Gambia-Senegal Sustainable Fisheries Project

USAID/BaNafaa

Year 4, First Quarter Report

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1. Introduction

The USAID/ BaNafaa project is a five-year regional initiative supported by the American people though the U.S. Agency for International Development (USAID)/West Africa Regional Mission. It is implemented through the University of Rhode Island (URI)-USAID cooperative agreement on Sustainable Coastal Communities and Ecosystems (SUCCESS). The World Wide Fund for Nature West Africa Marine Program Office (WWF-WAMPO) is a regional implementing partner. Local partners include TRY Oyster Women's Association, the National Sole Co-Management Committee (NASCOM), The Association of Gambian Fishing Companies (TAGFC) and the Water Resources Laboratory. At the end of Year 2, Water, Sanitation and Hygiene (WASH) and Climate Change funding was added to the award in addition to previous fisheries activities under the biodiversity earmark. URI works with local partners the Trust Agency for Rural Development (TARUD) and The Gambian Agency for Public Works (GAMWORKS) to implement WASH activities and a bilateral Climate Change Vulnerability Assessment was conducted by WWF in Year 3. All project activities are carried out in partnership with the Department of Fisheries (DoFish) and stakeholders in the fisheries sector in The Gambia and Senegal. The focus is on sustainable fisheries management including the shared marine and coastal resources between The Gambia and Senegal. However, most field activities are in The Gambia. The Gambia - Senegal Sustainable Fisheries Project contributes directly to the achievement of the USAID West Africa Regional Office of Environment & Climate Change Response's (ROECCR) Results Framework through contributions to multiple Intermediate Results.

As a result of significant achievements and the need to build on this momentum to further institutionalize and expand on favorable enabling conditions and governance systems established with project assistance over the first three years, URI developed and submitted requests for add-ons and a project extension to April 2016 as follows:

Funding Source	Add-on Request	Submission Date
Climate Change Adaptation	$1,983,835	July 27, 2012
WASH	$430,692	July 27, 2012
Biodiversity	$2,023,996	August 31, 2012
Total	**$4,438,523**	

An external evaluation of the project was conducted by a USAID contracted firm in November and December 2012. As of December 31, the evaluation report was not yet final. URI expects to hear feedback from USAID on the extension requests following finalization of the evaluation.

At this point, USAID/BaNafaa's approach for the remaining 19 months of the project is to focus primarily on consolidating achievements made and ensuring that measures, systems and procedures already developed are functioning and can be sustained when project assistance ends. Institutionalizing the adaptive management process around which the two approved co-management plans were designed is a key priority. Continuing to reinforce the capacity of the

government and civil society co-management institutions responsible for implementation of the two plans is also central to all Year 4 activities.

This report describes progress made in the first quarter of Year 4 (October 1, 2012 – December 31, 2013).

1.1 Background

In West Africa, an estimated 1.5 million tons of fish are harvested annually from the region's waters, with a gross retail value of US$1.5 billion. In The Gambia and Senegal artisanal fisheries make up a majority of the fisheries landings and contribute significantly to income generation and local food security for coastal communities and for many communities inland where fish are traded. Some 200,000 people in the Gambia and 600,000 in Senegal are directly or indirectly employed in the fishing sector. Seafood products are a leading export of the region and generate as much as 20% of the gross value of exports. While the majority of seafood exports are destined for European Union (EU) markets, a growing volume of trade goes to the U.S. and other countries in the region.

Fish provides the main source of animal protein for the average rural family in the sub-region, where annual fish consumption can be as much as 25kg per capita. In many rural areas, fishing serves as a "social safety net" when farming turns unproductive due to depleted soil, drought, disease, or other factors.

In addition to direct socioeconomic benefits derived from fishing, a well-managed sector can benefit other aspects of the region's economy and quality-of-life. This includes a growing tourism sector and a number of globally and regionally significant natural heritage areas. With annual tourist arrivals surpassing 120,000 in The Gambia and 400,000 in Senegal, a growing number of tourists are taking advantage of the countries' ecologically significant reserves, parks, and protected areas—most of which have direct links to the fate of well-managed fisheries. These include but are not limited to the Sine-Saloum Delta Biosphere Reserve in Senegal and in The Gambia the Niumi National Park, the Baobolon Wetland Reserve, and the Tanbi Wetland Complex—all are designated Ramsar sites and contain globally significant wetlands.

The Gambia's fisheries sector operates under the authority and responsibility of the Minister of Fisheries and Water Resources, through the Department of Fisheries (DoFish). The policy, legal and management framework for fisheries in The Gambia is provided by the 2007 Fisheries Act and the 2008 Fisheries Regulations. A draft Fisheries Management Plan for shrimp, sardinella and sole fish was prepared in 2009. The Fisheries Act mandates a Fishery Advisory Committee and Community Fisheries Centers as the institutional structure for inclusive oversight of the sector and also allows for decentralized fisheries co-management. The policy objectives of the fisheries sector as articulated in policy documents include:

- Rational and long-term utilization of the marine and inland fisheries resources
- Improving nutritional standards of the population
- Increasing employment opportunities in the sector
- Increasing foreign exchange earnings

- Increasing and expanding the participation of Gambians in the fisheries sector
- Improving the institutional capacity and legal framework for the management of the fisheries sector

The policy objectives of the fisheries sector are linked to key national development objectives that include: increased food self-sufficiency and security; a healthy population and enhanced employment opportunities for nationals; increased revenue generation and foreign exchange earnings; and the attainment of national social and economic development. They are designed to support key national development objectives as outlined in the Poverty Reduction Strategy Paper and The Gambia Incorporated Vision 2020, which are blueprints for national development and eradication of poverty.

For additional context see Appendix C of the USAID/BaNafaa Year 4 Workplan.

1.2 Program Goal and Key Results

The goal of the USAID/ BaNafaa Project is to support the Government of The Gambia in achieving its fisheries development objectives by contributing to the following vision:

Artisanal fisheries and coastal ecosystems in The Gambia and selected stocks shared with Senegal are being managed more sustainably, incorporating significant participation of fisherfolk in decision-making, and attaining improved economic benefits for both men and women involved in the market value chain.

USAID/BaNafaa builds on the on-going efforts of the Department of Fisheries in The Gambia, working with community fisheries centers and their management committees to improve fisherfolk involvement in the management of fisheries resources. More specifically, to further the development and implementation of the fisheries co-management plans for sole and for cockles and oysters. Sole is an important export commodity so this involves partnerships with export processing businesses as well. This is also a shared stock with Senegal. As gender equity is another important aspect of the project, USAID/BaNafaa is benefiting both men and women in the fisheries sector by also working with oyster harvesters—a women-dominated fishery whose importance is often under-recognized.

Key Results for the USAID/BaNafaa Project:

- IR 1: Strategies to increase social and economic benefits to artisanal fishing communities, and otherwise create incentives for a sustainable fisheries agenda in the WAMER identified, tested and applied
- IR 2: Institutional capacity strengthened at all levels of governance to implement an ecosystem-based, co-management approach to sustainable fisheries, and to prevent overfishing

Project Strategies

- A participatory co-management approach that engages fisherfolk in decision-making.
- An ecosystem-based approach that looks not only at the fish, but protection of critical habitats and reduction of fishery impacts on threatened marine species
- Mainstreaming gender dimensions that provide opportunities for both men and women to benefit economically and participate in decision-making.
- A threats-based approach to coastal and marine biodiversity conservation.

- IR 3: Nursery areas and spawning areas for critical life stages of commercially important species and for associated marine turtles and mammals are protected
- IR 4: Change unsustainable and destructive marine resource use practices that threaten improved biodiversity conservation in the West Africa Marine Ecoregion

Geographic Scope. The Project concentrates on the marine and coastal resources and fisheries stocks shared among the Casamance, the Gambia River and Saloum Delta region—an area of regional biodiversity significance (see Figure 1). The majority of on-the-ground activities occur in The Gambia, where USAID/BaNafaa focuses on the artisanal nearshore fisheries along the Atlantic coastline and the estuarine and mangrove dominated portions of The Gambia River. A sister project in Senegal, the Wula Nafaa project, is working on fisheries management in the Saloum Delta and Casamance River. Together, these two USAID-supported initiatives are expected to have a significant impact on improved management of this biodiversity-rich area.

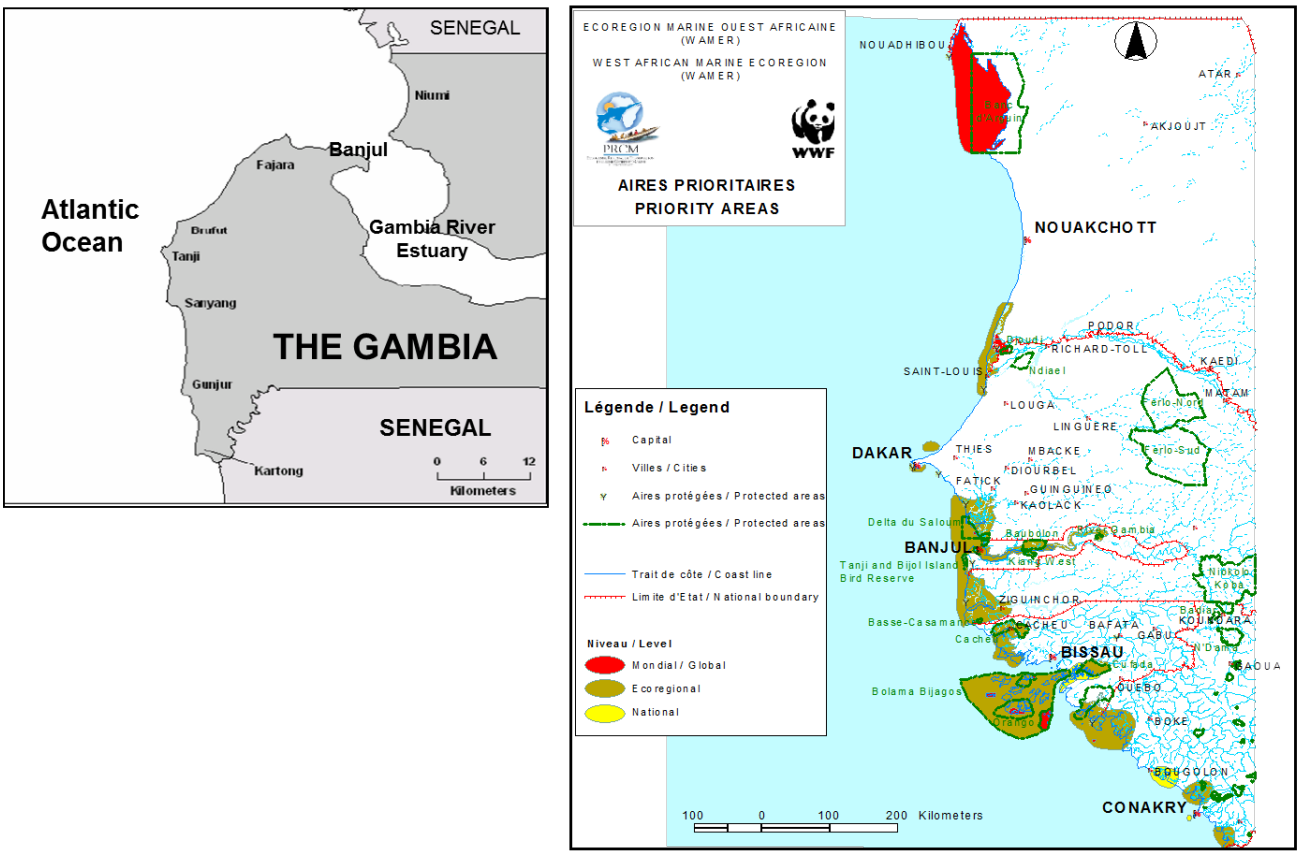


Figure 1. Areas of Biodiversity Significance in the WAMER and The Gambia River Estuary and Atlantic Coast

2. Year 4 Quarter 1 Accomplishments

See Appendix A for The Results Framework, Indicator Results Tables, Results to Date and Life of Project Targets and Appendix C for Activity Implementation Status.

