



PROJECT CHARTER

Loaves and Fish for Children

Two-Year Floating Cage Tilapia Farming and Child Nutrition Project

RefugeRoot Foundation of Canada

Project Period: July 1, 2026 - June 30, 2028

Location: Segbohoue / Sègbohouè, Commune of Kpomassè, Benin

Aquaculture Site: Lake Ahémé, Benin

Project Manager	Thein Gi Chaw
Fundraising Specialist	Aysha Hazri
Project Sponsor	RefugeRoot Foundation of Canada
Target Children	100 vulnerable children per day
Target Widows	Up to 100 widows through rotational paid roles

Prepared: May 25, 2026

Table of Contents

1. Project Identification	3
2. Executive Summary	3
3. Evidence-Based Rationale	3
4. Problem Statement	4
5. Project Goal and Objectives	4
Objectives	4
6. Project Scope.....	5
In Scope.....	5
Out of Scope.....	5
7. Beneficiary Targets	5
8. Technical Production Model	6
9. Revenue-to-Meal Sustainability Model	6
10. Key Deliverables.....	7
11. Implementation Timeline	7
12. Governance Structure	7
13. Two-Year Project Budget	8
13.1 Budget Assumptions	8
13.2 Year 1 Budget: July 1, 2026 - June 30, 2027	8
13.3 Year 1 Revenue Projection	9
13.4 Year 2 Operating Budget: July 1, 2027 - June 30, 2028	9
13.5 Year 2 Revenue Projection and Sustainability Test	10
13.6 Two-Year Budget and Net Donor Requirement	10
14. Monitoring and Evaluation.....	10
15. Environmental and Operational Safeguards	11
16. Key Risks and Mitigation Measures.....	11
17. Sustainability and Scale-Up Strategy	11
18. Alignment with RefugeRoot Mission	12
19. Approval Section	12
20. References.....	13

1. Project Identification

Field	Description
Project Name	Loaves and Fish for Children
Implementing Organization	RefugeRoot Foundation of Canada
Project Type	Social enterprise, child nutrition, aquaculture, and widows' economic empowerment
Project Location	Sègbohoulè, Commune of Kpomassè, Benin
Aquaculture Site	Lake Ahémé, Benin
Production Model	Floating cage tilapia farming
Project Duration	24 months
Start Date	July 1, 2026
End Date	June 30, 2028
Project Manager	Thein Gi Chaw
Fundraising Specialist	Aysha Hazri
Primary Beneficiaries	Vulnerable children and widows in the Commune of Kpomassè

2. Executive Summary

Loaves and Fish for Children is a two-year pilot project designed to establish a floating cage tilapia farming operation on Lake Ahémé to generate local income and support a daily warm-meal program for vulnerable children in the Commune of Kpomassè, Benin.

The project will provide one warm meal per day for 100 vulnerable children. This represents 36,500 meals per year and 73,000 warm meals over the two-year pilot period.

The project will also create structured, rotational income-generating opportunities for up to 100 widows. Widows will participate in aquaculture support, fish handling, processing, sales, meal preparation, meal distribution, cleaning, logistics, and community-based monitoring.

The sustainability model is straightforward: Tilapia production creates fish sales; fish sales recover operating costs; net operating revenue is used to support the meal program and livelihood activities. Year 1 requires donor investment for setup and cash flow before the first harvest. Year 2 is designed as the sustainability test year, with projected fish sales sufficient to cover core operating costs and the daily feeding target of 100 children.

3. Evidence-Based Rationale

Aquaculture is increasingly recognized as a strategic solution for food security, nutrition, and livelihood creation. Global aquaculture production reached 130.9 million tonnes in 2022, and aquaculture became the leading source of aquatic animal production worldwide for the first time in history (Food and Agriculture Organization of the United Nations [FAO], 2024).

The project is relevant in Benin because tilapia aquaculture already exists in the country. FAO reports that Benin's aquaculture production reached 4,530 tonnes in 2017, including 2,770 tonnes of Nile tilapia and 1,760 tonnes of North African catfish, with a value of approximately USD 14 million (FAO, n.d.).

