Gambia-Senegal Sustainable Fisheries Project

Year 4 Work Plan

October 1, 2012 – September 30, 2013

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A partnership of:

United States Agency for International Development / West Africa
Coastal Resources Center, University of Rhode Island
World Wide Fund, West Africa Regional Office
Department of Fisheries
Ministry of Fisheries, Water Resources and National Assembly Matters, The Gambia

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1. Introduction

The USAID/ BaNafaa project is a five-year regional initiative (ending in April 2014) 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 West Africa Marine Program Office is a regional implementing partner. At the end of Year 2 (FY11), URI established an office presence in The Gambia and is working directly with local implementing partners, including TRY, NASCOM, TAGFC and the Water Resources Laboratory. Project activities are carried out in partnership with the Department of Fisheries (DoFish) and stakeholders in the fisheries sector in The Gambia and in 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 USAID/BaNafaa Project contributes directly to the achievement of the USAID West Africa Regional Office's Environment & Climate Change Response (ROECCR) Results Framework through contributions to multiple Intermediate Results.

In July 2011, WASH and Climate Change funding was awarded in addition to previous fisheries activities under the biodiversity earmark. With these funds, a Bilateral Climate Change Vulnerability Assessment was conducted in Year 3 and bi-lateral climate change adaptation priorities were identified by stakeholders. As planned, a Bilateral Climate Change Adaptation Add-On Request was submitted to USAID/WA in FY12. URI has been working directly with local partners TARUD and GAMWORKS to implement WASH activities beginning in Year 3 (FY12). In light of significant project achievements in the first three years and positive momentum on overall project objectives for participatory, eco-system-based sustainable fisheries management, add-on requests for WASH and Biodiversity funding, as well as a two year project extension through April 2016 were also submitted to USAID/WA in FY12. The following table summarizes these requests:

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**	

This Year 4 (FY13) Workplan is based on the funding level and April 31, 2014 end date currently authorized in the USAID/BaNafaa Cooperative Agreement. It describes the planned Year 4 project activities. If add-on requests are approved, the workplan will be revised. The contents of this workplan were generated from discussions and outputs developed during meetings with project staff and through consultations with the Department of Fisheries and other key stakeholder groups via meetings and workshop events. The document provides a detailed description of Project activities to be implemented in Year 4 organized by Intermediate Result (IR). It includes a task implementation schedule as well as expected outputs and results by IR. For each task, the workplan also identifies the responsible Project staff and participating partners

to guide teams involved in implementation. In addition, the Project management structure, the monitoring and evaluation strategy, and the corresponding performance and reporting framework are described. Summary budget information is also included. Appendix A provides a summary of the performance plan targets and the results to be achieved for each performance indicator.

1.1 The Gambia Fishery Context

The marine fishery of the Gambia is located in the highly productive upwelling zone of the Canary Current Large Marine Ecosystem (CCLME). Seasonal upwellings and the flow of nutrients from the River Gambia (an estuary attracting fish for feeding and spawning) make the marine waters a highly productive area with rich fishery resources, both pelagic and demersal. The River Gambia and its tributaries are about 2,500 km in total length with 480 km of its length in the Gambia. Appendix C provides additional background on the regional fisheries context.

There are two types of fisheries in The Gambia—artisanal and industrial. The total fish landed from both were estimated at nearly 40,000 MT in 2006 and 47,000 MT in 2007. In 2006, the artisanal fishery contributed approximately 93%.

In the mid 1960s The Gambia witnessed the transformation of the artisanal fishery from paddled canoes with simple fishing techniques to one with modern fish-capturing technologies and larger canoes with outboard engines, which resulted in an increase in fish landings. Decades of growth in the artisanal fishery combined with the activities of the industrial fishery has caused high levels of exploitation, especially of high-value fish, crustaceans and cephalopods. Production in the artisanal fishery has increased from 10,000MT in 1985 to approximately 40,000MT in 2007, while industrial production has been declining. Reports of dwindling catch per unit of effort indicate that high-valued demersal species are under threat from high levels of exploitation. Regular assessments carried out by the Demersal Working Group of the FAO's Committee for Eastern Central Africa Fisheries (CECAF) also indicate that the major demersal fish stocks are either fully or overexploited. Pelagic stocks are also considered to be fully or overexploited regionally, but there are some indications that The Gambian stocks may not be fully exploited.

In 2007, a total of 32 industrial fishing vessels operated with a license in Gambian waters—15 shrimp trawlers and 17 fish\cephalopod trawlers. All industrial vessels operating in Gambian waters are foreign-owned and foreign fishermen dominate. These vessels land their catches in foreign ports where the fish is processed, packaged and labeled as products originating from those foreign ports. The absence of a deep water port is the reason that the industrial fleet does not land their catches in The Gambia as is required by fisheries licensing regulations. A deep water landing dock in Banjul is now under construction. This construction project was developed and supported by the Gambia Artisanal Fisheries Development Project supported by the African Development Bank and BADEA (Arab Bank for Economic Development).

The industrial fisheries sub-sector also includes industrial seafood processing plants that purchase fish from the artisanal fishery and provide permanent and part-time employment to between 1,500 to 2,000 people (mainly women). Presently, there are seven processing plants, three of which export to the EU. Two plants are temporarily closed due to lack of material (fish) and high operating costs. Lack of adequate fish for processing is an annual problem, especially

when most Senegalese fishers return to Senegal for Ramadan and Tabaski (Islamic holidays). It is expected that the new deep water port in Banjul will reduce the problem of lack of material and the need to operate below capacity. Processing factories also suffer from unreliable provision and high prices for electricity—electricity represents the greatest cost for processing plants with The Gambia having one of the highest kilowatt hour cost of electricity in Africa. Another problem is the high cost of financing.

The artisanal sector, which is the major supplier of both food fish for the Gambian populace and raw material fish for commercial fish processing plants, provides direct employment to 1,410 head fishermen and 4,694 assistant fishermen. Considering fish buyers, processors, boat builders, fuelwood collectors, and other ancillary activities it is estimated that over 200,000 people are directly or indirectly dependent on artisanal fisheries for their livelihoods. Of the 1,410 head fishermen operating in the artisanal fisheries, 805 are Gambian nationals and 605 foreign. In the coastal area, however, foreign nationals—mainly Senegalese—form the majority with 249 head fishermen compared to 167 Gambians. The number of canoes and fishermen operating in artisanal fisheries steadily increased from 1983 to 1997, but thereafter and until 2006 declined. The artisanal subsector is highly diverse, incorporating marine, estuarine and freshwater fishing operations. The majority of the communities located along the Atlantic coastline and close to the River Gambia and tributaries engage in some form of artisanal fishing activity. The more prominent fishing communities are located along the Atlantic coast and include the coastal villages of Kartong, Brufut, Tanji, Sanyang, Gunjur and Bakau, and the riverbank villages of Albreda, Bintang, Kemoto and Tendaba.

Artisanal fishing crafts are predominantly dug-out canoes along the river, and planked open hull vessels (pirogues) of the Senegalese type along the marine coast. Most fishermen (74 %) own their canoes followed by joint ownership (14%). The Frame Survey revealed that 94% of the fishermen use canoes for fishing and the most common type of canoe used is dug-out (50%) followed by planked-dugout (37%). There are also 1,082 un-motorized and 625 motorized canoes.

Pelagics are now the dominant catch of the artisanal fishery. Gear used in the pelagic fishery includes surround gillnets and purse seine nets and the main species that are caught are shads (Bonga), sardinella, anchovies, mackerel, barracuda and jacks. Demersal species are caught by artisanal fishermen using set/bottom gillnets, drift nets, traps, and hook and line. Various species of croaksers, solefish, catfish, cuttlefish, threadfins, grunts and groupers are captured with these fishing gears. Stow nets and drift nets (fele-fele) are especially used by artisanal fishermen for catching shrimps in the estuary and tributaries.

With regard to fish market outlets, about 60 percent of fishermen sell fish catches through Banabana (fish dealers) and 31 percent sell directly to consumers. The rest sell through bidding. The artisanal fish catch is either sold among the local communities for processing (drying and smoking) or is transported and marketed in major towns and villages in the interior. Post harvest losses are high due to a combination of oversupply, lack of preservation and lack of market. The processed fishery products are transported and sold in inland markets, and some are exported to neighboring countries. A proportion of the artisanal fish catch of high value (shrimps, soles, sea breams, lobsters) are purchased by industrial seafood processing companies for export abroad.

The Ministry of Fisheries and communities at the artisanal fisheries landing sites have indicated that Water and Sanitation are development priorities for the artisanal fisheries sector due to the lack of sanitary facilities and potable water sources at most landing sites. This situation poses a public health threat for users of the site and surrounding communities as well as a threat to the quality of fisheries products handled and processed at the sites.

The Gambia's fisheries sector operates under the authority and responsibility of the Minister of Fisheries, Water Resources, and National Assembly Matters 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.

The Fisheries Act empowers the Minister of Fisheries, Water Resources and National Assembly Matters and the Director of Fisheries to declare Special Management Areas for purposes of community-based fisheries management; establish open or closed seasons for specified areas and fish stocks; define minimum fish size regulations; and impose gear and fish method restrictions. See Appendix C for additional information on the legal basis for co-management in The Gambia and the rational for piloting regional demonstration activities in The Gambia.

At stake in a successful ecosystem-based approach to fisheries management is the ability of millions of people to sustain a resource-dependent existence while at the same time protect the overall ecological integrity and biodiversity of the region. The Project workplan described below sets out to contribute to addressing this challenge.

1.2 Program Goal and Intermediate 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 several 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 draft fisheries management plan for sole and other selected species. 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.

Intermediate Results for the USAID/BaNafaa Project are to:

- 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
- 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

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.

Geographic Scope. The Project concentrates its activities 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 as well as the estuarine- and mangrove-dominated portions of The Gambia River (see Figure 2 below). A sister project in Senegal, called 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.

