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# USAID and ABCG – INTEGRATED INDICATORS FOR FRESHWATER CONSERVATION AND WASH WORKSHOP REPORT



July 15-17, 2014



## AFRICA BIODIVERSITY COLLABORATIVE GROUP



the Jane Goodall Institute



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# INTRODUCTION

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The Africa Biodiversity Collaborative Group (ABCG) comprises seven international conservation Non-Governmental Organizations (NGOs), including African Wildlife Foundation (AWF), Conservation International (CI), the Jane Goodall Institute, The Nature Conservancy (TNC), Wildlife Conservation Society, World Resources Institute, and World Wildlife Fund. The goal of ABCG is to work collaboratively and efficiently and effectively to further a sustainable future for the African continent. Funding has been generously provided by The John D. and Catherine T. MacArthur Foundation, the Critical Ecosystem Partnership Fund, the U.S. Agency for International Development (USAID), the U.S. Fish and Wildlife Service and members.

USAID funded ABCG to produce an initial report titled, "[Linking Biodiversity Conservation and Water, Sanitation, and Hygiene: Experiences from sub-Saharan Africa](#)" (June 2012). The report found numerous projects in sub-Saharan Africa integrating *ad-hoc* WASH and biodiversity conservation on a disparate and disconnected basis. It called for guidance on how to integrate the two disciplines under different scenarios, ecoregions and climates. Building on the report, in 2013, ABCG members collaborated with a number of development organizations specializing in WASH to develop guidelines for the design and implementation of integrated projects to improve freshwater conservation and human well-being.

During the development of the ABCG product "[Freshwater Conservation and WASH Integration Guidelines: A Framework for Implementation in sub-Saharan Africa](#)," published December 2013, monitoring and evaluation, indicators, and measuring results were themes that came up repeatedly as areas that were lacking research and guidance. Although biodiversity and WASH each have existing frameworks for evaluation, for example, the number of people impacted by a WASH project or hectares restored within a watershed, existing resources that evaluate the benefits of an integrated project were limited. USAID Associate Administrator, Bureau for Economic Growth, Education and the Environment, Christian Holmes cited that this gap is one of the major challenges the Agency has for the promotion and funding of these joint projects.

It will take time to create a rigorous monitoring and evaluation (M&E) framework for integrated projects, but there is an existing evidence base that can be drawn upon to make a meaningful contribution to this process by developing indicators, based on

experiences and lessons learned. To that end, ABCG members, AWF, CI, and TNC, co-hosted a workshop from July 15-17, 2014 in Nairobi, Kenya, for African conservation, health and development practitioners to design a WASH and freshwater conservation M&E framework. The workshop was co-sponsored by the USAID Bureau for Africa and ABCG. This event, entitled the **Workshop on Integrated Indicators for Freshwater Conservation and WASH Programming**, was the first time that WASH and freshwater conservation sector professionals came together to craft an integrated M&E framework for improved health, development and conservation goals.

By the end of the three days, workshop participants had reached agreement on a draft M&E framework and indicators for integrated programming, and CI, in collaboration with ABCG members, workshop participants and WASH and conservation partner organizations, will refine the framework in the coming month. The M&E framework builds on the USAID-funded ABCG programming guidelines which were released in December 2013. The group also developed an outreach plan for disseminating the draft framework with donors, multi-sectoral partners and other conservation, health and development practitioners in sub-Saharan Africa over the next three months.

## Overview of the Workshop Objectives

The workshop was facilitated by CI's Janet Edmond and Brittany Ajroud. They opened the workshop with a brief introduction activity to help the participants get to know one another and then shared the objectives and agenda (See [Annex 2](#) for full agenda).

The primary objectives of the workshop were to:

- Increase awareness of rationale for integrated indicators for Freshwater Conservation and WASH Programming.
- Review progress to date on indicators from existing or past projects.
- Build and reach consensus on an M&E Framework for Integrated Freshwater Conservation and WASH Programming.
- Explore potential integrated indicators for Freshwater Conservation and WASH Programming and develop a draft list to complement M&E Framework.
- Draft an outreach plan for vetting indicators with key stakeholders in sub-Saharan Africa and the US.