2.1 Intermediate Result 1[1]

Strategies to increase social and economic benefits to artisanal fishing communities, and otherwise create incentives for a sustainable fisheries agenda in the WAMER identified, tested and applied.

Quarter 1 Highlights

- First Annual Review Meeting for the *Fishery Co-Management Plan for The Gambia Sole Complex* (approved in January 2012) hosted by NASCOM.
    - New Stock assessment reviewed and revised management measures (increased mesh size from 40mm to 42-46mm) recommended.
    - Local Ecological Knowledge (LEK) and Scientific Knowledge on Catfish presented and recommendations for further work to develop management measures for catfish made.
    - LACOM by-laws reviewed and updated.
- NASCOM capacity strengthened
    - Office established with equipment and furniture purchased under the seed grant.
    - Administrative/Financial Management Training for USAID/BaNafaa local partners NASCOM, TRY, TAGFC and TARUD conducted by URI. NASCOM managed the organization and logistics under its seed grant.
    - German seafood company Kaufland announced a second fundraising campaign donation of an additional 50,000 Euro (50,000 Euro already provided) to support development of a Marine Stewardship Council eco-labeled Sole Fishery in The Gambia.
- Planning and preparation for the first annual review meeting of the *Oyster and Cockle Fishery Co-Management Plan for the Tanbi Special Management Area* to be hosted by TRY in January 2013.
- TRY Oyster Women's Association capacity strengthened.
    - Administrative/Financial Management Training provided by URI.
    - UNDP funding of $38,550 awarded for oyster processing and marketing support (industrial vacuum packing machine, freezers, training of 300 women in fish hygiene and handling, an oyster smoking oven at each of the 15 TRY community harvesting sites based on the USAID/BaNafaa funded demonstration model.
- Bi-monthly water quality testing at oyster harvesting sites continued as the basis for National Shellfish Sanitation Planning process.
- WASH Participatory Hygiene and Sanitation Transformation (PHAST) Training of 80 participants (55 women) conducted at 2 sites (Brufut – fish and Old Jeshwang – fish and oyster).
- 3 WASH Management Committees established and trained at 2 sites.
- 3 draft WASH Management Plans developed by Management Committees at 2 sites, including behavior change strategies, environmental compliance and facilities management and maintenance.
- WASH infrastructure designs completed and approved by Brufut and Old Jeshwang communities. Construction on track for completion at these sites in Quarter 2.

[1] Most of the activities described under IR1 also contribute to IRs 2, 3 and 4. Some activities described under IR2 also contribute to IR1.

Project activities described below have contributed significantly and directly to this IR in Quarter 1. The results of the strategies identified, tested and applied in economic and social terms and the degree to which they have influenced a broader sustainable fisheries agenda in the WAMER are positive but still preliminary. The quantification of number of businesses and persons benefitting economically, as reported in indicators for this IR, are already exceeding targets specified in the Project Design. However, these numbers do not reveal the underlying complexity of the benefits and the degree to which they are sustainable. USAID/BaNafaa project activities have, to date, focused on creating the enabling conditions for longer term sustained benefits to artisanal fishing communities. Integration of WASH activities at fishery and shellfish landing sites into the project is also aimed at ensuring that health and economic benefits are realized at the community level. The achievements under this IR also contribute to increasing recognition in the region and beyond of Gambian artisanal sole and oyster fisheries as a model for best management practices.

a. Effective Sole/Multispecies Demersal Fishery Co-Management Plan

1. First Annual Review Meeting for the Fishery Co-Management Plan for The Gambia Sole Complex.

The Fishery Co-Management Plan for the Gambia Sole Complex approved in January 2012 has yet to be gazetted by the Government of The Gambia. Administrative inertia seems to be the reason for the lack of action on this issue. NASCOM has addressed two official letters to the Government requesting that the Plan be gazetted as an urgent priority. A new Minister of Fisheries and Water Resources was appointed in early November 2012 and has been briefed. It is significant that NASCOM and its associated LACOMS developed the management measures specified in the Plan for their own short, medium and long term benefit and are motivated to start implementation while gazetting is pending. This includes implementing the annual review process described in the Plan as part of the Plan's adaptive management approach. It is critically important at this early stage that stakeholders experience the participatory and adaptive process moving forward and that it is not perceived to be just on paper.

With financial and technical support from the USAID/BaNafaa project provided through a seed grant, NASCOM took the lead to convene and host the first annual review meeting from October 10-11, 2012. The meeting was attended by 60 participants (including a strong showing of 29 women) from the Ministry of Fisheries and Water Resources, the Department of Fisheries, NASCOM, LACOMS, TAGFC, the National Environment Agency (NEA), USAID/BaNafaa, the University of Rhode Island and the media. The following key issues were on the agenda:

Status of the Sole Stock: DoFish technical staff presented the new stock assessment conducted in 2012 based on 2010/2011 data. USAID/BaNafaa, URI, the Atlantic Seafood Company and DoFish worked together to collect and analyze the sole data. The data, including gillnet catches shown in Figure 2 below, show signs of overfishing related to small numbers of adult/mature fish and high fishing effort. The following recommendations were made by the review meeting to address this issue:

- Increase mesh size from the current 40mm to 42mm or 46mm.

- Since fishers are responsible for juvenile landing through use of small mesh size, an auto-regulation approach should be introduced to bring defaulters to task.
- Monitoring Control and Surveillance (MCS) of the 1 nm seasonally closed area shall be the responsibility of NASCOM/LACOM members. They should check fishing activities at sea and gears used to ensure compliance with the recommended and legal mesh sizes. Some of the funding donated to NASCOM by German Seafood Company Kaufland will be for the purchase of surveillance boats and engines.
- A national forum on best and destructive fishing gears should be held, which will include the beach seine, purse seine and shrimp nets as they are considered the most destructive fishing gears.

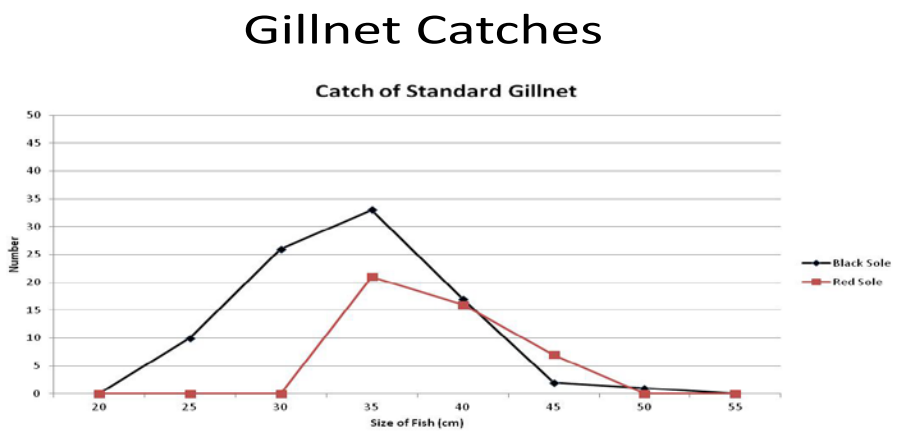


Figure 2. Number of Sole fish of each size caught with a standard gill net.

Although effort reduction is also recommended for consideration in the stock assessment report, the mesh size and seasonal area closure measures currently documented in the approved Management Plan have yet to be fully enforced and the impact evaluated. Stakeholder consensus is that this should happen first before other more contentious forms of effort reduction are considered for implementation. What is important is that the current process of annual co-management plan review, having just completed its first iteration, is being firmly established as a legitimate and recognized forum for future discussion of more sensitive management measures if necessary.

The co-management plan and its implementation is also significant for stakeholders in the Gambian artisanal sole fishery to demonstrate progress on management of the fishery at a standard that aims to meet the eligibility criteria for MSC certification, although certification is not the objective of USAID/BaNafaa project support. The Gambia is MSC's pilot country for its fisheries in transition program, which helps developing countries move towards sustainability. The information reviewed at the meeting did not result in an obvious timeline for the Gambian stakeholders to schedule another assessment by MSC. However, additional measures to institutionalize data collection and stock assessment capabilities among Gambian co-management institutions are needed to demonstrate a more robust and sustainable management system.

Development/Integration of a Catfish Co-Management Plan: Based on the Bycatch study conducted for the Sole Co-Management planning process, Catfish, Cymbium, and Sole make up 80% of the catch by weight for the Sole targeted fishery using gillnets. Since this fishery is associated with the same nets, landing sites and fishermen as sole, a catfish management plan along with sole can be easily integrated with work already done on sole and involves the same stakeholder groups. Management responsibilities for this stock could also be added to the charge of the sole management committee. This will close existing gaps in the ecosystem based sustainable management approach. The potential for economic benefits to artisanal fishing communities will, likewise, be broadened under a multi-species plan.

Findings of the Local Ecological Knowledge (LEK) study on Catfish begun in Year 3 were presented by USAID/BaNafaa staff Gibril Gabis and Peace Corps Volunteer Lina Kelpsaite. Interviews were conducted at 16 coastal and inland fish landing sites (see Figure 3). Key findings are as follows:

- Multiple Catfish species were identified including saltwater, brackish water and freshwater species (Figures 4 and 5).
- In general all species can be caught year round, however there are peak periods depending on the species and the location.
- Migration patterns are generally from the North (Sine Saloum area of Senegal) and from deep waters North and West to The Gambia River through the river mouth in January and back to the sea when the rains start around June.
- In Mbankam, Jinak Niji, Kajata and Bintang prevalence of Ngunja (*Arius heudeloti*) is much less compared to the past. In Mbankam fishermen have not seen Ngunja for the last 5 years. They can only catch it further south - around Banjul, Bakau, Tanji, Kartong.

Figure 3. Interview sites for the Catfish Local Ecological Knowledge (LEK) study

Figure 4. Catfish identified during the Local Ecological Knowledge (LEK) study

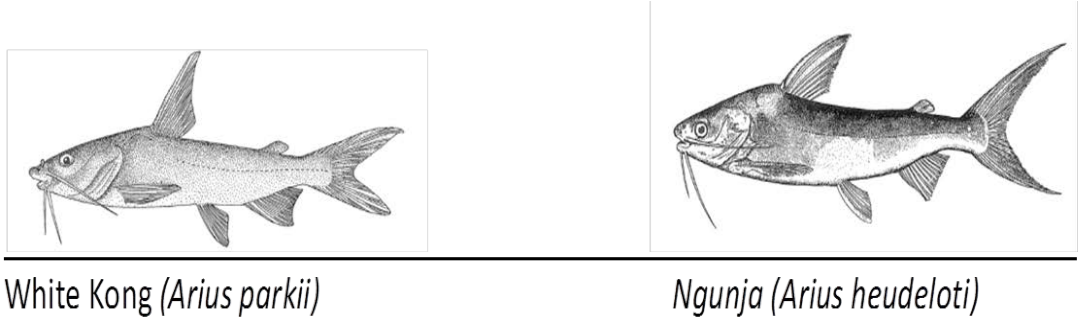


Figure 5. Two of the saltwater Catfish species identified in the LEK study

Dr. Kathy Castro, URI/Fisheries Center summarized the following Scientific Knowledge and gaps in Scientific Knowledge on Catfish in The Gambia:

- Very slow growing and believed to live more than 30 years
- Only produce a few eggs per year and the male mouth- broods them for 2 months
- Mature between ages 2 and 3 (which is about 25 cm Fork length), and can reach 80 cm
- Appear to be highly vulnerable to overfishing and may well be overfished
- By-catch survey showed large catches year round in all the sites
- Fishermen reported they catch Catfish with gillnets and long lines and even purse seines
- Noted that the Marine Stewardship Council (MSC) process for eco-labeling will want to know percentages of catfish caught by the sole nets out of some total amount landed
- Proposed the need to be very proactive with catfish management to get the MSC label
- Length frequency information would be useful
- Suggested that a hook selectivity study - along with gillnet, be conducted
- Information on the period of egg brooding by the female before the 2 months male mouth brooding is also needed.

