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Tubig Yaman

Human Rights-Based Local WatSan Governance Toolbox

Karapatan at Kakayanan sa Katubigan

Operationalizing the Rights Based Local WatSan Governance Framework

Volume

Karapatan at Kakayanan sa Katubigan

Operationalizing the Human Rights Based Local WatSan Governance Framework

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INTRODUCTION

One of the key targets of the MDGF 1919 project is the development of capacities at the local level that will enable enhanced access to and provision of water services. While Volume I of the Handbook is aimed at providing the basic concepts and principles of human rights based local Water and Sanitation (WatSan) governance, Volume II was developed to provide a practical guide to the LGU, the community and water service providers (WSPs) on how to operationalize the framework. For the LGU as the Duty Bearer, the Handbook is a step-by-step guide on how to comply in fulfilling the obligation to realize the target of guaranteeing the provision of safe, available, affordable and acceptable water especially to the most vulnerable sectors of the community.

Volume II presents the processes that will be undergone by the different water governance actors following a human rights-based approach in four major phases; i.e. from recognizing the need for water up to the time that a water utility is up and running and undertaking measures to attain sustainability. It is divided into two major sections:

Section 1 - From Raising Awareness Ensuring The Sustainability of Water
Section 2 - Tools and Mechanisms For Enabling Access To Water Services Through Human Rights Based Local WatSan Governance

Section 1 has four parts that discuss the entire cycle of water service provision:

Part 1: Recognize the Need! – Awareness Building and Community Organizing

Part 2: Get Together! – Planning and Development

Part 3: Work Together! – Operating and Managing the Water Utility

Part 4: Move Forward! – Ensuring Water Sustainability

Each of the four parts of Section 1 presents a detailed discussion on what activities are to be undertaken, the processes that are expected to take place, and the expected output/outcome in each activity.

Section 2 presents the different tools and mechanisms that will be useful to the Duty Bearer (LGUs), the Claimholder (community) and other actors such as the WSPs, national government agencies, non-government organizations and others in undertaking their respective roles in operationalizing human rights-based local water governance.

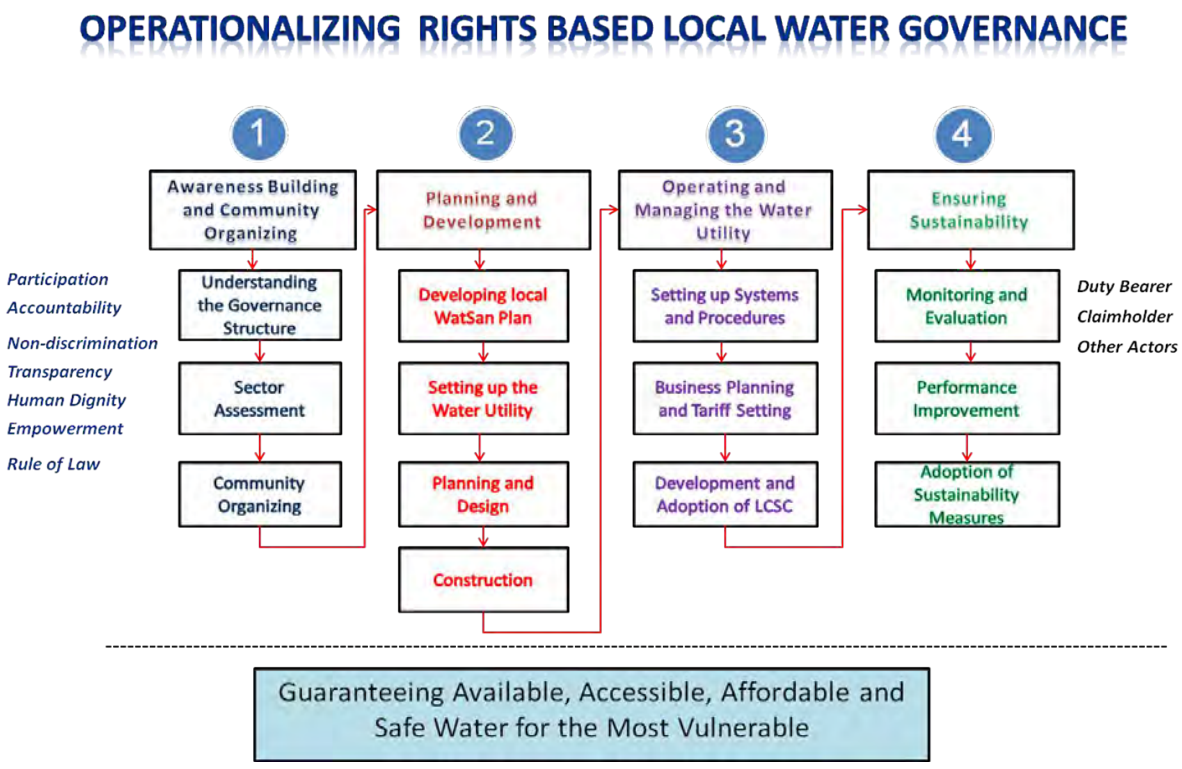
Volume 2 is useful for Claimholders in understanding their right to water and how this understanding can be useful to the LGU in fulfilling its mandate of water and sanitation provision as it presents an

overview on what it needs to do from start to end, what resources are necessary, and where to access assistance in terms of information and capacity building tools, and who to connect with. It can also be used by WSPs as it provides the how to's in setting up a water utility, planning and designing a water system and eventually operating and managing the water utility.