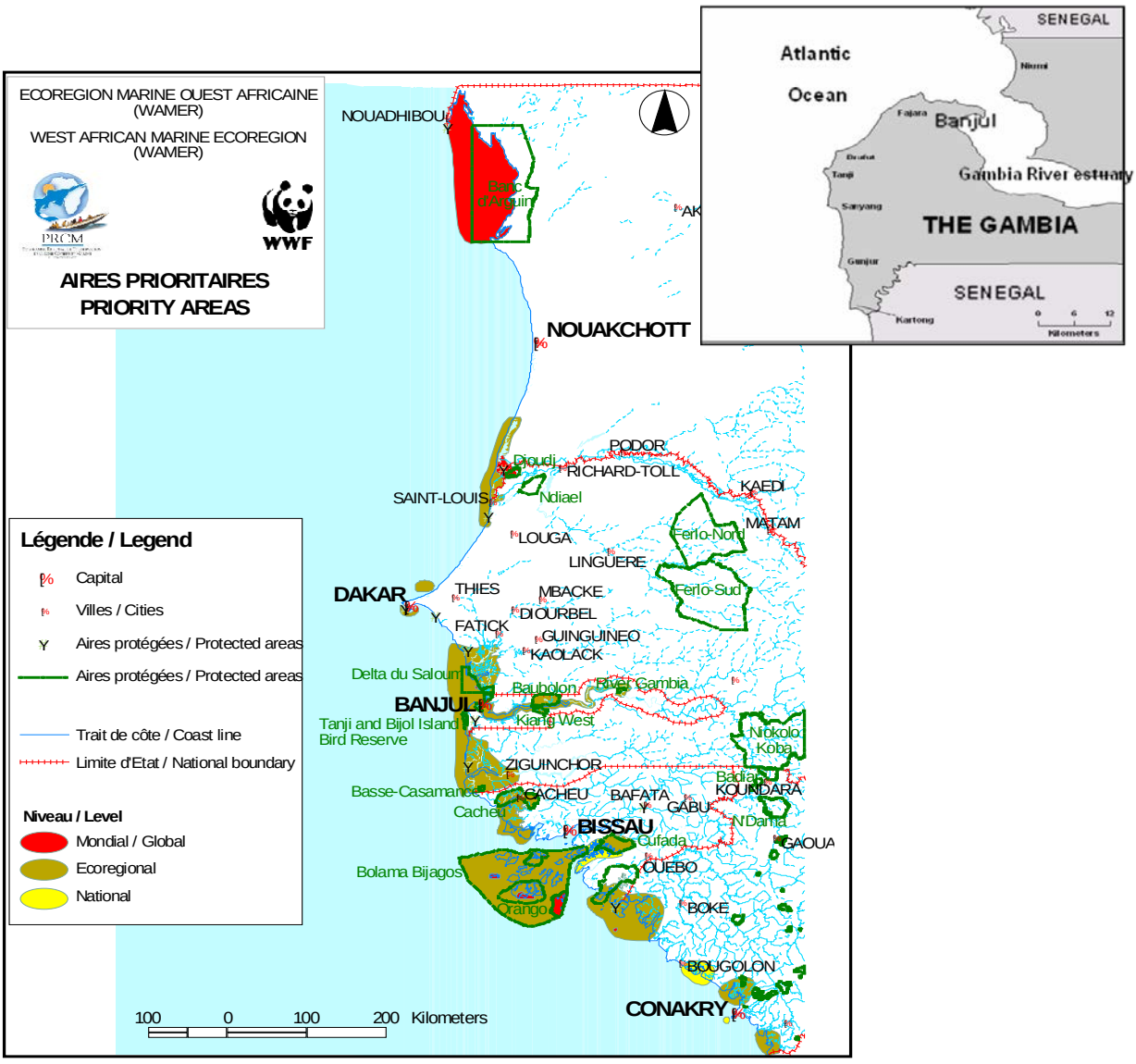


Figure 1. Areas of Biodiversity Significance in the WAMER and The Gambia River Estuary and Atlantic Coast

2. Summary of Accomplishments to Date

The Comprehensive Year 3 Annual Report will be prepared and submitted by October 31, 2012. A few highlights of the major accomplishments in the first three years of the project are provided below. For a summary of project results relative to performance indicators as of the end of Year 2 and targets for Year 3, see Appendix A.

1. Approval of the Fishery Co-Management Plan for The Gambia Sole Complex in January 2012 bringing 121,245 ha under improved management (the entire Atlantic Coast of The Gambia out to 9 nautical miles). The plan designates exclusive use rights to the sole fishery within this zone to the National Sole Fishery Co-Management Committee (NASCOM) and specifies a seasonal closure of one nautical mile from the coastline for all fishing from May1 through October 31 for all fish species and gear types. This is in addition to a minimum fish size, a minimum mesh size and a prohibition on the use of drift nets for the mouth of The Gambia River.

2. Approval of the Cockle and Oyster Fishery Co-Management Plan for the Tanbi Wetlands National Park Special Management Area in January 2012 bringing 6,304 ha under improved management (the entire Tanbi Wetlands National Park). The plan designates TRY Oyster Women's Association as having exclusive use rights in this area, specifies an extended closed season to allow oysters to grow to a larger size before harvesting and identifies gear restrictions to reduce damage to mangroves during harvesting.

3. Successful participatory eco-system-based co-management planning processes that led to the above Co-Management Plans and included the following achievements among others:

   For the Sole Fishery:
   - Action research and technical studies including, sole spawning hotspot mapping, local ecological knowledge, otolith studies, a by-catch study, a fish identification guide, a gillnet study, updated stock assessment, a value chain study, exchange visits on fish processing and a cross-border trade study, among others.
   - Management committees established and actively participating in planning processes (LACOMS and NASCOM). NASCOM legally registered.
   - Agreement with the Marine Stewardship Council on accelerated movement towards international certification of a sustainable Gambian sole fisheries product.

   For the Oyster and Cockle Fishery:
   - Action research and technical studies including, a Participatory Rural Apraisal (PRA), spat settlement studies, oyster aquaculture pilots, a value chain study, and exchange visits on fish processing, as well as water quality monitoring of the Tanbi harvesting areas and a shoreline shellfish sanitation survey showing high potential for a shellfish sanitation program to open new markets.
   - TRY Community Management Committees established and actively participating in planning processes.
   - Institutional strengthening grants to the TRY women's oyster harvesters association to establish business and fundraising strategies

- TRY fundraising event in 2011 attended by more than 250 non-TRY participants including the US Ambassador and the President of The Gambia. Raised 100,000 GMD, 20 scholarships for girls and significantly increased awareness of efforts to sustainably manage the oyster fishery.
- 250 women oyster harvesters participating in a Micro-Credit Scheme
- TRY selected as a UNDP Equator Prize winner in 2012.

4. The first Bilateral (Gambia-Senegal) Fisher Level Co-Management Workshop held in 2012.

5. A Bilateral Climate Change Vulnerability Assessment and a Stakeholder Workshop where 18 government and civil society institutions from Senegal and The Gambia identified priorities for a Bilateral Climate Change Adaptation Add-on Request submitted to USAID/WA in July 2012.

6. Six priority sites for WASH activities prioritized by stakeholders based on a WASH Needs Assessment of 16 fisheries landing sites and oyster and cockle harvesting/processing sites.

3. Year Four Activities

3.1 Introduction

If add-on requests are not approved, USAID/BaNafaa's approach for the remaining 19 months of the project will be 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 will be a key priority. Continuing to reinforce the capacity of the government and civil society co-management institutions responsible for implementation of the two plans will also be central to all Year 4 activities. Due to limited remaining funds, Biodiversity funded activities in particular will be finalized by December 2013 and the remaining months used only to complete WASH activities and to prepare for close-out.

3.2 Intermediate Result 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.1

3.2.1 Effective Sole/Multispecies Demersal Fishery Co-Management Plan

The potential both for advancing the sustainable fisheries management agenda and for social and economic benefits for artisanal fishing communities in the sole fishery in The Gambia is significant as stakeholders in The Gambia continue to engage in participatory ecosystem based co-management of the artisanal Sole fishery under the approved co-management plan. The USAID/BaNafaa project has been the most significant partner of The Gambian Government and fisheries stakeholders in this effort. Year 4 activities described below will continue this focus.

Accomplishing the milestone of an approved sole co-management plan has also advanced the process of meeting Marine Stewardship Council standards for fisheries in transition. While MSC certification has not been the objective of project support, the Gambia's efforts to meet MSC standards are stimulating increasing interest from suppliers of sustainable seafood to Europe. USAID/BaNafaa support for the remaining 19 months of the project aims to leave stakeholders in a stronger position to manage this demand. The project, particularly through NASCOM capacity building activities described below, will work to support an enabling environment for potential price premiums from increasing market demand for sustainably harvested seafood from The Gambia to be realized at the artisanal fisher level.

[1] Note that the Co-Management Plans and most of the other activities described under IR1 also contribute to IRs 2, 3 and 4. Likewise, some of the activities described under IR2 also contribute to IR1.

Gazetting of the Sole Fishery Co-Management Plan.

Due to multiple changes at the Ministerial level since November 2011, the Department of Fisheries is currently without a Minister. Gazetting of the Plan after its approval in January 2012 has, therefore, been delayed. Gazetting will be a top priority for the first quarter of Year 4. Once gazetted, the Co-Management institutions will have the force of law behind them when official enforcement actions are required. However, fisher community consensus created through the participatory co-management planning process is still the most important factor that will contribute to on-going compliance with the plan. USAID/BaNafaa project support will focus primarily on efforts at this level.

Support Integration of Catfish into the Sole Fishery Co-Management Plan.

In Year 4 the project will continue to support work to integrate Catfish, *Arius latiscutatus*, into the Co-Management plan. Much of the Catfish catch is targeted during spawning aggregations outside the mouth of the Gambia river just prior to the rainy season. Hence concerns over this fishing practice and associated risks to sustainability of the stock. 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 by making the Sole plan a more comprehensive multi-species plan. The potential for economic benefits to artisanal fishing communities will, likewise, be broadened under a multi-species 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. While Sole is caught almost exclusively for the export market, other demersals, including Catfish, are valued in local, regional and international markets. Diversified markets mean less vulnerability for fishermen and greater opportunity to maximize value from the catch.

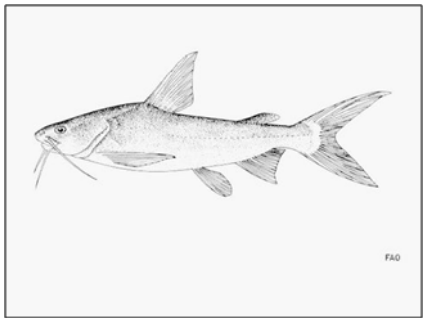


Figure 2. ***Arius latiscutatus, FAO***

In Year 4, this will include completing the Local Ecological Knowledge study begun in Year 3 with a validation workshop and compiling existing information on Catfish from the literature and other available data. In addition to regular quarterly NASCOM meetings and 2 stakeholder meetings on Catfish planned for Year 4, the annual Sole Co-Management Plan review meeting of all stakeholders planned for January 2013 will serve as the forum to discuss formal incorporation

of the additional species. Officially approving an updated plan based on the best available information at the time is expected to be achieved in Year 5 (January 2014) at the annual Sole Co-Management Plan meeting, just before USAID/BaNafaa assistance ends. If the biodiversity add-on request is not approved, more in-depth information, including a value chain study, stock assessment, otolith analysis and additional gear studies will not be pursued, but recommended as part of the future research plan for Catfish.