The review meeting recommended that Catfish work should be expedited so that a management plan is developed to prevent its extinction. As noted in the USAID/BaNafaa Year 4 Workplan, if the biodiversity add-on request is not approved, the USAID/BaNafaa Project's capacity to support more in-depth analyses, including a value chain study, stock assessment, otolith analysis and additional gear studies will be very limited, but can be recommended as part of the future research plan for Catfish.

Review of LACOM By-Laws: Prior to the annual Co-Management Plan review meeting, NASCOM conducted a consultative process with the 7 LACOMS to review, revise and harmonize by-laws to ensure that they reflect the management measures and responsibilities of LACOMS specified in the Sole Co-Management Plan in addition to the membership fees, landing site fees and other institutional arrangements agreed upon internally. At the annual review meeting proposed revisions were presented and discussed and will now be taken back to the LACOMS for final approval.

The review meeting also made the following recommendations for NASCOM/LACOM organizational development:

- Landing sites must strengthen their sanitation taskforces and removal of waste to designated dumping sites
- NASCOM should undertake another outreach to other landing sites for inclusion in its membership since it is national committee

The annual Sole Co-Management Plan review meeting consolidated NASCOMs standing as an active and responsible co-management institution that is stepping into its leadership role as it continues to gain experience and strengthen its capacity to represent and serve its members and to responsibly manage valuable national fisheries resources.

2. NASCOM Capacity Strengthened.

Based on a preliminary assessment of NASCOM's institutional capacity conducted by the project, a seed grant was provided to NASCOM in the last quarter of FY 12 to strengthen its institutional capacity. Sound administrative and financial management systems and the capacity to operationalize them is of immediate and growing concern for NASCOM as it is beginning to attract donor funding and has an ambitious agenda for collecting and managing its own membership fees, fines and penalties for non-compliance with co-management plan measures, and other financial transactions. NASCOM's reputation and credibility will depend in part on its real and perceived strength as capable and transparent in financial management. In Quarter 1 of Year 4 the following activities were implemented under the seed grant:

- Hosting of the first Annual Review meeting for the Fishery Co-Management Plan for The Gambia Sole Complex (as highlighted in the previous section).
- LACOM by-laws reviewed and revised (as highlighted above at the annual review meeting).
- Regular Quarterly and Executive Committee Meetings conducted.
- NASCOM office established with equipment and furniture.
- Administrative/Financial Management Training for USAID/BaNafaa local partners NASCOM, TRY, TAGFC and TARUD conducted by URI, with logistics and finances for the training managed by NASCOM.
    - Three NASCOM management team members attended the 3 day training, followed by a mini audit of NASCOM's seed grant accounts conducted by URI at NASCOM's office and an action plan for the URI in-country Admin/Finance Assistant to continue to provide targeted follow-up mentoring one on one.

- Action research to test various buoy types to determine the most durable and cost effective options for marking the 1 nm seasonal closure zone was initiated. Supplies were purchased.

During this period, German seafood company Kaufland announced a second fundraising campaign donation of an additional 50,000 Euro (50,000 Euro already provided) to support development of a Marine Stewardship Council eco-labeled Sole Fishery in The Gambia. NASCOM is considering how it might use these additional funds.

3. TAGFC Capacity Strengthened.

The project has also been in dialogue with The Association of Gambian Fisheries Companies (TAGFC), which is an institutional member of NASCOM. Although the Director attended the URI Fisheries Leadership course in July 2012 and TAGFC members attended the Administrative/Financial Management training conducted by URI in The Gambia in October in preparation for a seed grant, TAGFC is still working to address organizational issues related to its constitution and management structure. At this point, USAID/BaNafaa is waiting for proactive action from TAGFC before proceeding with a seed grant.

4. Mesh Size Gillnet Study.

As per the Year 4 Workplan and following analysis of the new Sole stock assessment at the Annual Review Meeting for the Sole Co-Management Plan held in October 2012, USAID/BaNafaa will provide technical assistance for a follow-on gillnet study. The study will be conducted in Quarter 2 with assistance from Chis Parkins of URI. Based on the recommendation of the annual review meeting, the objective will be to test the effectiveness of an increased mesh size (from the current 40mm to 42-46mm) as a management measure to reduce the catch of juveniles.

b. Effective Oyster and Cockle Co-Management Plan

1. Planning and preparation for the first annual review meeting of the Oyster and Cockle Fishery Co-Management Plan for the Tanbi Special Management Area.

As for the Sole Co-Management Plan, the Oyster and Cockle Co-Management Plan approved in January 2012 has yet to be gazetted by the Government of The Gambia. Like the Sole fishermen, TRY Oyster Women's Association members, having developed the management measures specified in the Plan for their own short, medium and long term benefit are motivated to implement the Plan while gazetting is pending. This includes implementing the annual review process described in the Plan as part of the Plan's adaptive management approach. As for the Sole Plan, it is critically important at this early stage that stakeholders experience the participatory and adaptive process moving forward and that it is not perceived to be just on paper. The Annual Review Meeting for the Oyster and Cockle Plan is scheduled for January 2013. USAID/BaNafaa provided technical assistance to TRY in December to prepare the meeting.

2. TRY Capacity Strengthened.

Along with the benefits of the Co-Management Plan, TRY and its members also have a significant obligation to responsibly and sustainably manage the oyster and cockle fishery. Thus, ensuring the institutional sustainability of the TRY Association and the social and economic wellbeing of its members is a principal focus of TRY's efforts at this stage in its development.

Activities under USAID/BaNafaa's capacity strengthening seed grant to TRY in Year 3 are wrapping up and a follow-on seed grant is in preparation to continue support in FY13. The details will be reported in Quarter 2, but will include the First Annual Review Meeting of the Oyster and Cockle Co-Management Plan in January 2013 and biological sampling of oysters at sales points throughout the open season from March 1 – June 30, 2013.

TRY's Executive Director and the Peace Corps Volunteer posted with TRY attended the Administrative/Finance Management Training for local partners conducted by URI in October in The Gambia. Unfortunately, TRY's Administrative/Finance Assistant was not able to attend and has not returned to her position after the holiday break in 2012. TRY is currently advertising for a replacement. In the interim, a TRY board member is filling the financial management gap on a part time basis. The USAID/BaNafaa URI in-country Administrative/Finance Assistant also continues to provide mentoring to TRY in this area. As TRY continues to attract significant donor funding from multiple donors, begins to increase its own revenues from product sales and manages financial transactions with members, sound and transparent financial management is an increasingly important priority for the short and long term.

While TRY has been highly successful in attracting grants and in kind donations from other donors (UNDP, Action Aid, Global Giving, the Ministry of Education, etc.) none of these sources cover TRY's core operating costs, key staff stipends (including the Director and Administrative/Finance Assistant), rent, utilities, fuel and transportation. Covering these costs sustainably remains a key challenge for TRY.

TRY has worked effectively in recent months to institutionalize and emphasize to its members the importance of timely payment of annual membership dues. Access to participation in the microfinance program, in GEF funded oyster aquaculture activities and to benefitting from school uniforms purchased with Global Giving funds have all been made conditional on timely payment of membership dues. However, membership dues can currently only generate a maximum of $5,000 per year. This is not enough to sustain TRY's core operating costs, which are currently at least $20,000 per year. Investment in developing a sustainable revenue stream from product sales (and services) is TRY's principle long term strategy for covering operating costs (in addition to reducing major costs such as rent by establishing its own center). Seeking donor support for the core operating costs of this young and developing organization as an interim measure will be necessary for the short and medium term.

To date, USAID/BaNafaa has contributed to core operating costs through its seed grants to TRY. The project has also supported housing and project related per diem and transportation for a Peace Corps Volunteer posted with TRY. At the end of February 2013 the current volunteer will complete her service and a replacement is not immediately available. The new group of Health

volunteers starting in May 2013 will be the next opportunity for a PCV posting with TRY, but is not assured. The immediate absence of an embedded capacity building resource as provided by Peace Corps Volunteer's over the last two years will be a significant loss of support to TRY just as the 2013 oyster harvesting season begins and activities are at their peak.

TRY received funds from Global Giving in July 2012 totaling $735. TRY purchased school uniforms for over 65 children of TRY members and distributed them in October and November. TRY will revise the donation options currently listed on its Global Giving page and understands the importance of page development to generate more donations, but is limited by the current lack of personnel to do these tasks. Also, TRY plans to take over the Global Giving account from CRC by January 2014.

3. Processing and Marketing.

This Quarter TRY has pursued its plans to acquire land from The Government of The Gambia to establish a permanent headquarters/processing/marketing and education center. In early December, TRY appealed to the Permanent Secretary of the Ministry of Regional Administration, Lands and Traditional Rulers for a fee waiver for the land application, copying the letter of request to other parties, including the Vice President, the Secretary General and Honorable Minister for Presidential Affairs and National Assembly Matters, National Environment Agency, Department of Parks and Wildlife Management, and Department of Fisheries. TRY has not yet received a response. In Quarter 2, TRY will have an opportunity to raise the issue of land acquisition directly with National Assembly members in the context of the Shellfish Sanitation Planning activities to be facilitated by USAID/BaNafaa. At the same time, TRY is following up on donor interest in financing construction of the planned center. In January TRY will receive a delegation from the Japanese Embassy in Dakar to discuss potential opportunities. TRY has also submitted an application for a United Nations Volunteer to be funded by the Japanese Government. The position would provide technical assistance for the processing of shellfish and oyster culture.

TRY received funding of approximately $38,550 under UNDP's 2012 Work Plan budget line: "Support value addition of primary commodities on-site in terms of processing, marketing and distribution by small producers, particularly women, youths, and vulnerable groups." USAID/BaNafaa staff provided technical assistance to TRY for the development and negotiation of this proposal. The funding provides:

- An industrial vacuum packing machine (arrival pending)
- Equipment, including chest freezers, an LCD projector, flat screen TV, and DVD player (already received by TRY)
- Fuel saving oyster smoking ovens as demonstrated by the oven at Kamalo built with USAID/BaNafaa assistance in FY12 (see Figure 6 below) at 15 TRY community landing sites (under construction with completion anticipated by mid-February). Not only does smoking with this oven require less fuelwood than would otherwise be used to boil the oysters on a traditional 3 rock fire, but the price per kilogram of smoked oysters is higher than boiled and so should bring more value to the women for the limited kilograms they are sustainably harvesting.

- Capacity building training for 300 women from TRY's 15 communities on shellfish handling, processing and quality control (completed). The program has raised awareness on improved shellfish handling and processing practices, which will contribute to the attainment of increased production of high quality and wholesome seafood products.

The UNDP assistance is timely for the opening of the oyster harvesting season on March 1, 2013 and should enable TRY to more fully develop smoked and frozen oyster markets in 2013 and to improve economic returns to the Association and individual members.

Figure 6. Fuel saving oyster smoking oven demonstrated at Kamalo oyster harvesting site with USAID/BaNafaa support in FY12 now replicated at 15 TRY oyster harvesting sites with UNDP funding.

In late December, TRY was invited to prepare a proposal for UNDP's 2013 Work Plan facilitated by the Ministry of Trade, Regional Integration and Employment (MOTIE) under the categories of livelihood improvement and capacity building. The proposal includes: working gear, vacuum packing materials, a perimeter fence at the Jeshwang landing site, office supplies, capacity building trainings, outreach to other oyster harvesting communities and support for the next Co-Management Plan review meeting. TRY Association should know in Quarter 2 which elements of the proposal are approved. UNDP funding to TRY for 2012 and 2013 activities is considered as Cost Share from TRY under the USAID/BaNafaa project.