The project also aligns with Benin’s national direction. In 2024, the Government of Benin and the African Development Bank launched an initiative to strengthen sustainable aquaculture and fisheries value chains, including support to fish farms, breeding centres, feed manufacturers, and fisheries sector modernization (African Development Bank, 2024).

The child nutrition component responds to a major global challenge. UNICEF reports that approximately 181 million children under five, or one in four young children globally, live in severe child food poverty and are up to 50% more likely to experience wasting (UNICEF, 2024).

Meal programs are widely recognized as effective social protection and nutrition interventions. The World Food Programme reports that 466 million children benefit from school meal programs globally and that every US\$1 invested in school meals can generate up to US\$35 in benefits through education, health, nutrition, social protection, and local economic effects (World Food Programme [WFP], n.d.).

Floating cage aquaculture can be effective when properly designed, monitored, and managed. However, responsible implementation requires technical site selection, carrying capacity considerations, stocking-density controls, water-quality monitoring, fish health protocols, recordkeeping, and community consultation (Ross et al., 2013; WorldFish, 2023).

4. Problem Statement

The Commune of Kpomassè faces interconnected challenges related to child food insecurity, household poverty, and limited livelihood opportunities for widows. Vulnerable children often lack consistent access to warm meals, while widows may carry heavy household responsibilities without stable income-generating opportunities.

Loaves and Fish for Children respond through an integrated model that combines child nutrition, women’s economic empowerment, local food production, and social enterprise sustainability.

- Child nutrition: one warm meal per day for 100 vulnerable children.
- Women’s economic empowerment: rotational paid roles for up to 100 widows.
- Local food production: tilapia farming through floating cages on Lake Ahémé.
- Sustainability: fish sales used to finance core project operations and the meal program.

5. Project Goal and Objectives

Project Goal: To establish a sustainable floating cage tilapia farming project on Lake Ahémé that generates enough income by Year 2 to support a daily warm-meal program for 100 vulnerable children and create structured livelihood opportunities for up to 100 widows in the Commune of Kpomassè.

Objectives

- Install and operate approximately 45 floating cages for tilapia production on Lake Ahémé, subject to technical feasibility, local authorization, and environmental review.
- Produce and sell tilapia locally to generate income for the child meal program.
- Provide one warm meal per day to 100 vulnerable children, equivalent to 36,500 meals per year and 73,000 meals over two years.

- Engage up to 100 widows through rotational income-generating roles connected to aquaculture, fish processing, meal preparation, distribution, cleaning, logistics, and local monitoring.
- Establish a transparent revenue-to-impact model showing how fish sales contribute directly to child nutrition.
- Produce monthly reports tracking fish production, sales revenue, meal distribution, widow participation, expenses, risks, and lessons learned.

6. Project Scope

In Scope

- Technical feasibility study for floating cage installation on Lake Ahémé.
- Consultation with local authorities, fishers, community leaders, and relevant government services.
- Installation of approximately 45 floating tilapia cages.
- Purchase of tilapia fingerlings, fish feed, nets, anchors, ropes, floats, tools, and basic water-quality monitoring materials.
- Recruitment and training of widows for rotational project roles.
- Tilapia feeding, monitoring, harvesting, processing, and sale.
- Daily meal preparation and distribution for 100 vulnerable children.
- Financial tracking of fish sales and meal expenses.
- Monthly reporting to RefugeRoot leadership, donors, and partners.
- Final evaluation and scale-up recommendation.

Out of Scope

- Construction of a children's home.
- Expansion outside the Commune of Kpomassè during the two-year pilot.
- Feeding 500 children per day during the pilot phase.
- Large-scale commercial aquaculture beyond approved technical capacity.
- Medical care, formal education, or housing services unless funded under a separate project.
- Expansion of cage production without environmental and technical review.