The outputs of the other components of Millenium Development Goal Fund (MDGF) 1919 were incorporated in Volume II and harmonized with the author's institutional knowledge of the water and sanitation sector. The final product is a step-by-step guide using a human rights-based approach in realizing the objectives of increasing access to water and sanitation.

The four major steps that make up the chapters and sections within each one will be your guide in responding to the plea of the waterless communities. In Section 1, the detailed steps making up each part from "recognizing the need" to "ensuring water sustainability" are illustrated in Figure 1, Operationalizing the Local WatSan Governance (LWG) Framework.

Figure 1: Operationalizing Human Rights Based Local WatSan Governance



Section

From Raising Awareness to Ensuring the Sustainability of Water

PART 1

RECOGNIZE THE NEED! AWARENESS BUILDING AND COMMUNITY ORGANIZING

Recognize the Need!
Awareness Building and Community Organizing

INTRODUCTION

Definition and Scope

Part 1 which deals with awareness building and community organizing is the stage where the human rights-based local water governance framework is introduced to the LGU and the community. The Local Government Unit (LGU) recognizes that it has the mandate as Duty Bearer to comply with the obligation to realize the right to water and the Community (Claimholder) is empowered and demands that its right to water be fulfilled.

Aside from understanding the obligations and rights under human rights-based local water governance, Part 1 discusses the different steps (that correspond to each chapter) that shall be undertaken by the LGU to build awareness in the community and understand better the water and sanitation condition in the area.

Chapter 1: **Understanding the Governance Structure** - this involves knowing and understanding the institutional arrangements - who are the water service providers, the regulator and the policy maker and other actors involved in the water and sanitation sector.

Chapter 2: **Conducting a Water and Sanitation Sector Assessment** - this urges the LGU to conduct a water and sanitation sector assessment to obtain a better appreciation of the existing situation. A more common way to do this is through the conduct of a baseline survey.

Chapter 3: **Community Organizing** - this discusses human rights-based community organizing as an important tool to bring together the different actors in the realization of the right to water.

Human Rights Guiding Principles

While the entire Human Rights-Based Framework on Local Water Governance applies to the Handbook, certain human rights concepts, principles and practices discussed in Volume 1 are highlighted in the approaches and procedures in Part 2. These include:

General Obligations of the LGUs

The LGUs have immediate obligations in relation to the right to water, such as the guarantee that the right will be exercised without discrimination of any kind and the obligation to take deliberate,

concrete and targeted steps towards the full realization of the right to water.

The LGUs have a constant and continuing duty to move as expeditiously and effectively as possible towards the full realization of the right to water in the most feasible and practicable manner.

Specific legal obligations

The right to water imposes three types of obligations on the LGUs and the more relevant obligation in Part 1 is the obligation to fulfill.

Obligation to fulfill - The obligation to fulfill is further disaggregated into the obligations to facilitate, promote and provide.

- *The obligation to facilitate requires the LGU to take positive measures to assist individuals and communities to enjoy the right.*
- *The obligation to promote obliges the LGU to take steps to ensure that there is appropriate education concerning the hygienic use of water, protection of water sources and methods to minimize water wastage.*
- *The LGUs are also obliged to fulfill (provide) the right when individuals or a group are unable, for reasons beyond their control, to realize that right themselves by the means at their disposal.*

To comply with the obligation to fulfill, LGUs have to adopt necessary measures directed towards the full realization of the right to water. These measures as outlined in the Handbook are to be implemented together with the community. Some may require local legislation but there are immediately implementable measures that will effectively lead to the realization of the right to water.

Other measures would require enabling action at the national level by way of a national water strategy and plan of action; facilitating improved and sustainable access to water, particularly in rural and deprived urban areas and ensuring that water is affordable for everyone.

Human Rights Principles that Promote Good Governance

The Participatory, Accountability, Non Discrimination, Transparency, Human Dignity, Empowerment and Rule of Law (PANTHER) principles shall guide the undertaking in Part 1. The LGU as duty bearer shall ensure the full participation of the community and shall be transparent in all its plans for the sector. At the end of Part 1, it is targeted that there is an empowered community participating fully and taking ownership for the activities to enable the realization of the right to water.

Roles and Responsibilities

- LGU as Duty Bearer - The LGU being the Duty Bearer takes (as represented by the WatSan Council if already in place) the lead in assessing the water and sanitation situation in the municipality. It shall initiate activities to inform and enable the community to participate in working together to improve water and sanitation in the municipality.
- Community - Claimholder as represented by existing Civil Society Organizations in the municipality or through newly formed Water Users' Associations and/or Claimholder's groups shall actively participate in initiatives to define the goals and vision for the sector that will lead to realizing the right to water.

