Officials, which has facilitated 20 Women's Groups (Wanawake wachuuzi) to develop constitutions and become registered at district level. 17 groups have started saving and opened bank accounts, 10 of these groups are trained and linked to VICOBAs. VIFAFIO undertook consultations with Women's Groups to identify priority solutions for reducing post-harvest losses from fisheries. As a result VIFAFIO has purchased four deep freezers to be used by Women's Groups for the storage of fish, and also for storing horticulture crops during periods of low fish catch. See VIFAFIO activity photos in annex 23.

The following activities took place to support the achievement of output 4.

4. Facilitate enabling conditions for scaling up:

4.1 Develop/update local and district plans to incorporate lessons from the project:
6 District Environmental Action Plans (DEAPs) have been revised (5 through this project and 1 through the Mara river catchment project), and approved by district directors and district councils in their respective districts. WWF-Tanzania collaborated with WUAs to review, update, and implement two Sub-Catchment Management Plans (SCMPs), which have been distributed for community-led implementation. The SCMPs (annex 14 and 15) are now being implemented by the WUAs.

4.2 Support identification of potential finance for future fisheries co-management:
Following a site visit and interviews with all CMUs, BMUs and fisheries officers in February 2024, a co-management funding strategy (see annex 24) for financing the CMUs has been developed. The strategy highlights projects and activities that the CMUs and BMUs aim to continue post-project, and will be implemented during year 3.

4.3 Exchange insights with WWF's Freshwater Practice, Ramsar/CBD secretariats, InFish global professional network, Darwin Initiative secretariat:
Representatives from WWF, VIFAFIO and the Mara local government authority, participated in in-person learning exchange with WWF's RUMAKI+ seascape programme to discuss cold chain storage approaches in Kilwa, as a strategy to reduce post-harvest loss.

Project communications materials have been developed including social media materials, e-newsletter content, tv broadcast feature, a project film and website page. See the project's communication strategy (annex 25) for further details.

WWF also presented the project during Africa's Riverlution Water Week Session, a virtual event focusing on freshwater issues. The success story of our implementation was shared with over 120 participants from across Africa. During the session, the project team had the opportunity to learn from other institutions about their approaches to managing water resources in their respective areas.

3.1 Progress towards project Outputs

In our revised logframe, we have included a terminology change: Of the 6 Beach Management Units (BMUs) (Ind 1.3, 2.2), MoV 0.4, 1.3, 2.2, 2.3, and Outcome and Output-level Assumptions the four upstream groups are now referred to as Community Management Units (CMUs). This is because BMUs are found around Lake Victoria – based on 'beaches' (of which there are none on the Wetland; they are legal entities and have specific and well-defined roles in the lake fisheries – not all of which are applicable to the Wetland fisheries.

Output 1. Fisheries co-management: *By 2025, adoption of one community-led fisheries co-management plan, based on initial fisheries situation assessment for the Mara Wetlands, and incorporating i) measures to protect habitat and breeding sites for fish stocks and refugee/threatened species, and ii) measures for ongoing monitoring and adaptive management of fish catch, indicator and threatened species and wider wetland health*.

Follow-up ecological surveys took place in December 2023 with TAFIRI and IHE Delft, with data being collated and some samples still being processed (see above section 3, activity 1.1). Larval surveys by TAFIRI took place in March 2024. The identification of fish distribution from year 1, mapping of larvae fish breeding sites from year 2, and mapping of the wetland, will continue to guide co-management and the protection of sensitive areas from over-exploitation from fishing and other disturbances.

At the beginning of the project there were no community-led fisheries groups or monitoring systems formally operating in the Mara wetlands. The project has made good progress in establishing and supporting the operationalisation of 4 Community Management Units (2 in Butiama, 1 in Rorya, and 1 in Serengeti district). The CMUs assist in data collection and sustainable fisheries management, and comprise 320 community members (27% female). 65 individuals (28 female and 37 male) have been identified as executive committee members of the CMUs. 2 Water User Associations have been supported to develop and implement citizen science approaches through the e-CAS system to monitor fish catch and stock, and the River Health Assessment to measure wider wetland health.

TAFIRI in collaboration with village leaders, CMUs, Fisheries Resources Protection Unit, Fisheries officers, Centre Director TAFIRI, Director General TAFIRI, Fisheries Department have developed a community-led fisheries co-management plan, which has been validated and is currently pending approval by the fisheries department / Regional Government.

Output 2. Fishing practices: *By 2025, increased fisherfolk capacity on sustainable fishing and monitoring practices, leading to reduced overfishing and declining pressure on refugee and threatened fish species.*

12 ToTs have cascaded training on sustainable fisheries management to a further 310 participants across 9 villages. A campaign on the impact of improper fishing gear on livelihoods and biodiversity has engaged 504 individuals (30% women), including fishers, traders and processors and consumers. Through TAFIRI led gear exchange, 51 fishers across 4 villages voluntarily surrendered 242 illegal gears.

Anecdotal evidence and community feedback during year two indicates a decline in illegal fishing practices (see example case studies annex 26), as the CMUs have increasingly collaborated with village governments to tackle illegal fishing. Community members have testified an increase in catch size due to the management taken. Additionally the CMUs are now involved in fisheries data collection for informing fisheries management and are patrolling fishing hotspots to prohibit illegal fishing activities.

Output 3. Value chain enhancement: *By 2025, enhanced fisheries value chains provide more resilient (i.e. diversified and/or increased incomes) livelihoods, especially for women.*

During year 2, 60 women fishmongers (TOTs) were provided training on fisheries livelihoods, particularly on post-harvest strategies to reduce fish spoilage. VIFAFIO has helped engage 321

women fishmongers and 6 people with disabilities through training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain. 20 Women's Groups (Wanawake wachuuzi) have developed constitutions and become registered at district level. 17 groups have started saving and opened bank accounts, 10 of these groups are trained and linked to VICOBAs.

Case studies from women's groups (Kirumi and Buswahili) and communities have been compiled to demonstrate livelihood impacts (see annex 26) ahead of a more detailed survey scheduled for year 3. Women have anecdotally reported increased incomes due to reduced post-harvest losses following the implementation of techniques including solar-drying and the provision of chest freezers.

Output 4. Enabling conditions for scaling-up: *By 2025, enabling conditions (plans, finances, lesson-sharing) are in place to facilitate sustained impacts from the project, and to facilitate scaling-up of fisheries co-management for the benefit of livelihoods and biodiversity across the entire Mara Wetlands.*

In collaboration with local government and communities, good progress is being made against the development of plans and guidelines to help sustain impacts of the project in terms of fisheries co-management, livelihood resilience, and biodiversity in the wetlands. Building on progress in year 1, 5 District Environmental Action Plans (DEAPs) have been revised, and approved by district directors and district councils in their respective districts. Two Sub-Catchment Management Plans (SCMPs) have now been reviewed, updated and are now being implemented by the WUAs. A collaborative co-management funding strategy for financing the CMUs has been developed.

3.2 Progress towards the project Outcome

Outcome: By 2025, community-led sustainable fisheries and improved value chains have increased resilience of livelihoods and have started to reduce threats to freshwater biodiversity in the Mara Wetlands.

A comprehensive review of the project's progress towards the Outcome was undertaken during the Monitoring Review in February 2024, (see annex 27). Following discussions and feedback, we have revised the project logframe, clarified some units and adjusted targets. In some cases, we have increased or reduced the number of expected beneficiaries. A Change Request was submitted on 16 April 2024, however as we have not received a formal response at the time of preparing this Annual Report, we have reported against the original logframe.

During year 3, a follow-up survey is scheduled to measure the presence of illegal nets across the Mara wetlands village, which will be used to monitor progress against the baselines established in year 1. A follow-up socio-economic survey will also assess cases of illegal fishing methods, lack of licences and illegal gear. The socio-economic survey will assess poverty reduction around economic improvement such as income, access to loans and market capacity on direct beneficiaries. Ongoing data collection and analysis through the eCAS platform will assist with monitoring biodiversity and sustainable fisheries progress. We also intend to report on the allocation of resources e.g. staffing, budget by regional, local government agencies to support Mara wetlands conservation.

3.3 Monitoring of assumptions

Following reflections during the project's internal mid-term reflection workshop and monitoring review visit, we have added the following assumptions to the project's logframe:

- Pollution from agriculture and livestock is not so significant as to impact freshwater biodiversity and the ecological integrity of the Wetlands (Outcome).

- Fishers can be persuaded to fish with only a single panel (depth) of legal net, through improved messaging and CMU enforcement in the wetland (Output 2)

Outcome assumptions

Assumption 1: With appropriate preventive measures against Covid-19 (eg social distancing, outdoor meetings, provision of Personal Protective Equipment) and by working closely with appropriate health experts at a local level in providing education and awareness to communities and project staff and stakeholders, the risks to health will be mitigated and communities will feel comfortable working with project staff.
Comments: Tanzania currently has a low covid risk. Activities have been able to continue as planned without covid restrictions.