7. Beneficiary Targets

Beneficiary / Output	Year 1	Year 2	Two-Year Target
Vulnerable children receiving meals	100/day	100/day	100/day sustained
Warm meals served	36,500	36,500	73,000
Widows engaged	Up to 100	Up to 100	Up to 100
Floating cages	45 installed	45 operational	45 operational
Production cycles	1 cycle after setup	2 cycles	3 cycles total

8. Technical Production Model

The project will use floating cage aquaculture for tilapia production. Tilapia fingerlings will be stocked in floating cages installed in a technically suitable area of Lake Ahémé. The cages will be secured with anchors and maintained through regular feeding, monitoring, cleaning, and harvesting.

Before installation, the project will verify water depth, water flow and oxygen conditions, accessibility, security, distance from sensitive ecological zones, possible conflicts with fishers or other lake users, local authorization requirements, environmental carrying capacity, and availability of technical supervision.

Production Assumption	Planning Value
Number of floating cages	45
Fingerlings stocked per cage per cycle	3,000
Total fingerlings per cycle	135,000
Survival rate assumption	85%
Fish harvested per cycle	114,750 fish
Average harvest weight	0.5 kg
Harvest per cycle	57,375 kg
Selling price assumption	2,000 XOF/kg
Gross revenue per cycle	114,750,000 XOF / 286,875 CAD
Year 1 harvest assumption	1 production cycle
Year 2 harvest assumption	2 production cycles

These figures are planning assumptions and must be validated by the technical aquaculture advisor after the feasibility study. The project should not expand beyond the approved carrying capacity of the Lake Ahémé site.

9. Revenue-to-Meal Sustainability Model

The project's sustainability logic is based on the following model: fish production > fish sales > operating cost recovery > meal program funding.

Meal Program Calculation	Amount
Children served daily	100
Days per year	365
Annual meals	36,500
Two-year meals	73,000
Estimated meal cost	400 XOF per meal
Annual meal budget	14,600,000 XOF / 36,500 CAD
Two-year meal budget	29,200,000 XOF / 73,000 CAD

For planning purposes, this charter uses an exchange rate of 1 CAD = 400 XOF. The West African CFA franc is officially pegged to the euro at 1 EUR = 655.957 XOF; therefore, the CAD/XOF equivalent should be updated before final grant submission because CAD fluctuates against the euro (BCEAO, n.d.).

10. Key Deliverables

Deliverable	Description
Feasibility study	Technical and environmental assessment of the Lake Ahémé site.
Authorization file	Required local administrative and technical approvals.
Floating cage system	Approximately 45 cages installed and operational.
Tilapia production cycles	At least three total production cycles over two years.
Widow engagement system	Up to 100 widows organized into rotational paid roles.
Meal program	100 vulnerable children receiving one warm meal per day.
Financial tracking system	Fish sales, production costs, meal expenses, and net contribution recorded.
Monthly reports	Production, sales, meals, beneficiaries, risks, and expenses reported.
Final evaluation report	Project results, financial performance, lessons learned, and scale-up plan.

11. Implementation Timeline

Phase	Period	Main Activities
Phase 1: Preparation	July-August 2026	Feasibility study, authorization, stakeholder consultation, procurement planning.
Phase 2: Setup	September 2026	Cage installation, widow recruitment, training, fingerling and feed purchase.
Phase 3: Production Cycle 1	October 2026-March 2027	Fish grow-out, feeding, monitoring, recordkeeping, cage maintenance.
Phase 4: Harvest 1 and Sales	April-May 2027	Harvesting, fish sales, revenue tracking, first sustainability assessment.
Phase 5: Year 1 Evaluation	June 2027	Financial review, technical review, Year 2 adjustment plan.
Phase 6: Production Cycles 2 and 3	July 2027-May 2028	Two production cycles, meal distribution, widow engagement, monthly reporting.
Phase 7: Final Evaluation	June 2028	Final report, sustainability assessment, decision on scale-up.

