



Activity Report 124

West Africa Water Initiative (WAWI)

Monitoring and Evaluation Plan, Program Framework and Indicators

by

Lisa Nichols

January 2004

Prepared under EHP Project 26568/CESH.WAWI.M&E

Environmental Health Project
Contract HRN-I-00-99-00011-00
is sponsored by the
Office of Health, Infectious Diseases and Nutrition
Bureau for Global Health
U.S. Agency for International Development
Washington, DC 20523

Contents

Acknowledgements.....	v
Executive Summary	vii
Acronyms	ix
Background to WAWI	1
Background of the Assignment.....	3
Methodology and Process for Developing the M&E Plan.....	5
Components of the M&E Program	9
Program Framework	10
Detailed Information on Each Core Indicator.....	17
Proposed Options and Implementation Steps	29
Annex 1. Final Scope of Work	33
Annex 2. Resource Organizations Referred to for State of the Art Research.....	43
Annex 3. Members of the Monitoring and Evaluation Working Group.....	45
Annex 4. Bibliography of References.....	47

Acknowledgements

The author thanks the West Africa Water Initiative partners at the headquarters and at the field levels in Mali, Ghana, and Niger for their helpful collaboration and input into this assignment. The author met with WAWI partners during the start-up meeting in Bamako, Mali, in July 2003, and at the headquarters partner meeting in the United States in September 2003. In addition to the interchange during these meetings, the author also received valuable comments and suggestions from the staff of the Conrad Hilton Foundation, World Vision, WaterAid, USAID, the WAWI Secretariat, and ARD. Thanks also go to the Activity Manager, David Fernandes, and to the Assistant Activity Manager, Aimee Eden, for their valuable support to the author.

Executive Summary

The West Africa Water Initiative (WAWI) was launched in late 2001 to help improve the lives of poor and vulnerable rural and urban populations in the developing world. In order to accomplish the goals and objectives of WAWI, a partnership, currently comprised of fourteen international institutions, was assembled: the Conrad Hilton Foundation, World Vision, USAID, UNICEF, WaterAid, the World Chlorine Council, Winrock International, Lions Club International, the Cornell International Institute for Food, Agriculture and Development, the Desert Research Institute, the International Trachoma Initiative, the United Nations Foundation, Helen Keller International and the Carter Center.

In early 2003, the Environmental Health Project, funded through the Global Bureau for Health of USAID, was requested to develop a Monitoring and Evaluation (M&E) plan and, in particular, to select a core set of indicators. This process was to be based on research of existing practices for M&E, discussions with partners, and the programmatic framework. This document represents the results of this process.

The M&E plan, as presented here, is intended to be a “living” document for the WAWI partners and for the WAWI Secretariat. As this plan is used to monitor and assess progress towards the four WAWI objectives stated below, the indicators, operational definitions, and basic assumptions will most likely go through revisions and modifications by the users. This often happens as tools are being applied and activities progress. Therefore, this document should be used as a starting point and not as a definitive plan.

The West Africa Water Initiative’s four objectives are to:

- Increase the level of access for the poor and vulnerable populations to sustainable, safe water and environmental sanitation services
- Reduce the prevalence of water-borne diseases, including trachoma, guinea worm, and diarrheal diseases
- Ensure ecologically and financially sustainable management of water quantity and quality
- Foster a new model of partnership and institutional synergy.

To measure the progress made toward the above-stated objectives, the following six core indicators were chosen:

- Percentage of target population with access to safe water

- Percentage of households in target communities with access to sanitation
- Percentage of caretakers and food preparers who wash their hands properly with soap, and at appropriate times
- Number of cases of water-borne and water-related diseases (guinea worm, trachoma)
- Percentage of sites where the pump did not operate for a maximum of ten days
- Work plans that were created and adopted by the respective country teams and annually updated.

A full presentation of each indicator, with an accompanying discussion, is presented in this report, along with recommended next steps for the implementation of the WAWI M&E plan.

Acronyms

EHP	Environmental Health Project
CNHF	Conrad N. Hilton Foundation
IQC	Indefinite Quality Contract
M&E	Monitoring and Evaluation
SOW	Scope of Work
USAID	United States Agency for International Development
WAWI	West Africa Water Initiative
WSS	Water and Sanitation Committee

Background to WAWI

The West Africa Water Initiative (WAWI) was launched in late 2001 to help improve the lives of poor and vulnerable rural and urban populations in the developing world. The impact of this initiative is expected to be significant, and will result in increased access to services, improved health and welfare, and in more sustainable management of water resources for hundreds of thousands of people. The following are the goals of WAWI:

- Increase the level of access to sustainable, safe water and environmental sanitation services among the poor and vulnerable populations
- Reduce the prevalence of water-borne diseases including trachoma, guinea worm, and diarrheal diseases
- Ensure ecologically and financially sustainable management of water quantity and quality
- Foster a new model of partnership and institutional synergy.

In order to accomplish the goals and objectives of WAWI, a partnership currently comprised of fourteen international institutions has been assembled: the Conrad N. Hilton Foundation, World Vision, USAID, UNICEF, WaterAid, the World Chlorine Council, Winrock International, Lions Club International, the Cornell International Institute for Food, Agriculture and Development, the Desert Research Institute, the International Trachoma Initiative, the United Nations Foundation, Helen Keller International and the Carter Center.

As part of its contribution to WAWI, USAID has awarded a Task Order under the Water Indefinite Quantity Contract (IQC) to ARD, Inc. to serve in a management, coordination, and facilitation role related to USAID's financial contributions to the Initiative. USAID's Bureau for Global Health funds the Environmental Health Project (EHP). EHP, through its core funding, provides technical assistance to the WAWI partners in the areas of Monitoring and Evaluation (M&E) and Hygiene Promotion.

While the core emphasis in the West Africa Water Initiative is the link between water and health—in particular diseases such as trachoma, guinea worm and diarrhea—there has been a recognized need for attention to be given to water management within a broader context. WAWI will work in rural and peri-urban communities in Ghana, Mali, and Niger, and will focus on access to water supply and sanitation, community mobilization and organization, disease reduction through hygiene behavior, livelihood and income generating activities, and ecological management at boreholes.

Background of the Assignment

During a partners meeting in Washington, D.C., Dec. 30, 2002, one of the sessions focused on the development of indicators for WAWI. The partners discussed organizational preferences and ideas and considered long term M&E issues, such as looking at behavioral change and identifying lessons learned and success stories. At this meeting, EHP was requested to assist the WAWI partners in the area of M&E, particularly in regard to the selection of a core set of indicators. A Scope of Work was developed after initial discussions between EHP, the WAWI Secretariat (located in Ghana and headed by Bismark Nerquaye-Tettah), and other partners. The Scope of Work (SOW) would focus on the selection of the core set of indicators for the four WAWI objectives—to be reported on by all partners throughout the first five-year phase of WAWI. The SOW was reviewed by the WAWI Secretariat, Jeff Schaffer of the Hilton Foundation, Phil Roark of ARD, and the EHP technical staff (see Annex 1).

Work on this assignment was initiated in April 2003, after the SOW was finalized. A technical lead, Lisa Nichols, a member of the EHP staff with a background in monitoring and evaluation, was selected. A team planning meeting for the assignment was held at EHP, the WAWI Secretariat was consulted on its outcome, and next steps were outlined.

EHP was invited to participate in a start-up workshop for WAWI that was held in Bamako, Mali, June–July 2003, in order to present the work on the core indicators that Lisa Nichols had developed. Prior to this, Ms. Nichols was sent the WAWI draft conceptual framework and was requested by the workshop organizers to participate in the WAWI Framework “launch,” which was designed to solicit input from the workshop participants on the objectives and outcomes of the WAWI activities. This proved to be an excellent organizational tool for the workshop, as it allowed the various partners an opportunity to discuss where their activities and grants fit within the WAWI framework, and to specifically find synergies between the outcomes of their various grants (USAID and the Conrad N. Hilton Foundation are grant sources, and some partners are providing matching funds), and the overall WAWI outcomes and objectives. Finally, this also provided an opportunity for an early discussion on monitoring and evaluation, prior to the presentation of the proposed core indicators.