Assumption 2: Through participatory consultations and co-creation processes, community members around the Mara Wetlands perceive potential for more resilient and equitable benefits from fisheries co-management of the Mara Wetlands, and have increased understanding on the value of sustainable fisheries for the resilience of their livelihoods.
Comments: This assumption holds true. There has been good ongoing collaboration with community members who have reported an increased understanding on sustainable fisheries, with feedback on increasing fish size catches and improved incomes.

Assumption 3: Capacity building on citizen science and provision of equipment will increase participation of Community Management Units, Water Users Associations and collaboration with Local Government Authorities and the Mara catchment committee will result in improved fisheries co-management.
Comments: This assumption holds true. There is ongoing close collaboration between project partners, Local Government Authorities, Community Management Units (CMU), and Water Users Associations (WUA) which has fostered a robust system for the co-management of wetland resources. The continuous monitoring of fisheries catch and water quality through CMU and WUAs has ensured the effective management of wetland resources.

Assumption 4: Fisheries situation assessments and other lessons learnt from this and other relevant projects will enable communities and local authorities to reach agreement on fisheries co-management plans.
Comments: This assumption holds true. With support from TAFIRI, community and LGA, a Mara River Wetlands Fisheries Management plan has been developed, which will be shared further amongst wetland villages during year 3.

Output 1 Assumptions

Assumption 5: Alternative remote systems of engagement to gather data will allow the timely completion of situation assessment in case of Covid or extreme events such as floods.
Comments: We have not needed to implement remote systems of engagement, as all activities have been able to take place in person as planned.

Assumption 6: Offline data collection on smartphones will allow effective information sharing in case of failure of telephone network coverage or power cuts.
Comments: This assumption holds true. The e-CAS citizen science monitoring has smartphone capability to collect data in an offline mode when data connectivity is poor.

Output 2 Assumptions

Assumption 7: Beach Management Units / Community Management Units have the capacity to enforce improved fishing practices, and fisherfolk perceive shared benefits and are willing to adopt new practices collectively.
Comments: This assumption has been updated to include the Community Management Units. Good progress has been made on establishing four new CMUs as the structure for enforcing fishing practices in the community.

Assumption 8: Supplementary income from engagement in improved fisheries, participation in the design of restrictions, and provision of equipment such as replacement fishing gear, phones

and internet access for CMU members as citizen scientist for biodiversity monitoring, will be enough to compensate for any initial losses from the application of legal practices.
Comments: This assumption mostly holds true, however we will be reviewing the voluntary time commitments required from community members for eCAS data collection during year 3 of the project.

Output 3 Assumptions
Assumption 9: The 50 women trained as trainers are selected communally with the condition to train others and that will give them enough motivation to train the rest of the women engaged in fisheries in each group.
Comments: This assumption holds true, 60 TOT are being closely supported and monitored by their respective Village Executive Officers and VIFAFIO, which has enabled 321 women to be reached through the project.

Assumption 10: Women's groups are motivated to take up the opportunities and have support from the community to do so.
Comments: This assumption holds true. So far, the project is working with 17 women's groups, who have indicated willingness to continue activities post-project.

Assumption 11: Effective enforcement and BMU cooperation ensures demand for undersized/illegal sized nets reduces.
Comments: This assumption holds true. Project partners are working closely with CMUs to establish and enforce by-laws and provide training to fisherfolk on sustainable fisheries management. The Monitoring Control and Surveillance is strong and there are reports of less illegal fishing practices due to good monitoring.

Output 4 Assumptions
Assumption 12: Regional and Local Government Authorities are willing and capable to develop the Environmental Management Plans, including increase of budget allocation.
Comments: This assumption holds true. Regional and Local Government Authorities are implementing the District Environmental Action Plans, and they have shown the willingness for budget allocation to sustainable fisheries management.

Assumption 13: Equitable participation in resource governance, decision-making and benefit sharing is accepted/ implemented as co-developed by the same communities.
Comments: This assumption holds true.

Assumption 14: Village governments are supportive and include the initiative in the Village Development Plan for scaling up.
Comments: This assumption holds true.

3.4 Impact: achievement of positive impact on biodiversity and poverty reduction

The project's intended impact is: Protected fish habitats, sustainable fishing methods and improved value chains enhance the resilience of local livelihoods, sustain freshwater biodiversity and help to secure the ecological integrity of the Mara Wetlands.

The project has successfully achieved positive impacts for both biodiversity conservation and poverty reduction in targeted communities. Key outcomes include the establishment of no-take zones that promote biodiversity integrity with no reported cases of degradation, alongside an increase in the size of fish caught, indicating improved ecosystem health. Additionally, women fishmongers have experienced increased income through Women's Groups established VICOBA systems demonstrating economic empowerment. Community engagement has led to a reduction of destructive fishing practices, supported by local government initiatives promoting sustainable fishing. Testimonials and documentary evidence compiled in communication strategy (annex 25 and 26) provide compelling evidence of these transformative achievements, highlighting the project's success in fostering sustainable development and inclusive growth.

Impact will be fully measured at the end of the project, as a comparison to the baselines on biodiversity and social aspects determined during year 1.

4. Project support to the Conventions, Treaties or Agreements

During year 2, WWF-Tanzania has engaged Tanzania's Ramsar national focal person (Dr Deogratius Nyangu) under the Vice President Office (VPO). He is willing to engage further and provide more experiences (based on Minziro Wetlands) on how to designate the wetlands into Ramsar site. WWF-Tanzania has continued to prioritise receiving feedback from local communities, including from some people who are sceptical about designation. Recommendations to the government will be closely informed by continuing engagement with these communities. The project is planning to continue engagement with the Ramsar focal person during year 3 as part of sharing lessons and results from the project for scaling-up.

There is strong alignment between the project objectives and several of the targets set out in the Kunming-Montreal Global Biodiversity Framework agreed by parties to the CBD in December 2022. In particular, Targets 9 (on sustainable harvests and benefits to people) and 10 (on sustainable fisheries) resonate with the project Outcome. At the national scale, the Tanzanian government has started to review and update the NBSAP. WWF-Tanzania through the Voices for Diversity (V4D) project is coordinating inputs and support to the Government for reviewing and setting out priorities for implementation of the Kunming-Montreal framework.

WWF-Tanzania has developed a ToR, hired a consultant and is organising stakeholder meetings as support to the Tanzanian government to revise its NBSAP, which is expected to be finalised by September 2024. In year 3 we will continue to engage with the V4D project to provide lessons learnt from this Mara Wetlands project to the Government of Tanzania for the revision of the NBSAP.

5. Project support for multidimensional poverty reduction

The project intends to contribute towards poverty reduction for local communities surrounding the Mara Wetlands in the following ways:

Fishing communities: The project aims to improve the personal food security and income of community members who rely on fishing for their livelihoods. During year 2, TAFIRI promoted sustainable fishing practices during awareness campaigns and carried out a successful illegal fishing gear exchange programme. VIFAFIO provided training on fish handling and processing to Women's Groups, as well as facilitating access to markets and the promotion of village saving groups. These initiatives aim to enhance livelihoods by improving their fishing productivity, profitability, and market access, ultimately leading to increased household income, better nutrition, and improved economic well-being for the fishing communities as well as ensuring sustainable fisheries, maintaining fish abundance in the wetlands.

Local institutions: Community-led fisheries initiatives often involve engaging local communities in decision-making processes related to resource management, such as establishing community-based management plans (i.e., SCMP, BMUs/CMU-Management plans), setting fishery by-laws in respective BMUs/CMUs, and monitoring compliance. By empowering local communities to actively participate in the management of their fisheries resources, the project aims to contribute to improved community governance, increased ownership, and better stewardship of the wetland resources. This will lead to more sustainable and equitable use of the resources, reduced conflict, and improved long-term livelihoods resilience.

Below we report on the current change expected, following the reflections from the Monitoring Review, and updated figures submitted in the project's revised logframe.

Change expected: Communities across the Mara wetlands will have enhanced capacity to co-manage the fisheries on which they depend.
Year 2 progress: WWF-Tanzania facilitated the formation of four Community Management

Units (CMUs) composed of 320 dedicated community members to enable community-led fisheries management. Training provided by TAFIRI, LVBWB and VIFAFIO to 12 CMU/BMU members using a ToT model, on natural resources management (with a focus on sustainable fishing practices); governance and leadership, and conflict resolution. The 12 ToTs have cascaded the training to a further 310 participants across 9 villages.

Change expected: 521 women and 10 PWD from vulnerable/poor households will have improved capability to use post-harvest technologies to reduce fish spoilage and to develop market strategies to enhance income from fish value chains.
Year 2 progress: 60 women fishmongers (ToTs) were provided training on fisheries livelihoods, particularly on post-harvest strategies to reduce fish spoilage. They helped reach 321 women fishmongers (including 6 people with disabilities) from 17 registered women fishmonger groups. 4 deep freezers for fish and horticulture storage have been purchased.

Change expected: At least ~400 (40% of direct beneficiaries) around the wetland including vulnerable poor people (504 men, 521 women and 10 persons with disability) report more resilient livelihoods
Year 2 progress: Anecdotal evidence of improved livelihoods. Full impact will be assessed by the end of year 3.