4. Aquaculture Action Research.

As reported in the Year 3 annual report, Brian Crawford has been invited by the USAID Aquafish Collaborative Research Support Project to present at Aquaculture 2013 in Nashville, TN in February 2013. The presentation entitled, Action Research In The Gambia: Can Shellfish Aquaculture And Sea Ranching Enhance Food Security, Incomes And Empower Women Harvesters In The Gambia is co-authored by Lina Kelpsaite, Gibril Gabis, and Ousman

Drammeh, of USAID/BaNafaa, Michael Rice of URI and Fatou Mboob, Executive Director of TRY Association. It concludes:

"Oyster aquaculture has the potential to increase women's income and harvest yields, and reduce wild harvest pressure…Improving incomes, food security and empowering this disadvantaged group of women requires an integrated approach where no one activity will be sufficient to achieve this goal. Improving production through aquaculture and improved wild harvest management must be coupled with other interventions aimed at a broad range of factors that keep these women in poverty. These include - improved literacy, access to credit, a stronger producer association, improved products, markets, and landing site sanitary facilities, exclusive harvest rights, as well as cooperative and capable local government and non-government institutions that can provide support services."

Environmentally friendly aquaculture research and development is a management measure specified in the Oyster and Cockle Co-Management Plan. USAID/BaNafaa has been supporting this aspect with action research pilots on floating basket culture of oysters, cockle ranching and rack culture of oysters conducted by TRY members in their communities.

A technical paper on the results of the floating basket culture of oysters by Dr. Michael Rice of URI is forthcoming in Quarter 2. The relatively high cost of materials compared to the volume and value of oysters does not appear to be profitable. The women now know how this technique is done and some who are interested may use local lower cost materials to construct baskets and continue the activity on their own.

Cockle ranching/redistribution in Kartong was showing some positive results. However, in September 2012, cockle populations experienced a significant die off, probably related to the higher than normal rainfall this year and the resulting runoff affecting salinity, temperature, turbidity or other factors. The die off is being investigated through controlled experiments on cockle die off at various levels of salinity. Ranching activities will continue as a co-management plan for Kartong is developed in Year 4.

Rack culture of oysters, USAID/BaNafaa support for this activity other than technical advice to TRY by project technical staff has not continued due to the lack of a clear economic benefit unless the activity is subsidized. Aquaculture reduces pressure on the mangroves, could extend the harvest of larger, higher value oysters later in the season and could significantly reduce travel time to and from ever more distant harvesting sites as the season goes on, but the wild harvest is currently so plentiful it is not evident that aquaculture could produce comparable volume with comparable effort and cost/benefit in the immediate future. TRY has received a GEF grant and has chosen to pursue subsidized scale up of rack culture in 6 TRY communities in the Tanbi Wetlands National Park in collaboration with Department of Parks and Wildlife Management field staff. The activity now involves 180 TRY members in the communities of Jeshwang, Kamallo, Wencho, Fajikunda, Abuko, and Kubeneh. This GEF funding is considered as cost share from TRY on the USAID/BaNafaa project.

5. Other Programs Directly Benefitting Members.

   a. Microfinance.

TRY Association's microfinance program is continuing with existing active participants. In these past few months, many women have come to withdraw money from their savings accounts to pay for school fees and the other costs associated with school. The women are slowly continuing to realize the importance of saving their money.

   b. Skills Training of TRY Daughters.

Alternative livelihood development is also a management measure specified in the co-management plan to reduce pressure on shellfish and mangrove resources. From October 2012 to present, the girls of the Girls Skills Training Program continued their tie-dye and crochet skills instruction. Two days a week, the girls also learned about sexual and reproductive health topics, including STIs, menstruation, family planning, saying "No", from two experienced and trained community health educators. Funding for this health education program came from Peace Corps Small Project Assistance (SPA). The skills training is funded by an Action Aid grant that USAID/BaNafaa considers as cost share from TRY. After completing their two-year course of skills training, the girls will graduate from the program at the beginning of February 2013. After graduation, TRY Association will assist the girls in finding work at local businesses and homes. TRY also hopes to use the top students in the class to help facilitate the next skills training class.

TRY Association would like to offer this program to another class of young women as it has seen the crucial impact it has had on the lives of this graduating group of girls. There is currently a long waiting list of girls (all daughters of oyster harvesters) interested in attending the next program. Appeals for funding have been made again to Action Aid The Gambia. To continue offering this program, TRY Association also realizes the importance of contributions from the participants (e.g. a one-time fee of approximately $15-$30), which not only encourages program sustainability, but it may also help to make the girls and their families take the program more seriously.

Figure 7. The girls of the Skills Training Class act in health dramas during their peer health education training.

c. Health.

TRY Association has begun a health education initiative to educate the TRY members on various health topics relevant to their lives and chosen by the women themselves, including sexual and reproductive health, malaria, cancer, nutrition, oral and eye health. This initiative came in response to requests from the TRY women for health classes. The activity is currently being funded by the Peace Corps SPA (Small Project Assistance) Program. However, because the costs are so minimal ($45-$60), this program can be continued by TRY once SPA funds end.

During the first two classes a certified nurse-midwife and a community educator instructed with help from the TRY Coordinator. They discussed female and male reproductive anatomy, menstruation, menopause, breast health, and STIs, including HIV. After the first two classes, the women expressed strong interest in continuation. The class is a great opportunity for the women to learn about their bodies as well as share experiences and concerns, and most importantly ask questions. Rarely do Gambians, especially uneducated women, have the chance to speak freely with willing health professionals. TRY Association's goal is to host a health session on the last Friday of every month. The next lecture in January will be conducted by the Medical Director of the SOS Mother and Child Clinic. He, with his team of midwives, will discuss cervical cancer.

6. Water Quality, Shoreline Sanitation Survey and a Gambian National Shellfish Sanitation Plan (GNSSP).

Water quality testing to determine whether there are public health risks from contamination of oyster harvesting areas has continued in Quarter 1 of Year 4 at 16 oyster harvesting sites within Tanbi Wetlands and Western Region. Testing is conducted on a fortnightly basis and analyzed at the laboratory in Abuko. Total and fecal coliforms are determined by use of the membrane filtration method, using standard TC and FC media. Coliform counts are done using 25 mL of filtrate and reported as colony counts per 100mL of sample as is routinely reported in shellfish sanitary water quality literature (e.g. Graybow et al, 1981). The results of the study to date show

that both total coliform and fecal coliform counts were relatively low in all sample sites. The data from the Tanbi sites appears to be reasonably clean in comparison to U.S. NSSP Total Coliform water sanitation standards, although Fecal Coliforms are higher. The data also show that there is a distinct wet season signal and variability in the maxima from month to month indicating that there are definite transient contamination events from time to time in some locations.

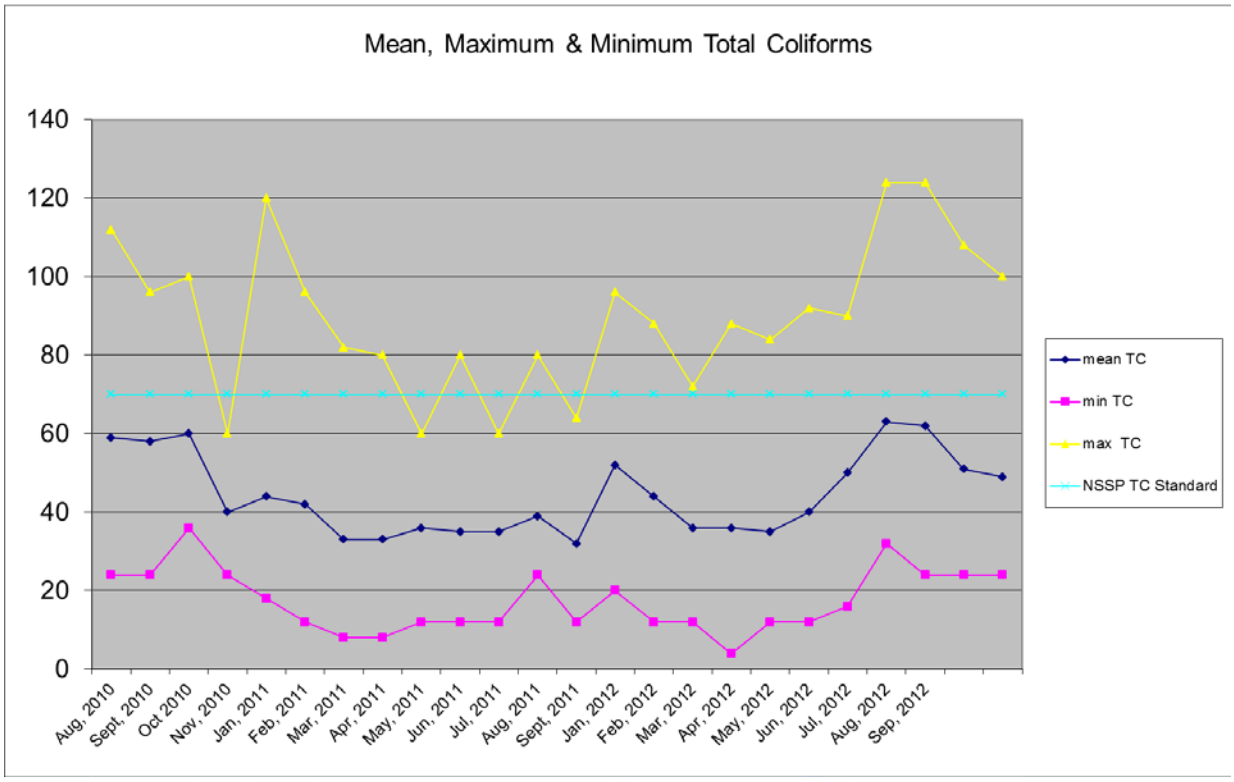


Figure 8. Average Total Coliforms at oyster harvesting sites August 2010 – November 2012.

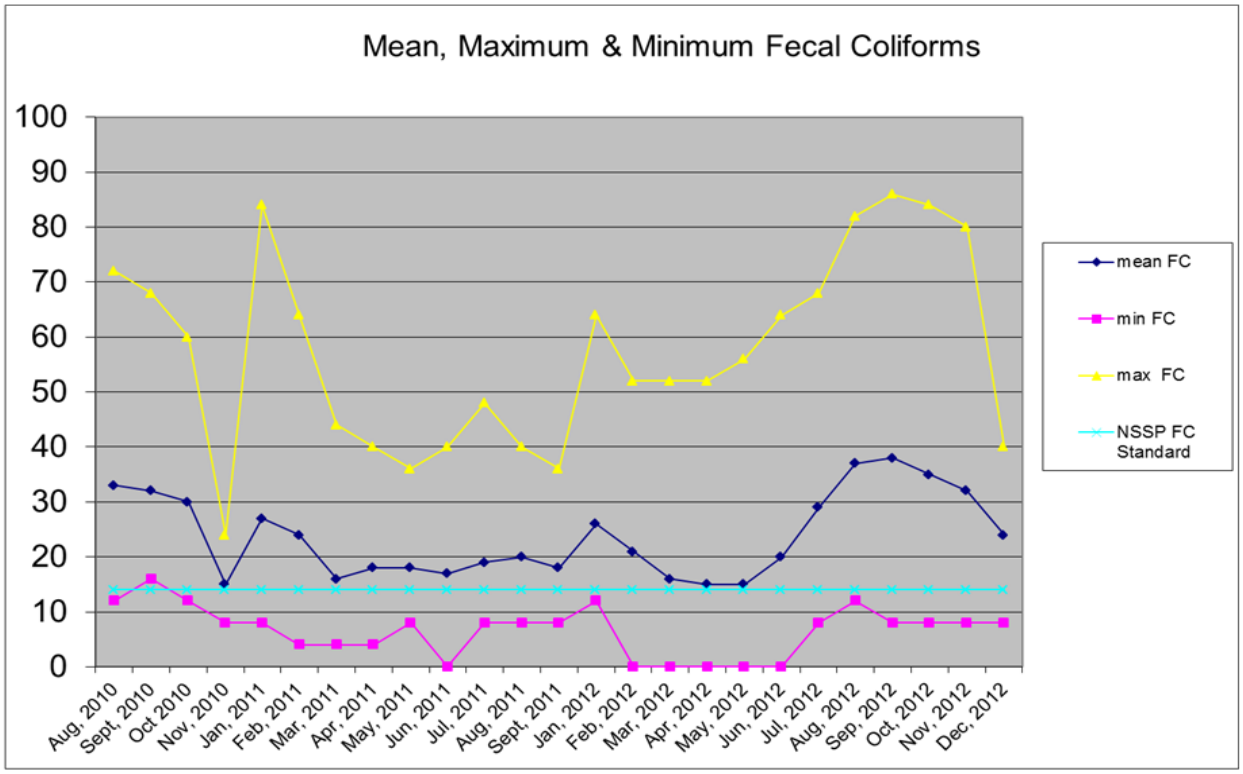


Figure 9. Average Fecal Coliforms at oyster harvesting sites August 2010 – November 2012.