## Participant Summary

More than 26 health, development and conservation experts from Kenya, Malawi, Rwanda, Tanzania and Uganda contributed technical advice and strategic inputs on the overall framework for how WASH and freshwater conservation projects can be measured in a more holistic, mutually-reinforcing manner. The workshop participants included representatives from AWF, Catholic Relief Services, CI, Jane Goodall Institute, Kenya Water Towers Agency, Kenya WASH Alliance, Millennium Water Alliance, Neighbours Initiative Alliance, Netherlands Development Organization (SNV), Total LandCare, TNC, Water for People, Water Aid East Africa, Water and Sanitation for the Urban Poor, Wetlands International, World Vision, and the ABCG program officer. See [Annex 1](#) for a full participant list.

# WORKSHOP OVERVIEW

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## Day 1

The first day set a positive tone for the workshop and provided ample learning opportunities for participants. The workshop opened with remarks from Daudi Sumba (AWF), Kamweti Mutu (ABCG), Charles Oluchina (TNC), Albert Mwangi (CI) and Francis Nkako (Water Towers Agency).



Pair introductions

This was followed by an icebreaker activity to help participants get to know each other and become comfortable with each other. Participants were asked to find a partner whom they knew the least about and were given 10 minutes to interview each other, including a “fun fact”. After the interviews, the group reassembled into a big circle and each participant introduced their partner to the group. The morning session closed with participants writing down their individual expectations for the workshop:

- Learn about water + WASH and challenges in many countries in East Africa
- Understand the integrated indicators for freshwater conservation
- How to select quality integrated indicators
- Learn from other stakeholders on how they track/monitor their WASH programs
- Understand more integrated indicators for WASH and conservation
- Refine existing WASH and freshwater conservation to match reality of developing countries context
- Focus on indicators for good governance in conservation and WASH and determination of shared indicators across climate change, WASH and conservation targets
- Streamlining of indicators to integrate better WASH and freshwater conservation
- Better understanding of WASH indicators to inform policy
- To attribute to the review and development of integrated measures for monitoring and reporting on Wash programs in Africa
- Focus more on the role of sanitation and hygiene in biodiversity



- A mechanism for sharing tools and experiences in WASH and conservation projects
- What is unique about this topic? (that has never been heard/talked about)
- To learn the best ways to integrate WASH and conservation indicators
- Indicators for water resource conservation
- Understand how WASH indicators can be formulated to include conservation component
- Develop common indicators for Africa
- To share knowledge and experiences in WASH performance and indicators to measure results
- The added value and distinctiveness of integrated indicators approach to sectoral indicators approach (crystal clear business case?)

After a short break, Janet Edmond provided context for the workshop by briefing participants on the Freshwater Conservation and WASH Integration Guidelines and USAID's Biodiversity Policy. The mid-morning session continued with three presentations to provide the group with examples of integrated projects touching on objectives, partners and the use of M&E. Petro Masolwa of TNC introduced the Tuungane Project of western Tanzania which is addressing population, health and environment (PHE) issues in the Greater Mahale Ecosystem. Doris Kaaberia of Millennium Water Alliance talked about the Kenya Arid Lands Disaster Reduction-WASH Program. Leonard Akwany of Wetlands International presented a case study of the Rwambu Sub-Catchment's full sustainability approach.

Several themes emerged during Q&A including discussion around longitudinal integration and linking M&E at the national and international level, the need to emphasize and develop indicators that measure private sector engagement and issues related to governance, and challenges in coordinating M&E efforts across sectors and partners.



**Christine Banga, of CRS, presents the work of the WASH sub-group**

In the afternoon, the group was presented a draft Results Framework to critique and make suggestions for improvement. Participants were divided based on freshwater conservation or WASH expertise, with sub-groups focusing their analysis on the Intermediate Results for their

respective sector. The freshwater conservation sub-group debated whether the term freshwater conservation is broad enough to capture watershed-scale conservation results and discussed the importance of measuring ecosystem functionality. They also changed the IR “Maintained or improved water quality and flow” to “Maintained or improved water quality and *quantity*” after the point was made that the word ‘flow’ only pertains to rivers while quantity covers all types of water bodies.