Target Outputs and Outcome

At the end of Part 1, the following outcomes and outputs are expected:

- Awareness and understanding of the LGU (Mayor, WatSan Council and other key officers of the LGU) and the community on the human rights-based local water governance framework.
- Recognition of the roles and responsibilities by both Duty Bearer and claimholder in the realization of the right to water.
- Assessment of the current situation of the water and sanitation condition in the area.
- The LGU (through the WatSan Council) has mobilized and organized the community. Community groups on water or water users' associations have been established or at the very least representatives to the WatSan Councils have been named/appointed.

CHAPTER 1 UNDERSTANDING THE GOVERNANCE STRUCTURE FOR WATER AND SANITATION

A. UNDERSTANDING THE GOVERNANCE STRUCTURE

The initial step for the LGU in understanding its mandate as duty bearer in water and sanitation provision is to be aware of the institutional arrangements for water and sanitation in the area (municipality or city). This means understanding the relationship among the various players or actors and their roles and responsibilities as well as their rights and obligations. Shown below is a matrix on current segregation of roles and responsibilities depending on the service provider. The items marked in red are suggested measures for enabling a human rights-based governance structure.

But regardless of who the WSP is, the LGU continues to comply with the obligation to fulfill the right to water following the principles of good governance.

The WatSan Council and the WatSan Team in the LGU are the key partners of the community (Claimholder) in realizing the right to water.

Table 1.1.1 Governance Structure 1: If LGU-led and LGU is also the WSP

Community / Civil Society Organization (CSO)	LGU	Other Government Agencies	Water Service Provider
• Representation in the WatSan Council and participation in the decision-making process. • Organize a water user's group and select or elect representative(s) to the WatSan Council. • Provide timely feedback on the performance of WSP and suggestions to improve operations.	• Water service provision. • Policy making through the WatSan Council. • Monitoring and regulation through the WatSan Council and other units such as the Health Office. • Creation of a separate regulatory unit within the LGU. • Engage CSOs to sit in the WatSan Council.	• COA (- monitoring and control). • DENR (NWRB) - compliance with govt. regulations such as water permitting, etc. • Department of Budget and Management (DBM). • Department of Finance (DOF). • Department of Health (DOH). • Department of the Interior and Local Government (DILG).	• Same as the LGU - operates and maintain utility.

MUST KNOW

Regardless of who the WSP is, the LGU is mandated to comply with the obligation to fulfill the right to water. This can be ensured only when there is a unit within the LGU that looks after water and sanitiation.

A WatSan Council and a WatSan Team are important players in the governance structure in the local water sector. They can take on the role of initiator, leader and facilitator to achieve the goal of providing access to water.

Under Governance Structure 1 where the LGU is both the policy maker and the WSP, the community as Claimholder has a bigger role of ensuring that their rights and interests as Claimholders are protected. In a set-up where the role of policy making and water service provision is shared by the same entity, there is a higher risk that the right to water and consumer interests are overlooked when the balance is shifted to water service provision and the LGU neglects its policy making and regulatory role. This is a situation where there is a need for stronger and more active community participation. Hence the right to participate for the community becomes more critical and the LGU as duty bearer shall enable the organization of a Claimholders' Group or Water Users' Group and/or the appointment of community leaders to the WatSan Council to represent the interest of the community.

Table 1.1.2: Governance Structure 2:If self-governing WSPs other than the LGUs

Community	LGU	Other Government Agencies	Water Service Provider
• As Consumer - pays for water services and supports and complies with water utility rules and regulations. • Monitors and checks performance of WSP indirectly thru participation in performance audits and surveys. • More active participation through a "Claimholders' Group" that will be required in all municipalities.	• As Policy Maker - communicates the national and local policies program on water and sanitation; and leads the development of policies for the sector. • Monitors and checks performace of WSP. • Creation of a Claimholders' Group with representatives to sit in the WatSan Council.	• Commission on Audit - monitoring and control. • Department of Environment and Natural Resources (DENR) (NWRB) - compliance with govt. regulations such as water permitting, issuance of franchise Certificate of Public Convenience (CPC) and review and approval of tariff.	• Other Community Based Organizations: Operates and maintains the water utility. • Other non-LGU.
		• Commission on Audit - monitoring and control. • Local Water Utilities Administration (LWUA) - review and approval of tariff. • Dept. of Budget and Management - regulates personnel appoinment and salary structure.	• Water Districts: Operates and maintains the water utility.

B. SETTING UP THE WATSAN COUNCIL AND TECHNICAL WORKING GROUP

The LGU shall set up/create a group that shall act as local oversight body on water matters. This is the Water and Sanitation Council and its tasks include, among others, regularly engaging the community in dialogues and consultations as well as carrying out the functions of the LGU as Duty Bearer. The WatSan Council plays a key role in providing direction and coordinating the activities in the sector.

KNOW MORE

Membership in the Water and Sanitation Council

The members of the Council following the human rights-based approach shall include representatives of the community to ensure that they have a hand in decision making, planning and development of the sector.

At least two members of the WatSan Council shall come from the community with one of the representatives to come from the most vulnerable sectors of society (women, older persons, persons with disabilities, indigenous people) and the other member shall represent the interest of the Claimholders in general. They shall be selected and recommended by civil society groups to sit in the WatSan Council for a term not exceeding three years.