12. Governance Structure

Role	Name	Responsibilities
Project Sponsor	RefugeRoot Foundation of Canada	Strategic oversight, donor accountability, and final approval.
Co-Founder	Constant Sossoulo	Project sponsorship, donor relations, and strategic direction.
Co-Founder	Satya Wallin	Mission alignment and strategic oversight.
Project Manager	Thein Gi Chaw	Planning, implementation, coordination, risk management, and reporting.
Fundraising Specialist	Aysha Hazri	Fundraising strategy, donor communication, and approval of donor-facing materials.
Technical Aquaculture Advisor	To be confirmed	Cage design, stocking density, water-quality guidance, and fish health.

Role	Name	Responsibilities
Local Field Team	To be confirmed	Local coordination, beneficiary tracking, and daily follow-up.
Widow Work Groups	To be selected	Aquaculture support, fish processing, meal preparation, distribution, and cleaning.

13. Two-Year Project Budget

The budget below is a planning budget for grant applications. It should be validated locally before submission, especially the unit costs for cages, feed, fingerlings, local transport, security, cooking fuel, and fish market prices.

13.1 Budget Assumptions

Budget Assumption	Value
Currency	CAD and XOF
Planning exchange rate	1 CAD = 400 XOF
Project duration	24 months
Feeding target	100 children/day
Annual meals	36,500
Two-year meals	73,000
Meal cost assumption	400 XOF per meal
Floating cages	45
Year 1 production cycles	1
Year 2 production cycles	2
Selling price assumption	2,000 XOF/kg
Widows engaged	Up to 100 through rotational paid roles

13.2 Year 1 Budget: July 1, 2026 - June 30, 2027

Budget Category	Description	XOF	CAD
Technical feasibility and authorization	Site study, water-quality review, authorization, stakeholder consultation	2 000 000	5,000
Floating cage system	45 cages, nets, floats, anchors, ropes, installation materials	45 000 000	112,500
Aquaculture equipment and tools	Scales, buckets, fish handling tools, maintenance tools, basic water-quality tools	5 500 000	13,750
Tilapia fingerlings	First production cycle for 45 cages	13 500 000	33,750
Fish feed	Feed for first production cycle	59 625 000	149,062
Technical supervision	Aquaculture advisor, fish health monitoring, technical follow-up	4 500 000	11,250
Security and cage monitoring	Local monitoring, theft prevention, night security	6 600 000	16,500
Harvesting, storage, and transport	Harvesting materials, containers, ice, transport to market	8 100 000	20,250
Widow training and rotational stipends	Training and income support for up to 100 widows	18 000 000	45,000
Meal ingredients	100 children x 365 days x 400 XOF	14 600 000	36,500

Budget Category	Description	XOF	CAD
Cooking fuel, hygiene, and distribution	Fuel, water, soap, containers, local delivery	4 000 000	10,000
Kitchen equipment	Pots, utensils, storage supplies, serving materials	3 200 000	8,000
Coordination and administration	Local coordination, communication, administration	4 800 000	12,000
Monitoring, evaluation, and reporting	Monthly reports, beneficiary tracking, donor reporting	2 400 000	6,000
Subtotal Year 1		191 825 000	479,562
Contingency reserve, 10%	Inflation, feed price increases, fish mortality, transport changes	19 182 500	47,956
Total Year 1 Budget		211 007 500	527,519

13.3 Year 1 Revenue Projection

Revenue Assumption	Estimate
Number of cages	45
Production cycles completed	1
Estimated harvest	57,375 kg
Selling price	2,000 XOF/kg
Estimated gross sales	114,750,000 XOF
CAD equivalent	286,875 CAD

Year 1 requires donor cash-flow support because the first meaningful fish revenue is expected only after the first production cycle. Fish sales may reduce the net donor requirement, but they cannot finance the setup costs before the first harvest.