The WASH subgroup noted that it would be helpful to include a goal statement in the framework and suggested incorporating improved governance of water resources as an additional Intermediate Result. They emphasized the importance of measuring both access and use of sanitation facilities, as the presence of functioning facilities in a community does not guarantee that they are being used by community members. In plenary, both sub-groups presented their recommendations to the larger group and changes were made to the Results Framework when the group reached consensus.



**The freshwater conservation sub-group works on standardized indicators**

## Day 2

The second day of the workshop began with participants reflecting on some of the highlights from Day 1. Among the big takeaways was the need to define terminology in the Results Framework, a call to clearly link impacts of integrated programming to policy, and the emergence of governance as a key theme in discussions. Participants

also found the examples of integrated projects to be insightful and noted the friendly environment among participants.

The morning continued with presentations from M&E practitioners Enos Omondi (AWF) and Nicaise Ugabinema (World Vision), who provided an overview of their organization's approach to M&E and developing indicators, indicator standards used in the WASH and freshwater conservation sectors, and examples of integrated indicators from their work. Gender emerged as an important topic during the Q&A session, with several participants calling for indicators that can measure real impact and are more robust than sex-disaggregated data.

Another question that emerged was around data ownership and the level of community participation in data collection and use. The session closed with discussion on what makes a good indicator and a review of SMART (specific, measurable, achievable, relevant, and time-bound) criteria.

Participants were then divided back into sub-groups based on freshwater conservation or WASH expertise and tasked with developing a list of standardized indicators for the Results Framework referencing the illustrative indicator sets provided in participant folders. They were also asked to note any critical assumptions. This activity continued for an hour after lunch.

The group reconvened in the afternoon to allow the sub-groups to present their work. It is important to note that during this time three participants decided to form a working group to tackle the Results Framework. Throughout the workshop, participants continued to challenge causal links in the Results Framework and whether it supported the level of integration desired. This discussion carried into Day 3 and resulted in several revisions of the draft Results Framework.



Group reviews value-added indicators

The day concluded with a group brainstorm of value-added categories. The group came up with eight themes: gender, governance, policy, community capacity, livelihoods, peace and protection, youth and non-revenue water. This list was later consolidated to six themes due to overlap with non-revenue water indicators placed under policy and livelihoods indicators placed under community capacity. Each participant was asked to select one category and draft value-added indicators for their selected category as homework.

### Day 3

The last day of the workshop kicked off with a group review of the value-added indicators that participants had drafted for homework. Each participant presented their indicators while the rest of the group decided if it met SMART criteria and was relevant. This session was highly effective as together the group came up with more than 40 draft value-added indicators. With governance being such a broad category, one participant suggested dividing governance value-added indicators into three sub-categories: empowerment of marginalized communities, effective and accountable public authorities, and space of interaction between public authorities and marginalized communities (with regard to creating a more effective delivery or environment). It was also noted that several of the draft indicators would need to be adjusted to make more specific to freshwater conservation-WASH.

Following the morning session, participants gathered for a final group review of the Results Framework. To better facilitate the discussion, each participant was given three index cards. An index card was taken each time the participant offered a suggestion; thereby encouraging participants to prioritize and contribute their best suggestions. The group came to consensus on a goal and Strategic Objective and made slight modifications to the Intermediate Results to better reflect a spirit of integration (see [Annex 4](#)).

### Wrap-Up

The workshop closed with consideration of next steps. The group brainstormed an outreach plan for sharing the M&E framework with DC and Africa-based donors and policy makers. Upcoming opportunities were identified across Africa including the Kenya Ministry Tech working group meet-up, the East Africa Civil Society Organizations (CSO) forum, the Tanzania CSO Water Forum, the Dutch marketplace in Nairobi, a donor working group for water in Nairobi, and roundtable discussions hosted by Malawi Wildlife and Environment Society. Additionally, several participants committed

to writing blog posts to reach a broader audience. Fiesta Warinwa (AWF) and Charles Oluchina (TNC) offered closing remarks and participants were given time to complete an evaluation form.



**Group photo of workshop participants at AWF Headquarters**

# Evaluation

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At the end of the workshop, 16 participants completed evaluations to assess the effectiveness of sessions and logistical aspects. The overall results are described below:

## Overall rating

The majority of participants agreed the objectives of the workshop were met, indicating that sessions were highly effective.

