



AFRICAN DEVELOPMENT BANK GROUP



PROGRESS REPORT

PROJECT NAME: PROGRAMME FOR IMPROVING FISHERIES GOVERNANCE AND BLUE ECONOMY TRADE CORRIDORS IN SADC REGION (PROFISHBLUE) PROJECT

Project Code: 2100155041083

Assignment Title: GENETIC IMPROVEMENT, SUPPORT TO AQUACULTURE VALUE CHAINS AND PROMOTION OF FISH IN FOODS SYSTEMS IN SADC

Implementing agency: WorldFish Period:

October–December 2024

By

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Country - Multinational: Zambia, Malawi, Mozambique, United Republic of Tanzania (URT) and South Africa

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LIST OF ACRONYMS

ABiST	Aquatic Biosolutions Tanzania
ADAZ	Aquaculture Development Association of Zambia
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AICCRA	Accelerating Impact of CGIAR Climate Research for Africa
AWFISHNET	African Women Fish Processors and Traders Network
CIS	Climate Information Services
FAO	The United Nations Food and Agriculture Organization
GEF	Global Environmental Facility
GIP	Genetic Improvement Program
GIF	Genetic Improvement Framework
ICLARM	International Centre for Living Aquatic Resources Management
NAC	National Aquaculture Centre
PIU	Project Implementation Unit
PROFISHBLUE	Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in SADC region
SA	South Africa
SADC	Southern African Development Community
SMEs	Small to Medium Scale Enterprises
SIDO	Small Industries development Organisation
TAFIRI	Tanzania Fisheries Research Institute
TC	Trade Corridors
TDA	Tanzania Trade Development Agency
TNA	Training Needs Assessment

UNIDO	United Nations Industrial Development Organization
URT	United Republic of Tanzania
USD	United States Dollar
WWF	Worldwide Fund for Nature (WWF)

A – REPORT SUMMARY AND PROPOSED ACTIONS

A.1- Project data

Project Title	Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in SADC Region (PROFISHBLUE)		
Project Code/Grant Number	2100155041083		
Country	Multinational: Zambia, Malawi, Mozambique, United Republic of Tanzania (URT) and South Africa		
Sector	Blue Economy		
Executing Agency	WorldFish		
Responsible Staff	Dr. Victor Siamudaala (Project Lead and Nutrition Sub-component lead) Dr. Peerzadi Rumana Hossain (FIS sub-component lead) Yvonne Mwanza (Genetics sub-component interim lead)		
Objective	GENETIC IMPROVEMENT, SUPPORT TO AQUACULTURE VALUE CHAINS AND PROMOTION OF FISH IN FOODS SYSTEMS IN SADC		
Project Components/subcomponents	Component 1: subcomponent Genetics and FIS Component 2: subcomponent Nutrition		
Reporting Period			
Financing source/ instrument	Total approved amount (USD)	Disbursed to date (USD)	Disbursed to date (%)
Financing source/inst1: SADC GRANT	1,453,690.00	799,530.00	55%
Financing source/inst3: WorldFish (in Kind contribution if any)		0.00	0%
TOTAL	1,453,690.00	799,530.00	55%

A.1 - Executive summary on project implementation during the year

This report details the progress made during the 4th quarter of 2024 (October – December) covering the three sub-components as described below.

Component 1: Improving collaborative governance of transboundary fisheries and genetic resources.

1.3 Promote genetic improvement and aquaculture programs/regional hatchery support and training subcomponent.

In the quarter under review, WorldFish rendered support to research activities on regional genetics resources through its ongoing work at the *Oreochromis andersonii* breeding nucleus in Kitwe Zambia. The primary activity was the harvest of generation two fish that were stocked from April to June, 2024. Phenotypic data was collected during the harvest exercise and is in the process of being analyzed. The following morphometric measurements were done; weight(grams), standard length, total length, head length, body depth and sex determination and all the measurements are within expected range although a detailed analysis still needs to be done. Physical monitoring was also done so as to check for any visible signs of deformities on the fish. A total of 3186 fish were harvested with 1454 females and 1732 males.

1.5 Digital fisheries information systems (FIS) for value chain actors and knowledge sharing platform for manager

Based on the targets set for Q4 of 2024 to enhance digital fisheries and climate information services, several key activities were successfully completed. In line with the goal to gather critical data for the integration of vessel tracking and fisheries catch data, field surveys and data collection were carried out at the Nguwo and Lifuwu landing sites in Malawi. A total of 10 VMS-equipped boats at each site were sampled, with four boats selected daily over three consecutive days to ensure a representative dataset. Data collected included fish catch weight by species, number of fishermen involved, fishing gear types, and the types of boats used. Examples of species caught were *Diplotaxodon argenteus* (Ndunduma), *Rhamphochromis Macrocephalus* (Mcheni), and *Engraulicypris sardella* (Usipa), which are important for both local consumption and regional trade. At the end of quarter 4, the data collection process continued, focusing on documenting vessel types and fishing gears, particularly VMS-equipped boats. The data collection at both Nguwo and Lifuwu followed a consistent procedure, with four days of data collection at each site. This data is integral to the ongoing integration of vessel tracking and fisheries catch data, with the aim to fully integrate it into the digital fisheries dashboard by June 2025.