13.4 Year 2 Operating Budget: July 1, 2027 - June 30, 2028

Budget Category	Description	XOF	CAD
Tilapia fingerlings	Two production cycles for 45 cages	27 000 000	67,500
Fish feed	Feed for two production cycles	119 250 000	298,125
Technical supervision and fish health	Aquaculture advisor, monitoring, technical visits	7 000 000	17,500
Security and cage monitoring	Cage protection and daily monitoring	8 400 000	21,000
Harvesting, storage, and transport	Harvesting, containers, ice, transport to market	16 200 000	40,500
Cage maintenance	Nets, floats, ropes, repairs, replacement materials	4 500 000	11,250
Meal ingredients	100 children x 365 days x 400 XOF	14 600 000	36,500
Cooking fuel, hygiene, and distribution	Fuel, water, hygiene supplies, local delivery	4 000 000	10,000
Widow rotational stipends	Up to 100 widows through part-time or rotational roles	18 000 000	45,000
Coordination, administration, and reporting	Lean Year 2 project coordination and reports	2 400 000	6,000

Budget Category	Description	XOF	CAD
Total Year 2 Operating Budget		221 350 000	553,375

13.5 Year 2 Revenue Projection and Sustainability Test

Item	XOF	CAD
Estimated Year 2 gross fish sales	229 500 000	573,750
Estimated Year 2 operating budget	221 350 000	553,375
Estimated Year 2 operating surplus	8 150 000	20,375

Under the base-case assumptions, Year 2 can be presented as operationally sustainable with a modest projected surplus. This surplus should be treated as a small operating reserve rather than as guaranteed profit. Sustainability depends on technical performance, fish survival, stable feed costs, reliable buyers, and continued discipline in the meal budget.

13.6 Two-Year Budget and Net Donor Requirement

Item	XOF	CAD
Year 1 total budget	211 007 500	527,519
Year 2 operating budget	221 350 000	553,375
Total two-year project cost	432 357 500	1,080,894
Year 1 projected fish sales	114 750 000	286,875
Year 2 projected fish sales	229 500 000	573,750
Total projected fish sales	344 250 000	860,625
Estimated net donor funding required	88 107 500	220,269

The estimated net donor requirement over two years is approximately 88,107,500 XOF, or 220,269 CAD. However, the up-front cash-flow requirement is higher because the project must install cages, purchase inputs, train widows, and operate before fish sales are realized.

14. Monitoring and Evaluation

Indicator	Target
Children receiving meals	100/day
Meals served per year	36,500
Meals served over two years	73,000
Widows engaged	Up to 100
Floating cages installed	45
Production cycles completed	At least 3 over two years
Fish sales recorded	100%
Meal expenses recorded	100%
Monthly reports submitted	24
Final evaluation report	1
Fish mortality tracking	Weekly
Feed-use tracking	Daily
Cage inspections	Weekly
Water-quality checks	Monthly or as recommended by the technical advisor

15. Environmental and Operational Safeguards

Because cage aquaculture can affect water quality if poorly managed, the project will apply safeguards before and during implementation. The project will not install cages until technical and administrative suitability are confirmed.

- Complete a feasibility study and consult local authorities and lake users before installation.
- Respect technical stocking-density recommendations and avoid overstocking.
- Use controlled feeding protocols to reduce waste and production costs.
- Monitor fish mortality and water-quality indicators.
- Maintain cage cleanliness and repair nets, ropes, anchors, and floats promptly.
- Prevent fish escapes and disease spread through routine cage inspections.
- Secure cages against theft or damage through community engagement and local monitoring.
- Maintain accurate production, sales, expense, and beneficiary records.
- Limit any expansion until environmental and technical capacity is confirmed.