An outcome of this meeting was the completion of a WAWI program framework, included in the monitoring and evaluation plan in this document, with outcomes and objectives discussed by the WAWI partners’ field staff. This framework and indicators were presented at the September 2003 meeting of WAWI headquarters’ staff and further comments and input were gathered. The program framework and indicators presented in this document represent the final version and reflect all comments received by the technical lead on this assignment.

This report represents the final deliverable to the Scope of Work providing M&E support to WAWI. It is referred to as “Version 1” because this is a living document. It is expected that the plan will undergo some changes, once it is applied in the field and once its usefulness and practicality for measuring WAWI activities is tested. A Program Framework working group was formed in 2003 to work on the program framework and the indicators. This group, to be referred to as the M&E working group, will be responsible for overseeing the application of the M&E plan.

The report is comprised of the following:

- A brief discussion of the process used for selecting the indicators
- A Monitoring and Evaluation plan with its elements
- Issues around the selected indicators and the framework
- Next steps for implementation of the plan.

Methodology and Process for Developing the M&E Plan

The following steps outline the methodology and process, derived from the Scope of Work, which were used for this assignment. A brief description of their status is also presented below:

- Gather existing M&E questionnaires, impact evaluation, and other relevant information from WAWI partners at central and/or local levels.

Because the WAWI activities are new and had not yet been initiated at the time of this assignment, no questionnaires were available. However, several partners shared program documents from other programs similar to WAWI. Lisa Nichols, with the assistance of the Assistant Activity Manager Aimee Eden, began collecting information on existing practices from the partners through e-mail and telephone exchanges. All of the partners were contacted between April and June, and some provided background information on their programs and their respective M&E plans. In order to discuss the assignment and its progress, Ms. Nichols met with M&E advisors at World Vision Washington, with a representative of the CNHF, with WaterAid headquarters staff, and several times with ARD representative Phil Roark.

- Obtain consensus from WAWI partners on their information requirements regarding indicators for the Initiative goals.

All WAWI partners are monitoring their progress as a requirement of the grants they received from CNHF and USAID. Some of the proposed indicators in the M&E plan were selected from standard indicators used internationally, as well as those standards used by some of the WAWI partners—in particular sectors such as water supply. One thing was clear however—the WAWI partners wanted a small set of indicators that could be *commonly tracked and reported without additional burden to the programs*. Consensus on the selected indicators was attained, but additional work is needed to achieve consensus on certain details such as operational definitions, standard measurements, and quantitative targets for each indicator. This document is a starting point from which the WAWI M&E Working Group can build consensus on these additional elements to the M&E plan.

- Assess potential indicators. Analyze this existing set of indicators to identify those that are most relevant to WAWI goals and objectives and propose alternatives, if needed.

The existing set of indicators that were included in the grant proposals was reviewed. Supplemental indicators were chosen in the area of partnerships and hygiene behavior, which are two areas that were not adequately addressed for various reasons

in the existing grants. For example, hygiene behavior was not specifically being measured, and instead the burden of disease for the various water-related and water-borne diseases was used as an indicator.

As part of this assessment, a matrix was developed, which looked at “state of the art” indicators in the water and sanitation sector, in order to take into consideration any existing standards in the sector. Another important reference is EHP’s work on analyzing the state of the art in indicators, which are being compiled in a document entitled, “Guidelines for Assessing Hygiene Improvement” (Draft: Kleinau et al, 2003).

- Discuss, with partners, as to which organization would assume responsibility for the collecting and reporting of required data.

Currently, the operational issues for implementing the M&E plan have not been fully resolved. It is assumed that the M&E Working Group and the WAWI Secretariat will play a role in determining the operational steps. A suggested process for implementing the M&E plan is included in the last section of this report.

- Identify, in collaboration with WAWI partners, data sources and collection methods. Cost implications should be included in this process. Recommend data collection tools. Prepare a schedule for data collection and for partner consultation that includes methodologies for the analysis of data collected and for the formulation of baseline targets.

Data sources and collection methods were identified and discussed with WAWI partners. Some gaps exist and suggestions were made in the course of discussions of indicators on data collection methods and tools, particularly for measuring hygiene behaviors. The M&E plan includes suggested methods, a schedule for data collection, and partner consultation. However, cost implications have not fully been addressed. It is recognized by the WAWI partners that adequate funding is needed for monitoring and evaluation. The recommended next steps section will raise this issue again and specific suggestions will be offered.

- Select recommended indicators for discussion with partners. Present the set of indicators to a WAWI working group of partner representatives. Finalize the list of indicators with partners.

A draft list of indicators was assembled and internally reviewed by EHP, prior to the June–July 2003 start up workshop. These indicators were presented and comments on the framework and the indicators also were solicited during and after the meeting from the members of the Framework Working Group. This group was formed in order to provide support to Lisa Nichols as the process evolved, and also to provide an internal “home” within WAWI for the M&E plan.

Feedback from the meetings and comments received afterwards were incorporated into the next draft. In particular, attention was given to the selection of additional

indicators for Objective 3. A second draft of the indicators and the program framework was presented at the September 2003 WAWI Partners' Headquarters Meeting. The participants at this meeting were then given a month's time to provide comments on both the framework and the indicators.

The current M&E plan in this document reflects the methodology described above and the feedback received throughout this process.

Notes on the use and interpretation of the WAWI M&E Plan:

- The M&E plan is not meant to replace any existing M&E for the various program grants.
- The M&E plan is designed to be used by the WAWI Secretariat, so as to capture the sum or the results of the most significant activities being carried out by the WAWI partners in a **cumulative** manner.
- This set of indicators is meant to be a **selection** of essential results of the WAWI activities and is therefore not a thorough and comprehensive set of measurements. Given the multitude of WAWI activities, a judgment call was necessary to streamline and select a small number of indicators. Supplemental information is already collected and reported under the individual grants.
- The M&E plan is designed to complement the information that is gathered in the individual WAWI grants and should be used in combination with the information in the WAWI partners' progress reports.
- The core indicators were selected based on the following criteria¹:
 - Direct – closely tracks the result it is measuring (validity is included here).
 - Objective – unambiguous with clear definitions to be used consistently.
 - Practical – data can be collected in a timely manner and for a reasonable cost.
 - Adequate – the minimum number of indicators necessary to ensure that progress toward a result is sufficiently captured.

Other considerations in the selection process were the cost in the collection of data and the availability of information in the WAWI program's interval (i.e., that would show a change within the program period). The issue of comparability—that the indicator data could be compared over time and across programs—was also considered.

¹ These criteria are standard criteria used throughout social science when judging the quality of a measurement. These particular criteria and their description are found in USAID guidance, TIPS #12 <http://www.usaid.gov/policy/ads/200/tips12.pdf>

- Baselines for each indicator will need to be collected, analyzed, controlled for data quality and analysis, and documented. This process will be repeated for midterm and final evaluations.
- It will be important—if it has not already been done—for the WAWI partners to determine accurately the population size in the target areas in each of the WAWI countries. The country team members could do this collectively, so that one target figure or denominator for each indicator (where required), is available and consistently applied. This number will be documented, and each year an increase in the population size can be calculated using national level growth figures.

Further discussion of next steps is included in the last section of this report.