	Expectations Met	Mostly Met	Somewhat Met
Number of responses	11	4	1

Selected comments:

- Two participants reported that workshop objectives were enriched by vibrant participation and the opportunity to share experiences.
- Almost all participants expressed that the most effective component of the workshop was the refinement of the results framework to reflect integration and the development of value-added indicators.
- One participant reported that the workshop was well organized, but could have benefitted more from the presence of 2 or 3 additional M&E experts.

## Logistics

The workshop was held at the African Wildlife Foundation headquarters located in the Karen suburb of Nairobi, Kenya. Overall participants were highly positive about the quality of the meeting facilities, hotel accommodations and catering services.

	Could be improved	Okay	Good	Excellent
Meeting facilities			3	12
Facilitators meeting management		1	8	6
Meeting materials in folder		1	7	7
Catering – meals and tea breaks	1		5	8
Hotel accommodations (for Country Lodge guests)		1	4	3

## Additional comments

The following feedback was received in follow-up emails:

- Many thanks indeed for such a wonderful opportunity to interact with a highly charged and committed group. Look forward to sharing more as we forge ahead with integration.
- It was indeed a great workshop; I learnt a lot and I am looking forward to applying the workshop lessons/outcomes to my work and related collaborations.
- Thanks for the great effort! I am sure the outcomes of the integrated indicators for freshwater conservation and WASH programming will be felt soon.
- It was a pleasure meeting and working with you and team.
- Appreciate to have been part of such high level professionals. Let us keep integration on course.

## Annex One: Participant List

Country	First Name	Family Name	Organization	Sex	Email
Rwanda	Nicaise	Ugabinema	World Vision	F	nicaise_ugabinema@wvi.org
Kenya	Leonard	Akwany	Wetlands International	M	lakwany@wetlands-africa.org
Kenya	Petro	Masolwa	TNC	M	pmasolwa@tnc.org
Kenya	Kariuki	Mugo	Water and Sanitation for the Urban Poor (WSUP)	M	kmugo@wsup.org
Uganda	Peter	Apell	The Jane Goodall Institute	M	peter@janegoodallug.org
Kenya	Julie	Mulonga	Wetlands International	F	jmulonga@wetlands-africa.org
Kenya	Kenny	Matampash	Neighbours Initiative Alliance	M	info@niakajiado.org
Kenya	George	Njugi	TNC	M	gnjugi@tnc.org
Tanzania	Paul	Obura	WaterAid	M	PaulObura@wateraid.org
Kenya	Nancy	Ndirangu	SNV	F	nndirangu@snvworld.org
Kenya	Tobias	Omufwoko	Kenya WASH Alliance	M	tomufwoko@yahoo.com
Kenya	Albert	Mwangi	Conservation International	M	amwangi@conservation.org
Malawi	Blessings	Mwale	Total LandCare	M	blessings.mwale@gmail.com
USA	Brittany	Ajrout	Conservation International	F	bajrout@conservation.org
USA	Janet	Edmond	Conservation International	F	jedmond@conservation.org
Kenya	Charles	Oluchina	TNC	M	coluchina@tnc.org
USA	Jimmiel	Mandima	AWF	M	jmandima@awf.org
Kenya	Enos	Omondi	AWF	M	eomondi@awf.org
Kenya	Fiesta	Warinwa	AWF	F	FWarinwa@awf.org
Kenya	Christine	Banga	Catholic Relief Services	F	Christine.banga@crs.org
Kenya	Gordon	Mumbo	Water for People	M	gmumbo@waterforpeople.org
Kenya	Doris	Kaberia	Millennium Water Alliance	F	doris.kaberia@mwawater.org
Kenya	Samson	Shivaji	Kenya Water and Sanitation Civil Society Network	M	s.shivaji@kewasnet.co.ke
Kenya	Paul	Orengoh	Kenya Water Towers Agency	M	paulorengoh.254@gmail.com
Kenya	Francis	Nkako	Water Towers Agency	M	Molenkako@gmail.com