16. Key Risks and Mitigation Measures

Risk	Potential Impact	Mitigation Measure
Fish mortality	Reduced revenue and sustainability risk	Use quality fingerlings, technical supervision, and weekly mortality tracking.
Feed cost increases	Higher operating costs	Bulk purchasing, feed monitoring, and contingency planning.
Theft or vandalism	Loss of fish and equipment	Local security, community engagement, and cage monitoring.
Weak fish sales	Revenue shortfall	Secure buyers before harvest and diversify markets.
Delayed authorization	Project implementation delay	Engage local authorities early and prepare complete documentation.
Poor water quality	Fish loss and environmental harm	Feasibility study, water monitoring, and stocking control.
Overfeeding	Waste, pollution, and higher costs	Controlled feeding schedule and daily feed records.
Weak reporting	Donor confidence risk	Monthly financial and impact reports.
Meal program cost increase	Reduced number of children served	Maintain the 100-child baseline and adjust menus carefully.

17. Sustainability and Scale-Up Strategy

The project's sustainability strategy is based on building a local revenue-generating aquaculture system capable of financing a focused, measurable meal program. The first year will focus on setup, training, production, and proof of concept. The second year will test whether fish sales can reliably cover operating costs and maintain daily meals for 100 children.

The project will not promise to feed 500 children during the first two years. Instead, it uses 100 children per day as the donor-facing target because it is meaningful for funders and more financially credible than an immediate 500-child target.

Expansion beyond 100 children per day should depend on technical confirmation of lake carrying capacity, higher fish survival rates, stable feed costs, reliable buyers, increased cage productivity, additional donor support, and strong Year 2 financial results.

18. Alignment with RefugeRoot Mission

Loaves and Fish for Children directly supports RefugeRoot's mission by feeding vulnerable children, creating dignified income-generating work for widows, building sustainable local food production, reducing dependency on short-term charity, connecting donor support with measurable community impact, and strengthening long-term resilience in the Commune of Kpomassè.

Plant roots. Grow futures.

19. Approval Section

This project charter authorizes the planning and implementation of Loaves and Fish for Children as a two-year pilot project from July 1, 2026, to June 30, 2028, in Sègbohoulè, Commune of Kpomassè, Benin, using floating cage tilapia farming on Lake Ahémé to support a sustainable meal program for 100 vulnerable children per day and income-generating opportunities for up to 100 widows.

Name	Role	Signature	Date
Constant Sossoulo	Co-Founder, RefugeRoot Foundation of Canada		
Satya Wallin	Co-Founder, RefugeRoot Foundation of Canada		
Thein Gi Chaw	Project Manager		
Aysha Hazri	Fundraising Specialist		
Local Representative	To be confirmed		
Technical Aquaculture Advisor	To be confirmed		

20. References

- African Development Bank. (2024). Benin: A government and African Development Bank project launched to boost the fisheries and aquaculture sector. <https://www.afdb.org/en/news-and-events/press-releases/benin-government-and-african-development-bank-project-launched-boost-fisheries-and-aquaculture-sector-70849>
- Central Bank of West African States. (n.d.). History of the CFA franc. <https://www.bceao.int/en/content/history-cfa-franc>
- Food and Agriculture Organization of the United Nations. (2024). The State of World Fisheries and Aquaculture 2024: Blue transformation in action. <https://www.fao.org/3/cd0683en/online/sofia/2024/>
- Food and Agriculture Organization of the United Nations. (n.d.). Fishery and aquaculture country profiles: Benin. <https://www.fao.org/fishery/en/facp/ben>
- Ross, L. G., Telfer, T. C., Falconer, L., Soto, D., & Aguilar-Manjarrez, J. (Eds.). (2013). Site selection and carrying capacities for inland and coastal aquaculture. Food and Agriculture Organization of the United Nations. <https://www.fao.org/fishery/docs/CDrom/P21/root/02.pdf>
- UNICEF. (2024). Child food poverty: Nutrition deprivation in early childhood. <https://data.unicef.org/resources/child-food-poverty-report-2024/>
- WorldFish. (2023). Best management practices guidelines for small-scale tilapia cage aquaculture in Ghana and Nigeria. <https://digitalarchive.worldfishcenter.org/items/fa7eaabd-3058-4f86-93cb-93abf520e6d3>
- World Food Programme. (n.d.). School meals. <https://www.wfp.org/school-meals>