Conduct a Mesh Size Gillnet Study.

The purpose of the gillnet study conducted in Year 3 was to explore meaningful management options for the artisanal sole fishery related to fishing gear. If fishermen in The Gambia want to use mesh selectivity as a management tool, it needs to have selectivity. The objective of the study was, therefore, to determine selectivity of the gillnet as now fished (as an entanglement net). A secondary objective was to determine the selectivity of the net, especially for catfish, if hung correctly. Preliminary results show that the control (entanglement) net caught all size fish (no selectivity). Hanging the net with a 0.5 ratio increased the mean size of fish capture, but the catch from this net may be so reduced that fishermen are not willing to use it. The study recommended that future research might focus on mesh size as an option. USAID/BaNafaa will support a follow-on gillnet study on mesh size with master fishermen in Year 4. The field data will be collected during quarter 3 by Gibril Gabis and Chis Parkins of URI and a report produced.

Figure 3. Master fisherman setting the net for the gillnet study on hanging ratio in April 2012.

Support Enabling Environment for Consideration of Management options to better align the resource to the biological reference points.

Integral to the co-management planning process is the need for stakeholders to consider further management options to maintain sustainability of the multi-species complex. Support from USAID/BaNafaa in Year 4 will continue to create the enabling environment for this to happen. Consistent support for annual Co-Management Plan review meetings as specified in the Plan, as well as continued support for one additional annual bi-lateral (Gambia-Senegal) fisher level co-management workshop based on the recommendations of the participants of the first meeting held in May 2012, will play a critical role in keeping the consultation and adaptive management process going and institutionalizing it. At the bi-lateral co-management meeting, fishermen voiced their intention to seek to be included in the Senegal-Gambian Reciprocal Fishing Agreement meetings every two years when discussions on Article 1 concerning artisanal fisheries are addressed. Fishermen are clearly better positioned to benefit socially and economically from fisheries management decisions if they are participants in discussions at all levels and have had the opportunity to identify challenges and develop solutions that can be shared at higher level discussions and that are bi-lateral in nature. The annual co-management plan review meeting is tentatively scheduled for Quarter 2. The Bilateral Co-Management Workshop is planned for Quarter 3.

Strengthen Stock Assessment Capacity.

(see IR2 below)

Strengthen Co-Management Organizations' Capacity.

Since signature of the co-management plans in January 2012, consistent support to the co-management organizations through at least two annual cycles of implementation and monitoring of the management measures and through practicing the adaptive management approach embodied in the plans will be a significant factor in institutionalizing the co-management approach and demonstrating its success both to NASCOM members and as a model for other fisheries and other countries. In Year 4 the USAID/BaNafaa project will continue to support institutional strengthening of the National Sole Co-Management Committee (NASCOM) and its associated Landing Site Co-Management Committees (LACOMS) to sustainably manage the artisanal demersal fishery in a manner that represents the interests of their members. The project will support implementation of the first seed grant to NASCOM provided by URI's in-country office in late FY 12 and will provide a second grant in FY 13. These grants will support:

- Establishment and institutionalization of sound financial and administrative systems and procedures (NASCOM's first bank account was just opened in early 2012 and in addition to USAID/BaNafaa support, NASCOM is expected to receive donated funds from Kaufland Seafood's fundraising campaign to support the development of sustainably harvested Sole from The Gambia). This will include the following:
    - Development of a Standard Operating Procedures Manual
    - Administrative and Financial Training provided in-country in Quarter 1 by URI's WASH Administrative/Finance Assistant, Assan Camara and Kim Kaine from

URI/CRC in Rhode Island. NASCOM and TRY will host and manage the training administratively.
    - On-going technical assistance support in admin./finance systems implementation from URI in-country and RI offices.
- Development of a Business Plan
- Holding of regular quarterly and annual co-management meetings as specified in the Co-Management Plan. The annual meeting is tentatively scheduled for Quarter 2.
- NASCOM's support to LACOMs for the development/revision of their by-laws.
- Action research and training focused on implementing management measures as per the co-management plan, reducing post-harvest losses, strategies for capturing potential eco-label price premiums at the level of fishing communities, and other issues of importance to NASCOM/LACOM members. This will include improving Fish Quality Assurance in combination with WASH investments at the landing sites, through site based training by the USAID/BaNafaa WASH Coordinator in fish hygiene and handling at priority landing sites. NASCOM will host and manage the trainings administratively.
- Implementation of the twinning activity (exchange visit) between fishing communities in The Gambia and Senegal as identified in the Bilateral Co-Management Workshop action plan.

The project will also support The Association of Gambian Fisheries Companies (TAGFC), which is an institutional member of NASCOM, with a seed grant from URI's in-country office in Year 4. The grant will be developed in Quarter 1 of Year 4 and will enable TAGFC to strengthen its institutional capacity and to begin piloting activities that will address the need for traceability of Sole from The Gambia if it is to be marketed under an eco-label in the European export market. The President of TAGFC attended the URI Fisheries Leadership Summer Institute in Rhode Island in July 2012. TAGFC will also participate in the in-country administrative and financial training provided by URI in Quarter 1.

Support readiness for Marine Stewardship Council (MSC) provisional/conditional certification.

The Gambia is MSC's pilot country for fisheries in transition which helps developing countries move towards sustainability. It is anticipated that continued USAID/BaNafaa support for additional strengthening and documentation of systems and institutions, as described above and under IR2 below, will be required for provisional/conditional certification to be granted and subsequently remain on track towards a permanent status. USAID/BaNafaa's focus will continue to be on sustainable management of the Sole (and now multispecies including Catfish) fishery. MSC certification of The Gambia Sole fishery is one potential opportunity that could result. Certification or provisional certification could provide economic benefits to Gambian stakeholders, either through maintaining export opportunities in an increasingly demanding market and/or improving them while also creating added incentive to sustainably manage the fishery.

Activity Implementation Schedule

IR1 Activities	FY13				Local Implement. Partners	BaNafaa in-country	URI
	Q1	Q2	Q3	Q4			
Gazetting of the Sole Co-Management Plan					DoFish	Ousman WWF	Karen
Gillnet Study testing impact of larger mesh size conducted					Master Fishermen, DoFish	Ousman Gibril WWF	Parkins, Castro
Support addition of Catfish to the Sole Co-Management Plan					NASCOM, DoFish	Ousman, Gibril WWF	Castro
Implement Seed Grant #1 to NASCOM					NASCOM	Ousman	Karen, Castro
- SOP Manual					‘	‘	‘
- Business Plan					‘	‘	‘
- LACOM By-Laws revised					‘	‘	‘
- Quarterly/annual Co-Management Plan meetings held and documented					‘	‘	‘
Seed Grant #2 Capacity Strengthening to NASCOM					NASCOM	Ousman	Karen, Castro
- Fish handling and hygiene training, selected landing sites					NASCOM	Bamba	Karen
- Bi-lateral co-management twinning exchange visit					NASCOM	Ousman,	Castro
Seed Grant #1 Capacity Strengthening to TAGFC					TAGFC	Ousman	Karen, Castro
Implementation TAGFC Seed Grant, including activities focused on traceability					TAGFC	Ousman	Karen, Castro
Administrative/Financial Training for Seed Grant recipients					NASCOM, TAGFC	Assan	Kim

Key Outputs and Milestones

- Gazetted Sole Co-Management Plan
- Gillnet Study Report
- Catfish LEK Final Report after Validation Workshop
- Catfish - Desktop survey of existing knowledge Report
- Draft Amendment to the Sole Co-Management Plan for Catfish (official approval Year 5)
- NASCOM Standard Operating Procedures (SOP) Manual
- NASCOM Business Plan
- LACOM By-Laws revised/developed (7)
- Sole Co-Management Plan Meeting Reports (4 Quarterly and 1 Annual (Jan. 2013))

- Fish Handling and Hygiene Training Modules.
- Bilateral twinning exchange visit report.

Key Results

No.	Indicator	FY13 Target
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)	65
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	85

3.2.2 Effective Oyster and Cockle Co-Management Plan

The key strategy of the USAID/BaNafaa project to support development of a participatory ecosystem based co-management approach in The Gambia for sustainable management of the oyster and cockle fishery and adjacent mangroves was to team up with TRY Oyster Women's Association and build on what the Association was already doing with the oyster and cockle harvesters. Building the capacity of the Association to serve members needs and uplift their quality of life was, and is still, the key long term goal. The project's near term goal was to develop a model of a co-management plan that empowers the women harvesters to directly manage the harvesting of the oysters and cockles, and that can be replicated in other mangrove subsystems within the country and region.

With approval of The Oyster and Cockle Co-Management Plan for the Tanbi Wetlands National Park in Year 3, this goal has been achieved. In Year 4, the project will continue to support the necessary conditions for effective implementation of the Plan, as well as replication of the model in the cockle and oyster harvesting community and mangrove ecosystem in Kartong, also affiliated with TRY. These Year 4 activities are described below:

Gazetting of the Oyster and Cockle Fishery Co-Management Plan for the Tanbi.

Due to multiple changes at the Ministerial level since November 2011, the Department of Fisheries is currently without a Minister. Gazetting of the Plan after its approval in January 2012 has, therefore, been delayed. Gazetting will be a top priority for the first quarter of Year 4. Once gazetted, the Co-Management institutions will have the force of law behind them when official enforcement actions are required. However, TRY community consensus created through the participatory co-management planning process is still the most important factor that will contribute to on-going compliance with the plan. USAID/BaNafaa project support will focus primarily on efforts at this level.

Support Development of a Kartong Cockle and Oyster Co-Management Plan.

In Year 4, USAID/BaNafaa support for participatory action research on cockle ranching/redistribution from high density areas to low density areas, including trials of stocking density, optimal location of plots in the intertidal zone, optimal harvesting times and other management parameters will continue. This approach to research strengthens the capacity of TRY women in Kartong and the local fisheries officer to identify and test management options and to conduct similar research in the future (the basis for a sound adaptive management approach). This action research, together with the Participatory Rural Appraisal (PRA) conducted in Year 3 will form the basis for the Co-Management Plan that will be developed in Year 4 for the Kartong Special Management Area. The project, working with DoFish and TRY, will support 4 community meetings and 2 larger stakeholder workshops as well as participation of the Peace Corps Volunteer based in Kartong (new volunteer arrived in May 2012) in order to develop the plan into a near final draft by September 2013. The conclusion of this process in a formal Co-Management plan approved by the Department of Fisheries may not be achieved by the project's current end date in April 2014. However, TRY and DoFish will have the capacity to complete the process on their own, having done it before.

Strengthen TRY Capacity.