Components of the M&E Program

- 1. Program Framework** – final version reflecting edits, inputs and comments.
- 2. Diagram of Framework and Core Set of Indicators**
- 3. Detailed description of each core indicator**
 - Source
 - Method of Data Collection
 - Frequency of data collection
 - A discussion of:
 - Rationale
 - Definition of terms
 - Calculation
 - Data Sources
 - Target values
 - Issues

Program Framework

OVERALL GOAL: IMPROVE THE HEALTH AND WELL-BEING OF FAMILIES AND COMMUNITIES IN GHANA, MALI & NIGER	
Objective 1: To increase the access to sustainable, safe water and environmental sanitation to poor and vulnerable communities in rural and peri-urban settings	
Outcome 1: Rural households have access to adequate all year round supply of water through increase in numbers of sustainable potable water sources.	Output 1.1: Yielding boreholes developed and hand pumps installed
	Output 1.2: Other sources of water developed for communities and institutions
	Output 1.3: Water quality of water sources meet, WHO/National standards
	Output 1.4: Thematic maps are produced. Documentation and analysis of data on water resources. Water resources database developed
Outcome 2: Hygiene and sanitation facilities in place and in use.	Output 2.1: Aprons and laundry pads constructed
	Output 2.2: Latrines constructed and household drainage constructed
Outcome 3: Residents of low income urban settlements have access to water and adequate sanitation services.	Output 3.1: <ul style="list-style-type: none"> • Appropriate water sources developed • Solid waste management systems in place • Institutional capacity enhanced in social promotion of latrines
Outcome 4: Expanded water availability for agricultural purposes (drip irrigation and livestock watering) at selected villages	Output 4.1 : Sites using excess water from boreholes, dugouts, impoundments, dams, and streams for productive purposes
Outcome 5: Increased efficiency in the development of WATSAN services	Output 5.1 : Research into water quality issues, alternative water supply sanitation, technologies and environmental issues

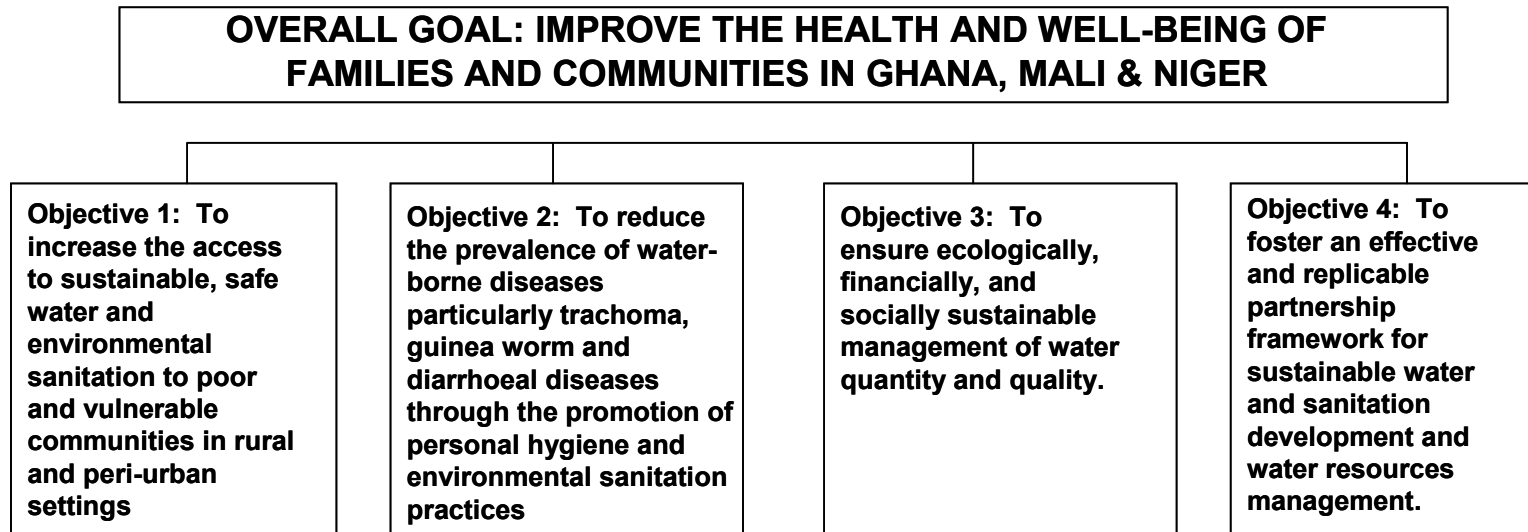
OVERALL GOAL: IMPROVE THE HEALTH AND WELL-BEING OF FAMILIES AND COMMUNITIES IN GHANA, MALI & NIGER	
Objective 2: To reduce the prevalence of water-borne diseases, particularly trachoma, guinea worm and diarrhoeal diseases through the promotion of personal hygiene and environmental sanitation practices	
Outcome 1: Increased community awareness and understanding of prevention of trachoma, guinea worm and diarrhoeal diseases	Output 1.1. Community health, hygiene & sanitation education for trachoma, guinea worm and diarrhoeal diseases prevention conducted
	Output 1.2. Prevention of trachoma, guinea worm and diarrhoeal diseases promoted by community leaders
Outcome 2: Communities practicing appropriate behaviours for the prevention of trachoma, guinea worm and diarrhoeal diseases at the household and individual levels	Output 2.1. Safe water storage and handling at the household level adopted
	Output 2.2. Safe water and sanitation facilities used by households
	Output 2.3. Hand and face washing practiced by community members
Outcome 3: Increased awareness by teachers and school children and understanding of prevention of trachoma, guinea worm and diarrhoeal diseases	Output 3.1. Teachers educated on trachoma, guinea worm and diarrhoeal diseases prevention
	Output 3.2. School children educated on trachoma, guinea worm and diarrhoeal diseases prevention
Outcome 4: School children (boys and girls) and teachers practicing appropriate health, hygiene and sanitation behaviour	Output 4.1: Safe water storage and handling at schools
	Output 4.2: Hand and face washing practiced by school children and teachers
Outcome 5: Integration of health and hygiene promotion into school curriculum	Output 5.1: Water and sanitation facilities used by school children and teachers

OVERALL GOAL: IMPROVE THE HEALTH AND WELL-BEING OF FAMILIES AND COMMUNITIES IN GHANA, MALI & NIGER	
Objective 3: To ensure ecologically, financially, and socially sustainable management of water quantity and quality	
Outcome 1: Communities (both genders) mobilized, organized and empowered to own and manage water facilities for sustainability.	Output 1.1: Community (youths, men and women) volunteers trained in pump maintenance
	Output 1.2: Community level WATSAN committees comprised of men and women operational
	Output 1.3: Community members (youths, men and women) trained in functional literacy
	Output 1.4: Pump tool kits distributed to communities
	Output 1.5: Service centers built
	Output 1.6: Communities contributing funds for the maintenance of facilities such as hand pumps, etc.
	Output 1.7: Communities trained and empowered to plan, implement, and monitor self-supporting programmes
Outcome 2: Enabling environment created	Output 2.1: National and local government and non-governmental institutions strengthened
	Output 2.2: Political will mobilized to support sound water resources management
	Output 2.3: Public awareness and citizen action promoted for sound water resources management
Outcome 3: Sound environmental management practiced	Output 3.1: Training received by farmers (youths, men and women) in environmental and natural resources management
	Output 3.2: Improved farming and environmental management techniques used by farmers (youths, men and women)
	Output 3.3: Capacity to monitor consumption and water quality at District level enhanced

<p>Outcome 4: Livelihood and income generation promoted</p>	Output 4.1: Household nutritional status improved
	Output 4.2: Income through irrigation of high value crops improved
	Output 4.3: Access to micro-credit improved
	Output 4.4: Capacity to manage credit and savings strengthened
	Output 4.5: Input and output markets developed
<p>Outcome 5: Research capacities developed and research findings being utilized</p>	Output 5.1: Resource center established to train water and sanitation practitioners in the sub-region
	Output 5.2: Participatory action research carried out in communities to develop innovative approaches and test their outcomes in beneficiary communities
	Output 5.3: Local and external students (graduate and undergraduate) supported to undertake participatory action research in project communities in agriculture and natural resources management
	Output 5.4: Research into water quality issues, alternative water supply and sanitation technologies and environmental issues conducted and disseminated
	Output 5.5: "Safe water yield" of wells evaluated