## Annex Two: Workshop Agenda

DAY 1 – Tuesday, July 15th	
<p><b>By the end of Day 1, participants will:</b></p> <ul style="list-style-type: none"> <li>✓ Set expectations for the workshop.</li> <li>✓ Have a clear understanding of the objectives of the workshop.</li> <li>✓ Establish the basic rationale for doing integrated projects and look at different approaches.</li> <li>✓ Increase knowledge of common measures and definitions of integrated indicators.</li> </ul>	
Time	Activities
8:30-9:00	Registration
9:00-9:45	<p><b>Welcome and opening remarks</b></p> <ul style="list-style-type: none"> <li>• Daudi Sumba, AWF</li> <li>• Kamweti Mutu, ABCG</li> <li>• Charles Oluchina, TNC</li> <li>• Albert Mwangi, CI</li> <li>• Francis Nkako, Water Towers Agency</li> <li>• Facilitators: Janet Edmond, Brittany Ajroud</li> </ul>
9:45-10:30	<b>Introductions:</b> pair interviews, setting expectations
10:30-10:45	Coffee/tea
10:45-11:00	<b>Overview of workshop objectives and agenda</b>
11:00-12:00	<p><b>Individual presentations:</b> Integrated projects – objectives, partners and indicators used</p> <ul style="list-style-type: none"> <li>• Tuungane Project - Petro Masolwa, TNC</li> <li>• Kenya Arid Lands Disaster Reduction WASH Program - Doris Kaberia, Millennium Water Alliance</li> <li>• Rwambu Sub-Catchment Case Study - Leonard Akwany, Wetlands International</li> </ul>
12:00-1:00	Lunch
1:00-3:00	<b>Group review activity:</b> presentation of draft framework and small group discussions broken up by sector
3:00-3:15	Coffee/tea
3:15-4:00	<b>Present examples from other sectors of integrated M&amp;E framework</b>
4:00	Adjourn

## DAY 2 – Wednesday, July 16th

**By the end of Day 2, participants will:**

- ✓ Clarify concepts regarding monitoring and evaluation for freshwater conservation and WASH sectors.
- ✓ Agree on criteria to be considered in the selection of indicators.
- ✓ Create a list of standardized sectoral indicators for freshwater conservation and WASH Intermediate Results.

Time	Activities
8:30-9:00	Coffee/tea
9:00-9:15	<b>Welcome to Day 2:</b> reflections and “big ideas” from Day 1
9:15-10:30	<b>Individual presentations:</b> M&E overview and the role of indicators in project management and implementation <ul style="list-style-type: none"> <li>• Enos Omondi, African Wildlife Foundation</li> <li>• Marie Nicaise Ugabinema, World Vision</li> </ul>
10:30-10:45	Coffee/tea
10:45-11:00	<b>Facilitated discussion:</b> review characteristics of good indicators and the key considerations for selection, establish criteria for selection of sectoral and value-added indicators
11:00-12:00	<b>Breakout session:</b> card and chart activity  Divide participants into two groups based on freshwater conservation or WASH expertise and task with creating a list of standardized sectoral indicators and critical assumptions for respective Intermediate Results.
12:00-1:00	Lunch
1:00-2:00	<b>Breakout session cont.</b>
2:00-3:00	<b>Group review:</b> participants review selected indicators and provide comments and feedback
3:00-3:15	Coffee/tea
3:15-4:00	<b>Facilitated discussion:</b> participants brainstorm value-added categories (e.g. gender, governance) and are assigned a category for homework
4:00	Adjourn

## DAY 3 – Thursday, July 17th

**By the end of Day 3, participants will:**

- ✓ Develop a draft list of value-added indicators.
- ✓ Refine the integrated Results Framework.
- ✓ Agree to next steps and develop a “back home” application with an associated timeline.