The role of the WatSan Council is particularly critical during the initial stages of crafting the vision for the water and sanitation sector. It is expected to carry out most of the activities and at the same time enables the full participation of the community in the planning for the sector. As access to water and sanitation is increased over the years, the WatSan Council shall take on a more regulatory function if there is no established regulator yet and/or coordinate the WatSan activities in the municipality. The Technical Working Group shall be established to assist the WatSan Council in the daily discharge of its functions.

The WatSan Council and the TWG are created through an Executive Order. Their tenure shall be permanent to ensure continuity and focus in carrying out the water and sanitation mandate of the LGU. There shall also be clearly written functions and responsibilities and a working arrangement that will allow the members of the council to devote sufficient time to their functions in the Council and TWG.

The Council has a number of functions as enumerated in table 3. These functions are in addition to regular job descriptions in the LGU. If they are to spend substantial time for the development of the water sector, they should at least be provided some incentives and allowances. A budget to cover the activities of the Council and the TWG aside from the cost of allowances should be set aside.

Table 1.1.3: Functions and Responsibilities of WatSan Council and Technical Working

Watsan Council	Technical Working Group
• Prepare annual work plan • Integrate project coordination activities of staff, consultants and other local government offices to ensure smoother working relationships • Manage and conduct M&E of project implementation activities • Resolve issues and concerns • Encourage inclusion of counterpart funds in annual budget and ensure timely releases of counterpart funds to support such related activities • Provide technical and institutional assistance to WSPs and water users groups to strengthen the O & M of water supply facilities	• Provide administrative, communications and general support to the council • Take custody and proper maintenance of equipment to be provided under the program • Conduct monitoring and evaluation activities on the extent of project implementation • Participate in training workshops and activities conducted by DILG

CHAPTER 2 CONDUCTING A WATER AND SANITATION SECTOR ASSESSMENT

A. SCOPE AND OBJECTIVES

The LGU has the mandate to carry out obligations associated with water and sanitation service provision. Its functions as Duty Bearer are set out in the Local Government Code and its implementing rules and regulations. As such, the LGU has the foremost obligation to initiate action and involve/ engage the community in undertaking the vision of water and sanitation service provision.

The LGU at this stage (Part 1) shall initiate the task of taking forward the obligation to fulfill the right to water. To start off the process, the LGU needs to have an understanding of the status of the water and sanitation sector, who are the players and actors, what are the needs of the community so that it can properly undertake its obligations as a Duty Bearer.

LGU MANDATE

The Local Government Code and its Implementing Rules and Regulations provide the mandates to the Local Government Units in their role in the provision of water supply and sanitation services including policy, planning and regulatory functions. Relevant Provisions from its Implementing Rules and Regulations are:

Based on Sec 17. *LGUs shall discharge functions and exercise powers that are intrinsic to their devolved mandate of providing basic services and maintaining facilities.*

Barangays*: Services and facilities related to general hygiene and sanitation, beautification and solid waste collection; maintenance of water supply systems.*

Municipalities*: Provision of services related to hygiene and sanitation; construction and maintenance of local-funded infra facilities such as water supply, irrigation, source development, sewerage and flood control, rainwater collection and others.*

B. HUMAN RIGHTS GUIDING PRINCIPLES FOR GOOD GOVERNANCE

In carrying out the water and sanitation assessment, PANTHER principles must be observed. The assessment shall be carried out in a participatory manner; and shall establish accountabilities in the sector and assess whether no individual or group is discriminated in water service provision.

C. DETAILED METHODOLOGY

1. Participatory Baseline Survey

There are different ways of assessing the sector: the LGU could undertake a water and sanitation audit, a sector mapping or a baseline survey. Presented below are the guidelines for conducting a baseline survey following human rights-based local water governance that the LGU can utilize.

A baseline survey instrument is a useful tool to gain an understanding of the current state of water and sanitation in the municipality. The survey shall cover a comprehensive review of the hydrological, population, technical and institutional aspects, including an inventory of theoretically potential water supply options based on existing data and information.

The Baseline Survey Guidelines developed for Human Rights-Based Local Water Governance Framework provides a useful basis for planning the development efforts for water and sanitation. The survey focuses on three major components:

- Technical inventory, assessment and mapping of existing infrastructure;
- Profile and status of households; and,
- Profile and capacities of water users associations, local water service providers and local government units, particularly the water and sanitation council.

Baseline Survey Guidelines

The guidelines that were developed are compiled in a four-volume Manual containing general and specific guidelines and tools for activities at field level:

Volume I: The MDGF 1919 Complete Manual of Guidelines for Baseline Survey of Thirty-six Waterless Municipalities

Volume II: The Manual of Guidelines for Facilities Mapping, Technical Inventory and Assessment

Volume III: The Manual of Guidelines for Household Survey

Another separate package, Volume V, is a guide for data management, preservation, updating and retrieval. These Guidelines provide the requirements, processes and tools to pursue a baseline survey and adopt a unified approach and methodology that espouse participatory concepts and strategies. Basic roles and responsibilities of different groups are also identified, as well as reporting forms.