In addition to water quality testing and the use of resulting data to manage the oyster fishery, shoreline sanitation survey techniques enable decision makers to identify areas of critical threat to shellfish sanitation. As per the Year 4 Workplan, Dr. Michael Rice of URI will visit The Gambia in January 2013 to provide technical assistance on the on-going development of a framework for an interagency Memorandum of Understanding (MOU) to form a Gambian National Shellfish Sanitation Program (GNSSP).

c. Water, Sanitation and Hygiene (WASH)

In July 2011, the USAID/BaNafaa Project was awarded a Water and Sanitation add-on to support needed water and sanitation activities linked to the artisanal fishery and Community Fishery Centers (CFCs) and oyster landing sites. The objectives of these WASH activities are to improve water supply and sanitation at approximately seven public fisheries landing/processing facilities, including oyster harvesting/processing sites. This will provide direct benefit to the thousands of fishermen, oyster harvesters, women fish venders, small scale fish processers and other laborers that utilize these facilities daily. An added benefit is that clean water supply and sanitary facilities at these sites will also result in improved sanitary handling of seafood supply and result in safer and healthier seafood product that enters both the local food chain as well as processing centers for export. In addition, recent research on small-scale African fisheries suggests that addressing high priority fisher household vulnerabilities such as water, sanitation and health issues are likely to increase incentives for fishermen to engage in more sustainable

fisheries management practices[2]. Lessons Learned from outbreaks of Cholera in neighboring countries in West Africa over the last 2 years have also highlighted the critical importance of addressing poor water, sanitation and hygiene conditions at hubs, such as fish landing and marketing sites, that can be the entry points for spreading the epidemic nationwide and across borders.

The six fish and oyster landing sites prioritized for WASH interventions as a result of the needs assessment and stakeholder workshop were identified in Year 3 (FY12) (see Table 1). As reported in the Year 3 Annual Report, Brufut and Old Jeshwang are the first two sites to be developed.

Table 1. USAID/BaNafaa WASH Intervention Sites

No.	Site	Rank( ) and type of site	Comments
1	Brufut	(1) Fisheries	
2	Kamalo	(1) Oysters	
3	Sanyang	(3) Fisheries	
4	Jeshwang	(3) Fisheries and Oysters	
5	Abuko	(3) Oysters	
6	Kartong	(6) Fisheries and Oysters	
7	Tanji	(7) Fisheries	Not anticipated due to size/cost and difficulty/complexity/timeframe.

As implementation of the USAID/BaNafaa WASH component enters its second year, the progress made in Quarter 1 is as follows:

- The Environmental Screening Report and Environmental Mitigation and Monitoring Plan (EMMP) for the construction phase, as well as recommendations for individual site EMMPs for management of the completed facilities submitted by GAMWORKS has been approved by the project.
- The USAID approved Hach Arsenic Test Kit to be used by GAMWORKS for testing of potable water sources as per USAID requirements has been received in The Gambia and testing for arsenic and all other required water quality parameters will be completed in Quarter 2. Note that only 2 of the six WASH sites will have boreholes. The 4 others will access municipal water. Based on the geology of The Gambia, The Department of Water Resources and other technical specialists in The Gambia do not expect arsenic to be present.
- Participatory Hygiene and Sanitation Transformation (PHAST) Training of a total of 80 participants, including 55 women, at Brufut and Old Jeshwang (40 at each site) has been conducted by TARUD. Coordination with UNICEF's previous work on Community Led Total Sanitation (CLTS) in The Gambia and their training of in-country resource persons in this approach has benefitted the implementation of USAID/BaNafaa project training at the community level.

[2] Mills, D., et al. 2009. Vulnerability in small-scale African fishing communities. J. Int. Dev. DOI: 10.1002/jid.

- 3 WASH Management Committees have been established. One at the Brufut fish landing site, one at the Old Jeshwang oyster site and one at the Old Jeshwang fish landing site. All 3 have participated in PHAST training.
- Draft WASH Management Plans have been developed by Brufut and Old Jeshwang communities, including behavior change strategies, environmental compliance and facilities management and maintenance. Community discussions of WASH Management Plans have been particularly rich and well attended, with women participating fully as they want their voices to be heard on water, sanitation and hygiene issues that affect them so fundamentally. As for the fisheries management plans, the WASH management planning process has made clear that management plans should be flexible to adjustment as implementation begins and experience is gained. Behavior change and user fee strategies in particular will need to be reviewed and revisited regularly by the WASH Management Committees.
- WASH infrastructure siting and engineering designs by GAMWORKS are completed and approved by the Brufut and Old Jeshwang communities after a series of participatory consultations, including consideration of climate change impacts on the coast (coastal erosion and sea level rise). Construction is on track to begin and be completed at these two sites in Quarter 2.

The USAID/BaNafaa team's observation thus far is that integrating WASH activities into existing fisheries co-management activities with communities and stakeholders who have been participating in a successful participatory co-management process with the USAID/BaNafaa project and with each other for more than 3 years has made the work more efficient and promises to deliver a higher quality and more sustainable result than would otherwise be the case.

2.2 Intermediate Result 2

Institutional capacity strengthened at all levels of governance to implement an ecosystem-based, co-management approach to sustainable fisheries, and to prevent overfishing.

Quarter 1 Highlights

- Department of Fisheries Capacity Strengthened
  - 2012 Stock assessment (most recent 2010/2011 data) presented by DoFish staff at the First Annual Review Meeting for the *Fishery Co-Management Plan for The Gambia Sole Complex* and reviewed by stakeholders for management decision-making.
  - Degree training in Fisheries for 1 staff in Nigeria continuing
- NASCOM capacity strengthened (see IR1)
- TRY Oyster Women's Association capacity strengthened. (see IR1)
- The Association of Gambian Fishing Companies (TAGFC) trained in Administrative/Financial Management (see IR 1)
- A total of 89 participants trained, of whom 58 were women (65%).

a. DoFish Capacity Strengthened

1. Stock Assessment.

As reported in Year 3, the first stock assessment done by MSC was very rough and preliminary, based on little data. With USAID/BaNafaa assistance, DoFish improved the data and a 2012 Stock Assessment Report based on 2010/2011 data was produced. As reported under IR1 above, the findings were presented by DoFish staff at the first Annual Review Meeting of the *Fishery Co-Management Plan for The Gambia Sole Complex* in October 2012. The co-management plan provides the institutional framework for stakeholders to decide how to act on the findings. The 1 nautical mile (nm) seasonal closure was incorporated into the management plan as a precautionary measure, but will now be considered a significant management action. The meeting also recommended increasing the gillnet mesh size minimum from 40mm (currently in the Plan) to 42-46mm.

In spite of this recent progress and the very positive momentum on the part of NASCOM for implementation of the Co-Management plan, the greatest challenge now faced by stakeholders in the co-management process is the fact that DoFish has not taken action to effectively capitalize on technical assistance and capacity building provided by the USAID/BaNafaa project and others to institutionalize the sole stock assessment function within the Department. This is in spite of growing competency demonstrated by technical staff in the statistics unit and in spite of three senior DoFish staff attending the URI Fisheries Leadership course in Rhode Island since 2010, among multiple other opportunities provided by the project to support DoFish to realize its co-management role.

The fact that DoFish has still not managed to schedule the fish biology training that it's staff have been trained to lead, has still not produced and shared a report on vessel registration completed in 2011 (with USAID/BaNafaa financial assistance) and has still not been able to facilitate the gazetting of either the Sole or the Oyster and Cockle Co-Management Plans 12 months after their approval, are additional examples of DoFish's weak service to its stakeholders in The Gambia. The project will continue to address these issues with DoFish and with the New Minister of Fisheries and Water Resources appointed in November 2012.

2. Degree Training for DoFish Staff

Within DoFish, there is a strong cadre of approximately one dozen mid-career professionals who cannot be advanced through promotion within the civil service system as they lack the appropriate degree qualifications, in spite of the fact that they have ample experience and competencies. This creates a morale problem and is typically a problem for retaining highly skilled people within the Department. Most of these individuals have completed two-year diploma programs, but require a four-year degree to be promoted. Such degrees in fisheries are not available in The Gambia and require training outside the country. Individuals from DoFish with two years of study already completed have been selected to continue degree training to a four year level (i.e., the Project provides support for an additional two years of education). Degree training at Nigerian universities is very cost effective. Two individuals have been nominated for these degree scholarships, were accepted for admission and began their studies. One who only needed an additional year has completed his degree in September 2012 and is currently seconded to the USAID/BaNafaa project, the other is expected to complete his program in 2013.

b. Local Partner Capacity Strengthened

As reported under IR1 above, in Quarter 1, USAID/BaNafaa provided a 3 day Administrative and Financial Management Training for local partners NASCOM, TRY, TAGFC and TARUD. The training was facilitated in The Gambia by Kim Kaine of URI and Assan Camara, USAID/BaNafaa, URI Administrative/Financial Assistant. The training was extremely well received by participating organizations and individuals whose scores on pre and post assessments all improved. One on one follow-up mentoring plans have been developed for each organization and have been implemented in November and December. A follow-up training will be conducted in-country by Assan Camara over the next 6 months.

As reported under IR1 for the WASH component, PHAST training of WASH Management Committees and community leaders is also building capacity at the community level.

In Year 4, the project also planned to support the environmental journalist's group Biodiversity Action Journalists (BAJ) to launch its activities and to conduct a training session for its members on providing more in-depth and meaningful reporting on sustainable fisheries management issues in The Gambia. USAID/BaNafaa is not satisfied that this group adequately represents a significant segment of the environmental journalists the project hopes to reach. As a result, this activity will not be implemented until a more representative mechanism is found.

2.3 Intermediate Results 3 and 4

IR 3. Nursery areas and spawning areas for critical life stages of commercially important species and for associated marine turtles and mammals are protected

IR 4. Change unsustainable and destructive marine resource use practices that threaten improved biodiversity conservation in the West Africa Marine Ecoregion.