To support the Department of Fisheries in improving data management and analysis based on the capacity needs assessments, an R programming training was during this quarter successfully delivered on 17 December 2024. A total of 19 officials joined this training from Malawi DoF. The training aimed to enhance small-scale

fisheries data analysis skills among department personnel thereby facilitating their future involvement in integrating vessel tracking and catch data into the digital fisheries dashboard for data informed decision making.

In addition to these activities, progress was made on the Climate Information Services (CIS) decision framework for Malawi and Zambia, a critical target for Q4 2024. Throughout November and December, climate and household data analysis were consolidated to develop a framework for creating climate advisories tailored to specific fish species and climate conditions. During this period, the onboarded consultant from University of Stellenbosch finalized the decision frameworks. The air-water temperature algorithm from the retrieved water probes during Q3 was finalised, and the decision tree based on identified species for specific advisories on real-time climate data was completed. The development of this framework marks a key milestone toward offering climate-resilient advisory services to small-scale aquaculture farmers in both Zambia and Malawi.

Component 2: Policy harmonization and trade facilitation towards intra-regional trade

Under this component WorldFish leads sub-component 2.5 i. e Promotion of national and regional fisheries and aquaculture tradeable/nutritious food products focusing on SMEs, linkages with eco-tourism, and market connectivity to the AfCFTA.

1. Tanzania - key activities undertaken during the period under review are:

- i. During the period under review, the project supported five SMEs in Tanzania to showcase at the World Food Day (WFD) Commemorations held in Dar es Salaam. They exhibited several of their products such as smoked fish, fish biltong, kapenta snacks, fish oil, fish sausages etc. The global theme for the 2024 WFD '**right to foods for a better life and a better future**' was an appropriate platform for the SMEs to promote their products.
- ii. Generate Knowledge Products and Communication Tools - progress achieved to date is:
 - a) Development of Communication Tools/Materials – Two promotional videos have been developed.
 - b) Mapping of nutritious aquatic foods – Production of an atlas on aquatic foods present in Tanzania has been completed.
 - c) Development of a Recipe Book – Recipe Book on aquatic foods has been finalized. This product covers mostly recipes predominant in Tanzania. The recipes have potential for replication across southern Africa and East Africa as well. This volume of the recipe will be embedded in the Regional recipe book which is being developed by WorldFish.

2. Zambia - the activities implemented in Zambia are:

- a. Conduct Training Workshops and Create Business Platform for Product Development - progress achieved to-date include:
 - i. Business Mentorship and Coaching – During the quarter under review, a total of 8 SMEs completed one-on-one mentorship in a number of subject areas key to growing their businesses. These included but not limited to: (i) Product development and certification, (ii) Markets and Product Marketing this includes strategies of market and market development, (iii) Trade and Investments, (iv) Financing/Grants opportunities, (v) Export procedures, and (vi) Writing bankable proposals. Mentors were drawn from the following institutions: Ministry of Fisheries and Livestock (MFL), Ministry of Small and Medium Enterprise Development (MSMED), Zambia Bureau of Standards (ZABS), Citizens Economic Empowerment Commission (CEEC), Zambia Development Agency (ZDA), CNC360 Consulting Limited, and Choppies Hypermarket Zambia. SMEs under mentorship included six women and two men; among which was one youth.
 - iii. Generate Knowledge Products and Communication Tools - progress achieved to date is:
 - a) Development of Communication Tools/Materials – Finalization of two promotion videos on consumption of aquatic foods. The videos shall be shared with SADC project PIU in Q1 of 2025 for reviews before publication/sharing with the public.
 - b) Development of a Recipe Book – Draft recipe Book has been completed and under review by WorldFish for finalization. This is a collection of recipes from a number of SADC member states namely: Angola, Malawi, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe. The mentioned countries submitted recipes via the National Focal Point Persons. Request was submitted through the Project Coordinator to the NFPPs to submit country specific recipes for inclusion. The recipe book shall be shared with SADC project PIU in Q1 of 2025 for reviews before publication/sharing with the public.
 - c) Generate a SADC Policy Paper on Promotion of Nutritious Aquatic Food Products in the Region – The Paper has been developed and currently undergoing reviews before being validated; within Q1 of 2025. The Policy Paper shall be shared with SADC project PIU for reviews before publication/sharing with the public.

A2 – Issues, challenges, risks and actions for attention

No	Issues	Impact on the project/programme/work Package	Recommended solutions	Status
Fisheries Information System				
	Local travel budget is fully absorbed after the field survey in Zambia followed by fisheries catch data collection relevant travel and water temperature probes collection travel in Malawi under the FIS component	No local travel budget remaining for fisheries catch data collection relevant travel for next five months and for outreach programme next year to share the developed digital support system	A budget variation may work for this to resolve	A budget variation letter is sent to SADC secretariat and has since been approved.
<i>Genetic improvement program</i>				
	Backup of fish that has been created is all housed at the GIP breeding center in Kitwe	All the back of fish from founder populations to generation 2 are currently housed at the GIP breeding nucleus at NARDC, if a disease is to break out or a natural disease is to occur at NARDC, there is a potential risk of losing all the fish thereby grounding the GIP to a halt	There is a need to back up fish at different facilities in different localities.	We have engaged the department of fisheries for them to consider the backup of this fish at other research facilities to safeguard against disease outbreak or other natural disasters which may occur at the breeding nucleus.

B – RESULTS REPORTING

B.1– Progress toward Project Development Objective

Under Component 1: Improving collaborative governance of transboundary fisheries and genetic resources

Under support to research activities on regional genetic resources, the planned research is aimed at monitoring the performance of the improved *O. andersonii* of the ongoing GIP in Zambia. WorldFish in the period under review harvested the stocked F3 or G2 fish and phenotypic data was collected. Data analysis of the harvest data will be done in Q1 2025.