Change expected: 40 local Women's Groups will be better represented in local governance structures (BMUs, WUAs, village committees) and have greater voice in the management of the Mara Wetlands.
Year 2 progress: Local Government has facilitated 20 Women's Groups (Wanawake Wachuuzi) to develop constitutions and become registered at district level.

Change expected: 20 women's groups will report improved financial skills and access to microfinance through VICOBA for their members.
Year 2 progress: 17 groups have started saving and opened bank accounts, 10 of these groups are trained and linked to VICOBAs.

6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board[1].	50%
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].	**Partner organisations:** WWF-Tanzania: Senior leadership team (SMT) comprises 6 males and 2 females. IHE Delft - Senior leader team (Rectorate) comprises 2 males and one female. TAFIRI: - Mwanza Centre Director is a woman. VIFAFIO: Senior leadership team consists of 50% women.

GESI Scale	Description	Put X where you think your project is on the scale

[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.

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	

During year 2 of the project, we have gained valuable insights on gender aspects of value chains in the Mara wetlands, through a study supported by IHE Delft assessing fisheries-related value chains in the larger and more complex context of rural livelihoods. Fisheries activities are interlinked with farming and livestock value chains, and livelihood outcomes are influenced by context characteristics and gender dynamics. The study aims to clarify in more detail the pathways through which ecosystem deterioration, fisheries management and other interventions affect livelihoods in the Mara Wetlands. "Gendered" value chains imply that livelihood outcomes of men and women are impacted differently, depending on the specific inputs required for their primary activities, and access to alternative livelihood strategies. To contribute to the project's gender equality and social inclusion, detailed mapping of value-generating activities was used to reveal non-monetary changes in livelihood outcomes, including aspects such as physical wellbeing and nutrition, the distribution of risks and vulnerability between men and women, as well as links between specific activities and social status. The results highlight a broader range of gendered challenges created by declining fish stocks, suggesting gender-targeted action areas for the new community managed groups, and enable gender impact considerations in decision-making or the drafting of bylaws.

Additionally, the project has continued an emphasis on empowering women to take part in sustainable fisheries value chains. 60 women fishmongers (TOTs) were provided training by VIFAFIO on fisheries livelihoods, particularly on post-harvest strategies to reduce fish spoilage. They have helped to reach a further 321 women in the last year. In addition, 6 people with disabilities were supported to participate in training on value-chains. There is ongoing collaboration with a local organisation known as the Mara Women Empowerment Assistance (MWEA).

20 Women's Groups (Wanawake wachuuzi) were supported to develop constitutions and become registered at district level. 17 groups have started saving and opened bank accounts, 10 of these groups are trained and linked to VICOBAs. VIFAFIO undertook consultations with Women's Groups to identify priority solutions for reducing post-harvest losses from fisheries. As a result, VIFAFIO has purchased four deep freezers to be used by Women's Groups for the storage of fish, and also for storing horticulture crops during periods of low fish catch.

The project continues to promote meaningful participation and engagement for women in project activities. For example, during community meetings at least 30% of participants were women, and women were provided opportunities to take lead in discussions and facilitate topics. Moreover, women have been encouraged and supported to take up leadership roles in project activities, including those in women's groups, TOT, and local institutions e.g. progress has been made on gender representation in Water User Associations - the South Mara has

66% women on the leadership group, and the North Mara has 50% women on its leadership group. Men were also encouraged to collaborate with women rather than compete with them.

Several key lessons have been observed which demonstrate the positive impact of gender equality and female empowerment can provide to the community. For example, Kwibuse CMU is performing well under the leadership of a female chairperson. In addition, the Women Groups formed under the project are proving resilient and they have started revolving funds among themselves. The groups are now investing in small businesses, and some have collaborated with fishermen to purchase sustainable fishing nets and are splitting the profits.

7. Monitoring and evaluation

The M&E plan is owned by WWF-Tanzania, but is a live google document which is available for all project partners to contribute to. WWF-UK's Design and Impact Advisor provides regular support for all aspects of M&E for the project, working closely with the project team including WWF-Tanzania's M&E expert.

For activities facilitated by WWF Tanzania, the Project Executant prepares the activities Concept Notes which provide a narrative on how the activity will be undertaken, and outlines the contribution of the activity to the project outputs and outcome, as well as alignment with the M&E plan. The Concept Note has to be approved by WWF Tanzania Freshwater Technical adviser, Programme Manager (PM) and Country Director (CD).

WWF-Tanzania has regular bi-weekly progress meetings with partners to share updates on fieldwork activities and to monitor activities to ensure they align with the project deliverables. In collaboration with local project partners, WWF-Tanzania has developed Key Performance Indicators (KPIs) & Milestone to track progress. During meetings, partners are encouraged to share project challenges, opportunities, learnings, and adaptive management. An internal partner mid-term reflection meeting was held in-person in Musoma in December 2023, to assist with ongoing M&E, see annex 6 for the workshop report.

The project was selected for a Monitoring Review (MR) commissioned by NIRAS to provide an external perspective on the progress of the project (29-022). The MR was undertaken in early February 2024. The review was based on examination of key project documents: the Stage 2 application; the first annual report (AR1 – April 2023) and two half-year reports (HYR1 – October 2022; YHR2 - October 2023); the independent review of the project's annual report (AR1R), and a selection of other documents/reports relevant to the Mara River Basin and Wetlands. A brief visit by the Reviewer to the project area (Musoma, and the four Districts adjacent to the Wetland, and to TAFIRI HQ in Mwanza) took place between 6-9 February 2024 to meet project partners and to visit field sites. The project team found the Monitoring Review very useful and has updated some aspects of the project approaches and logframe based on the MR recommendations.

8. Lessons learnt

During this reporting timeframe, the project has focused on the formation of Community Management Units (CMUs) for collaborative co-management of the Mara wetlands. The Monitoring, Control, and Surveillance sub-committee within the CMUs have been instrumental in conducting training sessions and campaigns against the use of illegal fishing gear. We have updated the project logframe (detailed in the latest Change Request) to ensure that the difference between CMUs and BMUs is clear.

Challenges were encountered in establishing a CMU in Tarime due to extreme seasonality in fisheries in the area, and difficulty in engaging a sufficient number of fisheries stakeholders. WWF-Tanzania is planning to support the formation of a CMU in Tarime in year 3.

Several lessons have been learnt regarding the gear exchange programme during year 2. For example, fishers understand the reasons for giving up or exchanging their illegal gear and after training appear willing to do so. But they are not yet prepared to buy the legal replacements themselves, despite some anecdotal evidence that their incomes have improved because of the better prices achieved for the larger fish they now catch. Limited budgets mean it has not been possible to provide as many nets as originally anticipated, due to high demand for the

gear exchange initiative. Further discussions and scoping will be carried out during year 3 of the project to explore mechanisms to allow future sustainable gear exchange. In addition, the project team has learnt that the legal nets are much smaller than the illegal nets they are replacing, so fishers are using up to 6 of them to replace one illegal net, which is an illegal practice in the wetland. Further efforts will be undertaken during year 3 to inform the community about this illegal practice and collaborate with CMUs and other agencies to enforce regulations about the joining of nets.

The project team has also gained valuable lessons about the e-CAS platform developed by TAFIRI to record and monitor fish catch and stock. Currently the individuals trained to collect the data (two people for each of six landing sites) are spending up to 15 days/month on this work with little reward beyond their contribution to the development of fisheries co-management plans. This amount of time is unsustainable and is a priority to review with TAFIRI to find a solution. In addition, TAFIRI will prioritise the sharing of analysed information back with fisher communities during year 3.

Several lessons have been compiled from the ecological surveys. The spatial and temporal extent of the ecological surveys revealed the difficulty in doing this work in the physical settings of the wetland, where access for sampling can be restricted and where sampling techniques employed for fish and invertebrates based on open water or littoral zones are not ideal. The habitat structure of these areas changes seasonally. Hence, one-off surveys can only provide a snapshot of ecological community structure and taxa lists. The latter would be expected to increase cumulatively with more surveys, maybe considerably before reasonable total taxa richness can be estimated.

Seasonal sampling is restricted through resources and logistics. However, the work undertaken so far will enable consideration of new design for such settings, and in relation to high flow through the wetland that prevented meaningful sampling of zooplankton. Further development of fish larvae surveys provides a promising way for monitoring. Satellite imagery has shown to be effective for assessing changes of wetland area and vegetation structure across larger scales. Other groups such as birds may also provide useful overall ecological indicators for the conservation value of the wetland. Such surveys have occurred but are not currently a regular feature of monitoring.

Detailed reflections on the project undertaken during the mid-term project evaluation and external monitoring review have been used for adaptive management and informing year 3 work-plans. The proposed logframe changes have been submitted through a Change Request on 16 April.

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

Y1 feedback: During year two and three the project plans to co-develop community monitoring systems and plans to collect regular biodiversity and habitat distribution data through citizen scientists at specific sites across the wetland. It would be helpful to understand how the citizen scientists' approach will be implemented.
Response: An update on the citizen science eCAS fisheries monitoring system, and the River Health Assessment is provided in section 3, including links to training reports as annexes 16 and 18.