2. Purpose of a Baseline Survey

A Baseline Survey is a **conscientious situation analysis which can serve as useful baseline data and information on Water and Sanitation in the target municipalities. Key question to be answered is:** "*What factors facilitate or hinder the access to and provision of water services to members of the municipality, especially persons living in poverty?*"

Specifically, the Survey aims to establish the current situation in terms of:

- Current state of the infrastructure facilities whether: (1) fully functional; (2) partially functional; or (3) non-functional;
- Profile and status of the households, with special focus on women and children, the extent of their access to water or the extent of services they receive from water supply facilities, and the extent of their involvement in decision making;
- Assessment of water users associations' roles and capacities to (1) engage in local governance processes (decision-making, planning and implementation), (2) demand accountabilities, and (3) practice gender equality;
- An assessment of water service providers in terms of roles and capacities: (1) to provide safe, adequate, affordable and continuous water services; (2) to ensure gender equality and integrity in the provision of water services; (3) and to regularly consult and provide information to the community; and,
- An assessment of the Municipal Water and Sanitation (WatSan) Councils' roles and capacities: as the local oversight body on water matters; (1) to engage the community in regular dialogues and consultations; (2) in promoting gender equality in policies and plans; and (3) to ensure integrity in local water governance and respect, protect and fulfill the rights of its local citizens to water.

HELPFUL HINTS

Please note that the Guidelines make reference to a specific set of guidelines developed for the MDGF 1919 and may need to be adjusted to suit the specific needs of the LGU. Some features may not be applicable and/or may not exist at the time the guidelines are adopted by the LGU.

3. Focus of the Survey

The survey focuses on:

- the households
- the physical facilities
- the Water Service Providers (WSPs) and the Local Government Units (LGUs); and
- Enabling environment – external factors such as policies, relationships, the environment, and others which affect the households, the facilities, the water service providers, the LGUs and their relationships in the course of accessing/ delivering water services.

Users and Uses of the Baseline Survey Guidelines

The following table presents the users and uses of the Baseline Survey Guidelines

Table 1.1.4: Specific Users and Uses of the Baseline Survey Guidelines

Users	Uses
DILG-OPDS/WSSU and DILG regional, provincial and municipal level offices	Provision of guidance for implementing teams Monitoring of progress of activities and expected outputs
Provincial and Municipal LGUs	Reference for related decisions
Provincial and Municipal WATSAN Teams	Guide for the conduct of baseline survey activities Reference for the implementation and supervision of activities
Enumerators/Technical Inventory Teams	Guide for data gathering

Key Activities

The activities for the baseline survey (illustrated in the next page) are grouped into five phases:

- Capacity building for WatSan teams and those who will be involved in data gathering;
- Data gathering with the use of prescribed tools and procedures;

- Processing and analysis of data culminating in participatory analysis at LGU level analysis;
- Presentation of findings and generation of further data from WatSan Teams, LGUs, communities and other stakeholders (ownership); and,
- Incorporation of findings, analysis and recommendations in a report per municipality (reporting).

For easier reference, the tools are packaged according to the users and categories of data/information to be gathered.

Table 1.1.5: Baseline Survey Tools

	Title	Main User/s
A	General Guidelines	All
B	Guide for BLGU Orientation	Provincial/Municipal WATSAN Teams
C	Guidelines for Basic Profiling	
	Assessment of Water Supply Coverage	WSSU-Regional Coordinators (RCs)/WATSAN Teams
	List of Health and Sanitation Facilities	
	General Information on Water Service Providers (WSPs)	
D	Guide for Selection and Training of Technical Assessment Team and Enumerators	Provincial/Municipal WATSAN Teams
E	Technical Assessment	Technical Inventory/ Assessment Team
	Guidelines for Spot Mapping of Water Supply and Sanitation Facilities	
	Guidelines for Technical Inventory and Assessment of Water and Sanitation Facilities	
	Forms:	
	- General Information on Water Supply Facilities	
	- Level I Facilities Technical Information	
	- Level II Facilities Technical Information	
	- Level III Facilities Technical Information	
	- General Information on Sanitation Facilities	
	- Technical Information on Sanitation Facilities	
	- Guide for Computerized Entry of Technical Data	

	Title	Main User/s
F	Guidelines for Conducting Household Survey	Enumerators and Household Survey Supervisors,
	Interview Schedule	
G	Guidelines for Institutional Assessment	Institutional Assessment Team
	Plan and Guidelines for Institutional Assessment	
	Detailed Guidelines for Data Gathering	
	Data Generation Tools	
	Key Informant Interview Questionnaires and Guides	
	Focus Group Discussion (FGD) Guide	