OVERALL GOAL: IMPROVE THE HEALTH AND WELL-BEING OF FAMILIES AND COMMUNITIES IN GHANA, MALI & NIGER	
Objective 4: To foster an effective and replicable partnership framework for sustainable water and sanitation development and water resources management.	
Outcome 1: WAWI HQ and Country teams operational with shared visions well committed to the programme.	Output 1.1: Effective planning and coordination among partners
	Output 1.2: Mali, Niger and Ghana Country Teams established and functioning effectively
	Output 1.3: Communication strategies established and functional
Outcome 2: WAWI strengths (including activities, tools, approaches) shared and harmonised.	Output 2.1: Surveys and reports on partner strengths.
	Output 2.2: Documentation on partners collaboration and joint activities
	Output 2.3: Guidelines for partner activities developed
Outcome 3: Effective WAWI Project managed compliant with donors, Governments and community standards and procedures.	Output 3.1: WAWI committees providing guidance and leadership on specific technical matters: M&E, standards, etc... and co-ordination to country teams
	Output 3.2: Management and reporting system reviewed and consolidated
	Output 3.3: Project accounting, financial and procurement systems operational
	Output 3.4: Monitoring systems developed and applied
	Output 3.5: WAWI Procedures and policies supporting partnerships established
	Output 3.6: WAWI Secretariat providing leadership
Outcome 4: Learning outcomes produced in terms of lessons learned.	Output 4.1: Learning materials and documentation related to the integrated process & partnerships model developed and distributed
Outcome 5: Enhanced and unified institutional capacity for Government and communities.	Output 5.1: Management systems developed and in place
	Output 5.2: Timely Mid-term and end evaluations implemented
	Output 5.3: Improved performance criteria applied: 1. Monitoring reports distributed 2. Number of personnel trained in Government, community and villages
Outcome 6: All local/community partners work collaboratively with communities for sustainability	Output 6.1: A functional and complementary network of partnerships to sustain activities established
	Output 6.2: Capacity in place for communities / district authorities to mobilize local human and financial resources for development
	Output 6.3: Functional networks among development agencies working in the programme area established

WAWI Framework and Indicators Diagram



Core Indicators

- % of target population with access to safe water
- % of households in target communities with access to sanitation
- % of caretakers and food prepares correctly washing hands at appropriate times
- Number of cases of water-related and water-borne diseases (guinea worm, trachoma)
- % of sites that have no more than 10 days per year in which the pump did not operate
- Work plans created and adopted by the respective country teams and annually updated

Detailed Information on Each Core Indicator

Percentage of target population with access to safe water	
Source	WAWI partners project records
Method of Data Collection	Calculations using project records compared with total target population; project records should include estimates of population served, which can be verified through household surveys
Frequency of Data Collection	Annually

Rationale: For the hygiene situation of a household to improve, the household must have easy access to a functioning source of water, and to an improved type or water that is considered “safe.” A safe water source is a term used especially in cases where water quality is measured, such as in the case of the WAWI sites, and where water is directly determined to be “safe.”

Access

The amount of time required to collect a household’s water supply is a **proxy measure** for the quantity of water used. Evidence indicates that access to the water source is an indirect indicator of water use. The average liters per capita use per day (lcd) can range from several hundred liters with a pipe connection, to less than 10 liters when the source is more than a kilometer away. Thus, the closer a water source is to a household, the more water they tend to utilize.

Definition of Terms: Access should be within 30 minutes or 1 kilometer of the household in rural areas, and 5 minutes or 200 meters in urban areas (travel both ways, waiting and collection). The total time to fetch water should be as short as possible, far less than an hour. WAWI will use a standard measure for WAWI programs that may not correspond to the national definitions of access.

Safe water sources are defined by the presumed or verified quality of the water. If this is not possible due to cost restrictions or access issues, improved sources and newly installed sources are also acceptable. However, if the water is not being tested, then the term “improved water sources” should be used for this indicator. WAWI partners will need to be clear in their use of access to safe water or improved water.

Calculation: It is determined by how much time is consumed (as measured by distance traveled) on a daily basis to collect enough water for the household. This will

depend on distance from the water source, time waiting in line, and volume dispensed at the source. Time should be considered with distance as a more adequate representation of access.

This indicator is calculated by dividing:

Numerator: The number of the target population with access (as defined)

Denominator: The target population

Source of Data: Household surveys of *a sample of households* in which the water collector (usually the caretaker or head of household), is interviewed and their principal water source identified. Then the time required to get to and return from the source is estimated, including time for waiting and for filling containers.

Target Values: In general, there is no standard for the correct amount of time required for a household to collect its water supply. However, the higher the percentage of households that have access to water supply the better off that community will be. In general, the program goal is to reduce the overall time it takes to bring water to the household with the technologies available.

WAWI partners' targets as presented in their grant proposals are often expressed in absolute numbers such as "numbers of persons benefiting from safe potable water." Therefore for this indicator, the total population in each of the target communities will need to be calculated and compared to the population benefiting from the improved water source.

Issues: This is a composite indicator that relates to the quantity and quality of water.

Because water use varies seasonally, depending on climate and household activities, pre/post-intervention comparisons should be conducted *within the same season*. Moreover, data based on a single interview may be inaccurate, because family needs vary from day to day. They may collect more on a particular day for such things as cooking for special events or clothes washing. The survey sample size should be large enough to deal with these variations.

This indicator is designed not to count water sources installed or improved, but rather is expressed in terms of population benefiting from the source. A secondary level of this, of course, is the number of sources installed—but this number in and of itself does not give an indication of whether the WAWI activities are meeting a need, whereas the percentage of the population with access, does.

The WAWI partners should avoid calculating this indicator using only "numbers of sources improved/installed" and "guestimating" the population these sources theoretically should serve. This back of the envelope calculation is not justified, if the needs of the population are to be met. Often water sources and population served do not correlate on a linear basis for various reasons, due to geographic access, water output, and other barriers to access and use. Often times this calculation gives a very false sense of coverage (as noted in most official access to safe water numbers calculated at the national level). Sample surveys that are correctly carried out are a better estimate of actual access by the population to safe water.

Quality

Definition of terms: Safe water will need to be thoroughly defined by WAWI partners. Generally it includes water from:

Borehole (on household premises or public)

Protected dug well (on household premises or public)

Safe water can also be defined as water treated at the household level with chlorine. Currently, it's not clear if household treatment and storage of water will be addressed specifically in WAWI target communities. This aspect of the definition of safe water should be addressed when those activities are undertaken.

Calculation: Number of households having access to one of the types of safe water sources (regardless of distance) divided by the number of households in the sample.

Source of Data: The caretaker or head of household is interviewed about water source. If possible, it is suggested that the interviewer examine the water source and verify whether it can be classified as source of safe water.

Percentage of target population with access to sanitation	
Source	WAWI partners promoting installation and use of functional and hygienic sanitation facilities
Method of Data Collection	Household surveys
Frequency of Data Collection	Annually

Rationale: For the hygiene situation of a household to improve, the members of the household must have easy access to a functioning and hygienic sanitation facility. This composite indicator incorporates access and quality of a facility.

Definition of Terms: Sanitation is defined as an improved sanitation facility such as a latrine that is functional and hygienic. It should be located within a convenient distance from the user's dwelling, 30 meters or less—bearing in mind use at night and use by children and the elderly.

Access should allow any member of the household to use the facility at any time of day or night. It should also consider the following:

- Whether the facility is shared, public, or private

- Time to reach the facility
- Distance of facility from dwelling (in meters).

Safe disposal of feces requires a private latrine (one facility per family) or a well-maintained shared facility (private or public owned). Shared facilities that are not cleaned regularly and of appropriate size for the number of users, may discourage use because of unhygienic conditions. Whatever the type, it must have an appropriate superstructure, at minimum an enclosure that bars views into the latrine, to be considered accessible. Latrines without a minimal superstructure discourage use. Bucket latrines and similar types that require the manual removal of feces are not considered sanitary because of the risk of contaminating the immediate environment.

A **sanitation facility** should be thoroughly defined by WAWI partners. It can include improved facilities or new facilities, but should meet the following criteria:

1. Type of Facility, one of the following:
 - Simple pit latrine or
 - Ventilated improved pit latrine
2. Basic superstructure of walls, roof, and door that can be closed to keep animals out and provide privacy
3. A place for handwashing with water and soap within or next to the facility.

A **hygienic** facility means there are no feces on the floor, seat or walls. While the presence of flies may indicate unhygienic conditions, it is difficult to assess this objectively.

Calculation: Percentage of the target population with access to a functional and hygienic sanitation facility divided by the total sample size.

Source of Data: The caretaker or household head is interviewed about the household's access to a sanitation facility and type. The person is asked if the household has a sanitation facility and, if feasible, who in the family uses it. The distance to the facility is ascertained. For young children it is also asked whether their feces are deposited into a sanitation facility. After the interview, a latrine inspection should be carried out to determine if it is functioning and hygienic.