Y1 feedback: The report claims that a training guide manual had been developed in a participatory way between WUAs, village chairpersons, and fisheries officers based on the situational analysis of the fisheries value chain. The training guide is not added to the report as evidence. Please include as evidence to the next AR
Response: The training guide used by VIFAFIO is attached as annex 28.

Y1 feedback: The team is reporting a new risk related to the community perception of the project in relation to the rumours of a future Wetland gazettement. Some community members raised concerns about whether the Tanzanian government would gazette the wetland which could potentially lead to access restrictions. Please clarify in the next AR how the project team is dealing with this risk.

Response: The project team has organised different stakeholder meetings to further explain the future scenarios for gazetting the wetland, to support the sustainable use of the wetland's resources. Most community members, especially fisherfolks, are positive about the idea of raising the wetland status including the gazettement of the wetlands, however livestock keepers (e.g. from the Wegero village) are still concerned about the impacts on grazing lands. During year 3, the project is planning to organise different meetings and training sessions to explain how the sustainable use of wetland resources, (including the pasture) can be furthered by introducing sustainable rangeland management, and how the gazettement of the wetland could provide benefits for communities living in the Mara wetlands. Insights will be shared with the Tanzania national Ramsar focal point to determine a future potential roadmap after the project.

Y1 feedback: The report claims that an initial communication strategy draft has been developed but this strategy has not been added to the report. Please share it with the next AR.
Response: We have included a link to the project's communications strategy as annex 25 to this report.

10. Risk Management

The project's risk register and issues log has been updated as submitted with this annual report. To note the following risks / issues have been identified:

A new initiative for a sugarcane plantation at the Mara Wetlands, spearheaded by the Livestock and Fisheries division in the Rorya Local Government Authority, carries potential implications for the fisheries community and ecology surrounding the Wetlands. WWF-Tanzania is engaging with the relevant authorities to advocate for a comprehensive EIA involving all relevant stakeholders of the Mara wetlands.

As outlined in section 8, we have identified risks with the sustainability of the gear exchange with the legal nets being much smaller than the illegal nets being replaced, so fishers are using up to 6 of them to replace one illegal net, which in itself makes the new net illegal. Further efforts will be undertaken during year 3 to inform the community about this illegal practice and collaborate with CMUs and other agencies to enforce regulations about the joining of nets.

As outlined in section 8, a newly identified issue is the continuity of e-CAS in its current form, as it takes 15 days per month per enumerator, which is not a sustainable practice. This is a priority for TAFIRI and WWF-Tanzania to review during year 3 to find a sustainable solution. For example, efforts will be made to reduce the time volunteered by the enumerators or introduce an income generating process to maintain it.

10. Sustainability and legacy

This project is an important component of the wider southern Kenya northern Tanzania wildlife corridors programme, which WWF is committed to supporting this region and the broader landscape over the next 10 years (minimum) to ensure effective and sustainable impact. Throughout project implementation there has been involvement of the Local Government Authorities, County Governments, local project partners and local communities, to ensure strong collaboration and buy-in for the project.

The project has gained good recognition within Tanzania, particularly in the Mara regional office and amongst Local Government Authorities (LGAs), where efforts have been focused on promoting fisheries-related activities. The Mara regional office has recognized the importance of fisheries and hired a regional fisheries officer to support implementation of fisheries co-management plan. Notably, there has been strong community engagement, with the establishment of sustainable groups including Women's Groups (WGs) and Community Management Units (CMUs) overseeing wetland resource co-management.

As part of our open access plan, we've facilitated sharing of project data and information, ensuring LGAs have access to essential resources such as eCAS and RHA data collected through citizen science. This inclusive approach extends to involving project beneficiaries in

decision-making processes and sharing comprehensive activity reports with them. During year 3, we will further focus on consolidating and sharing project data.

The project has increased interest from various organisations and institutions, indicating its growing significance. Research institutions including TAFIRI and academic institutions such as Sokoine University and the Nelson Mandela Institute of Science and Technology have shown increased interest in conducting research in the area. Additionally, the Mara Region Fisheries Resources Protection Unit (MRFRU) has expressed interest in collaborating with CMUs to safeguard wetland fisheries resources, while the Lake Victoria Basin Water Board (LVBWB) has recognised the importance of including fishermen as stakeholders in their initiatives.

We are currently exploring options to further develop the project, in particular research on the social and economic value of the wetlands. This includes submission of a recent concept note application to the Global Centre on Biodiversity for Climate (GCBC).

During year 3, we aim to have a stronger focus at a political level and through the Ramsar convention focal points, including interactions across key ministries and their agencies, to ensure longer-term sustainability of the Mara wetlands.

11. Darwin Initiative identity

Our project has actively publicised the Darwin Initiative through various means. The Darwin initiative logo has been displayed on printed materials, sign boards, and banners at events and presentations in Tanzania. Through in-person discussions, stakeholders and partners engaged in our project have indicated a good understanding of the objectives of the Darwin Initiative.

We have utilised social media platforms such as Instagram to showcase project activities. Our engagement on these platforms includes links back to the Darwin Initiative and BCF's official social media channels to enhance visibility and reach. We also developed an article about the project focused on theme of intersection of food, biodiversity, and livelihoods, which was featured on the BCF website and newsletter. WWF-Tanzania also produced a mini-documentary about the project which will be promoted during year 3 of the project. We have also developed a project page on the WWF-UK website, featured the project in WWF-UK's e-newsletter and members magazine. Full details of the project's communications strategy and links to communications outputs are available in annex 25.

12. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been reported in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes - [redacted]
Has the focal point attended any formal training in the last 12 months?	Yes - Environmental Social Safeguards Framework (ESSF) training for WWF staff from 15-20 October 2023 as a participant and facilitator. The training was facilitated by the Regional Head for E&S Africa (WWF International).
What proportion (and number) of project staff have received formal training on Safeguarding?	100% - WWF-Tanzania staff based in the Mara-Serengeti Sub Landscape received safeguarding training in February 2024 including Project officer, Accountant and project driver.

Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.
There have been no safeguarding challenges during the last 12 months.

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.
Plans are underway to monitor WWF-Tanzania's ESSF implementation including the review of the grievance mechanisms across the sub-landscape which this project operates in. This will include workshops with key stakeholders from project sites and ongoing community sensitisation of WWF's safeguards and existing grievance mechanisms.

Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants.

WWF, Local Government Authorities (LGAs), VIFAFIO, and TAFIRI have served as facilitators during a total of 23 meetings, with decisions and solutions emerging primarily from grassroots resource users. The meetings focus on natural resources management, conflict resolution, leadership and governance. Details of community engagement in project activities including awareness events are detailed in section 3.

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

i. Table 1: Project expenditure <u>during the reporting period</u> (1 April 2023 – 31 March 2024)

Please note, Figures in Table 1 below are indicative figures only.

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Costs (£) DRAFT	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]	[redacted]	[redacted]	
Consultancy costs	[redacted]	[redacted]	[redacted]	

Overhead Costs	[redacted]	[redacted]	[redacted]	
Travel and subsistence	[redacted]	[redacted]	[redacted]	
Operating Costs	[redacted]	[redacted]	[redacted]	
Capital items (see below)	0	0	0	
Others (see below)	[redacted]	[redacted]	[redacted]	Lower BCF expenditures incurred on the Equipment budget line - it was possible to purchase the GPS at a lowerA market rate. In addition, lower consumables (stationery, printing) incurred - as only incurred based on need.
TOTAL	**176,891**	**176,891**	**0%**	

A budget revision was submitted and approved in March 2024.

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

The figure in the first column of Table 2 below (secured to date) is an indicative figure only. We are still in the process of finalising the financial reports from partners.

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	[redacted]	[redacted]	WWF UK, WWF Tanzania, IHE and Tanzanian Government
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)	0	0	

11. Other comments on progress not covered elsewhere

No other comments to add.

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

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

2. Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact Protected fish habitats, sustainable fishing methods and improved value chains enhance the resilience of local livelihoods, sustain freshwater biodiversity and help to secure the ecological integrity of the Mara Wetlands.	Anecdotal evidence of increasing uptake of sustainable fishing methods and improved livelihoods. Impact will be determined by the end of the project upon comparison of data on ecological integrity and livelihood results.	[redacted]
Outcome By 2025, community-led sustainable fisheries and improved value chains have increased resilience of livelihoods and have started to reduce threats to freshwater biodiversity in the Mara Wetlands		
Outcome indicator 0.0 0.0 By 2025, habitat distribution and biodiversity abundance and distribution of native (including identified threatened species) and non-native (including Nile perch and hyacinth) species are known and maintained	**Year 1:** Ecological surveys completed in December 2022. 17 fish species were identified in the Mara wetlands covering 330.42sqkm, primarily in the lower catchment. 132 species of macrobenthos were located in 8 sites, 3 sites were depleted due to low water quality. Catchment per unit effort (CPUE) provided a relative biomass of 9.2kg/net (lower catchment), 0.25kg/net (middle catchment), 1.9 kg/net (upper catchment) Drone survey completed March 2023, raw data is currently being analysed by IHE, due to be completed March 2024. **Year 2:** Follow-up ecological surveys took place in December 2023 with TAFIRI and IHE Delft. Consolidation and assembly of the mapping data for analysis of how the wetland extent and habitat have changed since previous updates. Water chemistry results and nutrients have been analysed by TAFIRI - water quality results are largely similar to those of the 2022 survey. Four macroinvertebrate samples and five vegetation samples were collected from each site. A fewer number of zooplankton samples were collected for processing by IHE. Low abundance suggested by field observations have been confirmed by processing in the lab by IHE. Results of phytoplankton and macrobenthos samples processed by TAFIRI are completed. Mostly moderately or highly tolerant macroinvertebrate taxa were observed in the samples.	Consolidation of ecological survey data. Ongoing eCAS data collection.