Time	Activities
8:30-9:00	Coffee/tea
9:00-10:30	<b>Group review:</b> participants present value-added indicators, the group decides if each indicator is SMART and relevant
10:30-10:45	Coffee/tea
10:45-12:00	<b>Facilitated discussion:</b> final group review of the draft results framework, identifying changes that need to be made to reflect integration
12:00-1:00	Lunch
1:00-2:00	<b>Facilitated discussion:</b> participants brainstorm ideas for outreach to donors and policymakers, next steps are identified for participants and organizers
2:00-2:30	<b>Closing remarks</b> <ul style="list-style-type: none"> <li>• Fiesta Warinwa, AWF</li> <li>• Charles Oluchina, TNC</li> </ul>
2:30	Adjourn
5:00-7:30	Reception and dinner at Tamambo Karen Blixen Coffee Garden

## Annex Three: Recommendations for follow-up actions

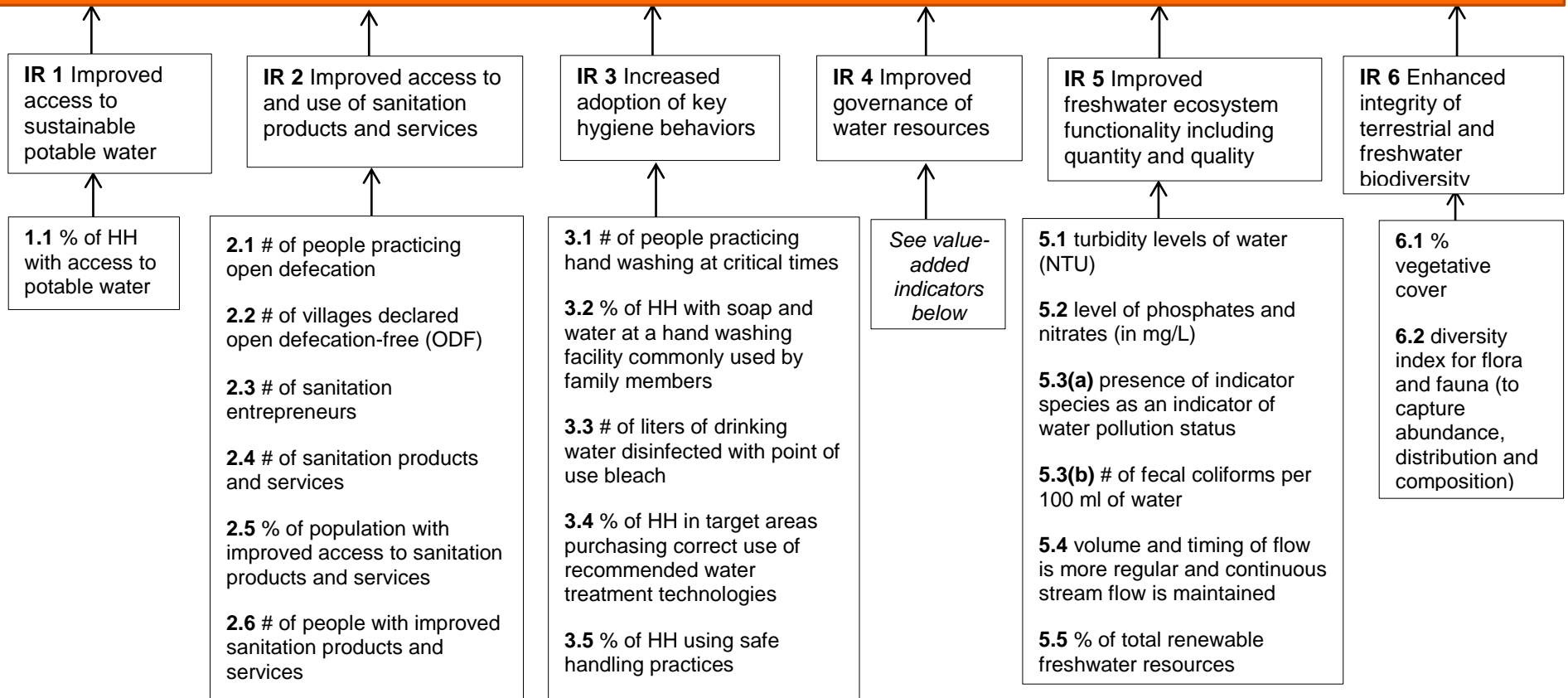
When asked for recommendations for follow up actions in the next 3 to 6 months, participants suggested the following:

- Refine the results framework and draft indicators.
- Develop an indicator reference sheet to clearly define indicator wording.
- Share workshop outcomes at relevant forums.
- Have a 'community of practice' dialogue based in Nairobi or DC.
- Develop a basic template for project integration for field practitioners.
- Develop a white paper or one page pitch to donors and policy makers on planning and financing integrated WASH programs.
- Set up a platform for interactive engagement by participants on the outputs of the workshop.
- Broaden sharing to other stakeholders in respective regions and alliances.
- Encourage government participation.