Table 1.1.6: Description of Specific Activities for the Baseline Survey

Activity/Key Outputs	Specific Objectives	Specific Activities	Who Will Do It	Target Source/ Participants
CAPACITY BUILDING PHASE				
1. Regional level training for Baseline Survey Key outputs: Regional Detailed Work Plan for Baseline Survey	Orient the Regional counterparts on the guidelines for survey	Review of agreements and schedules during regional JP orientation	WSSU and consultants	WATSAN Teams at Regional and Provincial levels
	Enable preparation of specific action plans and strategies	Discussion of Baseline Survey guidelines		Municipal WATSAN Teams
	Enable subdivision of tasks among WATSAN teams	Contextualization of questionnaires; strategy formulation		
		Detailed planning		
		Role Delineation		
		Reporting system		
2. Orientation and Planning Workshops for WATSAN Teams Key outputs: P/MWATSAN Work Plans for Baseline Survey Task Subdivision within teams	Orient the Provincial and Municipal WATSAN Teams on Baseline Survey Guidelines	Review/contextualization of Baseline Survey Guidelines		
	Enable preparation of specific work plans and strategies	Assessment of local situations and available resources		
		Work Planning		
	Agree on operating norms, including reporting	General Interaction		

Activity/Key Outputs	Specific Objectives	Specific Activities	Who Will Do It	Target Source/ Participants
3. BLGU Orientation and Commitment Setting	Orient BLGU and generate commitment and work plans for the conduct of survey	Overview of the Baseline Survey: background, purpose, activities List of activity schedules and action requirements from BLGU BLGU scheduling of activities: -Basic Profiling -technical inventory and mapping -Household survey -Community Feedback meeting/FGDs -others	Municipal WATSAN Team	BLGU key officials (at least the Brgy. Chairperson, Chairperson of Infrastructure Committee, Brgy. Secretary)
4. Basic profiling <u>Key Outputs</u>: -Basic Profiles per Municipality	Establish extent of coverage of water and sanitation services	Review of records at municipal and/or barangay levels	Municipal WATSAN Team/Barangay leaders	WATSAN Records, barangay profiles, project records
5. Selection of Technical Team	Assign team to undertake technical inventory and assessment	Clarification of tasks Formal designation	Municipal WATSAN team	
7. Selection/ hiring of enumerators	Assign team to undertake household census and survey	Clarification of tasks and qualifications Formal designation	Municipal WATSAN Team	BHW, BPO or equivalent, designated/hired enumerators

Activity/Key Outputs	Specific Objectives	Specific Activities	Who Will Do It	Target Source/ Participants
8. Training of Enumerators and Technical Inventory Team	Transfer knowledge and skills in the conduct of activities	Orientation/ classroom training On-the-job training/guided practice	Municipal WATSAN Team	Assigned/hired technical team and enumerators
DATA GATHERING PHASE				
9. Technical inventory/assessment and mapping per barangay	Gather data requirements	Inventory/assessment of source, facilities and service areas	Technical team	Water source, water supply facilities, sanitation facilities, key informants
10. Census and Survey		Interviews	Enumerators	Sample households
11. Institutional Assessment		Documents review, key informant interview, FGDs	Consultant/WatSan Teams	Key informants from WSPs, LGUs, etc.
ANALYSIS PHASE				
12. Processing and analysis of data	Analyze data and information gathered	Review, editing, encoding, tabulation, analysis	WSSU and consultants	
13. Integration and analysis at WATSAN level	Undertake overall analysis and interpretation	Discussion of findings Incorporation of inputs from WATSAN Teams	WSSU/ PDMU	WATSAN Teams

Activity/Key Outputs	Specific Objectives	Specific Activities	Who Will Do It	Target Source/ Participants
		OWNERSHIP PHASE		
14. Feedback and assessment workshop at LGU level	Promote LGU ownership of findings	Presentation of findings Further situation analysis (gaps, factors and constraints)	WSSU/ PDMU	LGU management and staff
15. FGD at the community level	Provide feedback on survey results and generate community assessment of WATSAN	Presentation of findings • Potentials • Gaps • Factor/ Constraints • Opportunities	WATSAN Teams	Sample inhabitants; If there are IPs, IPs must have separate FGD
16. Feedback meeting at LGU level	Present, discuss baseline survey results and generate list of next steps by LGUs	Half day meeting	MWATSAN Team with support from WSSU/ PDMU	LGU LCE and key LGU management and staff
		REPORTING PHASE		
17.Supplemental Desk Research/ Interview	Support, validate or probe findings as may be necessary	Documents review, Interviews, or e-research	Consultants	
18. Report preparation and Presentation Meetings	Present findings, incorporate further views of partners and stakeholders	Presentation Workshops; Report preparation/ Packaging	Consultants with WSSU	Partner institutions, other stakeholders