Quarter 1 Highlights

- Implementation of the *Fishery Co-Management Plan for The Gambia Sole Complex* (see IR1).
  - 121,245 ha under improved management (the entire Atlantic Coast of The Gambia out to 9 nautical miles)
  - Seasonal closure for all species and gear types out to 1 nautical mile from May to October
  - Fish size limits and gear restrictions, including a new recommendation to increase mesh size limits from the current 40mm to 42-46mm.
- Implementation of the *Oyster and Cockle Fishery Co-Management Plan for the Tanbi Special Management Area* (see IR1).
  - 6,304 ha under improved management (the entire Tanbi Wetlands National Park)
  - Seasonal Closure for Oysters from July to February
  - Gear restrictions for mangrove protection
  - Mangrove reforestation
  - Shellfish size limits
  - Shellfish Sanitation Planning, including bi-weekly water quality testing and bi-annual shoreline sanitation surveys.
- Improved biophysical conditions in areas under improved management not yet demonstrated.

a. Sole Fishery and Oyster and Cockle Fishery Co-Management Plans

The status of hectares under improved management remains the same as reported in the Year 3 Annual Report and as illustrated in Figures 10 and 11 below. As reported under IR 1 above, implementation of the Sole Fishery and Cockle and Oyster Fishery Co-Management Plans approved in January 2012 is underway. The co-management process of annual review of the two plans is being led by NASCOM and TRY respectively and updated information is being reviewed and used to adjust management measures. Improved biophysical conditions in the areas under improved management have not yet been demonstrated. Impact at this level is not expected at this point in time. Implementation of management measures is still very recent and still based solely on fisher community consensus to begin implementation while gazetting of the plans is pending. At the same time, the most recent sole stock assessment indicates that pressure on the fishery seems to be increasing in recent years and that improved management is more critical than ever.

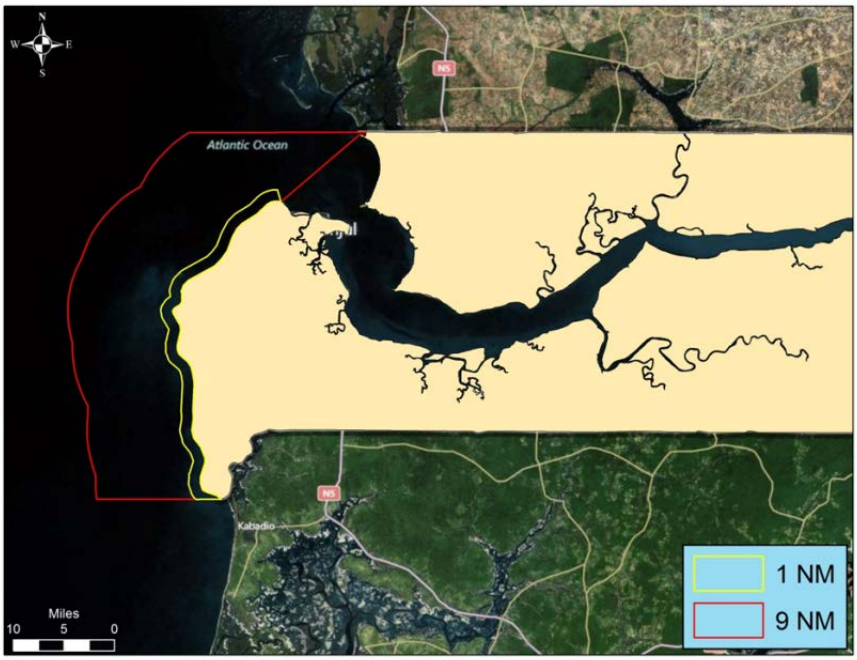


Figure 10. 121,245 hectares under improved management for the artisanal sole fishery out to 9nm.

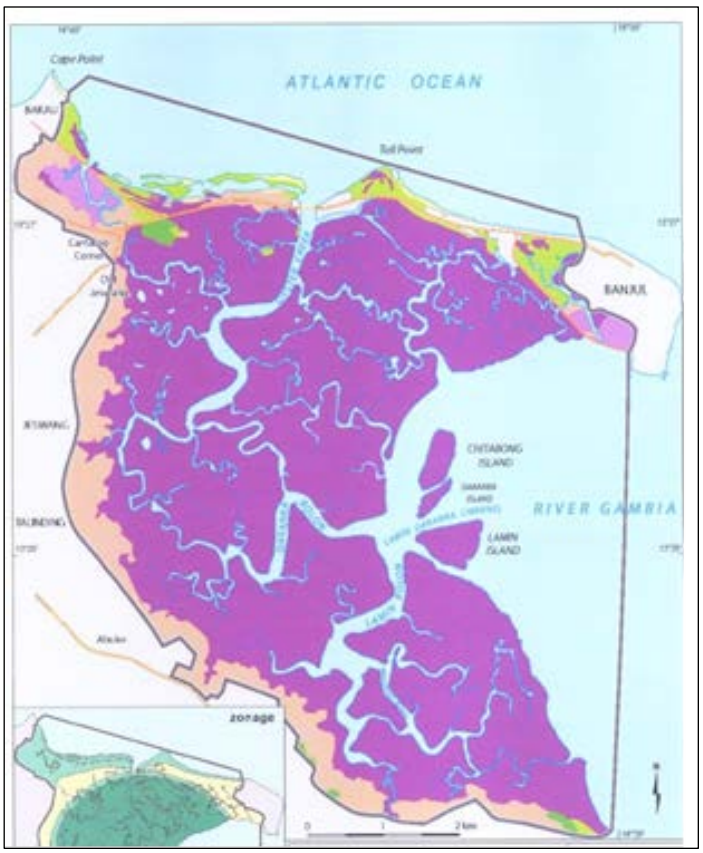


Figure 11. 6,304 hectares under improved management for the oyster and cockle fishery in the Tanbi

4. Project Management

CRC/URI established its own in-country office in The Gambia, primarily to manage the WASH component in Year 3, but also to implement directly some of the fisheries work with local partners previously managed under the WWF sub-contract. A WASH Coordinator, Dr. Bamba Banja started on September 1, 2011. An Administration and Finance Assistant was recruited and started on November 1, 2011. The WASH Coordinator is supervised by the USAID/BaNafaa Project Manager and provided oversight by the U.S. based USAID/BaNafaa Team Leader.

The WWF National Program Coordinator in The Gambia serves as a senior advisor to the project. Alagie Manjang, on secondment from the Department of Parks and Wildlife, has been interim Program Coordinator since November 1, 2011.

The Project has benefitted from direct collaboration with Peace Corps volunteers based in Kartong, in Banjul at TRY and in Banjul at the USAID/BaNafaa WWF office. As of March 2013, the current Peace Corps Volunteers at TRY and at WWF will complete their service. No replacements are currently programmed, but efforts to secure replacements, especially for TRY are underway.

External Evaluation: A USAID contracted firm, Mendez England & Associates conducted an external evaluation of the USAID/BaNafaa Project in November and December. Field work was conducted by a team of three consultants from the first week of November to the first week of December 2012. It should be noted that the USAID/BaNafaa in-country team met frequently with the evaluation team and provided significant support in arranging meetings with stakeholders and ensuring that the evaluation team had the logistics that it needed to conduct its work over this 5 week period. URI is looking forward to the evaluation report and detailed findings.

4.1 International Travel

This international travel schedule does not include travel between The Gambia and Senegal, which for planning and management purposes is considered local travel. The following list captures all international travel other than within and between The Gambia and Senegal.

First Quarter Actual

- Kim Kaine: Administrative/Financial Training for local seed grant partners (October)
- Kathy Castro & Barbara Sommers: DoFish Capacity Building Planning/Stock Assessment/Support Fish Biology Course/NASCOM Capacity Building and participation in first annual Sole Co-Management Plan Review meeting. (October)
- Karen Kent: External Evaluation, initial briefing, orientation and start up. WASH Implementation Support. (November)

Second Quarter Anticipated

- Mike Rice: Gambian National Shellfish Sanitation Plan MOU and TA, Kartong Cockle and Oyster Co-Management Plan Development support, January, 2013.
- Chris Parkins: Gillnet study field work, February 2013.

- Ousman Drammeh: Ghana for the USAID/WA Climate Change Training and Partner's Meeting, February 2013.

Third Quarter Anticipated

- Kathy Castro: Annual Bi-lateral Co-Management Workshop and Gambia-Senegal Fishing Community twinning activity (both to take place in Senegal) May 2013.

Fourth Quarter Anticipated

- Karen Kent: Workplanning (August/September)

4.2 Environmental Monitoring and Compliance

Based on the revised initial environmental evaluation (IEE) approved in 2011 for the project and in accordance with the Year 3 (FY12) Annual Report and accompanying EMMR, monitoring and mitigation schemes are in place to ensure no significant environmental impacts are occurring for those actions identified in the IEE with a negative determination subject to conditions. The key activity conducted this quarter that has conditions is the work related to water and sanitation improvements at landing sites.

In this respect, An environmental report has been completed by GAMWORKS for the WASH intervention. An Environmental Mitigation and Monitoring Plan (EMMP) has been developed for the construction phase of the WASH infrastructures and is included in URI's FY13 sub-agreement with GAMWORKS.

4.3 Branding

The USAID/BaNafaa Project provides information through many existing channels, including presentations at meetings, conferences, outreach sessions and other forums, print media—e.g., peer-reviewed articles in professional journals, locally produced Information, Education and Communication (IEC) materials, pamphlets, brochures, policy briefs, guides, and PowerPoint presentations. The main target audiences include local communities, local government agencies, national policymakers, grassroots NGOs, and other donors. Acknowledgement is always given to the generous support of the American people through USAID in all Project communications and materials. Also recognized are partnerships and support from local government ministries, agencies and departments who participate in various activities of the Project.

Synopsis of Communication Items Affected by USAID Marking/Branding Regulations (ADS 320/AAPD 05-11)

Item	*Type of USAID marking*	*Marking Code*	*Locations affected/ Explanation for any 'U'*
Press materials to announce Project progress and success stories	USAID logo (co-branded as appropriate)	M	Primarily a Gambian audience
Project brief / fact sheet	USAID logo (co-branded as appropriate)	M	Primarily a Gambian audience
PowerPoint presentations at	USAID logo (co-branded	M	Primarily a Gambian audience

Item	*Type of USAID marking*	*Marking Code*	*Locations affected/ Explanation for any 'U'*
meetings, workshops and trainings	as appropriate)		
Brochures/posters on environmental issues	USAID logo (cobranded where/as appropriate)	M	Primarily a Gambian audience
Landing or marketing site facility improvements	USAID logo / stickers (cobranded where/as appropriate)	M	Primarily a Gambian audience
Project Office/room within WWF/Gambia office in Banjul	Project sign in English and local dialect name as well *(USAID/BaNafaa*) but no USAID identity used	M	Primarily a Gambian audience
CRC Project Office/room within TRY/Gambia office in Banjul	Project sign in English and local dialect name as well *(USAID/BaNafaa*) but no USAID identity used	M	Primarily a Gambian audience
Fisheries management plans		PE	Primarily a Gambian audience
Project vehicles, office furnishings and computer equipment purchased for project administration by WWF	No USAID identity used	U	Standard exclusions under USAID marking guidelines/policies

Marking Codes: M = Marked, U=Unmarked, PE = Presumptive Exception, W=Waiver

4.4 TraiNet Data on Trainings Conducted during the Reporting Period

The Ba Nafaa Project Office compiles information on all training events as required by USAID, This information is submitted to CRC where the data is entered into the TraiNet electronic reporting system. A summary of trainings conducted to date is provided in the following table.