Under Component 1.5, the data collected during the survey in Zambia and Malawi on fishers' and farmers' perspective on climate issues has been analyzed and air-water temperature model has been developed for Malawi using the data collected from four different locations for last one year (October 2023 - September 2024). Based on these data analysis, the decision frameworks for aquaculture climate information services have been developed. Catch data integration with the vessel tracking data is also started for digital system. The need assessment for the R for Fisheries training was conducted, and accordingly training materials were developed, and the training was conducted virtually on December 17th 2024 where 19 officials from DOF in Malawi joined the training.

Component 2 sub-component 2.5

Zambia

A total of eight SMEs (six women and two men; with one youth) received one-on-one mentorship sessions which comprised the topics: product certification, access to markets, marketing, investments, trade, capital financing, among others. Mentors were drawn from Ministries of Fisheries, Small and Medium Enterprise Development, CEEC, ZDA, CNC360, and Choppies Zambia. The Aquatic Foods atlas has been developed and at typesetting stage. A regional recipe book has been developed and currently undergoing internal reviews before validation and launch. Promotional videos are at finalization stage.

Tanzania

A recipe booklet with a collection of dishes mainly from Tanzania; yet a reflection of East African cuisines has been developed and submitted to WorldFish. It is currently undergoing reviews before validation; after which this version shall be integrated into the regional cookbook which WorldFish has developed. Two promotional videos have been developed.

B.2 – Output reporting

Output Indicators	Most recent value	Annual Target (Expected value at project completion)	End target (expected cumulative value at completion)	Progress towards annual target (% realized)	Progress towards end target (% realized)	Assessment (on whether output indicator is on track to reach annual and end targets. If not on track, please justify)
Regional genetic improvement program scale-out						
GIP Framework						
One regional genetics training in GIP for the participating Countries (Zambia, Malawi, South Africa and Mozambique) Done	01	01	01	0	100	Completed- Training done from 8-11 th April 2024.
Set of hatchery equipment to Member States' participating institutions (NARDC Zambia) to support, genetic improvement programmes provided	01	01	02	95	100	Handover of the equipment was done 3 rd Quarter
Research activities on regional germplasm/aquatic genetic resources to participating institution-NARDC, Zambia Supported	01	01	01	100	100	Tagging, stocking and harvest completed
Set of hatchery equipment to Member States' participating institutions (NAC, Malawi) to support genetic improvement programmes provided	01	01	01	95	100	Completed-Procurement and installation done. Handover of the equipment was done in 3 rd Quarter
Output 1.5: Open-source regional digital platform established for data and information sharing	1	0	1	N/A	80%	On Track
Output 1.4: Report on the development of digital fisheries information systems (FIS) and	1	0	1	N/A	80%	On Track

knowledge sharing platform for managers and value chain actors						
SMEs trained in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets.	31 (20 women & 11 men and 30% youths	30	30	100	100	On track- For Zambia. 103% has been achieved, with an additional SME past the target of 30
SMEs trained in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets.	31 (23 women & 8 men and 19% youths	30	30	100	100	On track- For Tanzania. 103% has been achieved, with an additional SME past the target of 30

Output Indicators	Most recent value	Annual Target (expected value at project completion)	End Target (expected cumulative value at completion)	Progress towards annual target (% realized)	Progress towards end target (% realized)	Assessment (on whether output indicator is on track to reach annual and end targets. If not on track, please justify)
Mapping of Nutritious aquatic foods	1	1	1	95	95	Draft catalogue has been developed and is undergoing reviews by WorldFish
SMEs receive coaching & mentorship (including business platforms) in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets	24	30	30	90	90	Total of 24 SMEs have been mentored
SMEs exhibit at food Expos	16 (11 women & 05 man) with 1 youth	16	15	100	100	On track- ,16 SMEs have been supported to exhibit at the following events (Capacity Building Symposium conducted by Ministry of SME, Zambia International Trade Fair, and the Zambia Agriculture & Commercial)
Recipe book developed	01	01	01	95	95	Regional Recipe Book has been developed and undergoing reviews before validation and launch
Short videos	02	02	02	80	80	On track- Production near finalization
Web repository	01	01	01	100	100	Repository is done and link available and ready for use
Policy paper	01	01	01	95	95	Policy Paper has been developed and currently undergoing reviews before validation.
Tanzania						

30 SMEs trained in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets	31	30	30	100	100	Training of SMEs took place in Q2. 31 SMEs trained
Mapping of aquatic foods	1	1	1	100	100	Completed
30 SMEs receive coaching & mentorship in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets	15	30	30	100	100	Completed
15 SMEs exhibit at food expos	17	15	15	100	113	06 SMEs exhibited at the Africa Small Scale Fisheries Summit and also 15 at Sabasaba International Trade Fair (4 who exhibited at the summit featured gain) between June and July. Overachieved by an extra 02 SMEs
Recipe book developed	1	01	01	90	90	Recipe Book undergoing reviews before validation
Short videos	02	02	02	100	100	Completed
Web repository	01	01	01	10	100	The Tanzania project products will be loaded on the main repository which was developed in Zambia
Policy paper	01	01	01	95	95	One paper has been developed between Zambia & Tanzania; taking into account a regional context.