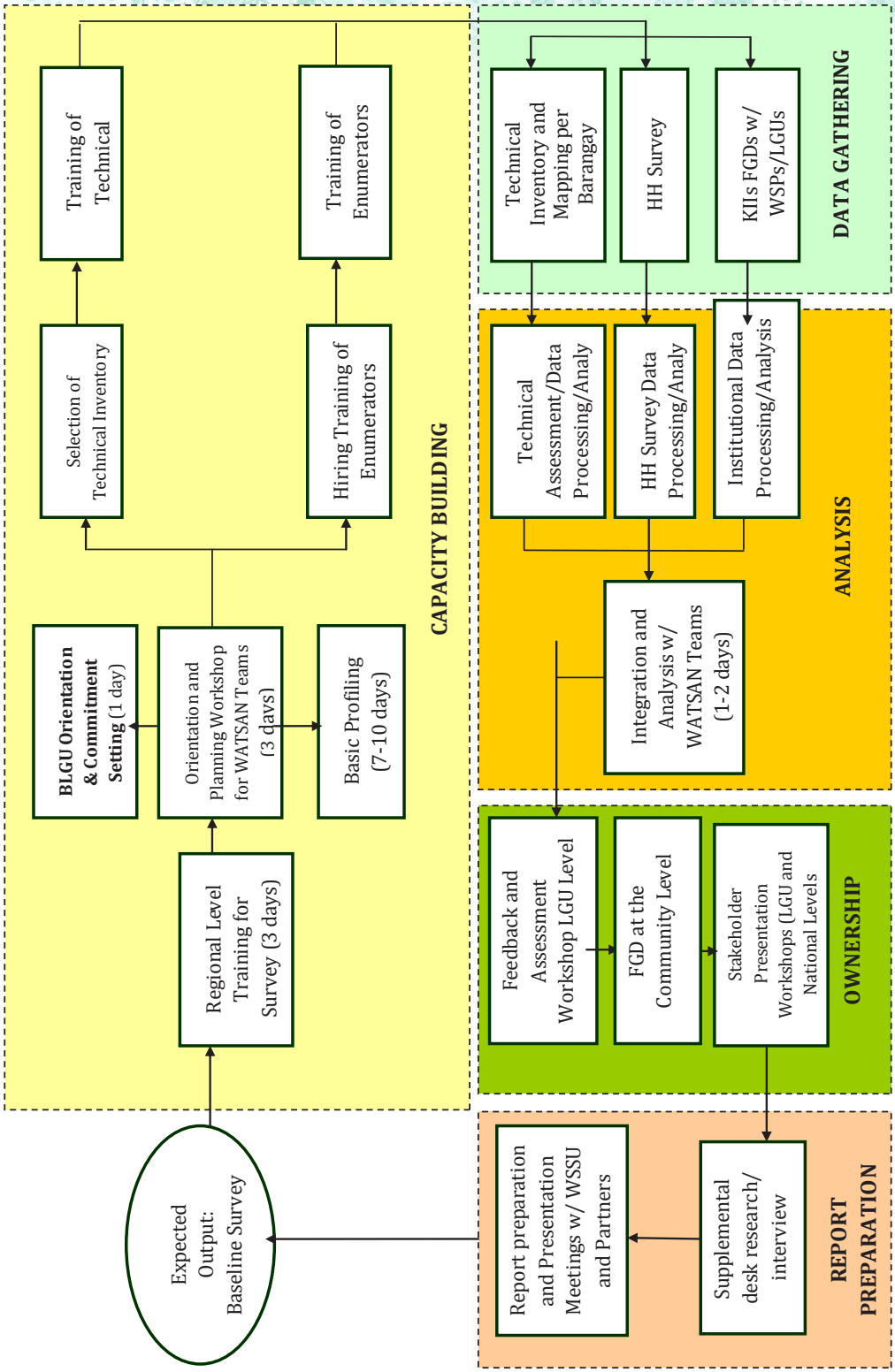


Figure 1.1.1: Outline of Baseline Survey Activities

CHAPTER 3 COMMUNITY ORGANIZING

INTRODUCTION

After the baseline survey has been conducted to assess the situation of water and sanitation provision in the municipality, the LGU through the Mayor shall gather the community to inform them on the results of the assessment and get them involved in the planning for water and sanitation. Initially, consultations and focus group discussions will be conducted with civil society organizations, water users, water service providers (WSPs) and other stakeholders. Preliminary meetings will include discussions on the current situation of the sector and how the community can participate in the visioning for the sector.

To address the needs of the waterless sections of the municipality which are usually the rural areas or the barangays where the most vulnerable sectors of the municipality are located, the LGU shall undertake community organizing that is targeted at establishing a community-based water organization or a barangay water and sanitation association (BWSA). The Human Rights-Based Community Organizing Framework (CO Guidebook) that is discussed in the ensuing sections of the Handbook presents the detailed steps and processes towards setting up a community-based water supply organization or more commonly referred to as a barangay water and sanitation association.

A. HUMAN RIGHTS BASED PRINCIPLES IN ORGANIZING

- Always focus on the individual human person, respecting her/him, recognizing her/him as an expert with innate and unique talents, challenging her/him to think for her/himself, helping her/him realize her/his own power to work collectively to change her/his situation, and encouraging her/him to identify her/ his own problems, choose her/his own solutions, hold those responsible accountable, and work together to undertake change;

- Consciously and conscientiously encourage all human persons to claim their right to water and sanitation, recognizing the right as both freedom and entitlement, which belongs to everyone, everywhere, does not change over time and space and is intertwined with all other human rights;

- Facilitate informed choices on water and sanitation, guaranteeing the right of all human persons to determine the level, type and management of water and sanitation facilities and services and consciously refraining from doing for the people what the people can and should do for themselves;

- Assist the assessment of whether and how well women, men and children and those most vulnerable in the community enjoy their right to water and sanitation;

- Develop community leadership and form a core group to promote the right to water and sanitation, recognizing that leaders know how to work together and how to be effective to realize the right to water and sanitation, deal with conflict and confrontation, mobilize the community, solicit community members' contributions, engage their support, and build a community that is democratically controlled by the members of the community.