Since signature of the co-management plans in January 2012, consistent support to the co-management organizations through at least two annual cycles of implementation and monitoring of the management measures and through practicing the adaptive management approach embodied in the plans will be a significant factor in institutionalizing the co-management approach and demonstrating its success both to TRY members and as a model for other fisheries and other countries. In Year 4 the USAID/BaNafaa project will continue to support institutional strengthening of TRY through a seed grant provided by URI's in-country office in Quarter 1for:

- The Peace Corps Volunteer placed with TRY
- Holding of regular quarterly and annual co-management meetings as specified in the Oyster and Cockle Co-Management Plan for the Tanbi. The annual meeting is tentatively scheduled for Quarter 2.
- Regular seasonal collection of data on the biological status of the stock from sales point samples. This data will be used to adapt management to maintain the biological status of the stock and will provide information that can help maximize economic gains for TRY members.
- Technical support and training focused on value added, marketing and other issues of importance to TRY members with the objective that shellfish harvesters being accessing local tourist hotel markets catering to international tourists by the end of Year 4. In addition to following up on the findings of the hotel market survey conducted in Year 3, this will include improving Shellfish Quality Assurance in combination with WASH investments at the landing sites, through site based training by the USAID/BaNafaa WASH Coordinator in shellfish hygiene and handling at priority landing sites. TRY will host and manage the trainings administratively.

- Technical Assistance for implementation of TRY's business plan aimed at sustainably financing its operations, providing services to and increasing livelihood opportunities for its members. For example, the project will continue to provide technical support for TRY in its fundraising and outreach efforts as it did in Year 3 (contributing to TRY's success in winning the Equator Prize, conducting its annual oyster festival, and most recently accessing funding from UNDP for value added processing activities that includes an oyster smoking oven for each of the 15 TRY communities).
- In Year 4, funding for TRY's operating costs will be minimal, with the focus on sustainability after USAID/BaNafaa support ends by April 2014.
- Administrative and Financial Training provided in-country in Quarter 1 by URI's WASH Administrative/Finance Assistant, Assan Camara and Kim Kaine from URI/CRC in Rhode Island. NASCOM and TRY will host and manage the training administratively.
- On-going technical assistance support in admin./finance systems implementation from URI in-country and RI offices.

Figure 4. TRY Oyster Women's Association members recognized during a ceremony in The Gambia after winning the UNDP Equator Prize

Support Development of a Gambia National Shellfish Sanitation Plan.

Water quality testing at 15+ oyster harvesting sites in and around the Tanbi Wetlands National Park since 2010 have shown and continue to show encouraging results as detailed in Project progress reports. These results are among the lowest counts in tropical oyster growing grounds and suggest that a shellfish sanitation program could allow for the safe harvest of live oysters for a raw oyster market to tourist hotels or, potentially, an eventual export market. The aim has been to start laying the foundation for a shellfish sanitation program including traceability standards. In Year 3, the project took the next step and supported the Water Resources Laboratory with the

training and resources to conduct a full shoreline sanitation survey of the Tanbi National Park. In conjunction with water quality data, the results of this survey are now available to decision-makers. In Year 4 the following activities will be prioritized. Dr. Michael Rice of URI will continue to provide technical assistance.

- The project will continue on-going work with stakeholders to establish in an interagency Memorandum of Understanding (MOU) for the development of a Gambian National Shellfish Sanitation Plan for the Tanbi Wetlands National Park (GNSSP – Tanbi). It is expected that the MOU will be signed by Quarter 4, prior to or concurrently with the annual Co-Management Plan Review meeting. The aim is for the GNSSP - Tanbi process to be recognized as a pilot for setting up interagency collaboration.

- Monthly Water quality testing conducted by the Water Resources Laboratory through a contract from the URI in-country office will continue to be supported by the project in FY 13 (Year 4). Commitments to fund water quality testing from the Water Resources Laboratory's budget or other Government of The Gambia sources starting in October 2013, will be included in the interagency MOU for development of GNSSP-Tanbi.

- A Draft GNSSP-Tanbi will be developed by the end of Year 4 with USAID/BaNafaa support, including the preliminary mapping of water quality zones that will form the basis for management actions. Administrative management of the stakeholder meetings for the MOU and draft GNSSP development will be handled by the Water Resources Laboratory as part of their contract from the URI in-country office.

Activity Implementation Schedule

IR1 Activities	FY13				Local Implement. Partners	BaNafaa In-country	URI
	Q1	Q2	Q3	Q4			
Gazetting of the Oyster and Cockle Co-Management Plan					DoFish	Ousman WWF	Karen
Seed Grant Capacity Strengthening to TRY					TRY	Ousman, Babanding	Karen
- Quarterly/annual Co-Management Plan meetings held and documented					'	'	'
- Shellfish handling and hygiene training, selected landing sites					'	Bamba	'
- Peace Corps Volunteer posting with TRY					'	'	'
- Annual market/biological survey at sales points					'	'	'
Administrative/Financial Training for Seed Grant recipients					TRY, NASCOM, TAGFC	Assan	Kim
Kartong Oyster and Cockle Co-Management Plan Development (to draft)					TRY	Ousman, Babanding	Karen, Dr. Rice
- Community meetings					TRY, DoFish	Ousman, Babanding	Karen, Dr. Rice

IR1 Activities	FY13				Local Implement. Partners	BaNafaa In-country	URI
	Q1	Q2	Q3	Q4			
- Larger stakeholder workshops					TRY, DoFish	Ousman, Babanding	Karen, Dr. Rice
Cockle Redistribution research continued					TRY DoFish,	Ousman Babanding WWF	Dr. Rice
Monthly Water Quality testing continued					Water Resources Lab. DoFish,	Bamba	Dr. Rice
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	Bamba, Ousman Babanding	Dr, Rice
Draft GNSSP – Tanbi developed, including preliminary mapping of water quality zones					Water Lab, DoFish, DPWM, DOH, NEA	Bamba, Ousman, Babanding	Dr. Rice

Key Outputs and Milestones

- Gazetted Cockle and Oyster Co-Management Plan
- Co-Management Plan Meeting Reports (4 Quarterly and 1 Annual (Jan. 2013))
- Annual biological survey at sales points report
- Technical Report on Cockle Redistribution
- Draft Kartong Co-Management Plan.
- Monthly and annual Water Quality Reports
- Interagency MOU for the development of a GNSSP – Tanbi
- Draft GNSSP - Tanbi
- Shellfish handling and hygiene training modules

Key Results

No.	Indicator	FY13 Target
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)	62
4	No. of institutions with improved capacity to address NR, BD, climate change, water issues as a result of USG assistance	3 (NEA, DPWM, Water Lab for GNSSP work)
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	92

3.2.3 Water, Sanitation and Hygiene (WASH)

The USAID/BaNafaa Project was awarded a Water and Sanitation (WASH) add-on at the end of Year 2 to support needed water supply and sanitation improvements at approximately seven public sole fishery and oyster/cockle fishery landing/processing sites by April 2014. The WASH component 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].

To implement WASH in Year 3, URI established an in-country office at the TRY Center, recruited a WASH Coordinator, Dr. Bamba Banja, and an Adminnistrative/Finance Assistant and contracted with local implementing partners. TARUD was contracted to conduct a needs assessment, training and management planning. GAMWORKS was contracted for the design, environmental assessment, sub-contracting and oversight/quality control of infrastructure construction. In Year 3, TARUD conducted the WASH Needs Assessment in 16 communities. A stakeholder workshop to review the results of the needs assessment, finalize the report, and prioritize sites identified the following six sites for USAID/BaNafaa WASH activities.

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.

In Year 4, implementation of the WASH component will focus on delivering WASH training, functional management structures and management plans and potable water and sanitation facilities at 4 of the six selected sites by the end of September 2013. The specific Year 4 activities for each implementing partner are as follows:

For TARUD:

- Continue PHAST training begun at the end of Year 3 for all 6 sites. Participatory Hygiene and Sanitation Transformation (PHAST) is aimed at CFC Management Committees, User Groups, and Local Government Authority. The training will include items such as personal hygiene, waste management, as well as management and maintenance of water and sanitation facilities.

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

- Continue community awareness raising, training and outreach on hygiene promotion begun at 2 sites in Year 3 plus an additional 2 sites. The broader community of fishermen, fish vendors and handlers will be targeted for training and outreach on hygiene promotion, sanitation and safe disposal of fish waste through a training of trainers approach.
- Management planning in 6 communities, resulting in 4 signed WASH site and facilities management plans by the end of Year 4. Plans will include a financial sustainability plan (e.g. user fees), maintenance and repair responsibilities, and personal hygiene as well as fish handling and processing sanitation good practices.

For GAMWORKS:

- Environmental Compliance activities identified in the Year 3 environmental screening process at 4 sites (including water quality testing, permitting, implementation of construction site mitigation measures)
- Designs for 4 additional sites (the initial 2 are estimated to be completed in Year 3. Two more will be started early in Year 4 and 2 more will be designed by the end of Year 4)
- Contracting with construction firms for continuing construction at the initial 2 sites and beginning construction at an additional 2 sites.
- Oversight of construction and environmental compliance at construction sites.
- Handover of water and sanitation facilities at 4 sites to Site Management Committees by September 2013. Two are expected by Quarter 2 and two by Quarter 4.

URI will organize and manage public handover ceremony events in collaboration with DoFish, implementing partners and sit Management Committees.

Activity Implementation Schedule

IR1 Activities	FY13				Local Implement. Partners	BaNafaa In-country	URI
	Q1	Q2	Q3	Q4			
PHAST Training for 6 sites					TARUD	Bamba	Karen
Community awareness raising, training and outreach for 4 sites through TOT model					TARUD	Bamba	Karen
Management planning 1st 2 sites					TARUD	Bamba	Karen
Management planning 2nd 2 sites					TARUD	Bamba	Karen
Management planning 3rd 2 sites					TARUD	Bamba	Karen
Environmental Compliance activities at 4 construction sites					GAMWORKS	Bamba	Karen
Site designs for 4 additional sites (2 in Q1 and 2 in Q4)					GAMWORKS	Bamba	Karen
Contracting for construction of infrastructure at 2 additional sites					GAMWORKS	Bamba	Karen
Construction at 4 sites					GAMWORKS	Bamba	Karen
Handover of 4 completed infrastructure (2 in Q2 and 2 in Q4)					GAMWORKS	Bamba	Karen

Key Outputs and Milestones

- 6 communities trained in PHAST (may be achieved by the end of FY12)
- Community awareness raising, training and outreach TOT modules and support materials and post training action plans for trained trainers at each of 4 sites showing how trainers will in turn train an average of 1000 people per site (more at larger fisheries sites and fewer at smaller oyster sites).
- Signed WASH Management Plans for 4 sites.
- 4 approved site designs (2 in Q1 and 2 by Q4). These are in addition to the first 2 approved in FY12.
- Handover of water and sanitation facilities at 4 sites.