# Annex Four: Draft Results Framework with value-added indicators for freshwater conservation and WASH

## GOAL: Improved human well-being and ecosystem health

### SO: Increase access to and use of WASH products and services integrated with the ability of an ecosystem to sustain these services



## VALUE-ADDED INDICATORS

GENDER	GOVERNANCE	POLICY	COMMUNITY CAPACITY	PEACE + PROTECTION	YOUTH
<p>%/# of institutions with accessible sanitation facilities for both sexes   # of by-laws or community sanctions advocating gender equality</p> <p>% of women in decision-making positions in community-based WASH and freshwater conservation</p> <p># of households reached with WASH and conservation program intervention (sex disaggregated)</p> <p>%/# of women involved in the planning, design or implementation of integrated WASH-freshwater conservation interventions</p>	<p># of people demonstrating awareness of WASH or FC related-policies</p> <p># of community managed institutions set up on integrated WASH-freshwater conservation</p> <p>% of people satisfied with FC/WASH interventions being implemented</p> <p># and type of finance incentives designed to facilitate better (improved) access to WASH services and products</p> <p>Participation in accountability mechanism (define as level and quality)</p> <p># of changes or successful negotiations due to citizen participation</p> <p># of marginalized communities articulating and voicing demands for WASH and FC</p> <p>Level of provision of services by public authorities</p> <p>Level and quality of implementation of progressive and transparent policy and budget processes</p> <p># of legislative and policy changes enhancing rights of marginalized groups and promoting conservation of freshwater sources</p> <p># of spaces and mechanisms for institutionalized participation in policy formulation, planning and implementation</p> <p>% of representation by marginalized groups</p> <p># of new or improved laws that facilitate affirmative action for marginalized groups</p>	<p># of government policies and laws supporting improved freshwater systems conservation</p> <p># of government policies and laws that promote access to improved water supply and sanitation</p> <p># and type of financial incentives designed to facilitate better (improved) access to WASH services and products</p> <p>Extent of enforcement of water access and use by-laws in target regions (across a hierarchy of effectiveness)</p> <p># of forums carried out to engaged the community to debate and influence WASH and FC policies</p> <p>% of water points/water supply utility that is non-revenue</p>	<p>#/% of water management committee members trained in management and maintenance of water and sanitation infrastructure/CBNRM</p> <p>% of community member groups involved in the management of freshwater resources</p> <p>#/% of WMC/private operators who are operationalized</p> <p># of water-based enterprises (related to WASH and FC)</p> <p>% of households accessing and utilizing water for production (e.g. crop, livestock)</p> <p># of households with standpipes</p> <p>Access to credit, diversity of income (varied units of measure applicable)</p> <p>#/% of communities able to renew, replace and rehabilitate their water infrastructure</p>	<p>% of people aware of user rights</p> <p># of water-related conflict incidences reported over time by the community</p> <p>% of community reported water-related conflicts incidents successfully resolved</p> <p>Time and mechanisms to resolve community reported water-related conflict incident (efficiency)</p> <p>% of community-equitable access to water</p> <p># of community water users (proportion to available water sources)</p> <p>% of household vulnerabilities from FC and WASH programs</p> <p>% of watershed with clearly determined land rights title</p>	<p>% of youth in decision-making in community-based WASH and freshwater conservation structures</p> <p>% of leadership positions held by youth in community-based NRM and WASH committees</p> <p># of youth employment</p> <p>#/% of youth taking up WASH businesses</p> <p>% of youth trained in life-skills</p>

## **LIST OF ACRONYMS**

HH: households

WASH: water, sanitation and hygiene (WASH)

FC: freshwater conservation

CBNRM: community-based natural resource management

WMC: water management committee

NTU: nephelometric turbidity units

TSS: total suspended solids

## **CRITICAL ASSUMPTIONS**

Conservation/environment partnerships and alliances protect watersheds and sources.