While the presence of a functional and hygienic sanitation facility is a necessary condition to eliminate feces from the household environment, only its use by all family members has a health impact. If possible, those undertaking the surveys should assess signs of use (e.g., well-worn path, door in good repair, absence of spider webs, presence of cleaning materials).

Target Values: The benefits of safe disposal practices are not only to the immediate household, but also to the community at large, because feces from one household can easily be carried, for example, through flies, or washed into the environment of neighboring households. Bateman and Smith, 1991, found that for maximum health impact, about 75% of households in a given community should have and use hygienic toilets or latrines.

Issues: Just having a sanitation facility is not sufficient. One important determinant of use is access or distance that household members have to cover to get to the facility. There must be signs of consistent use by all family members, if hygiene improvement is to be achieved. Unfortunately, such measures are subjective and less reliable.

There is at times sensitivity to the topic of sanitation in certain cultures. Thus, the interviewers must be well trained and attempt to be as unobtrusive and sensitive as possible. In some cases, it may be necessary for female interviewers to interview female household members. For good program design and for achieving sound results, it is recommended that qualitative research on the knowledge, attitudes and practices in excreta disposal be collected.

Percentage of caretakers and food preparers washing hands properly with soap and at appropriate times
--

Source	WAWI partners promoting handwashing
Method of Data Collection	Household surveys; individual surveys
Frequency of Data Collection	Bi-Annually

Rationale: To improve household hygiene, it is important that caregivers and those responsible for food preparation wash their hands after using sanitation facilities, after handling a child’s feces and/or before preparing food. This behavior is associated with their knowledge of proper handwashing behaviors (when and how), as well as of access to safe water and handwashing facilities. Caretakers and food preparers serve as a proxy for family practices. It is important that everybody in the household, including children, wash their hands with soap at appropriate times.

Definition of Terms: Handwashing appropriately involves 3 elements: (1) handwashing area, (2) handwashing technique, and (3) handwashing critical moments. The indicator is a composite of all three elements, by assigning each response category a value of one and adding them to obtain the total score. WAWI partners can determine a minimum score deemed to constitute appropriate handwashing.

People's ability to wash hands at appropriate times depends on whether households have immediate and easy access to all necessary items for handwashing, ideally, in a dedicated place:

- water – from tap or container
- soap, ash or other detergent

A basin or sink and a clean towel or cloth may add rigor, but may not be required to improve the effectiveness of handwashing significantly, because alternative means exist.

Appropriate handwashing technique involves:

- uses water
- uses soap, ash or other detergent
- washes both hands
- rubs hands together at least three times
- dries hands hygienically—by air or with a clean cloth

Critical moments include (listed by WHO as the instances for maximum effect on diarrheal disease reduction):

- after defecation
- after handling child's feces
- before feeding
- before eating
- before preparing food

Calculation: Number of caretakers who demonstrate handwashing appropriately (equivalent to the minimum score deemed to constitute appropriate handwashing) divided by the total sample size.

Source of Data: Interviewer asks the caretaker in the household two open-ended questions. First, when do you wash your hands? The interviewer has a list of the critical moments, but does not prompt the caretaker, and checks each one as it is cited. Second, how do you wash your hands? The interviewer has a list of steps and checks each one as it is cited, but does not prompt the caretaker. The caretaker is then

asked to demonstrate handwashing. The interviewer would also take note of the supplies available and the area in which handwashing is done.

Target Values: There is extensive evidence that improved handwashing leads to reductions in diarrheal disease and other water-related diseases. Social marketing and hygiene promotion programs have demonstrated impressive increases in improved handwashing behaviors. Targets aimed at increasing proper handwashing by 50% over the baseline are realistic and attainable.

Issues: Handwashing behavior is strongly influenced by the presence and access to water. Where water is scarce, people may resort increasingly to using recycled water for handwashing. Where this is the case, it should be assessed during the interview. It needs to be determined whether handwashing using recycled water is more desirable than not washing hands at all and/or whether it constitutes a considerable risk of fecal contamination.

Because of the tendency to over-report desirable behaviors, direct observation is more reliable. Answering these questions is also linked to the sustainability of improved behavior, especially in hygiene promotion campaigns, where people may have learned the responses expected from them during a household survey, which may poorly reflect their actual practices.

Caretakers are often asked when they “usually” wash their hands. However, it might improve reliability to ask whether and when in the past 24 hours the caretaker washed hands.

Number of cases of water-related and water-borne diseases (guinea worm, trachoma)
--

Source	WAWI partner epidemiological surveys
Method of Data Collection	Sample surveys in target communities
Frequency of Data Collection	Annually

Rationale: The reduction in the disease burden from guinea worm and trachoma demonstrates compound program results: that the population is using improved water and also practicing improved preventive behaviors for both guinea worm and trachoma. By comparing the baseline figure with data collected over time, progress can be determined.

Definition of terms: Both diseases have internationally standardized clinical definitions and protocols for their measurement. These are currently followed and

applied by WAWI partners and should continue to be used in measuring the disease burden from these two water-related illnesses.

Calculation: A baseline exists of trachoma and guinea worm for the WAWI target areas. Over time, the number of cases per thousand in the population can be tracked through sample surveys in target communities.

Source of Data: Existing WAWI partners will have a process that periodically detects, through a scientific process using international clinical standards, the number of cases of trachoma and guinea worm in the target areas. These partners will report this information to the WAWI Secretariat.

Target Value: A significant reduction in the disease burden is anticipated in the WAWI target areas.

Issues: It will be important that the enumerators are properly trained and that the quality of the data collected is assured. This can also be done through periodic cross checking of data with other sources outside of and within the WAWI partners, who are also examining the disease burden of these two illnesses. Grantees expect a reduction over the life of the program, but the expected amount of the reduction is to be discussed and/or determined.

Percentage of sites that have no more than 10 days per year in which the pump did not operate

Source	WAWI program records / community Water Sanitation committee records
Method of Data Collection	Site surveys from a sample of WAWI installed pumps over a one-year period
Frequency of Data Collection	Bi annually

Rationale: To adequately capture the appropriate functioning of a water and sanitation committee, the single best criteria is the delivery of water. This indicator captures two compound results:

- The proper functioning of the pump over time, and
- The proper maintenance of the pump (which implies the proper management of the source by the water and sanitation committee).

For the West Africa Water Initiative goals to be realized, all households in the target areas need continuous access to safe water. An undependable water system results in households looking for and using alternative sources that may not be safe. Therefore

the provision of water by the pump becomes the main criteria by which to measure the functioning of the committee, as well as the sustainability of the impact.

Occasional breakdowns of pumps are normal and several days may be required to fix the pump—that is arranging for a repair person, accessing funds, and/or procuring spare parts. A pump that is inoperable for more than 10 days per year is not only an indication that the Water and Sanitation (WSS) committee is not working effectively, but also that health benefits from potable water consumption and use are compromised. The ability of the WSS committee to manage the virtually continuous operation of the pump, that is to keep the water flowing, is the single best measure of sustainability.

Other criteria can be used involving: women’s participation in the water and sanitation committees; communities with means to collect and prescribe funds for recurring costs; also for those activities concerning water management, the number of farmers using micro-irrigation techniques could also be used.

Definition of terms: A pump is operational when it provides the intended quantity of water to the target community.

Calculations: Biannual visits to all pumps sites should be used. Site visits by WAWI staff to examine the committees records and determine the number of days the pump was not functioning. This information should be further validated through on-site interviews with pump repair persons and through a sampling of water users.

The data from these sites should be calculated as follows:

$$\frac{\text{Numerator: Number of sites with less than 10 days of pump breakdowns}}{\text{Denominator: Total number of sites}}$$

Source: WAWI water and sanitation committee records, site visit reports, and interviews with pump repair persons and users.

Target Values: It should be feasible to have virtually all (90 %) of pumps functioning during the twelve-month period, with fewer than 10 days of breakdowns.

Issues: Some records by water and sanitation committee might not be accurate and complete. Attention will need to be given to proper record keeping when the committees are formed.