Key Results

No.	Indicator	FY13 Target
W1	Improved access to water and sanitation facilities	12,000
W2	Number of persons receiving public health and sanitation training (PHAST)	0*
W3	Number of persons receiving training and outreach messages on hygiene promotion	4000
W4	Community water and sanitation committees established and trained with program assistance	4

* Note that the PHAST training is being conducted in late September 2012. If not completed by the end of the FY12, a target of 240 will be reported in FY 13.

3.3 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.[3]

3.3.1 DoFish Stock Assessment Capacity Strengthened.

DoFish human resources capacity to do stock assessment and analysis strengthened to i**mprove regularity and quality of measurement of the biological status of the stock**.

In Year 4 with limited time and resources remaining, this effort will include the following activities to be supported with technical assistance from URI Fisheries Center staff Kathy Castro, Najih Lazar and Barbara Sommers:

- Support to the DoFish Statistics unit and in-country stock assessment training by URI technical specialists. Participants at the URI Summer Institute course on Fisheries Leadership in July 12 developed ideas for the organization and functioning of the DoFish

[3] Note that many of the activities described under IR1 also contribute to IR2.

Statistics Unit that will be the basis for discussion and planning with DoFish in FY 13. Sustainability of the stock assessment function at DoFish after USAID/BaNafaa Support ends in December 2013 will be the strategic priority.

- In-country fish biology training for DoFish landing site staff. URI Summer Institute alumni from previous years will deliver this training in-country using the Fish Identification Guide that was finalized in Year 3. The guide will now be laminated and distributed to DoFish agents at the landing sites.
- Support for FY 13 annual stock assessment update by URI technical specialist (Najih Lazar).
- Support for completion of 2nd and final year of degree training in Fisheries in Nigeria for one DoFish staff, Mr. Cham, in FY13 (the other person supported by the project Mr. Kanyi Babanding, will finish his degree in September 2012).

3.3.2 Progress on Bi-lateral Sustainable Fisheries Management Issues.

Develop Cabinet Paper on Recommendations to Address Cross-Border Trade Issues.

The value chain for sole identified the fact that an unknown quantity of sole is transshipped into Senegal and much of this transshipment is not being fully captured by the DoFish statistics (and distorts Senegal sole capture statistics). Implications for marketing an eco-labeled product is also a concern. Sole is loaded into trucks coming from the Casamance but reported as caught in Senegal and then transshipped to Senegal for eventual processing and export. Ecolabeling may help curtail this trade, but other measures might be identified to bring this illegal trade into the open. Therefore, additional assessment of the cross border trade was carried out to fully understand market context and opportunities for improved marketing that benefits more fully Gambian fishermen, processors and exporters.

Following the Cross-Border Trade Study conducted in Year 3 and the stakeholder/validation meeting that followed, USAID/BaNafaa will support the recommendation that a committee be established to develop a Cabinet Paper on the issues identified. This paper will be important in setting the agenda for negotiations of renewal of Senegal-Gambia bilateral fisheries agreement. Given the current situation of no Minister for the Departments of Fisheries and Water Resources, the objective is to finalize the Cabinet paper through 3 committee meetings and a final validation workshop supported by the project in Year 4 and to submit it to the level of the Permanent Secretary in Year 5. Without a Minister, introduction of the paper at the Cabinet level may not be realistic during the remaining USAID/BaNafaa project timeframe.

Support an Annual Bi-lateral Co-Management Workshop and Action Plan Implementation.

In May 2012, USAID/BaNafaa supported the first Bi-lateral (Gambia-Senegal) Co-Management Workshop bringing together fisher-level participants and some government representatives from both countries. As documented in Year 3 progress reports, the event was well received and resulted in the recommendation that it be institutionalized and held annually. In Year 4,

USAID/BaNafaa will, therefore, support the second annual gathering of the forum in Quarter 3, FY13. USAID/BaNafaa will also support the implementation of one of the Bi-lateral Co-Management Action Plan items identified at the first workshop, the twinning of fishing communities in The Gambia and Senegal at the fisher level. Through the URI seed grant to NASCOM, a fisher to fisher exchange visit between twinned communities to be planned at the Quarter 3 forum will be supported in Quarter 4. As noted under IR1 above, at the bi-lateral co-management meeting, fishermen also voiced their intention to seek to be included in the Senegal-Gambian Reciprocal Fishing Agreement meetings every two years when discussions on Article 1 concerning artisanal fisheries are addressed. If this event is held in FY13, USAID/BaNafaa staff will be available to fishermens' representatives to provide technical support if they are granted the opportunity to participate.

3.3.3 Build Capacity of Environmental Journalists.

USAID/BaNafaa project support has resulted in significant progress by the Government of The Gambia and other stakeholders over the last three years on advancing a participatory eco-system-based co-management approach to sustainable fisheries management in The Gambia. However, coverage of sustainable fisheries management issues by the local print, electronic, radio and television media has not gone beyond relatively rote, descriptive coverage of public workshops, meetings and events. An informed and educated public is one of the principal factors that contributes to an enabling environment for sustained public and private investment and action on sustainable fisheries management issues. This will be especially important after USAID/BaNafaa support ends. In Year 4, the project will 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.

3.3.4 Fisheries Governance Scorecards.

In Year 4 USAID/BaNafaa will continue to use the Governance Scorecard process annually for stakeholders to track progress on governance indicators in the sole and oyster and cockle fisheries over time. The USAID/BaNafaa project conducted a baseline in 2009 and one annual rating in 2010 of fisheries governance along the parameters of: 1.) Goals, 2.) Constituencies, 3.) Formal Commitment and 4.) Institutional Capacity. The Governance Scorecard is one of the project's PMP indicators. In quarter 2, Year 4, the third annual rating of each of the two fisheries will be conducted. A presentation of the baseline and trends will be made at the first annual review meeting for each of the co-management plans also scheduled for Quarter 2.

3.3.5 Climate Change.

A Bi-lateral Climate Change Adaptation Vulnerability Assessment was conducted and a Climate Change Adaptation add-on request submitted to USAID/WA in July 2012. If approved, this workplan will be revised to incorporate additional Climate Change Adaptation activities. Otherwise, the results of the Vulnerability Assessment will be taken into account when implementing Bio-diversity and WASH activities for the remaining 19 months of the project and

stakeholder institutions will be encouraged to incorporate Climate Change considerations into all of the activities associated with this workpan.

Activity Implementation Schedule

IR2 Activities	FY13				Local Implement. Partners	BaNafaa In-country	URI
	Q1	Q2	Q3	Q4			
Support to DoFish Statistics unit and in-country stock assessment training.					DoFish	Ousman WWF	Castro, Najih, Barbara
In-country fish biology training					DoFish, URI course alumni	Ousman, Gibril WWF	Castro
Support annual stock assessment (Najih)					DoFish	Ousman WWF	Najih, Castro
Support Cross Border Trade Cabinet Paper development (submitted to Permanent Secretary) 3 committee meetings + 1 validation workshop					DoFish, Committee	Ousman WWF	Karen, Brian, Castro
Bilateral Co-Management (Gambia/Senegal) fishers and decision-makers annual workshop					NASCOM, DoFish, DPM, TRY	Ousman WWF	Castro
Support Bilateral Co-Management Action Plan - Twinning (through NASCOM seed grant fisher level exchange visit (see IR1 above))					NASCOM, DoFish, DPM	Ousman	Castro
Support for Environmental Journalist's Group (BAJ) launch and training					BAJ	Ousman WWF	Karen
Governance Scorecards (Sole and Oyster)					NASCOM, TRY, DoFish	Ousman	Karen

Key Outputs and Milestones

- DoFish Statistics Unit organizational chart, job descriptions, proposed budget and data collection tools updated and approved at the Director level.
- Fish Biology Guides laminated and distributed to DoFish landing site staff.
- FY13 Updated Stock Assessment Report produced and presented to DoFish/NASCOM.
- Final Cross Border Trade Cabinet Paper.
- 2nd Annual Bi-Lateral Co-Management Workshop Report
- BAJ launch, training report and action plan for reporting on sustainable fisheries management issues.
- Governance Scorecard Ratings Conducted for sole and oyster fisheries.

Key Results

No.	Indicator	FY13 Target
4	No. of institutions with improved capacity to address NR, BD, climate change, water issues as a result of USG assistance	4 (BAJ + 3 (NEA, DPWM, Water Resources Lab.) for GNSSP work described under IR1)
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	33
6	Improvements on governance scorecard	# is increasing
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)	1 Cabinet Paper

3.4 Intermediate Result 3:

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

The Co-Management plans and Year 4 activities described under IR1 will also contribute to this IR. These include the:

- Expanded Sole/Multispecies Catfish Fishery Co-Management Plan,
- Oyster and Cockle Co-Management Plan for the Tanbi
- Draft Oyster and Cockle Co-Management Plan for Kartong

3.5 Intermediate Result 4:

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

The Co-Management plans and activities described under IR1 will also contribute to this IR. These include the:

- Expanded Sole/Multispecies Catfish Fishery Co-Management Plan,
- Oyster and Cockle Co-Management Plan for the Tanbi
- Draft Oyster and Cockle Co-Management Plan for Kartong

Key Results

No.	Indicator	FY13 Target
12	No. of Hectares in areas of biological significance under improved natural resource management (ROECCR 1.1):	0 additional Kartong Plan in draft. Catfish added , but not adding Ha.

3.6 Communications and Outreach

The Project will produce several outreach and communications products in Year 4. This will include preparing outputs of many of the technical studies conducted as "technical reports" and made available via the CRC website. The Workplan, periodic project highlights and success stories and management plans will also be made publically available via the CRC website and the DEC clearinghouse. The project will also work with the communications officer at USAID/West Africa to inform them of events that may be of interest to have USAID staff attend, for review of press releases and to provide them with success stories.

4. Project Management

4.1 Strategic Partners

Since this Project is an Associate Award under the Leader with Associates Cooperative Agreement for *Sustainable Coastal Communities and Ecosystems* (SUCCESS) Program, the Coastal Resources Center (CRC) at the University of Rhode Island (URI) is the lead institution responsible for overall Project management and implementation including programmatic and financial reporting to the USAID/West Africa Regional Office. The World Wide Fund for Nature (WWF) West Africa Marine Program Office (WAMPO) located in Dakar, Senegal with a field office in The Gambia is the primary regional and in-country implementation partner for the fisheries activities to be implemented in Year 4. Some of the fisheries work with local partners is now be managed administratively directly by the URI in-country office that also manages WASH activities. These include TRY, NASCOM, TAGFC and the Water Resources Laboratory activities. However, the USAID/BaNafaa Project Manager at WWF in The Gambia continues to oversee all activities programmatically. The WASH component that started in Year 3 is implemented by local partners TARUD and GAMWORKS contracting directly with URI in the US.