B.3 – Unanticipated or Additional results¹

<p>Type</p> <p>(As applicable: gender, climate change, civil society engagement, private sector, HIV/AIDS other) (add/delete rows as needed)</p>	<p>Assessment</p> <p>(Summarize key activities, progress, including budget execution, institutional strengthening etc.)</p>
<p>Research activities on regional germplasm/ aquatic genetic resources to participating institution- NARDC, Zambia</p>	<p>We have managed to back up all the generations that have been produced since inception of the GIP with 1000 individual backed up per generation (500 males and 500 females), however this backup is within the breeding nucleus. We have engaged the department of fisheries for them to consider the backup of this fish at other research facilities to safeguard against disease outbreak or other natural disasters which may occur at the breeding nucleus.</p>
<p>Tracking devices for fishers' boats to collect fisheries information and incorporate those in a digital system for data informed decision/policy making in fisheries sector</p>	<p>Open access training materials are developed on R for Fisheries using the data collected from the vessel tracked boats in two fish landing sites of Salima district and training was conducted virtually on Dec 17th 2024</p>
<p>Attending AFRAQ24</p>	<p>Three project staff attended the World Aquaculture Society Africa Chapter Conference (AFRAQ24) which was held in Hammamet Tunisia from 19 to 22 November 2024. During the conference, the team promoted the work that the Project is doing; made presentations and exhibited some aquatic-based food products.</p>
<p>SMEs trained in Entrepreneurial/Business development; Product development; and Trade facilitation for domestic, regional & international markets</p>	<p>One SME (Pamela Mukoma Kalamba) trained in Zambia under the cohort-2 has upgraded her fish processing facility (initially an ordinary household kitchen with wooden cupboards and all) to conform to recommended standards by the Zambia Bureau of Standards. Pamela trades under PAMJIMA Enterprise. She has also constructed a modern fish smoking kiln (from use of ordinary metal drums-210L. Pamela got inspiration from the training and mentorship to grow her business and target high value markets including export by acquiring product certification; and increased production volumes.</p> <ul style="list-style-type: none"> • Facility launch took place on 2nd October 2024 at a ceremony organized by WorldFish under the PROFISHBLUE Project; and PROFISHBLUE Project Manager Dr. Motseki Hlatshwayo with

	<p>Department of Fisheries Deputy Director in charge of Aquaculture (Mr. Mbamwai Mbewe) graced the event.</p> <ul style="list-style-type: none"> • Pamela has since formalized her business by acquiring trading license from the local authority (inclusive health and fire certificates). <p>Pamela has since met all requirements towards facility certification by the ZABS (she is simply awaiting grant of certificate). She was also part of the Zambian delegation on a Trade Mission to Democratic Republic of Congo, together with Edna Chama Kalala and Theresa Khonje SMEs that were also trained by WordIFish under the PROFISHBLUE Project</p>
Formation of Partnerships	<p>Tanzania Project beneficiaries have formed an association termed the “Aqua Processors Association of Tanzania” - APAT. The new platform currently has 14 founding members comprised of 3 males (21%) and 11 females (79%). Among the 14 founding members, 2 are youth aged 21 and 24 years old.</p> <ul style="list-style-type: none"> • This is the first platform in Tanzania focusing on aquatic food processing and value addition. The APAT aims to enable SMEs to improve their business knowledge and skills, and eventually work with government and other stakeholders of interest to regulate aqua food processing and handling in Tanzania. Other members from the Ministry of Fisheries and Livestock will be included in the APAT as members of Board of Trustees to provide guidance and improve operationalization of APAT. • To be able to formally register the association, APAT members have voluntarily agreed to contribute 20,000 TZS (7.34 USD) each, which will be used for registration.
Support SMEs to Access Markets	<p>During the period under review, three SMEs in Zambia were supported by the ZDA to be part of the Zambia Trade Mission to the Democratic Republic of Congo. This exposure enabled the three SMEs to have access to the market in DRC. The said SMEs were all women.</p>

¹ benefits that were *not explicitly identified* at appraisal

C – PROJECT IMPLEMENTATION PROGRESS REPORTING

C.1 – Progress on compliance with covenants

C.1.1 – Compliance with project covenants

Project covenants (stated in the grant/loan agreement) <i>(Pending at project reporting)</i> (add/delete rows as needed)	Type (Entry into Force, conditions for 1st disbursement Undertakings)	Status (Pending initiation, in progress, finalized)	Comments
Upon approval of the inception report and submission of an invoice by 30 April 2023	Disbursement made-as covenanted	Finalized	- Completed on time
Upon acceptance of the Report on the Development of a Regional Framework for Genetic Improvement and to domesticate best practices and submission of invoice by 30th November 2023	Disbursement made-as covenanted	Completed	- The framework was presented by the SADC secretariat at the 41 st Fisheries Committee meeting held at Southern Sun in Johannesburg, South Africa in March 2024. -Portuguese and French translations of the framework have been made and were submitted to SADC secretariat in July, 2024
Upon acceptance of the Report on the Capacity building of participating institutions,	Disbursement made-as covenanted	Completed	- Equipment procured and installed for both countries Malawi and Zambia,