Work plans created and adopted by the respective country teams and annually updated
--

Source	Country team meetings – work plans submitted
Method of Data Collection	Country team reports prepared
Frequency of Data Collection	Annually

Rationale: The fourth WAWI objective was designed to recognize that WAWI is unique in having a large number of partners and that the partnerships add value to the development process. It is also understood that communities and local partners also play an important role in these partnerships. In order for the partnerships to add value they must function correctly and the partners must work together. A measure of this joint collaboration are the work plans created and adopted by the country teams.

Even though this indicator captures primarily country level collaboration, it could be assumed that headquarters collaboration is also essential for these work plans to be executed and updated. As WAWI evolves, indicators that measure the growth of the partnership, an increase in resources leveraged, or additional geographic coverage, and/or its replication can be adopted. This indicator therefore was selected to reflect a basic strength of the partnership as demonstrated in the collaborative preparation of the country work plans.

Definition of terms: Each country team has an annual meeting where a joint workplan is developed. The workplan contains various elements such as activities, roles and responsibilities, and timelines.

Calculations: Each country will have one work plan per year (total of three work plans, one each for Mali, Niger, and Ghana).

Source of Data: Country teams

Target Values: One per country.

Issues: The work plan as it is updated annually, should be an indication that the partnership is working, that agreements are being made, and that work is being accomplished. Other supporting indicators could address the expansion and replication of the partnership by measuring:

- The increase in the number of partners
- The number of new communities
- The amount of increased funding.

Proposed Options and Implementation Steps

The M&E Committee, in collaboration with the WAWI Secretariat, will initially take over the framework and indicators around mid-January 2004. The Secretariat and the committee will be responsible for communicating the M&E plan to the country teams. Steps to be taken for monitoring and evaluation, treated separately, are proposed below for consideration and options for carrying out these steps are also offered.

M&E Advisor

For both Monitoring and Evaluation tasks, one M&E advisor should be recruited who will be based at the WAWI Secretariat and work closely with the country teams. Identifying funding for this position and recruiting a qualified person is an immediate priority for the WAWI donors and partners.

The M&E advisor could be recruited from one of the WAWI countries, or the region. This person could also be seconded from one of the WAWI partner programs. S/he would work with the M&E point person from each country team. S/he should be bilingual and willing to travel significantly.

The major responsibilities of the M&E advisor would be:

- overall design of baseline and impact surveys including the development of survey instruments
- capacity building
- implementation of M&E tasks
- building consensus on operational definitions
- setting standards for monitoring with each field partner
- overall supervision and quality control WAWI M&E activities.

This person should be skilled and experienced in monitoring field programs, particularly in the areas of water, sanitation, and health and in evaluation methodologies. S/he will be assisted by an evaluation and survey expert hired through existing WAWI mechanisms such as EHP.

Monitoring

The country teams will be requested by the Secretariat to designate one M&E “point” person from one of the member organizations. It is urgent that these point persons be identified soon. This person would normally be someone from the staff who is responsible for M&E activities for one of the partners, or who has M&E experience. Since this person would be someone already on staff and s/he would devote less than half of their time to this task, the costs would be minimal.

Once the point person is identified, the M&E advisor would visit each WAWI country partner to review monitoring activities and field activities. The M&E advisor and the point person will work with individual WAWI partners, and collectively with the WAWI country team, on building M&E capacity and reaching consensus. The advisor would work with the M&E point person so that s/he could continue to follow up on recommendations and strengthen M&E activities with each team.

This review process will examine current ongoing WAWI related information collection/monitoring. This process will be used to establish and systematize the operational definitions, review existing data collection methodologies, and review the analysis of the monitoring information that is collected.

Evaluation

Two options are proposed for evaluation of WAWI progress. The two options vary considerably in costs and in the quality and precision of the data collected. The first option is an internal evaluation using mostly program resources to build the capacity of implementing partners in carrying out population-based evaluations. The second option, using an external evaluator or evaluation contracting agency, will require the most investment but will give the most objective, and precise survey results. Regardless of the option chosen, additional resources and investment are required.

The WAWI donors and implementing organizations will need to quickly reach consensus about the purpose of the evaluation, the need for either an internal or external process, and choose the evaluation methodology they would prefer and identify the funding. A baseline for all of the indicators will be critical to establish in the first six months of 2004. Even though the WAWI partners have already collected some baseline information for their individual grants, this survey will serve to unify and standardize the information and to provide an accurate reflection of the pre-intervention situation in each WAWI country. (It should be kept in mind that the time period of data collection should remain the same for each evaluation exercise, due to the effect of the seasons on behaviors and water availability.)

Option one: An outside consultant, possibly provided by EHP, could be hired to work with the M&E advisor and the WAWI point persons and partner staff on the implementation of a new survey instrument called the Lot Quality Assurance Sampling (LQAS) (for more information go to http://www.ngonetworks.org/pubs/pdf/Annex_36_Costs_of_LQAS.pdf and

<http://www.childsurvival.com/connections/KeyTerms.doc>). LQAS is a tool that is used frequently by PVO's working in child health who cannot make a large investment in surveying as it is less expensive and uses local project resources (vehicles, etc.) and staff. A consultant could be identified who understands this tool and has experience in its use. This option could cost approximately \$75,000 for each country for each survey (baseline and final). There will be less control over data collection, and the evaluation would be more of a capacity building exercise. The data will be useful for evaluating program process and impact, but the objectivity and scientific rigor will be limited.

Option two: An outside organization could be funded to perform the baseline, midterm (if resources allowed), and final evaluation of the WAWI activities. This would be a research firm specialized in evaluation that would collect and analyze the information in a sample of the WAWI areas. Three firms could be contracted, one in each country, who have the capacity to undertake household surveys. Terms of Reference, the survey protocols, and supervision could be developed by the WAWI M&E advisor.

Costs: These external evaluations (baseline survey, analysis, and final survey and analysis) would cost approximately \$150,000 each per country. These would provide independent, high quality verification of the impact of the WAWI activities.

It will be up to the WAWI donors and the Secretariat to review these options for monitoring and evaluation and to determine if additional investment is desirable. A review of the results from the Ghana Rural Water Supply program would indicate a need for additional investment in M&E among the WAWI partners.

Reporting

- The M&E advisor will be responsible for working with the country teams on reporting on the core indicators.
- The M&E advisor will receive the reports from the country teams, analyze and discuss the results with the Secretariat.
- The Secretariat with the M&E advisor should be responsible for reporting WAWI progress to the headquarters/donor partners and circulating back the report to all of the country teams, which will in turn share the results with their in-country partners. A feedback process should be used for sharing information at all levels.
- At least once a year, performance reporting using the core set of indicators should occur based on information gathered from routine monitoring. Not all of the core indicators will lend themselves to yearly reporting. Some can only be reported on if there are household surveys, for example.

- It needs to be determined how this information will be aggregated across programs and compiled by the M&E advisor. For example, will there be one data set per indicator per country? Or is it preferable to have one data element per indicator that represents the aggregate of the three countries? The M&E advisor can help the WAWI partners reach agreement on this issue.
- Reporting formats might be linked to the common reporting format being considered for WAWI partners.

Technical Meeting for M&E

A WAWI partners meeting should be held to further discuss M&E issues as soon as possible in early 2004. M&E and other staff, such as program managers, should be identified to attend this meeting. It's important for program managers to understand M&E issues in order that M&E be fully integrated into a program and not be a stand alone activity. By associating both M&E specialists from the WAWI partners and the managers, a more cohesive and effective approach to M&E can be implemented. This meeting could be organized by the WAWI M&E advisor.

Other M&E issues, such as addressing the quality of baseline collection, development of standardized reporting forms, and sharing partner experiences and concerns in M&E, should be addressed in this meeting.