Training program	*Location*	*Start date*	*End date*	*Participants*			*Estimated Cost*
				Male	**Fem**	**Total**	***US $***
Study Tour to Sine Saloum	Senegal	12/16/2009	12/18/2009	1	31	32	3,507
Co-management Training on Sole Fishery	The Gambia	1/25/2010	01/26/2010	37	3	40	2,188
Co-management Training on the Oyster Fishery	The Gambia	02/01/2010	02/02/2010	2	51	53	2,373
Aquaculture training	The Gambia	01/12/2010	02/05/2010	60	0	60	2,696
Training on Entrepreneurship (study tour to Baddibu)	Gambia	03/18/2010	03/19/2010	2	11	13	600
Stock assessment training	The Gambia	03/15/2010	03/22/2010	14	5	19	3,144

Training program	*Location*	*Start date*	*End date*	*Participants*			*Estimated Cost*
				Male	**Fem**	**Total**	***US $***
Training on Improved Processing & Packaging	Gambia	30/4/2010	12/4/2010	0	300	300	750
Coastal Adaptation to Climate Change	US	4/6/2010	25/6/2010	2	0	2	26,000
Cayar Study Tour	Senegal	13/6/2010	18/6/2010	11	4	15	4,500
Oyster Aquaculture Training	Gambia	17/6/2010-	28/6/2010	1	36	37	750
Water Quality Assessment Training Workshop	Gambia	23/6/2010	23/6/2010	18	5	23	100
Fisheries Leadership	US	16/8/2010	3/9/2010	3	1	4	32,000
Biostatistics course	Gambia	09/20/2010	09/27/2010	10	2	12	5,832
GRAND TOTAL YEAR 1				***161***	***449***	***610***	***$84,440***
Micro-credit and enterprise development	Gambia	25/10/2010	2/11/2010.	0	250	250	1,290
Climate Change workshop	Senegal	3/22/2011	3/25/2011	52	8	60	50,900
Study tour to Tanzania on res. mgt and livelihood development	Tanzania	2/7/2011	2/12/2011	0	1	1	2,145
Water quality and shellfish sanitation	USA	5/21/2011	6/5/2011	3	0	3	15,910
Fish stock assessment	USA	5/21/2011	6/12/2011	3	2	5	34,387
MPA-PRO Certification Training	Kenya	6/13/2011	6/17/2011	1	0	1	3,000
BS Degree Training – Fisheries technology	Nigeria	5/15/2011	on going	1	0	1	10,000
BS Degree Training – Fisheries technology	Nigeria	8/29/2011	9/30/2012	1	0	1	10,000
TRY members to FENAGIE	Senegal	09/2011	xx	0	4	4	2,759
GRAND TOTAL YEAR 2				***61***	***265***	***326***	***130,391***
CUMULATIVE GRAND TOTAL TO DATE END YEAR 2				***222***	***714***	***936***	***$214,831***
PHE workshop	Senegal	12/4/2011	12/07/2011	0	1	1	1,174
Training of the Facilitators for WASH Needs Assessment	The Gambia	12/27/2011	12/29/2011	8	2	10	1,128
TRY literacy training	The Gambia	11/2011	On-going	0	30	30	TBD
Shellfish Sanitation Shoreline Survey Training	The Gambia	1/5/12	1/11/12	8	0	8	TBD
Shellfish Sanitation Shoreline Survey Training	The Gambia	1/16/12	1/16/12	25	5	30	945
USAID Environmental Compliance Training	Ghana	3/19//12	3/23/12	1	0	1	1,040
Stock Assessment	The Gambia	1/20/2012	09/30/2012	2	0	2	4,098

Training program	*Location*	*Start date*	*End date*	*Participants*			*Estimated Cost*
				Male	**Fem**	**Total**	***US $***
TRY Microfinance training	The Gambia	2/6/12	2/24/12	0	67	67	1,229
TRY hygiene/food handling training	The Gambia	1/31/12	2/1/12	0	90	90	343
Bi-lateral Climate Change Vulnerability Assessment Workshop	The Gambia	4/10/2012	4/11/2012	35	9	44	27,651
WASH Needs Assessment Stakeholder Workshop	The Gambia	4/18/2012	4/18/2012	25	13	38	961
Shellfish Sanitary Shoreline Survey Report Stakeholder Workshop	The Gambia	4/19/2012	4/19/2012	17	4	21	775
Bi-lateral Fisheries Co-Management Workshop	The Gambia	5/30/2012	5/31/2012	60	25	85	23,110
Population, Health Environment URI/Summer Institute	USA, Rhode Island	6/4/2012	6/22/2012	2	0	2	20,380
Fisheries Leadership	USA, Rhode Island	7/2/2012	7/20/2012	2	1	3	19,516
GRAND TOTAL YEAR 3				***186***	***247***	***433***	
CUMULATIVE GRAND TOTAL TO DATE END YEAR 3				***408***	***961***	***1369***	
Administrative/Finance Training	The Gambia	11/12/2012	11/14/2012	6	3	9	947
PHAST Training (Brufut)	The Gambia	11/27/2012	11/29/2012	16	24	40	1,426
PHAST Training (Old Jeshwang)	The Gambia	12/17/2012	12/19/2012	9	31	40	1,393

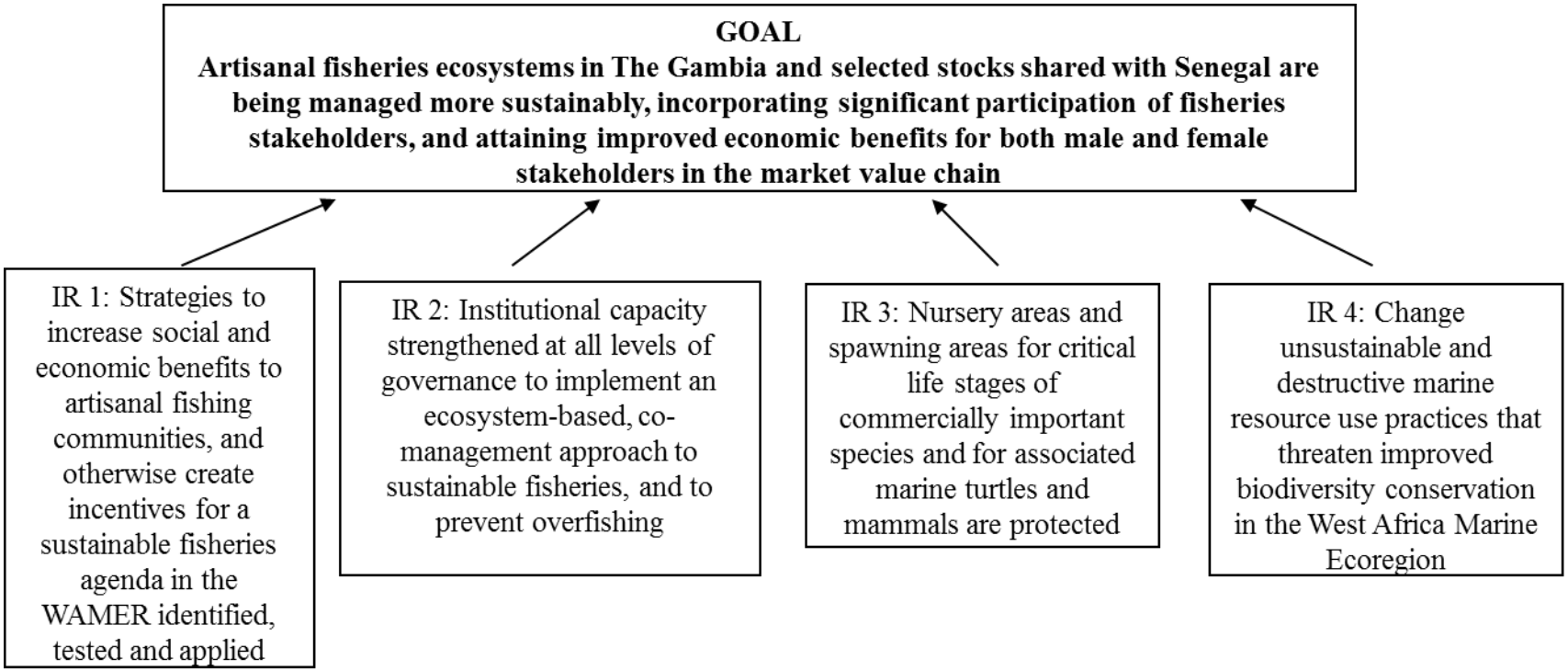
4.5 Estimated Financial Status

The following table shows a pipeline analysis of expenditures in relation to obligations through December 31, 2012.

AMOUNT SUB-OBLIGATED		3,414,566
(total federal outlays as of last SF 425/voucher)		
Expenditures		
Period Covered In Last SF 425	Thru September,2012	2,276,784
Estimated	October to December 2012	204,794
TOTAL EXPENDITURES (Amt on SF 425 + Recent Expenditure)		$2,481,578
BALANCE OF SUB-OBLIGATED FUNDS REMAINING		$932,988

Appendix A. Results Framework, Results to Date & LOP Targets

The Project Results Framework below is organized by Project Goal and IR. The Gambia - Senegal Sustainable Fisheries Project contributes directly to USAID West Africa Regional Office's Environment & Climate Change Response (ROECCR) Results Framework, specifically IRs 1, 3 and 4 as per the May 2011 draft in Appendix B below. Each IR in the Gambia - Senegal Sustainable Fisheries Project Results Framework has one or more indicators and Life of Project (LOP) Targets that are shown in the table on the following pages. In the Year 4 Workplan URI reduced and simplified the biodiversity indicators reported by the project to more closely align with ROECCR indicators. The remaining priority biodiversity indicators now include only ROECCR standard indicators and one custom URI indicator on governance scorecards.



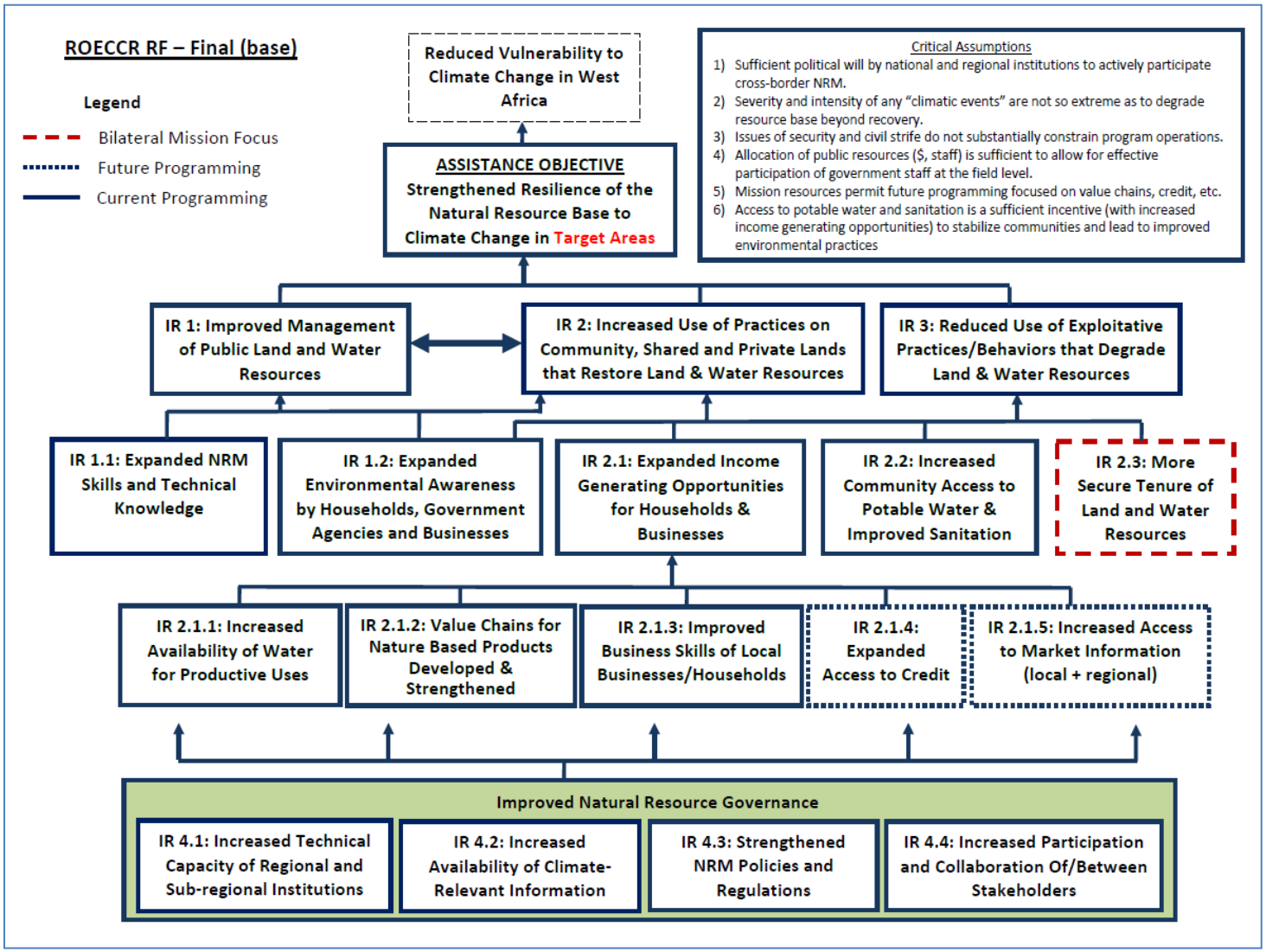
Results to Date, Year 4 (FY 13) and LOP Targets