<p>support National Hatchery equipment and Support to national research activities on regional germplasm (Zambia, Malawi, Mozambique and SA) and submission of the invoice 30th June 2024</p>			<p>handover was done on 22nd July, 2024 and 8th August 2024 for Malawi and Zambia respectively.</p> <ul style="list-style-type: none"> - Training successfully done from the 8th – 11th April, 2024. - G2 at NARDC Zambia tagged, stocked and harvested. - Capacity building report submitted and accepted by SADC secretariat.
<p>Upon acceptance of the Report on the Promotion of National and regional fisheries and Aquaculture tradable/nutritious food products focusing on SMEs, linkages with eco-tourism, and market connectivity to the AfCFTA by 15th December 2024</p>	<p>Not yet as this is still work in progress and the completion date is December 2024</p>	<p>In progress</p>	<ul style="list-style-type: none"> - A new partner/consultant Aqua Bio Solutions has been identified to support implementation activities in Tanzania to expedite implementation to be able to meet the covenant deadline of December 2024 - A No Objection successfully obtained in regard to partner change.
<p>Upon acceptance of the Report on the Development of Digital Fisheries Information Systems (FIS) and knowledge sharing</p>	<p>Not yet as this is still work in progress and the completion date is 30th June 2025</p>	<p>In progress</p>	<ul style="list-style-type: none"> - Fisheries catch data i.e. field surveys and data collection (October-December 2024) conducted

<p>Platform for managers and value chain actors and submission on an invoice by 30th June 2025</p>			<p>at Nguwo and Lifuwu landing sites in Malawi. The activity sampled 10 VMS-equipped boats at each site over 3 days, collecting data on fish species, catch weight, fishing gear, and boat types. Data integration into the digital fisheries dashboard aimed for completion by June 2025.</p> <ul style="list-style-type: none"> - Climate Information Services (CIS) Decision Framework (November-December 2024), consolidated inputs for developing a CIS decision framework for Malawi and Zambia, finalized air-water temperature algorithm based on data from Q3, completed decision tree for triggering species-specific climate advisories
<p>Upon acceptance of the final report and submission of an invoice by 31st December 2025</p>	<p>Not yet as this is still work in progress and the completion date is December 2025</p>	<p>Pending initiation once all project milestones are completed</p>	<ul style="list-style-type: none"> - To be completed by December 2025

C.2 – Progress on project activities

C.2.1 – Status of key activities undertaken during the previous quarter (as per AWP)

Table 4: Progress on the execution of planned activities for the financial year 2023-2024

No.	Planned activities (description)	Major achievement	%completion & Traffic Light (<50 is red; 50 to 75% is yellow and >75% is Green)	Plan ahead
1.3 Genetics component				
1.	Build capacity of participating institutions by Conducting a regional genetics training.	Training successfully done.	100%	Training concluded
2.	Provide hatchery equipment to Malawi	Procurement and installation of equipment done.	100%	Handover of equipment done
3.	Provide hatchery equipment to Zambia	Procurement and installation of equipment done.	100%	Handover of equipment done
1.3.3 Provide support to research activities on regional germplasm/aquatic genetic resources to participating institutions in Member states				

1	Preparation and sourcing of materials including experimental Units	Support purchase of feed for experiment and preparation of experimental units	95%	Data analysis of the morphometric data collected
2	Support growing of experimental fish	Participated in the grow out of experimental fish	100%	Fish grown to maturity and harvested at the end of year 2024.
FIS Component				
1.5.1	Set-up an open-source regional digital platform for data and info sharing and coordination and related training programs	<p>1.5.1.1 Identify fisheries and aquaculture relevant information to tailor climate information services system and knowledge sharing platform - Completed</p> <p>1.5.1.2 Develop decision framework in context of the region to provide CIS – Ongoing</p> <p>1.5.1.3 Develop digital decision support system for aquaculture and fisheries – Ongoing</p>	80%	<p>To develop the digital decision support systems for aquaculture and fisheries</p> <p>To draft the article based on the climate data analysis, field survey data analysis and the decision framework development process</p>
1.5.2	Disseminate fish value chain information and sharing application and hands-on training on digital apps	1.5.2.1 Training/outreach programs to enhance the capacity of fishers/fish-farmers and their support agents in understanding and using climate information services - Ongoing	80%	To share the digital decision support systems through workshop

Nutrition Component

<p>Partnerships for Component 2 – Nutrition sub-component Activities</p>	<ul style="list-style-type: none"> - Zambia - A new partnership/Consultancy has been engaged in Tanzania to expedite the implementation of activities similar to the being implemented in Zambia as per agreement. The contracting of the new partner/consultant was completed January 2024. - The project has established partnerships with the Ministry of Small and Medium Enterprises and Cooperatives (MSME). The objective is to see how the MSME can integrate the project SMEs to available investment opportunities within the Ministry - Partnership with Ministry of Fisheries & Livestock, Zambia Development Agency (ZDA), Ministry of Commerce Trade & Industry, Zambia Bureau of Standards, and University of Zambia for experts to facilitate training sessions. - The partnerships are also to create an enabling environment for SMEs to gain implementation support such as investment forums under the ZDA - Partnership with CNC360 Consulting Limited. CNC360 provides capacity building around markets and marketing 	<p>100%</p>	<ul style="list-style-type: none"> - Trainings concluded
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		<p>Tanzania</p> <ul style="list-style-type: none"> - Similar partnerships with the Small Industry Development Organization (SIDO) as chief trainer and coordinate the training; inclusive mentorship & coaching - Ministry of Livestock and Fisheries provided an exhibition Booth for SMEs to exhibit under the Ministry pavilion - SIDO equally provided exhibition space for SMEs 		
	<p>Activity 2.5.1: Training workshops and creating business platform for product development</p> <p>2-days workshops in each country (for up to 15 participants excluding facilitators) on developing aquatic food products (e.g. food safety and handling, nutrition labelling)</p>	<ul style="list-style-type: none"> - SME mapping done - Subject expert mapping done - SME have been placed on business platforms to network with different market players who can potentially support their business growth - Training finalized 	100%	<ul style="list-style-type: none"> - Coaching and mentorship completed. - Business platforms yet to be conducted