Timeline for Key Steps and Activities

Activity	Deadline	Lead
WAWI Framework Committee and Secretariat take over M&E plan	January 15	Secretariat
Secretariat contacts country teams to request designation of M&E point person	February 1	Secretariat
Country Teams designate point person for M&E	February 10	Country team leaders
M&E advisor hired (pending funding)	March 15	Secretariat
Monitoring and Evaluation Meeting of WAWI partners	April	M&E Advisor
Baseline protocols and questionnaire prepared	May – June	M&E Advisor (with possible input from EHP)
Contracted organizations or WAWI partner staff collect baseline information for core indicators (pending funding)	Before July 1	WAWI partners
Analysis of data performed and report prepared	September	M&E Advisor

Annex 1. Final Scope of Work

April 1, 2003

Scope of Work

West Africa Water Initiative (WAWI): Development of Indicators

Purpose

The purpose of this Scope of Work is to outline the essential tasks necessary for the compilation and selection of indicators to measure success in meeting the goals of the West Africa Water Initiative (WAWI). The indicators would be used by the WAWI consortium of implementing partners for the duration of 5-year program with field activities beginning in 2003. The indicators are expected to be limited to a select few to complement, but not supercede, ongoing plans for monitoring and evaluation by individual WAWI organizations.

Background

The World Summit on Sustainable Development has formally endorsed “partnerships” as a model for action. Organizations around the world are strengthening existing alliances, and fostering new collaborations to make progress on achieving the United Nations’ Millennium Development Goal of “halving, by 2015, the proportion of people without sustainable access to safe drinking water.” As part of this global movement towards partnership, the West Africa Water Initiative (WAWI) was launched in late 2001 to help

improve the lives of poor and vulnerable rural and urban populations in the developing world. The impact of this initiative is expected to be significant, and will result in increased access to services, improved health and welfare, and more sustainable management of water resources for hundreds of thousands of people. The following are the goals of WAWI:

- Increase the level of access to sustainable, safe water and environmental sanitation services among the poor and vulnerable populations;
- Reduce the prevalence of water-borne diseases including trachoma, guinea worm, and diarrheal diseases;
- Ensure ecologically and financially sustainable management of water quantity and quality; and
- Foster a new model of partnership and institutional synergy.

Leadership, and major funding, for WAWI has been provided by the Conrad N. Hilton Foundation. WAWI is a natural outgrowth of the Hilton Foundation's years of experience with World Vision, and other international non-governmental partners to provide rural water and sanitation as part of integrated community development. In 2002, the Hilton Foundation expanded their long-standing efforts in not only Ghana, but also in Mali and Niger, and added a peri-urban as well as rural focus to their work. While the core emphasis remains the link between water and health—in particular diseases such as trachoma, guinea worm and diarrhea—the need for attention to a broader water management context has been recognized and embraced. WAWI will work in rural and peri-urban communities in Ghana, Mali, and Niger, focusing on activities such as:

- Well drilling and pump installation, well rehabilitation, and alternative water source development;
- Community mobilization and organizing for financing, maintenance and decision-making;
- Construction of latrines, household disinfection, sanitation, and hygiene education in schools, households, and communities;
- Social marketing activities to promote hygiene for disease prevention;
- Hydro-geological analysis and capacity-building;
- Livelihood and income generation activities;
- Gender-focused training, program design and investment;
- Institutional strengthening, policy reform and enabling environment support; and
- Promotion of sound natural resource management at boreholes and participating communities.

In order to accomplish the goals and objectives of WAWI, a partnership of ten distinguished international institutions has been assembled, including the following:

- The *Conrad N. Hilton Foundation*, a private charitable foundation devoted to the alleviation of human suffering and provision of humanitarian assistance in the U.S. and abroad, focusing on areas including blindness, early childhood development, domestic violence, and homelessness. The Hilton Foundation is the primary external donor and will serve an important coordination and oversight role for its grantees;
- *World Vision International*, a Christian relief and development organization, which will take the lead in well drilling, pump installation, and alternative water

source development, along with community mobilization to facilitate local ownership and sustainable management of systems. World Vision will also establish a broad-based regional training program to support “hardware” and “software” components of the overall initiative for WAWI partners and counterparts;

- *The United States Agency for International Development (USAID)*, the bilateral assistance agency of the U.S. Government, will provide funding to WAWI partners, and will also help strengthen the integrated water resources management orientation of the initiative through support to areas including: livelihoods and income generation, policy and enabling environment, gender mainstreaming, and hydrologic information management in both rural and peri-urban settings;
- *UNICEF*, an international organization within the United Nations system committed to helping children living in poverty in developing countries, works in several priority areas of action including water and environmental sanitation. UNICEF will focus its efforts on rural school-based sanitation and hygiene, well rehabilitation and alternative water source development, and advocacy and enabling environment activities;
- *WaterAid*, a private charity dedicated to the provision of domestic water, sanitation, and hygiene promotion for the world’s poorest people, will be the principal implementer of peri-urban water supply and sanitation efforts within WAWI, in addition to supporting rural sanitation and hygiene capacity building and outreach;
- *The World Chlorine Council*, a non-profit network of national and regional trade associations and their member companies representing the global chlorine chemistry industry, will join with the Global Vinyl Council to provide a product donation of PVC pipe for tubewells in the target communities;
- *Winrock International*, a non-profit environment and development organization, will collaborate with the Desert Research Institute to develop sustainable, smallholder irrigation and micro-irrigation activities;
- *Lions Club International*, the grant-making arm of a worldwide private voluntary service club organization, will provide funding and in-country volunteers to carry out a targeted trachoma prevention campaign in Mali and Niger as part of their blindness program;
- *The Cornell International Institute for Food, Agriculture and Development*, a research and academic institution, will support community mobilization and water development in the context of sound natural resources management, pursuing action research and pilot activities in sustainable agriculture, environmental protection, and rural development; and

- *The Desert Research Institute*, a research and academic institution, will undertake hydro-geologic analysis and modeling, and will provide capacity building to strengthen government information management systems.

A recent addition to the membership includes the *International Trachoma Initiative*. Membership for the *United Nations Foundation* is pending. Their roles within the initiative have not yet been defined.

The members of the WAWI alliance represent experience across a broad spectrum of international development. They will collaborate together closely to create programmatic synergy and take advantage of individual, and collective, strengths among affiliated partners. Initiative partners will also collaborate closely with host country governments and other local actors who will be core participants at all stages of activity design and implementation to maximize the impact of water-related interventions by public and private sector actors alike. In its first five-year phase, this new partnership of ten international institutions will invest more than USD \$40 million in small scale, potable water supply, sanitation, hygiene, and integrated water resources management activities in Ghana, Mali, and Niger.

As part of its contribution to WAWI, USAID has awarded a Task Order under the Water Indefinite Quantity Contract (IQC) to ARD, Inc. to serve in a management, coordination, facilitation, and technical assistance role in respect to USAID's financial contribution to the Initiative. ARD staff member Phil Roark has been delegated responsibility for heading up this effort. One of the full group's first actions was to organize and convene an initial one-day WAWI Partners Meeting in Washington, DC on 30 December 2002. The goals of this initial meeting were threefold:

1. To learn more about each WAWI partner organization and exchange information on roles and strategic, operational, and other preferences;
2. To discuss and focus WAWI commitment around implementation next steps; and
3. To raise and discuss partnership issues and come to some understanding on these issues.

The meeting notes/results of this initial Partners Meeting are attached (as Annex A) to this scope of work. As noted on page 3 of the Meeting Notes, one of the sessions focused on the development of indicators. The full plenary group discussed organizational preferences and ideas for WAWI indicators. In addition, the group considered longer-term M&E issues, such as looking at behavioral change and identifying lessons learned and success stories. Agreement was reached on the following two key items:

- A working group would begin work on developing indicators to monitor WAWI goals. It was agreed that the leadership and coordination role would be delegated to staff on the Environmental Health Project (EHP) working closely with Phil

Roark, and all alliance partners. EHP staffers will collaborate with the appropriate M&E experts from each member organization to help compile a small set of indicators to track WAWI-wide goals.

- An agenda item on this topic will be included as a key session in the proposed initial start-up workshop in Bamako, Mali, to be held June 30 – July 3, 2003.

It was also agreed that it would be highly desirable to know what indicators each organization is currently using for activities and preferences each organization has for reporting. This would go a long way towards attaining the goal of using common indicators and/or reporting formats. To date, proposed and/or possible indicative indicators (based upon previous work regionally in the sectors covered) have been received from UNICEF and World Vision.