	eCAS data collection is underway. Initial fish size frequency catch data and distribution will be analysed by TAFIRI in 2024. Evidence provided in section 3 and annexes 8,9,10.	
Outcome indicator 0.1 0.1 By 2025, at least 190 km2 (~50%) of the Mara Wetlands is under improved fisheries co-management, with measures in place to protect identified fish habitats and breeding sites; benefiting Lake Victoria refugee species and threatened species (eg haplochromine cichlids, endangered native tilapias); and a monitoring regime is established based on indicators of fish stocks, threatened species distributions and populations, and wider wetland health.	**Year 1**: Initial identification of the wetland as a breeding site and refuge for threatened species - more data required to confirm. **Year 2:** River Health Assessment (RHA) data collection in progress, citizen science data is being shared with LVBWB monthly. Water quality is measured once per month at 18 sites across the wetland. Fish larvae surveys completed indicating breeding sites. Development of fisheries co-management plans carried out by TAFIRI (Jan - March 2024). Evidence provided in section 3 and annexes 12, 16 and 17.	Ongoing RHA data collection. Disseminate the draft co-management plan to authorities and community natural resource groups.
Outcome indicator 0.2 0.2 At least 510 fisherfolk have ceased the use of destructive fishing methods such as undersized nets	**Year 1:** Baseline identified through socio-economic TAFIRI research - 49% undersized nets (<3 inches) in survey area in December 2022. **Year 2:** Through TAFIRI led gear exchange, 51 fishers across 4 villages voluntarily surrendered 242 illegal gears (91 undersized nets, 125 monofilament nets, 1 beach seine, 2 traps, 18 hooks and 5 mosquito nets). These were exchanged with 229 legal gears (165 gillnets and 64 other legal sized nets). After the TAFIRI gear exchange scheme, 52 fishers in Kwibuse CMU voluntarily surrendered an additional 306 illegal fishing gears. Evidence provided in section 3 and annex 19.	Final fishing gear survey to assess presence of illegal gear and undersized nets across the wetlands. Ongoing illegal gear exchange programme.
Outcome indicator 0.3 0.3 By 2025, at least ~750 (60% of direct beneficiaries) around the Wetland including vulnerable poor people (510 men, 730 women and 10 persons with disability) report more resilient livelihoods through sustainable fish stocks, increased /diversification of income and/or value chain enhancement and improved governance.	**Year 1**: Household socio-economic survey completed. 28% report climate resilience on the baseline, though not yet development of resilient livelihoods. **Year 2:** Case studies from women's groups (Kirumi and Buswahili) collected to demonstrate livelihood impacts ahead of impact survey in year 3. Evidence provided in section 3 and annex 26.	Year 3 endline household socio-economic survey. VIFAFIO to assess livelihood impacts for those involved in Women's Groups.
Outcome indicator 0.4 0.4 Based on improved knowledge and lessons from this project, by 2025, 16 plans or guidelines have been agreed by local	**Year 1:** 2 sub-catchment management plans developed for 2 Water Users Associations. 3 District Environmental Action Plans developed, implementation is required.	Review Mara Wetlands Integrated Management Plan (IMP).

government and communities that will help to sustain impacts of the project in terms of fisheries co-management, livelihood resilience, and biodiversity in the Wetlands	**Year 2:** 6 District Environmental Action plans (DEAP) reviewed (5 through this project and 1 through the Mara River catchment project) and approved by district directors and district councils. 2 sub-catchment Management Plans finalised and now being implemented with WUAs in respective sub-catchment (North and South Mara WUAs). Templates prepared for Water User Associations to develop their constitutions. Evidence provided in section 3 and annexes 14 and 15.	
Output 1 Fisheries co-management By 2025, adoption of one community-led fisheries co-management plan, based on initial fisheries situation assessment for the Mara Wetlands, and incorporating i) measures to protect habitat and breeding sites for fish stocks and refugee/threatened species, and ii) measures for ongoing monitoring and adaptive management of fish catch, indicator and threatened species and wider wetland health		
Output indicator 1.1 1.1 Fisheries situation assessment for the Mara Wetlands completed and disseminated to fisherfolk and relevant local authorities (by end Yr 1). Baseline: No assessment in place.	**Year 1**: Initial ecological surveys carried out by TAFIRI and IHE in December 2022 to monitor habitat and biodiversity and assess updated baselines. TAFIRI conducted a socio-ecological survey providing the fisheries situation assessment from December 2022 to February 2023. **Year 2:** Follow-up ecological surveys took place in December 2023 with TAFIRI and IHE Delft. Larval survey for identification of breeding sites took place in March 2024. Evidence provided in section 3 and annexes 8,9,10,12.	Dissemination of the fisheries situation analysis to stakeholders (flyers, brochures, social media and fact sheets).
Output indicator 1.2, Community-led fisheries co-management plan agreed by local communities (with minimum 60% fisherfolk participation from 27 villages) and authorities, with specific measures for habitat/population protection, e.g., no take zones, off seasons, minimum net mesh sizes (by end Yr 2). Baseline: No community-led fisheries co-management plan in place	**Year 2:** 4 Community Management Units (CMUs) established and operating (2 in Butiama, 1 in Rorya, and 1 in Serengeti district). The CMUs assist in data collection and sustainable fisheries management and comprise 320 community members (27% female). 65 individuals (28 female and 37 male) have been identified as executive committee members of the CMUs. CMUs have developed by-laws for conserving the wetland resources, with two no-take zones established at Kukona landing site in Rorya, and Kirumi landing site Butiama 2 BMUs supported with equipment for surveillance (Jan-March 2024) who will also help in mentoring the 4 newly formed CMUs. 2 sub-catchment Management Plans developed. Mara River Wetland Fisheries Management Plan (MRWFMP) co developed in February 2024 Evidence provided in section 3 and annex 20.	Dissemination of co-management plan amongst Mara wetlands villages. Summarise co-management plan, identify ToTs, develop learning materials on the approved MRWFMP. Create awareness on the approved MRWFMP to local leaders, fisherfolks and wider community in 27 villages across the Mara wetlands.
Output indicator 1.3 At least 6 Beach Management Units (BMUs) and 3 Water User Associations (WUAs) develop and start to implement citizen science	**Year 2:** 27 enumerators from CMUs and BMUs were provided training on fish species identification using indigenous names. 14 enumerators representing seven landing sites were trained on how to collect catch and effort data using the mobile application Electronic Catch Assessment	Follow-up to WUAs and CMUs activities.

approaches (such as existing e-CAS platform) to monitor fish catch & stock, indicator/ threatened species and wider wetland health, providing quarterly data updates to the Mara Regional and Local Government Authorities and TAFIRI (From Yr 3). Baseline: No citizen science project in place. *Please note the original indicator of 6 Beach Management Units is now disaggregated as 2 Beach Management Units and 4 Community Management Units. Community Management Units are a structure more suited to the Mara wetlands context.*	Survey (eCAS). 4 Community Management Units (CMUs) are implementing eCAS. Fisheries catch data is uploaded daily to the TAFIRI server. Training and equipment for 39 citizens (18 female, 21 male) from two Water Users Associations (WUAs) in North Mara and South Mara areas, to collect monitoring data on wetland and river health. Data is being collected using the citizen science River Health Assessment (RHA) once per month across 18 points, to monitor the health of the Mara River catchment. Evidence provided in section 3 and annex 11 and 18.	Purchase 9 additional mobile phones for eCAS data collection Conduct workshop for dissemination of eCAs results to stakeholders eg. Fisheries officers and CMU/BMUs. Review sustainability of eCAS system.
Output 2. Fishing practices: By 2025, increased fisherfolk capacity on sustainable fishing and monitoring practices, leading to reduced overfishing and declining pressure on refugee and threatened fish species		
Output indicator 2.1. At least 510 fisherfolk trained on and engaged in sustainable fishing practices such as legal nets, off seasons, no take zones, etc. (By end of Yr 2). Baseline: 0	**Year 2:** Training provided by TAFIRI, LVBWB and VIFAFIO to 12 CMU/BMU members using a ToT model, on natural resources management (with a focus on sustainable fishing practices); governance and leadership, and conflict resolution. The 12 ToTs have cascaded the training to a further 310 participants across 9 villages. Evidence provided in section 3 and annex 19.	Conduct training to identified (TOTs) from Nyabange and Kinesi BMUs leaders as well as CMUs leaders from Kirumi (Butiama), Kwibuse (Rorya), Kembwi (Tarime), and Magatini (Serengeti). The training will be based on enforcement (fisheries regulations, patrols, enforcing penalties, fines, gear confiscation and deterring illegal fishing practices). Educate fisherfolks about the importance of using sustainable gears and benefits of compliance to regulations. Encourage community involvement in monitoring and reporting violations of gear regulations. Evaluate the impact of training to wider fisher community