Several other organizations play critical partnership roles in implementation or as primary clients who benefit from the Project. The Gambia Department of Fisheries (DoFish) is the primary national institution identified for institutional strengthening as well as the Department of Parks and Wildlife Management. Also targeted are the National Sole Co-Management Committee, Landing Site Co-Management Committees, Community Fisheries Centers and the TRY Oyster Women's Association. Each will contribute resources (e.g. staff time, equipment, etc.) to implementing a unified vision for the Project. Additional partners with roles include the USAID West Africa Regional Office and USAID Senegal. At the regional scale, the USAID Wula Nafaa II and USAID/COMFISH Project in Senegal and other ongoing donor regional initiatives also play a role. The Project also coordinates with other U.S. government-funded initiatives in the region as appropriate.

4.2 Operational Staffing and Lines of Authority

CRC and the WWF-WAMPO are the primary Project management and implementation partners. CRC will supervise WWF in their role in the Project. The in-country Project Manager (PM) is a full time position contracted by and housed in the WWF field office in The Gambia. He is the

primary liaison with the USAID/West Africa Regional Office in Accra, Ghana. The PM develops detailed terms of reference, contracts and supervises local consultants and other local partners contracted to provide Project services. Other full time local staff are contracted by WWF. Both WWF and CRC provide short-term foreign technical assistance and consultants as needed. The PM directs and supervises in-country field staff and activities, and is responsible for day-to-day field operations in The Gambia. CRC/URI has also established its own in-country office in The Gambia, primarily to manage the WASH component that began in Year 3, but also to implement directly some of the fisheries work with local partners previously managed under the WWF sub-contract. The WASH Coordinator and an Administration and Finance Assistant manage the URI in-country office. The WASH Coordinator is supervised by the BaNafaa Project Manager and provided oversight by the U.S. based BaNafaa lead.

The WWF National Program Coordinator in The Gambia serves as a senior advisor to the project. The WWF-WAMER Director of Conservation (Arona Soumare) provides WWF supervision of the PM (Ousman Drammeh). The Director of International Programs at CRC/URI (Brian Crawford) also serves as a senior advisor. Karen Kent is the CRC/URI staff with overall responsibility and oversight of the Project. Since URI is the legally entity in charge of the Project, Karen Kent will also be the URI staff person responsible to USAID. Extension staff are supervised by the PM and serve as the lead organizers, facilitators and liaisons with community-level government, civil society organizations and local NGOs. The PM will also act as the main liaison with strategic partners in The Gambia at the national level and in the region, especially with the DoFish in The Gambia and Senegal, and with key private sector stakeholder groups.

Staff responsibilities for key management activities are depicted in the table below.

Program Areas	Local Implementing Partners	WWF/URI in-country Person	CRC Point of Contact
PMP reporting	WWF, TARUD, GAMWORKS, TRY, NASCOM, TAGFC	Ousman	Karen
TraiNet	WWF, TARUD, TRY, NASCOM, TAGFC	Ousman	Kaine
Quarterly financial reporting	WWF, TARUD, GAMWORKS, TRY, NASCOM, TAGFC	Gaye, Bamba, Ousman	Kaine
Quarterly program reporting	WWF, TARUD, GAMWORKS, TRY, NASCOM, TAGFC	Ousman	Kent
Annual work planning	WWF, TARUD, GAMWORKS, TRY, NASCOM, DoFish	Ousman	Kent

4.3 Performance Management and Reporting

The goal of performance management and evaluation is to encourage adaptive management and learning within the Project and to report results to USAID/West Africa. The Gambia - Senegal Sustainable Fisheries Project contributes directly to USAID West Africa ROECCR Results Framework, specifically IRs 1, 3 and 4 (see Appendix B). Effective performance management and reporting requires collecting timely information using indicators selected to provide meaningful information on progress towards stated objectives. In Year 1, the Project developed a

Performance Management Plan (PMP), a summary of which is presented in Appendix A. The PMP includes key results, refined performance targets disaggregated by year, specific monitoring parameters, and source(s) of data for each indicator. Time-bound targets were refined through the work planning process in consultation with local partners and beneficiaries. These targets will be reviewed annually and adjusted as necessary based on Project progress, experience and lessons learned. USAID standard indicators for Biodiversity, Climate Change and WASH are included in the PMP and are tagged for easy reference in Appendix A. ***In Year 4 URI proposes to reduce and simplify the indicators reported by the project to more closely align with ROECCR indicators. The remaining priority indicators now include only ROECCR standard indicators and one custom URI indicator on governance scorecards.***

Quarterly performance monitoring reports document progress on achieving results. These reports include: 1) a comparison of actual accomplishments against the targets established for the period; 2) explanation of quantifiable outputs generated by Project activities; 3) reasons why goals were or were not met. The data reported is supported by evidence collected and filed by the PM, or his designee, who will serve as the in-country PMP coordinator. The CRC provides quality control measures to ensure the PMP system is properly implemented.

The USAID/BaNafaa Project invests resources in monitoring and reporting to foster learning and adaptive management. Learning and sharing occurs across implementation sites and with other projects and programs. An internal self- assessment is conducted annually in conjunction with the work-planning meeting.

Regular Project management and annual reporting activities are carried out by the CRC and WWF senior management team and coordinated by the PM. Main tasks and reporting requirements include:

- Preparation and submission of quarterly progress reports to USAID/West Africa CTO (Cognizant Technical Officer) and DoFish
- Timely and regular input of data into the USAID TrainNet system for all Project training activities
- Submission of all key documents such as workplans and technical reports to the USAID Development Clearninghouse.
- Annual self-assessment of progress and annual workplan preparation and submission by CRC/WWF for approval by USAID.
- Collection, analysis and reporting of data to USAID on Project indicators and targets for Project performance monitoring, submitted quarterly as part of the standard quarterly progress report
- Monthly accounting reports sent from WWF, TARUD and GAMWORKS to CRC
- Expenditure reports submitted to USAID from URI.

The schedule for producing the above listed tasks and reports are provided in the table below.

Management and Administration Activity Implementation Schedule

Activity	2010-2011												Responsible Person
	O	N	D	J	F	M	A	M	J	J	A	S	
Routine reporting													
Monthly activity updates to CRC	■	■	■	■	■	■	■	■	■	■	■	■	OD
Monthly key staff (WWF-CRC) Skype conference calls	■	■	■	■	■	■	■	■	■	■	■	■	KaKe
Quarterly PMP reporting	■			■			■			■			OD
Draft quarterly report to URI for review	■			■			■			■			OD
Review comments from CRC	■			■			■			■			KaKe
Quarterly reports to USAID	■			■			■			■			OD
Input PMP training data into the USAID TraiNet	■	■	■	■	■	■	■	■	■	■	■	■	KK
Stakeholder progress reporting and annual planning											■		OD
Workplan to USAID												■	BC
Workplan approval by USAID												■	GYQ
Financial Management													
Monthly account reports from WWF, TARUD and GAMWORKS to CRC	■	■	■	■	■	■	■	■	■	■	■	■	MG
Expenditure reports to USAID from CRC/URI			■			■			■			■	KK

KaKe - Karen Kent (CRC), KK-Kim Kaine (CRC)
OD - Ousman Drammeh (WWF), MG - Mamadou Gaye (WWF)
GYQ – Georgette Yarboi-Quayson (USAID/Accra/WA/PO)

4.4 International Travel Schedule

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

- Kim Kaine: Administrative/Financial Training for local seed grant partners, TRY, NASCOM, TAGFC
- Kathy Castro & Barbara Sommers (from Senegal only): DoFish Capacity Building Planning/Stock Assessment/Support Fish Biology Course/NASCOM Capacity Building support (to prepare for first annual Sole Co-Management Plan Review meeting)

Second Quarter

- Mike Rice: Gambian National Shellfish Sanitation Plan MOU signing and TA, Kartong Cockle and Oyster Co-Management Plan Development support, January, 2013
- Najih Lazar: Stock Assessment
- Karen Kent: WASH/attend first infrastructure hand-over. Attend Annual Co-Management Plan Review Meetings.

Third Quarter

- Chris Parkins: Gillnet study field work.
- Kathy Castro: Annual Bi-lateral Co-Management Workshop

Fourth Quarter

- Karen Kent: Workplanning

4.5 Environmental Monitoring and Compliance

Based on the revised initial environmental evaluation (IEE) approved in 2011 for the project , 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. Several activities being conducted this year that have conditions and require monitoring and/or mitigation plans include:

- Fisheries management plans
- Water and sanitation improvements at landing sites

Status on these activities will be included in the annual Environmental Monitoring and Mitigation Report submitted to USAID.

4.6 Branding

The USAID/BaNafaa Project provides information through many existing channels. This includes through presentations at meetings, conferences, outreach sessions and other forums as well as through 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 Planned 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 meetings, workshops and trainings	USAID logo (co-branded as appropriate)	M	Primarily a Gambian audience
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.	No USAID identity used	U	Standard exclusions under USAID marking guidelines/policies