The goal of this activity will be to develop a full set of common indicators that can be used by all partners throughout the first five-year phase of WAWI. Draft indicators will be compiled/proposed by a lead technical consultant (M&E expert) who has undertaken similar efforts in the past. This effort may require field visits to Mali, or Ghana—or both. The draft indicators will be developed in consultation and collaboration with all partners and a report will be presented and discussed at the Bamako Start-up Workshop, which is slated for sometime in June or July 2003.

Tasks

- Contact (either via phone, email, or in-person) key players (Phil Roark, USAID staff—John Austin, Merri Weinger, the Water Team, and others TBD, partner M&E specialists), and review any existing background documents. Collect all of the relevant information available from WAWI partners related to the framework (results, goals, and objectives) and use it to develop a plan for potential field visits and follow-up discussions with WAWI partner M&E personnel. EHP will also draw upon any previous M&E efforts (done by Pat Billig, and others), and will share relevant material with WAWI partners.
- Establish direct communications link with WAWI Field Coordinator (Bismark Nerquaye-Tetteh) and solicit his input.
- Solicit input on this Scope of Work from representatives from each WAWI partner organization.
- Obtain from each partner organization the name and contact information of their respective M&E specialists who will be the ongoing liaison for the development of WAWI indicators.
- A one-day, internal EHP team planning meeting (TPM) for the technical consultant will be organized prior to the assignment. The purpose of this meeting is for the consultant to fully understand the assignment and the deliverables, develop a draft workplan, and receive any necessary guidance on monitoring and

evaluation issues as s/he moves forward in close collaboration with WAWI partners.

- In close collaboration with WAWI partner organizations, and based on the input received to date, develop draft common indicators:
 - Gather existing M&E questionnaires, impact evaluation, and other relevant information from WAWI partners at central and/or local levels. Develop list of potential indicators.
 - Obtain consensus from WAWI partners on their information requirements regarding indicators for the Initiative goals.
 - Assess potential indicators. Analyze this existing set of indicators to identify those that are most relevant to WAWI goals and objectives and propose alternatives, if needed.
 - Discuss, with partners, which organization(s) would assume responsibility for collection and reporting of required data.
 - Select recommended indicators for discussion with partners.
 - Present the core set of indicators to a WAWI working group of partner representatives for their review and consideration.
 - Finalize list of indicators with partners.
- 1. In close collaboration with WAWI partners, identify data sources and collection methods, which are consistent with what WAWI partners, are currently doing in the field:
 - a. Identify potential data sources.
 - b. Assess data collection options, including cost implications, with regards to program indicators and discuss with implementing organizations.
 - c. Recommend data collection tools that are practical and can be applied universally throughout the life of the initial five-year phase of WAWI
 - d. Prepare a schedule for data collection and partner consultation (including community representatives) that includes methodologies for analysis of data collected and formulation of baseline and targets.
- 2. Participate in field meetings, when appropriate, and when invited to by the WAWI Field Coordinator. For example, potentially (if it makes sense and if an invitation is received), participate in the evaluation of the Ghana rural water supply and sanitation program as an observer to gain understanding of their methods and procedures. This evaluation will be headed by World Vision and is

expected to occur during period June 9-27, 2003. June 26 and 27 will be devoted to a summation of the evaluation results.

3. Working in close collaboration with WAWI partners to make sure that the M&E indicators are a dynamic and useful management tool to monitor progress and for the partners to manage activities, the package of indicators should include recommendations for data analysis and use, a plan for performance reviews, evaluations and special studies, and for ongoing data quality assessment. Consideration of industry standards and specifications will be included.
4. Prepare comprehensive M&E indicators in a document which outlines the final indicators and recommended implementation schedule. Consult partners on best format for plan, and use.
5. Prepare for, and help present the draft M&E indicators at the Start-up Workshop(s) for WAWI, which is expected to occur in June or July 2003.
6. Plan for follow-up steps.

Deliverables

1. Prepare a comprehensive report which will include:
 - Presentation and discussion of the WAWI performance framework (Objectives, Illustrative Activities) including critical success factors, key assumptions, time frame for WAWI implementation;
 - Comprehensive presentation of proposed M&E plan. The plan will include indicators for measuring the specific objectives and program outcomes of WAWI as identified by the partners. The indicators will also address the viability of the partnership as a preferred model and financial and resource tracking by partners and local communities;
 - The M&E plan will also include: Units of measurement, data sources, methods and approach for data collection, a data collection schedule (frequency, responsibilities, costs), analysis, and reporting schedules and responsibilities;
 - Proposed process (roles and responsibilities) by which collection, analysis and reporting of indicators is to be implemented within WAWI partnership;
 - A recommended implementation schedule for the M&E plan which will also include a schedule for reviewing progress and addressing the need for possible changes in the M&E plan.
2. Trip Report(s) documenting any field visits taken, or meetings/workshops attended.

Personnel and Level of Effort

A specialist in partnerships and monitoring and evaluations systems, EHP staff person Lisa Nichols, will serve as the lead consultant and carry out this activity. Staff from the partner organizations will be consulted and will participate in the selection of the indicators. An Activity Manager will manage this activity—and may also contribute on a technical level, as the activity evolves—with support from an Assistant Activity Manager. The EHP Project Director, EHP Project Manager, and EHP Senior Technical Director—and potentially other staff, as necessary and appropriate—will also be allocated TBD levels of effort to ensure oversight and quality control/quality assurance.

The lead consultant has extensive familiarity with and experience working within a multi-donor context for performance management, experience with implementing partners and with operationalizing M&E indicators and French language skills. She has knowledge of monitoring and evaluation issues and indicator standards. Proposed level of effort for the lead consultant per task is as follows:

Tasks	Level of Effort
1., 2., 3. and 4. Meet with key players, obtain consensus, and review background materials	5 days
5. TPM	1 days
6. Compile a list of draft indicators, performance indicators and solicit partner input	5 days
7. Identify data sources and collection methods	4 days
8. Potentially participate in Ghana evaluation	6 days
9. and 10. Develop and prepare recommendations for supplemental performance management activities and share with partners	3 days
11. Present final draft indicators at Start-up Workshop(s)	6 days
12. Plan for follow up steps	1 day

The total number of days is as follows:

Lead Consultant	31 days
EHP Activity Manager	10 days
EHP Asst. Activity Manager	4 days
Various EHP Staffers	12 days

Schedule

Review existing background documents	February - March 2003
TPM	February 19, 2003
Develop draft indicators	March - April 2003
Identify data sources	March - April 2003
Develop recommendations for supplemental activities	April - May 2003
Share draft indicators/recs with partners	April - May 2003
Develop final draft	May - June 2003
Presentation at Bamako start-up workshop	June 2003
Follow-on activities	TBD 2003

Budget

This task is fully funded and supported by the Environmental Health Project with funds from the USAID Global Bureau for Health (and is additive to existing USAID funding). Approximate costs which include labor, travel, per diem, communications, and other support: \$75,000.

Annex 2. Resource Organizations Referred to for State of the Art Research

The following organizations' documentation regarding monitoring and evaluation practices was used as a reference in the research for this activity. We classified each organizations' indicators into categories based on the WAWI goals and activities, looking for overlap, best practices, and cross-cutting indicators.

1. Water Aid
2. World Vision
3. UNICEF
4. ARD
5. IRC International Water and Sanitation Centre
6. World Bank
7. Academy for Educational Development
8. USAID
9. Water Supply and Sanitation Collaborative Council
10. EHP
11. WHO
12. Centers for Disease Control

Annex 3. Members of the Monitoring and Evaluation Working Group

1. Jean-Baptiste Kamate, World Vision Mali
2. Arlette Yepdjuo, World Vision Niger
3. Braimah Apambire, World Vision Headquarters
4. Phil Roark, ARD Washington
5. Jeff Schaffer, Conrad Hilton Foundation
6. Bismark Nerquqaye-Tetteh, WAWI Secretariat

Annex 4. Bibliography of References

- USAID Food and Nutrition Technical Assistance Project. 1999. *Water and Sanitation Indicators Measurement Guide*.
<http://www.fantaproject.org/downloads/pdfs/watsan.pdf>
- EHP. Guidelines for Assessing Hygiene Improvement (DRAFT). 2003