Output indicator 2.2. At least 6 Beach Management Units across 27 villages engaged in the promotion and enforcement of sustainable fishing practices. (By end of Yr 1). *Please note the original indicator of 6 Beach Management Units is now disaggregated as 2 Beach Management Units and 4 Community Management Units. Community Management Units are a structure more suited to the Mara wetlands context.*	**Year 2:** A campaign on the impact of improper fishing gear on livelihoods and biodiversity was led by TAFIRI engaging 504 individuals (30% women), including fishers, traders and processors and consumers.10 riparian villages were reached through 4 public events, and 160 brochures, 51 posters and 4 signboards were produced. Gear exchange for 51 fishers, with voluntary surrender of 242 illegal gears. A further 52 fishers in Kwibuse voluntarily surrendered an additional 306 illegal fishing gears. The 4 operational CMUs are now enforcing sustainable fishing practice through community involvement, monitoring and surveillance. Evidence provided in section 3 and annex 19.	Establish a collaborative Monitoring Control and Surveillance system for enhancing partnership for information sharing, training programs and technology to support compliance with gear regulations. Establish a centralised database to store information on licensed fishers, permitted gears, and reported violations. This will allow analysis to identify trends, patterns and hotspots for non-compliance with gear regulations. Perform gear exchange for at least 50 fisherfolk (exchange illegal fishing gears and adopt sustainable fishing practices using legal gear).
Output indicator 2.3 By Yr 3 a reduction by half in the number of breaches of the sustainable fishing measures (that are set out in co-management plans) by the fisherfolk from the baseline set in Yr 1.	This activity will be done in year 3 after the co-management plans are developed.	Socio-economic survey, including monitoring illegal fishing gear.
Output 3. Value chain enhancement: By 2025, enhanced fisheries value chains provide more resilient (i.e., diversified and/or increased incomes) livelihoods, especially for women.		
Output indicator 3.1 At least 10 People With Disability (PWD) and 730 women are engaged in and using training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain. (Yr 2: 400 women and 10 PWD, Yr 3: 330 women). Baseline: 0	**Year 1:** 30 fishmongers trained on fisheries value chains, selected from 6 communities, out of an initial 140 fishmongers (128 female, 12 male). VIFAFIO carried out an analysis of the value chain, with identification of the gaps through participation of all stakeholders. **Year 2:** 60 women fishmongers (ToTs) provided training on fisheries livelihoods, particularly on post-harvest strategies to reduce fish spoilage. They helped reach 321 women fishmongers (including 6 people with disabilities) from 17 registered women fishmonger groups. 4 deep freezers for fish and horticulture storage have been purchased.	Conducting training to 60 selected women fishmongers on post-harvest technologies to reduce fish spoilage. Procure / construct equipment or facilities to reduce fish product post-harvest losses.

	IHE Delft has supported further mapping of the main value-generating activities of subsistence communities in the Mara wetlands (fishing, farming, livestock keeping) to support livelihood-based value chain analysis. Evidence provided in section 3 and annexes 22 and 23.	
Output indicator 3.2 At least 20 women's groups are linked to VICOBAs to facilitate investment in new market opportunities to enhance incomes from the fishery value chain (Yr 2: 10 groups, Yr 3: 10 groups). Baseline: 3 women groups linked to VICOBA	**Year 1:** 7 newly instituted Women's groups of fishmongers. **Year 2:** Local Government has facilitated 20 Women's Groups (Wanawake Wachuuzi) to develop constitutions and become registered at district level. 17 groups have started saving and opened bank accounts, 10 of these groups are trained and linked to VICOBAs. Evidence provided in section 3 and annexes 23.	Facilitate establishment and strengthening of cooperatives by conducting meetings with 4 CMUs. Establish and strengthen cooperatives to sell the fish products and facilitate training on financial skills/record keeping.
Output 4 Enabling conditions for scaling-up: By 2025, enabling conditions (plans, finances, lesson-sharing) are in place to facilitate sustained impacts from the project, and to facilitate scaling-up of fisheries co-management for the benefit of livelihoods and biodiversity across the entire Mara Wetlands		
Output indicator 4.1 At least three (3) Local Government Authority Environmental Management Plans have been developed incorporating lessons for improved Mara Wetlands fisheries co-management, and the Mara Wetlands Integrated Management Plan has been updated in line with them. (By end of Yr 3).	**Year 1:** 6 District Environmental Assessments (DEA) took place as a first step for the development of management plans. (5 through this project and 1 through the Mara River catchment project). **Year 2:** 6 District Environmental Action Plans (DEAPs) have been revised and approved by district directors pending district council approval. Fisheries co-management plans revised (Feb-March 2024). WWF-Tanzania collaborated with WUAs to review, update, and implement two Sub-Catchment Management Plans (SCMPs), which have been distributed for community-led implementation. Evidence provided in section 3 and annexes 14 and 15.	Update Integrated Management Plan (IMP) for the Mara Wetlands, incorporating lessons learned from the project.
Output indicator 4.2 In at least 27 villages, fisheries co-management guidelines are established, inclusive of all groups of people including women, to enable future monitoring and adaptive management and to identify finance streams that can support more resilient livelihood opportunities (Yr 3).	**Year 2:** Co-management funding strategy for financing the CMUs has been developed. Evidence provided in section 3 and annex 24.	Implement the co-management funding strategy.
Output indicator 4.3	**Year 1:** First initial information-sharing webinar within the WWF-Zambia on the Kafue flats project.	

By Yr 3 insights from the project have been exchanged with other projects in Africa and shared with at least 10 key national and international forums, or policy decision-makers, e.g., national ministries, Ramsar Focal Point, CBD Focal Point, WWF network, global InFish professional network, other projects including relevant Darwin Initiative funded projects. Baseline: 0.	**Year 2:** WWF and VIFAFIO learning exchange with WWF's RUMAKI+ seascape programme to discuss cold chain storage approaches in Kilwa, as a strategy to reduce post-harvest loss. Project communications materials developed including social media materials, e-newsletter content, a project film and website page. Engagement with Tanzania Ramsar focal point. Evidence provided in section 3 and annex 25.	Ongoing project communication and advocacy including sharing lessons learned from the project. Ongoing collaboration with Tanzania Ramsar focal point.

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Community-led fisheries management in the Mara Wetlands, Tanzania.

Project Summary	**Measurable Indicators**	**Means of Verification**	**Important Assumptions**
Impact: Protected fish habitats, sustainable fishing methods and improved value chains enhance the resilience of local livelihoods, sustain freshwater biodiversity and help to secure the ecological integrity of the Mara Wetlands. (Max 30 words)			
Outcome: (Max 30 words) By 2025, community-led sustainable fisheries and improved value chains have increased resilience of livelihoods and have started to reduce threats to freshwater biodiversity in the Mara Wetlands.	0.0 By 2025, habitat distribution and biodiversity abundance and distribution of native (including identified threatened species) and non native (including Nile perch and hyacinth) species are known and maintained. Baseline: TBD from fisheries assessment. 0.1. By 2025, at least 190 km^2 (~50%) of the Mara Wetlands is under improved fisheries co-management, with measures in place to protect identified fish habitats and breeding sites; benefiting Lake Victoria refugee species and threatened species (eg haplochromine cichlids, endangered native tilapias); and a monitoring regime is established based on indicators of fish stocks, threatened species distributions and populations, and wider wetland health.	0.0 Fish size frequency catch data and distribution in the Wetlands; drone surveys of wetland habitat extent; Catch per unit effort (CPUE) survey data from TAFIRI to assess fisheries benefits. 0.1. Fisheries co-management plans in place; annual monitoring reports of management changes adopted; compliance with habitat protection measures such as no-take zones; repeated habitat surveys. 0.2. Data on number of fisherfolk using improved fishing gear and ceasing use of destructive gear from Beach Management Unit records; case studies on use of sustainable equipment and fishing practices; household survey reports. 0.3. Household survey reports (Yr 1 and Yr 3) to assess poverty reduction in a two fold process, around economic improvement such as income, access to loans and	With appropriate preventive measures against Covid-19 (eg social distancing, outdoor meetings, provision of Personal Protective Equipment) and by working closely with appropriate health experts at a local level in providing education and awareness to communities and project staff and stakeholders, the risks to health will be mitigated and communities will feel comfortable working with project staff. Through participatory consultations and co-creation processes, community members around the Mara Wetlands perceive potential for more resilient and equitable benefits from fisheries co-management of the Mara Wetlands, and have increased understanding on the value of sustainable fisheries for the resilience of their livelihoods.