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

5. Budget FY13

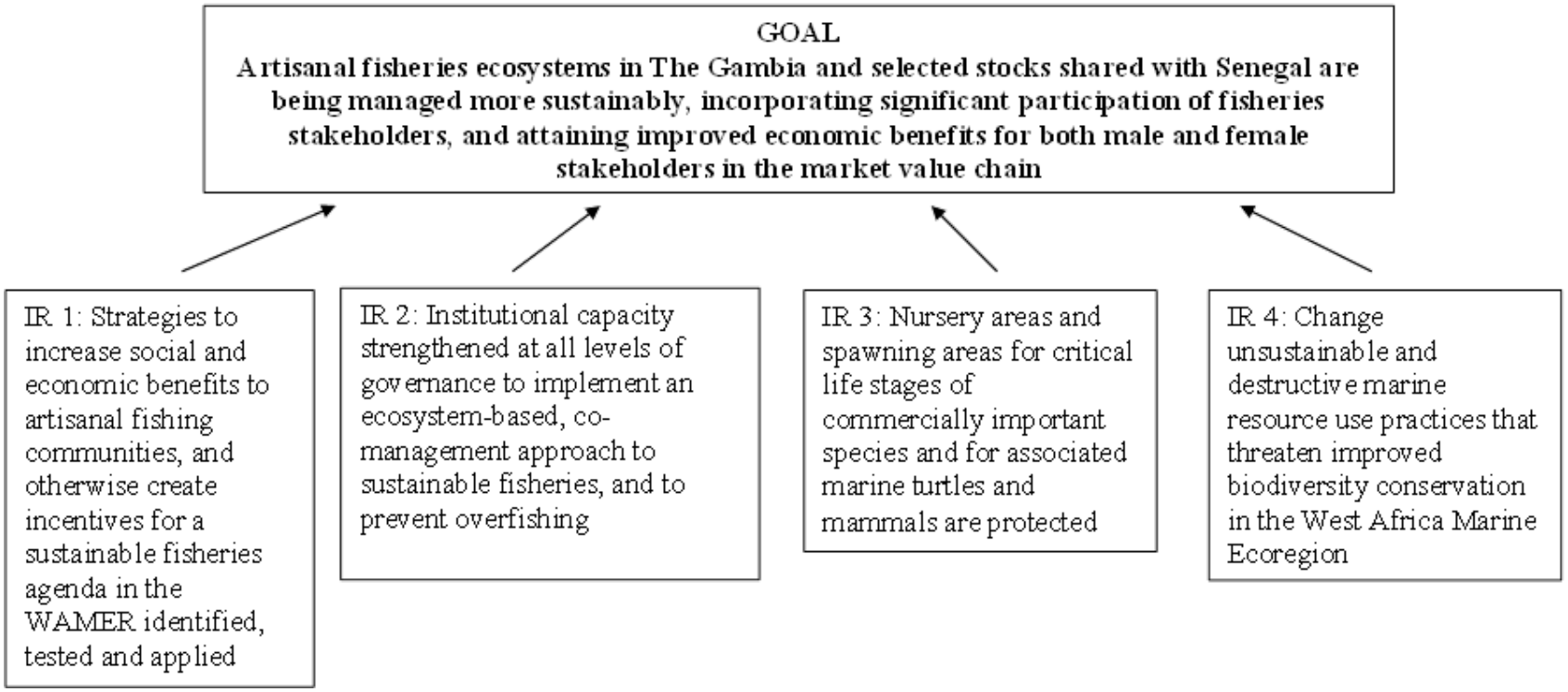
The Year 4 (FY13) summary budget of USAID funds is shown below by: (1) major accounting (object class) line items, and (2) funding source.

FY 13	Biodiversity	WASH	TOTAL
Personnel	57,136	25,554	82,690
Consutlants and In Country Staff	45,099	27,372	72,471
Fringe	17,946	11,306	29,252
Operating	2,800	14,035	16,835
Subagreements	215,321	232,980	448,301
Travel	23,590	14,607	38,197
Capital Equipment			
Total Direct	**361,891**	**325,853**	**687,745**
Modified Direct	146,571	92,873	239,444
Indirect	38,108	24,147	62,255
Total	**400,000**	**350,000**	**750,000**

Note that if the FY13 budget above is fully executed, a balance of $128,252 of biodiversity funds and $198,933 of WASH funds would remain on the total authorized amount in the Cooperative Agreement for FY 14, the project's final year (7 months: October 1, 2013 – April 31, 2014).

Appendix A. Results Framework & Life-of-Project (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 below. Each IR in the Gambia - Senegal Sustainable Fisheries Project Results Framework has one or more indicators and LoP Targets that are shown in the table on the following pages. In Year 4 URI proposes to reduce and simplify 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. Annual review and adjustment of targets was conducted. The LOP summary table below indicates where adjustments have been made.



	Indicator	Adjusted LOP Targets	Previous LOP Targets and indicator language
IR 1			
1	Number of businesses economically benefiting	Eliminated in favor of standard indicator in No. 2 below.	
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)	220	220. previous language "No of persons receiving economic assistance packages (assets, grants, training, etc.)" replaced in favor of standard indicator.
3	Number of people with improved access to loan capital (e.g. benefiting from new or strengthened savings & credit associations)	Eliminated in favor of standard indicator in No. 2 above.	
W1	Improved access to water and sanitation facilities	20,000	56,000[4]
W2	Number of persons receiving Participatory Hygiene and Sanitation Transformation (PHAST) Training.	240	280
W3	Number of persons receiving training and outreach messages on hygiene promotion	6000	1000 was a typo. It is 1000/site = 6000.
W4	Community water and sanitation committees established and trained with program assistance	6	7
IR 2			
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)	13	13. Pervious wording " Number of govt. agencies or management bodies strengthened or created" replaced with standard indicator
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	200 (gender disaggregated)	Previous wording "Number of government personnel, community leaders and private sector stakeholders trained in natural resources mgt"
6	Improvements on a governance scorecard covering, goals, constituencies, commitment and capacity dimensions, including measures that legislation and regulations are being implemented and complied with, and budgetary investments by government in fisheries management[5]	Qualitative increases on score card criteria for Gambia EB-fisheries mgt	
7	Number of fishermen and women with collective or individual use rights (collective quotas or territorial use rights, saleable licenses)	600 people w/ use rights (gender disaggregated). Eliminated to simplify to standard indicators	
8	Number of stakeholders participating in regional meetings and/or exchange visits	130 persons (gender disaggregated). Eliminated to simplify to standard indicators	
9	Number of workshops/meetings on policy reform for the artisanal fisheries sector held between Senegal and the Gambia	6 events. Eliminated to simplify to standard indicators.	

[4] The number of people with improved access to water and sanitation facilities has been revised downwards due to the larger number of smaller sites selected for the initial round of interventions and the elimination of one of the largest sites, Banjul, due to significant problems with relocation of the landing site as a result of port construction.

[5] Scorecard based on governance indicators in UNEP/GPA Ecosystem Based Management Guide

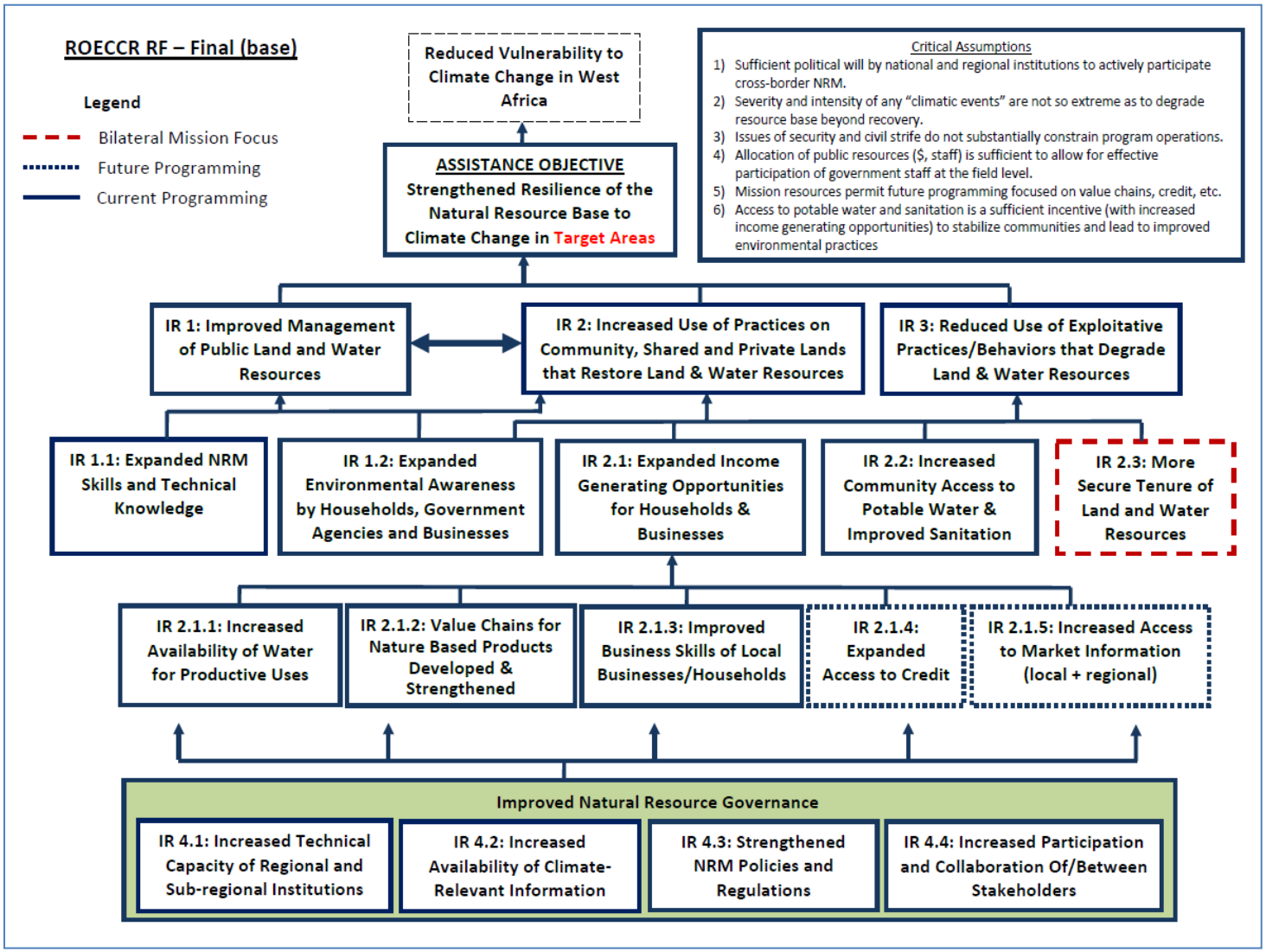
10	Number of reports documenting transboundary issues and alternative solutions	4 reports. Eliminated to simplify to standard indicators.	
11	Number of laws, policies, strategies, plans, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance (ROECCR 4.3.1)	2	Wording adjusted slightly to standard indicator.
CC1	Number of climate vulnerability assessments conducted as a result of USG assistance	1	1
CC2	Number of stakeholders using climate information in their decision making as a result of USG assistance	30	30
CC3	Number of institutions with improved capacity to address climate change issues as a result of USG assistance	8	8
IR 3 & 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	FMP Areas: • Sole = 12nm seaward = 158,332 ha Community managed oyster zones: • Tanbi wetlands 6000 ha	No change
IR 4			
13	Eliminated this indicator in FY12 WP: Number of technological innovations (gear or fisher behaviors) developed and/or effort restrictions that reduces bycatch.		
14	Eliminated this indicator in FY12 WP: Number of fishing units that adopt by-catch reduction technologies. 20% of vessels for catfish		
15	Eliminated this indicator in FY 12 WP: Number of processers that reduce fuel wood consumption Target: At least two reduce wood consumption by at least 20%		
16	Number of vessels registered/licensed	1000 artisanal vessels targeting sole. Eliminated to simplify to standard indicators.	
GOAL			
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 targets set but progress towards BRPs will be tracked.	