No	Indicator	Cumulative Results as of FY12	FY13 Target	Q1	LOP Target	Comments
IR1						
2	No people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance (ROECCR 2.1.1)	910[3]	127	0	220	FY 13 target = NASCOM & TRY members providing improved product due to improved fish handling and hygiene training. TAGFC members with traceability improvements.
W1	Improved access to water and sanitation facilities	0	12,000	0	20,000	Target = infrastructures at 4 sites completed in FY13.
W2	Number of persons receiving Participatory Hygiene and Sanitation Transformation (PHAST) Training.	0	240	80 F=55	240	Q1 FY 13 = 40 at Brufut and 40 at Old Jeshwang
W3	Number of persons receiving training and outreach messages on hygiene promotion	0	4000	0	6000	
W4	Community water and sanitation committees established and trained with program assistance	0	4	3	6	Q1 FY13 = 1 at Brufut and 2 (Fish and Oyster) at Old Jeshwang
IR2						
4	No of institutions with improved capacity to address NR, BD, climate change, water issues as a result of USG assistance (ROECCR 4.1.1)	16[4]	4	1	13	Cumulative. However, the same institutions continue to receive multiple additional capacity building assistance, but are not counted again. Previous = LACOMS in 7 communities (Gunjur, Brufut, Sanyang, Tanji, Batokunku/Tujereng, Bakau, Banjul), NASCOM, GAMFIDA, NAAFO, TRY, DoFish, NEA, DPWM, Water Lab. FY12 = TAGFC. FY13 = Most of the above institutions are to receive additional capacity building in FY 13, but TARUD is the only one not to have received it in previous years.
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	1,369	210	89 F=58	200	= TrainNet

[3] The same individuals may be counted more than once if they received assistance (i.e., training) that improves their economic benefits on multiple occasions in one year or in successive years.
[4] Adjusted up from the 13 reported in the Year 3 annual report as NEA, DPWM and Water Lab are in the "previous" group as documented by their repeated participation in various training activities documented in TraiNet.

6	Improvements on governance scorecard	Increasing	Increas-ing		Increase-ing	Not yet scored for the previous year (2012).
11	Number of laws, policies, strategies, plans, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance (ROECCR 4.3.1)	2	1	0	2	FY12 = Sole and Oyster Co-Management Plans FY13 – 14 = 2 drafts (Kartong cockle and oyster co-management plan, GNSSP-Tanbi,) FY 13 = Cabinet Paper on cross border trade issues.
CC1	Number of climate vulnerability assessments conducted as a result of USG assistance	1	0	0	1	No additional activity without add-on
CC2	Number of stakeholders using climate information in their decision making as a result of USG assistance	44	0	0	30	No additional activity without add-on
CC3	Number of institutions with improved capacity to address climate change issues as a result of USG assistance	18	0	0	8	No additional activity without add-on
IR3 & IR 4						
12	No. of Hectares in areas of biological significance under improved natural resource management (ROECCR 1.1): • Hectares covered by the fisheries management plan defined as the range of fishing fleets targeting these species • Oyster fishery estuarine and mangrove areas designated and allocated as community managed zones, including no-take areas	Sole = 121,245 Oyster = 6,304	Sole = 121,245 Oyster = 6,304	Sole = 121,245 Oyster = 6,304	FMP Areas: Sole = 12nm seaward = 158,332 ha FMP Areas Oyster = Tanbi wetlands 6000 ha	Kartong Co-Management Plan will only be draft and Catfish added to sole, but not adding Ha.
17	No. of HA in areas of biological significance showing improved biophysical conditions as a result of USG assistance. (ROECCR AO1) = Hectares under effective mgt (progress towards BRPs) for sole and oysters	No target but tracked	No target but tracked		No target but tracked	Reference points for sole to be established as part of the management plan. Baseline will be established based on results of preliminary stock assessment Baseline data for oysters collected in year 1 PRA

Appendix B. USAID ROECCR Results Framework



Appendix C. Activity Implementation Status

IR1 Sole Activities	FY13				Local Implement. Partners	Quarter 1 Progress
	Q1	Q2	Q3	Q4		
Gazetting of the Sole Co-Management Plan					DoFish	Pending.
Gillnet Study testing impact of larger mesh size conducted					Master Fishermen, DoFish	Fieldwork scheduled for quarter 2.
Support addition of Catfish to the Sole Co-Management Plan					NASCOM, DoFish	LEK and scientific knowledge for Catfish presented and reviewed at the first annual Sole Co-Management Plan review meeting in October. Recommendations for further research made. LEK Report finalized.
Implement Seed Grant #1 to NASCOM					NASCOM	See below.
- SOP Manual					‘	Pending.
- Business Plan					‘	Pending.
- LACOM By-Laws revised					‘	Reviewed at the Annual Co-Management meeting in October.
- Quarterly/annual Co-Management Plan meetings held and documented					‘	Annual Meeting hosted by NASCOM in October. Report produced by NASCOM. NASCOM Executive Committee meetings held in October and December.
Seed Grant #2 Capacity Strengthening to NASCOM					NASCOM	Expected Q3
- Fish handling and hygiene					NASCOM	Expected Q3

IR1 Sole Activities	FY13				Local Implement. Partners	Quarter 1 Progress
training, selected landing sites						
- Bi-lateral co-management twinning exchange visit					NASCOM	Expected Q3
Seed Grant #1 Capacity Strengthening to TAGFC					TAGFC	Still working to address organizational issues related to constitution and management structure. Waiting for proactive action from TAGFC before proceeding with a seed grant.
Implementation TAGFC Seed Grant, including activities focused on traceability					TAGFC	See previous.
Administrative/Financial Training for Seed Grant recipients					NASCOM, TAGFC	Completed in October.

IR1 Oyster Activities	FY13				Local Implement. Partners	Quarter 1 Progress
	Q1	Q2	Q3	Q4		
Gazetting of the Oyster and Cockle Co-Management Plan					DoFish	Pending
Seed Grant Capacity Strengthening to TRY					TRY	See below.
- Quarterly/annual Co-Management Plan meetings held and documented					‘	First Annual Co-Management Review Meeting to be hosted by TRY in January.
- Shellfish handling and hygiene training, selected landing sites					‘	300 TRY women trained Oct. – Dec. under UNDP funding. USAID/BaNafaa technical assistance provided for proposal development and submission.

- Peace Corps Volunteer posting with TRY					‘	Current volunteer end service as of March 1, 2013. No replacement yet programmed by Peace Corps.
- Annual market/biological survey at sales points					‘	To begin March 1, with open season.
Administrative/Financial Training for Seed Grant recipients					TRY, NASCOM, TAGFC	Completed in October.
Kartong Oyster and Cockle Co-Management Plan Development (to draft)					TRY	On-going.
- Community meetings					TRY, DoFish	None in Q1.
- Larger stakeholder workshops					TRY, DoFish	None in Q1.
Cockle Redistribution research continued					TRY DoFish,	On-going.
Monthly Water Quality testing continued					Water Resources Lab. DoFish,	On-going.
Inter-agency MOU for development of GNSSP – Tanbi signed, including commitments to fund water quality testing after Year 4.					Water Lab, DoFish, DPWM, DOH, NEA	Dr. Michael Rice technical assistance visit scheduled for Q2.
Draft GNSSP – Tanbi developed, including preliminary mapping of water quality zones					Water Lab, DoFish, DPWM, DOH, NEA	Dr. Michael Rice technical assistance visit scheduled for Q2.

IR1 WASH Activities	FY13				Local Implement. Partners	Quarter 1 Progress
	Q1	Q2	Q3	Q4		
PHAST Training for 6 sites					TARUD	Training for 2 sites Completed in Q1.
Community awareness raising, training and outreach for 4 sites through TOT model					TARUD	Pending.
Management planning 1st 2 sites					TARUD	Plans completed but not yet signed.
Management planning 2nd 2 sites					TARUD	
Management planning 3rd 2 sites					TARUD	
Environmental Compliance activities at 4 construction sites					GAMWORKS	Environmental report by GAMWORKS completed. EMMP for construction phase included in GAMWORKS contract.
Site designs for 4 additional sites (2 in Q1 and 2 in Q4)					GAMWORKS	Final designs for 2 sites completed.
Contracting for construction of infrastructure at 2 additional sites					GAMWORKS	Contracting for 1st 2 sites planned for Q2.
Construction at 4 sites					GAMWORKS	Construction at 1st 2 sites planned for Q2.
Handover of 4 completed infrastructure (2 in Q2 and 2 in Q4)					GAMWORKS	Handover of 1st 2 sites infrastructure expected end of Q2 or early Q3.

IR2 Activities	FY13				Local Implement. Partners	Quarter 1 Progress
	Q1	Q2	Q3	Q4		
Support to DoFish Statistics unit and in-country stock assessment training.					DoFish	Porvided technical assistance for DoFish staff to present the new Sole stock assessment results at the Annual Co-Management

						Review Meeting in October.
In-country fish biology training					DoFish, URI course alumni	Provided final color laminated copies of the bi-catch guide and technical assistance for the trainers who are to deliver the course. DoFish has not yet scheduled the training.
Support annual stock assessment (Najih)					DoFish	Nothing to report Q1.
Support Cross Border Trade Cabinet Paper development (submitted to Permanent Secretary) 3 committee meetings + 1 validation workshop					DoFish, Committee	Nothing to report Q1.
Bilateral Co-Management (Gambia/Senegal) fishers and decision-makers annual workshop					NASCOM, DoFish, DPM, TRY	Nothing to report Q1.
Support Bilateral Co-Management Action Plan - Twinning (through NASCOM seed grant fisher level exchange visit (see IR1 above))					NASCOM, DoFish, DPM	Nothing to report Q1.
Support for Environmental Journalist's Group (BAJ) launch and training					BAJ	USAID/BaNafaa not satisfied that BAJ adequately represents a significant segment of the environmental journalists the project hopes to reach. This activity will not be implemented until a more representative mechanism is found.
Governance Scorecards (Sole and Oyster)					NASCOM, TRY, DoFish	Nothing to report Q1.

IR3 & 4 Activities	FY13				Local Implement. Partners	Quarter 1 Progress
	Q1	Q2	Q3	Q4		
Expanded Sole/Multispecies Catfish Fishery Co-Management Plan					NASCOM, DoFish	See this activity under IR1 above
Oyster and Cockle Co-Management Plan for the Tanbi					TRY, DoFish	See this activity under IR1 above
Draft Oyster and Cockle Co-Management Plan for Kartong					TRY, DoFish	See this activity under IR1 above.