	Baseline: Wetland area is 387 km^2 with no formal fisheries management or monitoring. 0.2. At least 510 fisherfolk have ceased the use of destructive fishing methods such as undersized nets. (Yr 2: 300; Yr 3: 210). Baseline: ~ 20 to 30 fisher folks per village (total 27 villages in Mara Wetlands) currently fish using destructive gear. 0.3. By 2025, at least ~750 (60% of direct beneficiaries) around the Wetland including vulnerable poor people (510 men, 730 women and 10 persons with disability) report more resilient livelihoods through sustainable fish stocks, increased /diversification of income and/or value chain enhancement and improved governance. Baseline: 0 people currently benefiting. 0.4. Based on improved knowledge and lessons from this project, by 2025, 16 plans or guidelines have been agreed by local government and communities that will help to sustain impacts of the project in terms of fisheries co-management, livelihood resilience, and biodiversity in the Wetlands Baseline: 1 plan - the Mara Wetlands Integrated Management Plan which	market capacity but also increased equity with participation of all groups in fisheries co-management and decision making, ownership and responsibility around citizen science and governance. 0.4. Copies of conservation plans agreed by communities and ratified by regional governments which have been informed by fisheries situation assessment and lessons learnt from this project, including: ● Updated Integrated Wetland Management Plan (1). ● Community-led fisheries co-management plan (1). ● Beach Management Unit guidelines (6 BMU with one guideline each) (6). ● Community-led River Health Assessment Guideline (1). ● Tigite Sub - Catchment Management Plan (1). ● District Environmental Management Plan (3). ● Water User Associations (WUAs). Guidelines for 3 WUAs (3).	Capacity building on citizen science and provision of equipment will increase participation of Beach Management Units, Water Users Associations and collaboration with Local Government Authorities and the Mara catchment committee will result in improved fisheries co-management. Fisheries situation assessments and other lessons learnt from this and other relevant projects will enable communities and local authorities to reach agreement on fisheries co-management plans.

	needs to be updated and guidelines agreed.		

1. Fisheries co-management By 2025, adoption of one community-led fisheries co-management plan, based on initial fisheries situation assessment for the Mara Wetlands, and incorporating i) measures to protect habitat and breeding sites for fish stocks and refugee/threatened species, and ii) measures for ongoing monitoring and adaptive management of fish catch, indicator and threatened species and wider wetland health.	1.1 Fisheries situation assessment for the Mara Wetlands completed and disseminated to fisherfolk and relevant local authorities (by end Yr 1). Baseline: No assessment in place. 1.2 Community-led fisheries co-management plan agreed by local communities (with minimum 60% fisherfolk participation from 27 villages) and authorities, with specific measures for habitat/population protection, e.g. no take zones, off seasons, minimum net mesh sizes (by end Yr 2). Baseline: No community-led fisheries co-management plan in place. 1.3 At least 6 Beach Management Units (BMUs) and 3 Water User Associations (WUAs) develop and start to implement citizen science approaches (such as existing e-CAS platform) to monitor fish catch & stock, indicator/ threatened species and wider wetland health, providing quarterly data updates to the Mara Regional and Local Government Authorities and TAFIRI (From Yr 3). Baseline: No citizen science project in place.	1.1 Baseline fisheries situation assessment survey. 1.2 Documented fisheries co-management plans, signed off by relevant community groups and local authorities. 1.3 Quarterly data updates submitted by BMUs/WUAs to authorities and TAFIRI.	Alternative remote systems of engagement to gather data will allow the timely completion of situation assessment in case of Covid or extreme events such as floods. Offline data collection on smartphones will allow effective information sharing in case of failure of telephone network coverage or power cuts.

2. Fishing practices: By 2025, increased fisherfolk capacity on sustainable fishing and monitoring practices, leading to reduced overfishing and declining pressure on refugee and threatened fish species.	2.1. At least 510 fisherfolk trained on and engaged in sustainable fishing practices such as legal nets, off seasons, no take zones, etc. (By end of Yr 2). Baseline: 0. 2.2. At least 6 Beach Management Units across 27 villages engaged in the promotion and enforcement of sustainable fishing practices. (By end of Yr 1). Baseline: 1 Beach Management Unit. 2.3 By Yr 3 a reduction by half in the number of breaches of the sustainable fishing measures (that are set out in co-management plans) by the fisherfolk from the baseline set in Yr 1. Baseline: To be determined in Y1.	2.1. Training course registers; follow-up survey on fishing practices. 2.2. Beach Management Unit records on fish landings and enforcement patrols. 2.3 Beach Management Unit records on fish landings and enforcement patrols.	Beach Management Units have the capacity to enforce improved fishing practices, and fisherfolk perceive shared benefits and are willing to adopt new practices collectively. Supplementary income from engagement in improved fisheries, participation in the design of restrictions, and provision of equipment such as replacement fishing gear, phones and internet access for BMU members as citizen scientist for biodiversity monitoring, will be enough to compensate for any initial losses from the application of legal practices.
3. Value chain enhancement: By 2025, enhanced fisheries value chains provide more resilient (i.e. diversified and/or increased incomes) livelihoods, especially for women.	3.1. At least 10 People With Disability (PWD) and 730 women are engaged on and using training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain. (Yr 2: 400 women and 10 PWD, Yr 3: 330 women). Baseline: 0.	3.1.Training report; survey report including women's income from women's groups records and household survey. 3.2. Survey of women's groups, VICOBA membership records, and market monitoring study to identify percentage of value added fishery products in the market and market access.	The 50 women trained as trainers are selected communally with the condition to train others and that will give them enough motivation to train the rest of the women engaged in fisheries in each group. Women's groups are motivated to take up the opportunities and

	3.2. At least 20 women's groups are linked to VICOBAs to facilitate investment in new market opportunities to enhance incomes from the fishery value chain (Yr 2: 10 groups, Yr 3: 10 groups). Baseline: 3 women groups linked to VICOBA.		have support from the community to do so. Effective enforcement and BMU cooperation ensures demand for undersized/illegal size fish reduces.
4. Enabling conditions for scaling-up: By 2025, enabling conditions (plans, finances, lesson-sharing) are in place to facilitate sustained impacts from the project, and to facilitate scaling-up of fisheries co-management for the benefit of livelihoods and biodiversity across the entire Mara Wetlands.	4.1. At least three (3) Local Government Authority Environmental Management Plans have been developed incorporating lessons for improved Mara Wetlands fisheries co-management, and the Mara Wetlands Integrated Management Plan has been updated in line with them. (By end of Yr 3). Baseline: 1 district plan is in progress. 4.2. In at least 27 villages, fisheries co-management guidelines are established, inclusive of all groups of people including women, to enable future monitoring and adaptive management and to identify finance streams that can support more resilient livelihood opportunities (Yr 3). Baseline: 0. 4.3. By Yr 3 insights from the project have been exchanged with other projects in Africa and shared with at least 10 key national and international forums, or policy decision-makers, eg national ministries, Ramsar Focal Point, CBD	4.1. District Environmental Management Plans and budgets; revised Mara Wetlands Integrated Management Plan. 4.2. List of participants (indicating gender) in minutes/reports of planning workshops and community meetings; number of gender-specific management recommendations in planning and monitoring documents; gender-specific contributions and benefits reflected in project progress reports; household surveys assessing governance and inclusivity as part of wellbeing; end of project fisheries situation assessment incorporating value-chain opportunity analysis particularly for women. 4.3. Documentation of policy briefings, technical papers and forums shared with or presented to key audiences.	Regional and Local Government Authorities are willing and capable to develop the Environmental Management Plans, including increase of budget allocation Equitable participation in resource governance, decision-making and benefit sharing is accepted/ implemented as co-developed by the same communities. Village governments are supportive and include the initiative in the Village Development Plan for scaling up.

	Focal Point, WWF network, global InFish professional network, other projects including relevant Darwin Initiative funded projects. Baseline: 0.		

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) – keep each activity to approx. 25 words

0. Inception phase:

- 0.1 Stakeholder consultations with Beach Management Units (BMUs), Water User Associations (WUAs), women's groups, village leaders, women's groups, persons with disabilities, local and regional government.
- 0.2 Inception Meeting with all partners and stakeholders including community representatives.
- 0.3 Grievance mechanisms established.

1. Facilitate fisheries co-management plans, drawing on a fisheries situation assessment:

1.1 Undertake a fisheries situation assessment adapting methods used in the Kafue Flats, Zambia, including:

- 1.1.1 Review existing data on the fishery; boat and gear type; fishing methods; preferences in size/life-stage of species caught; preferences and constraints to fish trading;
- 1.1.2 Fish market surveys: number of fishers by gender/age/location/tenure; governance dynamics and regulation of fishing; reliance on fish for food and livelihoods.
- 1.1.3 Socio-economic surveys assessing poverty reduction including economic (income and market improvement), social (equity, legitimacy and governance participation) and poverty and biodiversity perceptions.
- 1.1.4 Seasonal ecological surveys to assess diversity, distribution and abundance of species, and to identify indicator species.
- 1.1.5 Habitat mapping of fishing "hotspots", reproduction sites, niche habitats for refugee and threatened species.

1.2 Support communities and local authorities to design co-management plans, drawing on the situation assessment:

- 1.2.1 Develop measures: no-take zones/off-seasons for stock recovery; catch diversification; minimisation of threatened species catch; regulation of fishing gear and enforcement by BMUs.
- 1.2.2 Documentation of measures in a Mara Wetlands fisheries plan and dissemination to fisherfolk and other stakeholders.