Results to Date and Year 4 (FY 13) Targets

No	Indicator	Cumulative Results (as of FY11)	FY12 Target Actual TBD	FY13 Target	LOP Target	Comments
IR 1						
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)	250	260	127	220	NASCOM & TRY members providing improved product due to improved fish handling and hygiene. TAGFC members with traceability improvements.
W1	Improved access to water and sanitation facilities	NA	0	12,000	20,000	Target = infrastructures at 4 sites completed in FY13.
W2	Number of persons receiving Participatory Hygiene and Sanitation Transformation (PHAST) Training.	NA	280	0	240	Training is occurring in late FY 12. If not completed, will be reported in FY13.
W3	Number of persons receiving training and outreach messages on hygiene promotion	NA	1000	4000	6000	
W4	Community water and sanitation committees established and trained with program assistance	NA	2	4	6	
IR 2						
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)	12	1	4	13	Previous = LACOMS in 7 communities (Gunjur, Brufut, Sanyang, Tanji, Batokunku/Tujereng, Bakau, Banjul), NASCOM, GAMFIDA, NAAFO,TRY, DoFish). FY12 = TAGFC. FY13 = Water Lab, NEA, DPWM for SSS work. BAJ.
5	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation. (F 4.8.1-27)	936	260	210	200	= TrainNet
6	Improvements on governance scorecard	increasing	increasing	increasing	increasing	
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)	0	2	1	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.

No	Indicator	Cumulative Results (as of FY11)	FY12 Target Actual TBD	FY13 Target	LOP Target	Comments
CC1	Number of climate vulnerability assessments conducted as a result of USG assistance	NA	1	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	NA	30	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	NA	8	0	8	No additional activity without add-on
IR 3 & 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	0	Sole = 158,332ha Oyster = 6000ha		FMP Areas: - Sole = 12nm seaward = 158,332 ha Community managed oyster zones: - Tanbi wetlands 6000 ha	Kartong Co-Management Plan will only be draft and Catfish added to sole, but not adding Ha.
Goal						
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	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 year1 PRA

Appendix B. USAID ROECCR Results Framework



Appendix C. Background

Regional Fisheries Context

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 parks and 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.

Senegal and The Gambia are centrally located within the West African Marine Ecoregion (WAMER) that spans 3,500km of coast in western Africa (Mauritania, Senegal, The Gambia, Cape Verde, Guinea Bissau, and Guinea). Its most striking feature is the powerful coastal upwelling of cold water that create a tremendously productive food chain supporting incredible biodiversity in one of the most diverse and economically important fishing zones in the world. Over 1,000 species of fish have been identified, along with several species of cetaceans including dolphins and whales, and five species of endangered marine turtles. This immense productivity is further enhanced by several major river/estuary/delta complexes that provide additional influx of nutrients and sediments to the marine realm, adding to its biological productivity. The estuarine wetlands are globally significant breeding and over-wintering grounds for numerous migratory birds.

The ecoregion is also known as the Canary Current Large Marine Ecosystem (CCLME). Fish that spawn in northern nurseries seasonally migrate southwards (as do the fishermen) and provide food for human fishing communities along the way. In addition, recent satellite tracking

has confirmed that green turtles lay eggs along the remote beaches of Guinea Bissau and travel northwards through Senegalese and Gambian waters to graze in the rich sea grasses of Mauritania. In short, the unique combination of climate and upwelling supports species and habitats that represent critical resources locally, nationally, regionally, and globally. Areas of international, regional and local significance within the WAMER are shown in Figure 1. The stretch from the Saloum Delta in Senegal, The Gambia River and the entire coastline of the Gambia, as well as the Casamance river system is one contiguous area that has regional biodiversity significance.

High levels of fishing effort, however, puts unsustainable pressures on limited fish stocks—only further exacerbated by recent improvements in fishing gear that increase fishing efficiency. As more boats search for fewer and fewer fish, the use of destructive, habitat-destroying fishing techniques such as bottom trawling, and beach seining have increased dramatically. Increased fishing has also led to increased capture of endangered marine turtles, juvenile fish, and expansion of the trade in shark and ray fins.

To address these threats, more integrated management approaches are needed at the local and regional scale, including approaches that move toward more sustainable fisheries utilization with less impact on the rich biodiversity of this region. Reducing overfishing through more sustainable harvesting practices will result in a healthier marine ecosystem, including higher biomass of standing stocks and more balanced species assemblages. In addition, promoting more sustainable use practices will help address the wasteful problem of incidental bycatch and capture of endangered species and will increase adaptive capacity of communities and fisheries to climate change.

Climate change is predicted to seriously modify coastal, marine and estuarine ecosystems and their human uses with social, economic and ecological consequences. In the Saloum, Sangomar Point has completely disappeared and the advancing sea is causing the progressive disappearance of mangroves in the Saloum estuary. Infrastructure in both the Saloum and in The Gambia are threatened by coastal erosion, menacing fisheries centers, and landing and processing sites. By one estimate, climate change will cause a reduction of fish catch in Senegal by 2% of GDP beginning in 2020.

It is therefore important to study the vulnerability of these ecosystems and productive human activities to identify appropriate adaptation measures that support sustainable socio-economic development and reduce the vulnerability of local populations. While the natural resources are trans boundary, resource management in The Gambia and Senegal is strictly national. An ecosystem-based approach to fisheries resource management and adaptation of fisheries to climate change needs to consider both countries and ensure bilateral cooperation and planning.

In short, at stake in a successful ecosystem-based approach to fisheries management is the ability of millions of people to sustain a resource-dependent existence while at the same time protect the overall ecological integrity and biodiversity of the region.

The current food security crisis in The Gambia and The Sahel has increased pressure on fishing communities and ecosystems. In January 2012, the Government of The Gambia declared the 2011/12 agricultural season a failure, seriously affecting more than 409,000 people in rural areas and another estimated 192,850 people living in the poorest urban areas who are still recovering from floods in previous seasons. They are vulnerable to food insecurity, rising food prices and additional economic pressure from helping relatives in affected rural areas. In early May 2012, the US Ambassador declared The Gambia an emergency and USAID/OFDA gave $500,000 in emergency funding. The Gambia food security crisis is taking place in the context of the larger Sahel wide food security crisis. Senegal is also severely affected and the crisis will potentially increase migration from Senegal to The Gambia in general and to the artisanal fisheries sector in particular, where 60% of fishing units at the Atlantic Coast fisheries landing sites are Senegalese owned.

Rationale for Piloting Regional Demonstration Activities in The Gambia

The Gambia is the only country in West Africa that has enacted a fisheries legislation that makes it possible to adopt and implement a fisheries co-management plan under the Ecosystem-Based Fisheries Management (EBFM) approach. The Fisheries Act of 2007 is comprehensive legislation that addresses national as well as international fisheries issues in a holistic manner incorporating the FAO Code of Conduct for Responsible Fisheries and other relevant international fisheries conventions and protocols to which the country is a member or has assented to. Thus, a strong legal basis for the implementation of a co-management regime is already in place. The top-down approach to fisheries management is a thing of the past; now the fisherfolk and their communities are fully participating in all aspects of fisheries management including decision-making. Community Fisheries Centers have been established in major fish landing sites and are operating under a co-management arrangement with Government and other stakeholders. However, the fisheries co-management institutions need to be strengthened. The USAID/BaNafaa project has been providing the requisite leadership, financial and technical support. Much has been achieved yet more work is needed to achieve success and sustainability of a co-management approach that can serve as a model for other nations in the region.

The small size of the country and comprehensive fisheries legislation offer the unique opportunity to introduce the EBFM approach as a pilot and if successful the approach can be adapted in other countries where USAID is supporting sustainable fisheries development programs (Ghana and Senegal). The Gambia is a good model for fisheries co-management in West Africa and other regions with open access fisheries.

The USAID/BaNafaa project focus in the first 2 years of project implementation has been on the oyster and sole fisheries. As of January 2012, a co-management plan for the sole fishery was adopted. The sole fishery is also now closer to meeting the sustainability criteria for certification by the Marine Stewardship Council, and may be the first artisanal fishery in sub-Saharan Africa to get an Eco-label. Other countries in West Africa including Morocco, Mauritania, Senegal and Ghana are interested in the work being done under this project and eager to learn from this experience. The oyster fishery activities are uniquely focused on women harvesters which are typically neglected in fisheries development planning. The co-management plan for the oyster

fishery, also approved in January 2012, gives exclusive use rights to the oyster fishery in the Tanbi wetland area to these women oyster harvesters who have now been organized into an area wide producer organization. Exclusive use rights to a fishery resource are rare in West Africa, let alone to women. This is the first case in sub-Saharan Africa where exclusive fishery harvest rights have been legally given to women harvesters.

Valuable lessons can be learnt from the implementation of the USAID/BaNafaa project, lessons that can guide the implementation of current and pipeline USAID Fisheries projects in the region. West African countries may also decide to revisit their fisheries legislations and make amendments incorporating provisions that will create a stronger enabling environment for the introduction of co-management and EBFM approaches to fisheries that can protect important marine bio-diversity assets, reduce their vulnerability to climate change and strengthen fish product food security through well managed resources.

The Legal Basis for Co-Management in The Gambia

Section 11 of the Fisheries Act gives power to the Minister of Fisheries to determine participatory rights in a fishery, such as allocations of the total allowable catch or of the total allowable level of fishing and this may include restrictions as to vessel type, gear type, seasons of operations, and areas in which fishing can take place; and any other restriction relevant to fisheries conservation, management and development.

Under Section 14, the Minister of Fisheries may, in the interest of conservation, management and sustainable utilization of fisheries resources, by Notice in the Gazette, declare any area of the fisheries waters and corresponding adjacent areas, including marine protected areas or reserves established under any other laws, to be Special Management Areas for purposes of community-based fisheries management, and the application of certain conservation and management measures and artisanal or subsistence fishing operations or any combination of the foregoing purposes or other specified purpose. The Notice published may specify the specified Special Management Area: the persons or groups of persons or types or classes of vessels that may be allowed to fish; the methods of fishing that may be used, the terms and conditions of fishing; and any other conservation and management measure that apply.

Section 15 stipulates that the Minister of Fisheries may, in consultation with the Local Authorities and where applicable, in accordance with the Local Government Act and other laws of The Gambia, establish a Community Fisheries Centre for the purposes of community-based fisheries management and may allocate the Management Areas or parts of them for which a Community Fisheries Centre shall be responsible under this Act and describe the rights and responsibilities of a Community Fisheries Centre in respect of the Special Management Areas or parts of them, taking into account the concerns of communities living within the immediate environs of the area to be declared as a Special Management Area.