<p>Activity 2.5.2: Support to SMEs for scaling out production using business development tools</p> <p>Organize 2 training sessions (in 2023 and 2024) in each country to increase awareness, knowledge and skills of SMEs to use business development tools for scaling up product availability and access</p>	<ul style="list-style-type: none"> - SME mapping done - Subject expert mapping done - SME have been placed on business platforms to network with different market players who can potentially support their business growth - SME recruitment tool is in currently being produced 	<p>100%</p>	<ul style="list-style-type: none"> - Coaching and mentorship done - Business platforms yet to be conducted
<p>Activity 2.5.3: Developing partnerships, financing, and promoting exportable fish based products</p> <p>2.5.3.1 : Organize 1 Capacity building sessions (one in each country) for SMEs to respond international and interregional trade opportunities (e.g.</p>	<ul style="list-style-type: none"> - Choppies, Cheers, and Shoprite supermarkets are now accepting to buy fish-based products from MSMEs. - Zambia industrial commercial bank engaged on the modalities of how SME can access financial support from them. - Citizen’s economic empowerment commission engaged on how SME can be empowered with capital financing. 	<p>95%</p>	<p>-</p>

	<p>labeling, packaging and food safety standards)</p> <p>2.5.3.2: Setting up 15 demonstration booths at Agritech Expo Zambia 2024 to promote diversity of aquatic products (including activities such as business matching sessions, training opportunities and awareness campaigns)</p>	<ul style="list-style-type: none"> - Engagement with Ministry of SME, Ministry of Commerce, and ZDA to see if they can onboard our SMEs in the existing investment initiatives 		
	<p>Activity 2.5.4: Developing knowledge products and communication tools</p> <p>2.5.4.1 : Develop a recipe book</p> <p>2.5.4.2 : Produce short videos on the benefits of consuming aquatic products</p> <p>2.5.4.2: Produce a web repository</p>	<ul style="list-style-type: none"> - Draft under review - Two videos near finalization - Web repository has been developed and is at 100% completion 	<p>95%</p>	

<p>2.5.4.2: Produce a policy paper</p>	<ul style="list-style-type: none"> - Policy Paper has been developed and under review for finalization 		<p>Repository is done and link available and ready for use https://worldfishcenter.org/project/program-improving-fisheries-governance-and-blue-economy-trade-corridors-SADC-region</p>
<p>Participate in technical committee meeting and other key events organized by SADC secretariat</p>	<ul style="list-style-type: none"> - 5th Project Technical Committee was attended-virtual via Zoom. - In November 2024, the team participated in engaging the AfDB supervision mission which was held in Lusaka (Hybrid Format-Virtual and Physical). <ul style="list-style-type: none"> • Further on WorldFish lead the supervisory mission on the field excursion to the PAMJIMA fish processing facility in Lusaka. • Apart from PANJIMA, seven other project beneficiaries (Four women, three men, two youths) equally were also present to showcase their products and interact with the mission delegation. 		<ul style="list-style-type: none"> - Attending the next PTC meeting. - Participate in similar events in the future

C.2.2 – Planned key activities for next quarter (as per AWP)

S/N	Component/Activity	Deadline	M1	M2	M3
1	Component 1: Improving collaborative governance of trans-boundary fisheries and genetic resources				
	Genetics Sub-component Activities				
	1.3.3 Provide support to research activities on regional germplasm/ aquatic genetic resources- Research testing for growth of <i>O. andersonii</i> in 2024, Zambia				
	1.3.3.1 Harvest data analysis	Q1 2025			
2	Component 1.5: Digital fisheries information systems (FIS) and knowledge sharing platform for managers and value chain actors – Activities				
	Develop the digital decision support systems for aquaculture and fisheries	March 2025			
3	2.5.1.1: Hosting Business Platform Meetings (Zambia)	28 Feb 2025			
4	Activity 2.5.4: Knowledge products and communication tools	31 Mar 2025			
	2.5.4.1 : Develop and disseminate, in association with local chefs, a recipe book on aquatic foods				
	-Regional Recipe Book draft has been developed and under review –Zambia & Tanzania				
	-Launch of Recipe Book				
	Finalizing videos for Tanzania and Zambia	31 March, 2025			
	Developing Position Paper on the status of capacity building for enterprise development in SADC region; what is the ideal approach	June 2025			
	Participate in technical committee meetings and other key events organized by the SADC secretariat and other implementing partners and member states (Writer’s workshop on the regional fish genetic improvement programme).	31 st Dec, 2025			
	Quarterly technical and financial progress report	15 th January, 2025			

C.3 – Project execution and financing

C.3.1 – Financial progress cxc

Criteria		Total amount (a) (US\$)	Cumulative amount to date (b) (US\$)	Cumulative amount at beginning of the fiscal year (c) (US\$)	Annual projection (expected cumulative amount) (d) (US\$)	Progress towards annual projection (% realized) (b-c)/(d-c) (US\$)	Progress towards total (% realized) (b/a) (US\$)
Disbursement	Financing source/inst (SADC)	1,453,690	1,038,696	306,412	1,090,268	93%	71%
	Financing source/inst. (WorldFish) – in-Kind						