1.3 Co-design a method for future management and monitoring of regulations with local authorities (MRFRU-Mara Regional Fisheries Resources Protection Unit & TAFIRI) and communities (BMUs, WUAs):

- 1.3.1 Strengthen WUAs as community groups for effective sub-catchment management plans (SCMPs).
- 1.3.2 Training to 2 WUAs on citizen led wetland and water quality monitoring.
- 1.3.3 Mara Regional Fisheries division (MRFD) and TAFARI train 6 BMUs to support enforcement of fisheries regulations
- 1.3.4 Develop a business case for MRFD to finance BMUs.

- 1.3.5 Facilitate BMUs to conduct regular patrols through provision of equipment.

2. Build capacity for sustainable fishing practices, to help implement the co-management plan:

2.1 Capacity building on sustainable fishing practices and monitoring methods/citizen science for fish catch and biodiversity for fisherfolk through BMUs:

- 2.1.1 Train 6 BMU leaders as Trainer of Trainers (TOT) to train 510 fishers.
- 2.1.2 Identify 27 enumerators from BMUs to train on basic species identification using indigenous names.
- 2.1.3 Training 13 fisher folk on Electronic Catch Assessment Survey (eCAS) for data collection on fish catch. Data delivered to TAFIRI database daily.

2.2 Co-creation of a system for the implementation and engagement of fisherfolk on sustainable fishing practices including the use of legal nets, off seasons and no take zones:

- 2.2.1 Campaign to wider community over the impact of improper fishing gear on long term community livelihoods, poverty and biodiversity.
- 2.2.2 Develop a business plan through VICOBA for the provision of proper equipment and support the procurement of the proper size fishing nets.
- 2.2.3 Facilitate fishing gear exchange with the destruction of unsustainable gear.
- 2.2.4 Create a system of control / surveillance over the use of proper gear within the BMUs.

3. Enhance fisheries value chain to improve local livelihoods:

3.1 Value chain analysis to identify key opportunities for diversifying/increasing incomes.

3.2 Capacity building for 730 women and 10 persons with disability (PWD) fishmongers and entrepreneurs on value chain enhancement, post-harvest technologies and financial management:

- 3.2.1 Train 50 women in the Training of Trainers on value chain enhancement and post harvest technologies to train another 730 women and 10 PWD.
- 3.2.2 Strengthen cooperatives as a financial arm of BMUs to sell fish products and facilitate training on financial skills/record keeping.

3.3 Support strengthening of women-based village community banks (VICOBA) to support loans, savings and business investment, seed funding and cooperatives:

- 3.3.1 Strengthen the governance of women-based village community banks (VICOBAs) to support loans, savings and business investment.

- 3.3.2 Provide seed funding to VICOBAs.

4. Facilitate enabling conditions for scaling up:

4.1 Develop/update local and district plans to incorporate lessons from the project:

- 4.1.1 Review the current District plans (4 Districts).
- 4.1.2 Influence/lobby District plans to incorporate lessons learnt from the project.

4.2 Support identification of potential finance for future fisheries co-management:

- 4.2.1 Influence/lobby District plan to incorporating lessons learnt from the project
- 4.2.2 Share the fisheries co-management funding strategy with potential development partners.
- 4.2.3 Review of BMU and cooperative by laws and constitution - ensuring 10% goes to resource protection.

4.3 Exchange insights with WWF's Freshwater Practice, Ramsar/CBD secretariats, InFish global professional network, Darwin Initiative secretariat:

- 4.3.1 Organize online workshops/conferences/webinars for sharing lessons learnt.
- 4.3.2 Develop/package information materials (technical papers, policy briefs, etc) on lessons learnt/ insights.
- 4.3.3 Disseminate and share project stories through global communication mechanisms including social media platforms and the WWF supporter magazine.

WWF's Environmental and Social Safeguards Framework will be used to manage risks, uphold human rights, and support better outcomes. Regular stakeholder feedback opportunities will be built into project design, and grievance mechanisms will be established.

3. Annex 3: Standard Indicator

Table 1 Project Standard Indicators

DI Indicator number	Name of Indicator after adjusting wording to align with DI Standard Indicators	Unit	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project.
DI-B11	0.0 Area identified as important for biodiversity (ha) in the Mara wetlands	#	None	38,800	38,800		38,800	38,800
DI-D01	0.1 Hectares of habitat in the Mara Wetland under sustainable management practices	ha	None	0	0		0	19,000
DI-B09	0.2 % of individuals/hh reporting a decrease in unsustainable practices such as the use of destructive fishing methods as a result of project activities Change Request submitted to reduce to 20% reduction	%	None	0	NA		0	510
DI-D16	0.3 Number of people around the wetland whose disaster/climate resilience has been improved through sustainable fish stocks, increased /diversification of income and/or value chain enhancement and improved governance Change Request submitted to reduce to 400 people	#	Women	30	NA		30	730
DI-C04	1.1 Fisheries situation assessment for the Mara Wetlands completed and disseminated to fisherfolk and relevant local authorities	#		1	2			2
[DI-B04]	1.2 Community-led fisheries co-management plan agreed by local communities and authorities	#		0	0			1

DI Indicator number	Name of Indicator after adjusting wording to align with DI Standard Indicators	Unit	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project.
[DI-A03	1.3 Number of organizations (WUAs/CMUs/ BMUs) develop and start to implement citizen science approaches (such as existing e-CAS platform) to monitor fish catch & stock, indicator/ threatened species and wider wetland health, providing quarterly data updates to the Mara Regional and Local Government Authorities and TAFIRI	#		0	8			8
[DI-B09]	2.2 Number of fisherfolk have exchanged illegal fishing gear for legal gear and have adopted sustainable fishing practices Change Request submitted to reduce to 151 fisherfolk	#		0	51			510
DI-A04]	3.1 Number of people engaged on and using training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain Change Request submitted to reduce to 521 women	#	Women	0	321			750
DI-A04]	3.1 Number of people engaged on and using training and equipment to reduce post-harvest losses and develop market strategies to enhance income from the fish value chain	#	PWD	0	6			10
[DI-A03]	3.2 Number of women's groups are active, with at least 20 women's groups practising VICOBA strategies to facilitate investment in new market opportunities to enhance incomes from the fishery value chain		VSLA / VICOBA	7	17			20

DI Indicator number	Name of Indicator after adjusting wording to align with DI Standard Indicators	Unit	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project.
	Change Request submitted to clarify to 40 groups active and 20 linked to VICOBA							
[DI-C01]	4.1 plans and / or guidelines have been developed and agreed by local government and communities (by Y3), incorporating project lessons, that will help to sustain impacts of the project in terms of fisheries co-management, livelihood resilience, and biodiversity in the Wetlands	#		5	8			18

Table 2 Publications

Please see project communications strategy in annex 25 for full details of recent communications outputs.

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)
Sustainable fisheries in the Mara wetlands	Website	Published Jan 2024	Female	British	N/A	https://www.wwf.org.uk/what-we-do/projects/sustainable-fisheries-mara-wetlands
Protecting the Mara Wetlands	Website blog post	Published Jan 2024	Male	Tanzanian	N/A	https://www.darwininitiative.org.uk/news/2024/01/11/protecting-the-mara-wetlands/

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

Please note that all supporting information provided is confidential, due to some reports containing personal information, and some outputs still in draft format. Please contact Katherine Elliott (Project Leader) if there is interest in sharing materials externally.

1. Report of progress and achievements against logframe for Financial Year 2023-2024.
2. Project's full current logframe as presented in the application form.
3. Standard Indicators.
4. Annex list
5. Maps of the Mara Wetland, Tanzania
6. Mid-term project reflection report - December 2023.
7. Revised project logframe - April 2024 (pending approval).
8. Remote Sensing Analysis of the Mara Wetland, Tanzania - March 2024
9. Ecological sampling data summary - Nov/Dec 2023.
10. TAFIRI ecological sampling report - April 2024.
11. TAFIRI report on Mara River and Wetlands Electronic Catch Assessment (eCAS) - April 2024.
12. TAFIRI report on the fish larvae and juvenile fish survey in the Mara River wetlands - April 2024.
13. Mara River Wetlands Fisheries Management Plan (MRWFMP I) 2024-2029
14. SCMP Mara South - June 2023
15. SCMP Mara Kaskazini - June 2023
16. WUA RHA Report_Citizen Science - May 2023
17. RHA Data Mara_River Health_WWF_23-24
18. eCAS training report
19. TAFIRI fisheries awareness campaign activity report - September 2023
20. Activity report - Creating a system of surveillance over the use of proper gear within the CMUs - March 2024.
21. IHE gender value chain research instruments.
22. VIFAFIO womens fishmonger training activity report August 2023.
23. VIFAFIO value chain photos.
24. Mara Wetlands Fisheries Co-Management Funding Strategy - October 2023.
25. Training manual - VIFAFIO Muongozo wa Mafunzo
26. Darwin Mara wetlands Communications Strategy
27. Case studies and quotes from the Darwin Mara wetlands project 2024
28. 29-022 Darwin Mara Wetlands Monitoring Review Report - February 2024.

29. 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.	
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.	Yes – separate emails
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 16)?	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.	