Services include financing, access to products and services.

Sanitation services and products are supported by sewerage, water supply, manure pit, etc.

Biodiversity restoration or conservation efforts are attainable.

Project cycle is long enough to observe change.

Ecosystem function assumes pollution is reduced/water is managed well.

Sustainable land management practices are practiced.

Impacts from climate change in the project area do not dramatically alter the landscape.

Abstracted water is regulated.

Water sources with <5 or less NTUs have higher quality drinking water and also higher ecological function.

## Annex Five: Speaker Bios



### PETRO MASOLWA

Mr. Petro Elius. Masolwa is an Environment/Natural resources expert with over 19 years of practical experience in the design, implementation, and management of development and conservation projects in East Africa. Mr. Masolwa holds a BSc in Agriculture from Sokoine University of Agriculture in Tanzania, an MSc in Natural Resources Management from the Department of

International Environmental and Development Studies of the Agricultural University of Norway, and a Postgraduate Diploma in Socio-economic Information for Natural Resources Management from ITC-Enschede the Netherlands. Mr. Masolwa has worked with government institutions and international organizations such as the Ministry of Agriculture and Food Security in Tanzania as an Agricultural Research and Training Officer; ActionAid International in Tanzania as an advisor for Education, Agriculture and Food security; and the World Wide Fund for Nature (WWF) in Tanzania where he served for 9 years in various positions ranging from a Community Development Officer and Program Coordinator for the Great Ruaha River Freshwater Conservation program and Conservation Manager for the WWF –Tanzania Country Office. Mr. Masolwa Joined the Nature Conservancy in 2012 as the Project Manager for the *Tuungane* program. He enjoys networking with people from different cultural backgrounds and trekking in natural wilderness.

### LEONARD AKWANY

Leonard Akwany works with Wetlands International, Kenya Office covering Eastern Africa. Currently working on Partners for Resilience (PFR) and WASH Alliance Programmes covering Kenya, Uganda and Ethiopia. He has many years of experience working around Lake Victoria Region and by extension Sub-Saharan Africa on Natural Resources Management, Environmental Entrepreneurship, WASH and Community Resilience.

### UGABINEMA MARIE NICAISE

Ugabinema Marie Nicaise is the WASH M&E coordinator from World Vision International, Rwanda office. A Rwandese national, she holds a BSc in Public Health. She has 7 years working experience with international NGOs in the area of monitoring and evaluation of development, community capacity building, HIV/AIDS, maternal child health nutrition and WASH related projects.





## **DORIS KABERIA**

Doris is the Kenya Program Director for Millennium Water Alliance. Doris has over ten years' experience in water, sanitation and hygiene program management and administration. Doris has also extensive experience managing food security & livelihood, climate change adaptation, disaster risk reduction, sustainable community development, grant writing, grants management, program monitoring and evaluation. Doris is an expert in pastoral and agro-pastoral livelihood programming in drought prone Horn of Africa. She

has experience leading and managing USAID, OFDA, ECHO, DANIDA, EC, AUSAID and DFID funded programs and worked previously for Care International in Kenya and Save the Children UK. Doris received her undergraduate degree from Egerton University in Kenya and a Master's degree in Natural Resources Management from the University of Wisconsin – Stevens Point, USA.

## **ENOS OMONDI**

Enos Omondi serves as the programme officer (Monitoring & Evaluation) for the African Wildlife Foundation (AWF). Enos is responsible for developing and executing AWF's M&E strategy across the landscapes in addition to the data governance and management framework to ensure effectiveness and efficiency in delivering AWF interventions. Enos has over 15 years' hands on experience in Research, Monitoring & Evaluation in the development world including Health, agriculture, livelihoods, Climate Change, Humanitarian & Conservation. Enos previously worked for the United Nations (ILO & UNHCR), Mildmay International and the Kenya Medical Research Institute in a similar capacity. He has Masters in Technical Demography (UoN), Development Studies (Open Univ. UK, Project Planning & Management (UoN) and a Bed in Education (Statistics) from Egerton. Enos is married and with two children, a son and a daughter in that order.