C.4 Performance of Stakeholders during the previous quarter

SADC Performance		General Assessment
Borrower Performance		N/A
		Department of Fisheries staff in Kitwe Zambia helped us to harvest the generation two fish that were stocked early in the year. Mr Edwin Kikamba really supported the harvest activity by availing staff members at the <i>Oreochromis andersonii</i> GIP breeding nucleus to join the WorldFish staff in harvesting the fish. He also ensured that a vehicle was assigned to the activity throughout the harvest period.
Other Stakeholders		Based on the capacity needs assessment of the fisheries catch data collection process, R Programming Training was conducted on December 17, 2024, as an online session for Department of Fisheries personnel. The training aimed to enhance small-scale fisheries data analysis skills for the future integration of vessel tracking and catch data into the digital fisheries dashboard. Key participants, out of a total of 19 (16 males, 3 females), included Dr. Maxon Ngochera (Senior Deputy Director of Fisheries), Mr. Titus Phiri (Deputy Director of Aquaculture), and Mr. Hassibu Shainani (Principal Fisheries Officer), along with other key personnel from the Department of Fisheries.
		Implementing activities in partnership with many key stakeholders such as Ministry of Fisheries & Livestock, Ministry of SME, ZDA, ZABS, CEEC, CNC360, Ministry of Commerce; and Country Focal Point persons have been highly instrumental in undertaking project activities (Zambia). In Tanzania, a similar arrangement in place partnering with SIDO, Tanzania Bureau of Standards, Tanzania Fisheries Research Institute (TAFIRI) and others to support project implementation.

Annex 1 – Output projections and status

Output Indicator <i>(add/delete rows as needed)</i>	Baseline <i>(start of project)</i>	Projection vs. Actual	Y ₁	2023	2024	2025
		Original projection				
		Updated projection				
		Actual				
		Original projection				
		Updated projection				
		Actual				
		Original projection				
		Updated projection				
		Actual				

Attach the evidence of outputs e.g reports, policy briefs, brochures etc

ANNEX

1. Success Stories

- Link to all regional training materials: [Regional Genetics training](#)
- Handover Blog <https://worldfishcenter.org/updates/worldfish-hands-over-gip-hatchery-equipment-malawi-and-zambia>
- Web repository link: <https://worldfishcenter.org/project/program-improving-fisheries-governance-and-%20%20%20Web%20Repository%20link:%20%20%20%20%20blue-economy-trade-corridors-sadc-region>
- <https://youtu.be/9H4aoEELZ3Q?si= ULC1tZgjeik WEW>
- <https://drive.google.com/drive/mobile/folders/1rZJaognB1PsPZxrz5WIG82NKlMKpaz3k?usp=sharing>
- Fact sheet: <https://hdl.handle.net/20.500.12348/6044>
- PROFISHBLUE SMEs in Zambia exhibit at the Zambia Agriculture and Commercial Show
<https://www.facebook.com/share/v/kAQqEafgkvipS42k/?mibextid=GOdwvm>
- R course for Fisheries (open access training materials): <https://worldfishcenter.github.io/ssf.training/>
- Digital Fisheries Information System [Peskas | Malawi](#)
- SADC& AfDB| IMPROVING FISHERIES GOVERNANCE AND BLUE ECONOMY TRADE CORRIDORS IN SADC REGION PROJECT (PROFISHBLUE) , Genetic Improvement, Support to Aquaculture Value Chains and Promotion of Fish in Foods Systems in SADC Q1 Progress Report, January–March 2024
<https://hdl.handle.net/20.500.12348/6204>
- SADC| Programme for improving fisheries governance and blue economy trade corridors in SADC region (PROFISHBLUE) project, Quarterly Progress Report, Q2_April–June 2024
<https://hdl.handle.net/20.500.12348/6132>
- PROFISHBLUE Project; Mid-Year Review (Jan – June 2024)
- SADC: Technical Progress Report for the Genetic Improvement, Support to Aquaculture Value Chains and Promotion of Fish in Foods Systems in SADC July–September 2024
<https://hdl.handle.net/20.500.12348/6203>

Pictures of some Achievements

Digital FIS

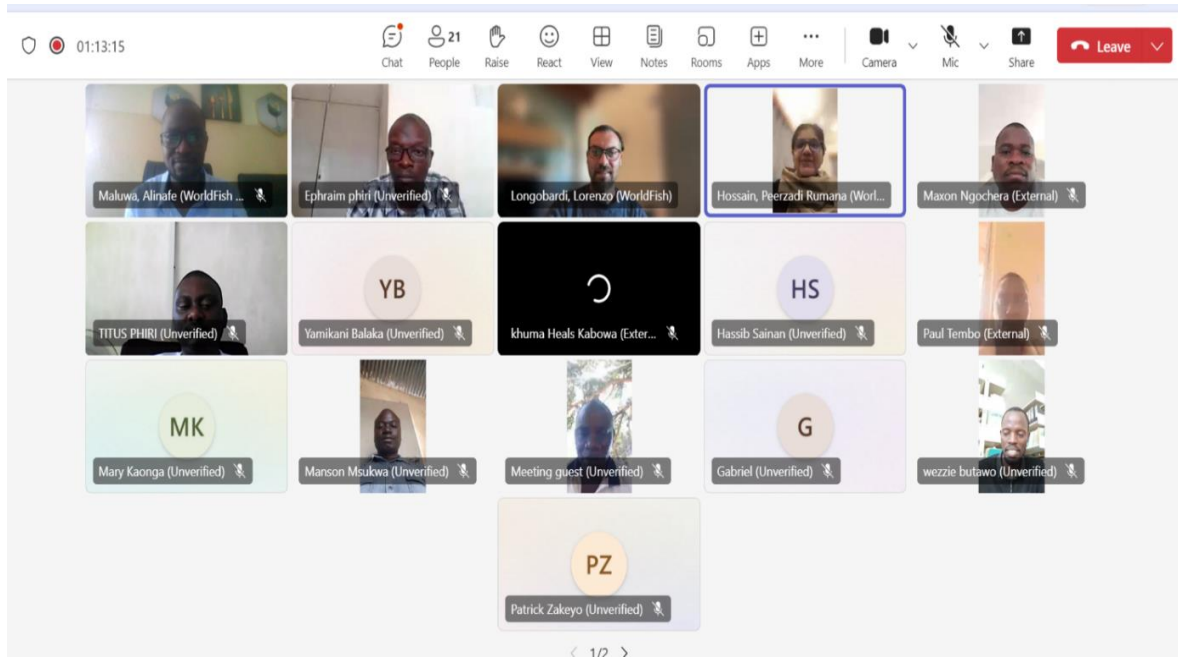


Figure1. Participants attending the R Programming course for small scale fisheries data analysis

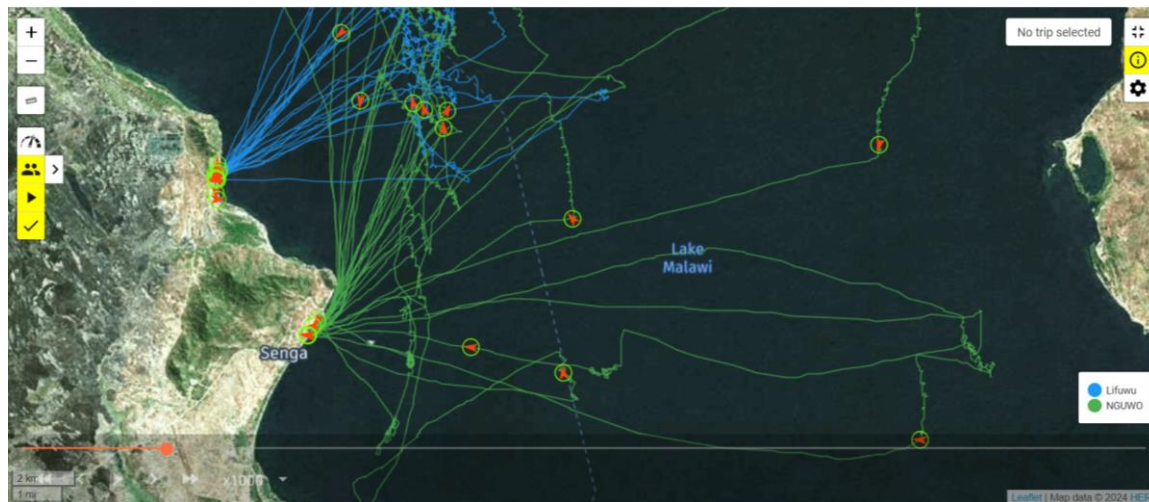


Figure 2. Snapshot of digital fisheries information system - Pelagic data system dashboard

GIP



Figure 3 & 4. Harvest of G2 fish and morphometric data collection at the Oreochromis andersonii breeding nucleus in Kitwe Zambia



Figure 5 & 6. Presentation and meetings during the AFRAQ 24 conference in Hammamet, Tunisia

Nutrition Component

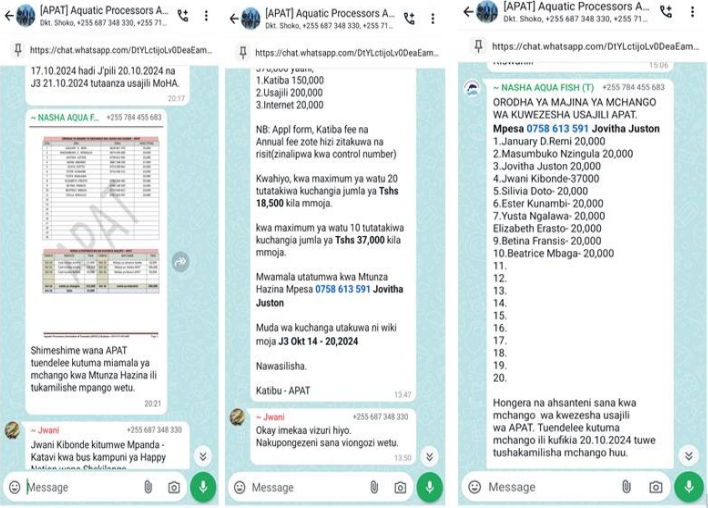


Figure 7 Tanzania SMEs at the 2024 World Food Day & Figure 8. Aqua processors association (APAT)meeting notes



Figure 8 & 9 SME mentorship at ZDA.



Figure 10 & 11 Zambia SMEs at the World Food Day Commemoration



Figure 12 & 13 Commissioning of PAMJIMA fish processing facility