B. INTRODUCTION TO COMMUNITY ORGANIZING

Community Organizing (CO) is a social development methodology used to facilitate the process of forming self-reliant and self-sustaining communities. In community development, the CO practice aims for the members of the community to be informed and empowered individuals. A key feature of an organized community is that it employs participatory development in the promotion of poverty reduction by creating more effective, equitable, and sustainable activities in the community. The participation of the members of the communities in the development activities fosters a deeper sense of ownership and commitment when they work together to assess and address their problems and issues. CO facilitates working together to assess their situation, evaluate their resources, consider possible solutions, choose actions, formulate strategies, manage, monitor, and evaluate their endeavors. In the end, Community Organizing aims at creating collective solutions together as a community. In this way, the process of CO changes the balance of power and creates new power bases, lifting the control from one or few people to the entire community.

Community organizing for sustainable water has become a trend especially during the rise of the Millennium Declaration by the United Nations.

The Millennium Development Goal 7, Target 10:

"Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation."

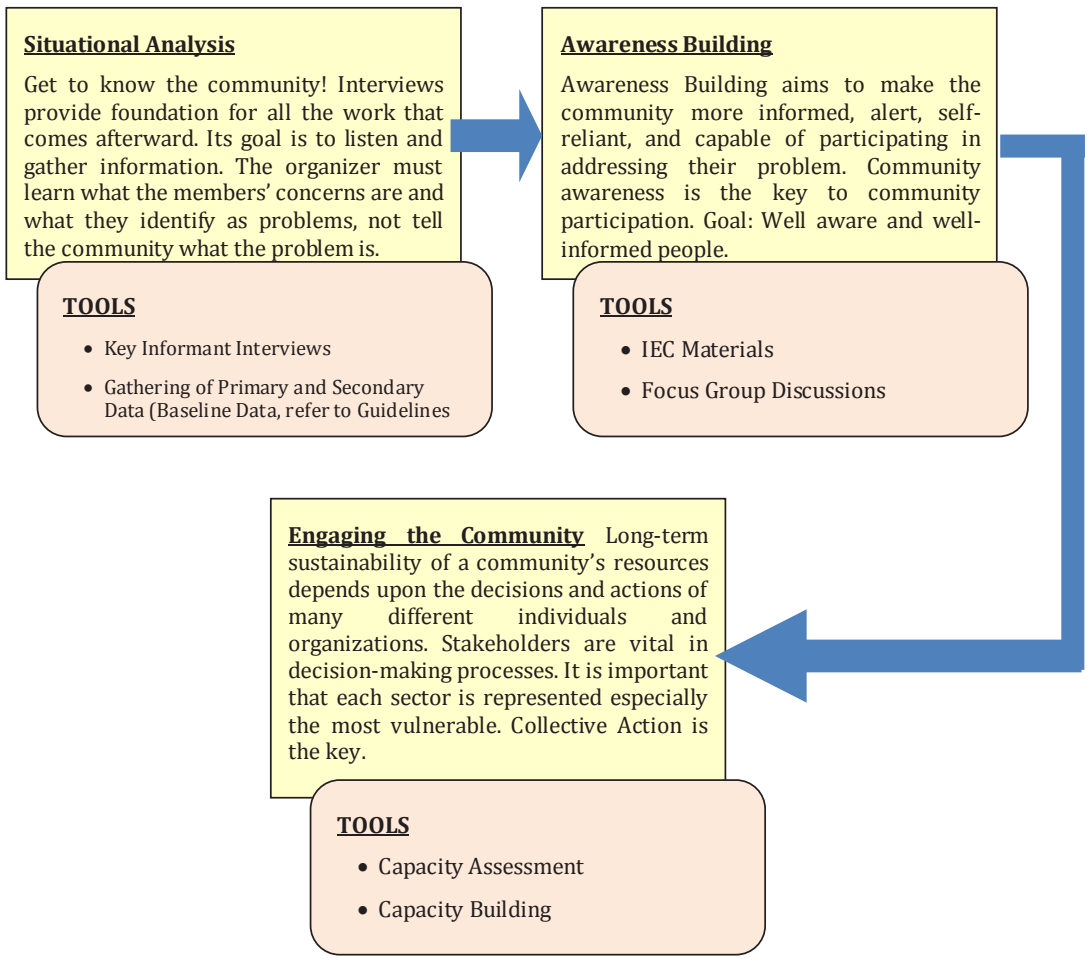
1. What is Community Organizing?

It is a continuous and sustained process of guiding people to understand the existing condition of their respective communities. In Community Organizing, people are gathered to efficiently address their immediate and long-term problems. In addition, people are mobilized to develop their capacities and build up their ability to respond and take action. Activities in Community Organizing include community consultations and the conduct of community assemblies - vital venues where the members can voice out their concerns. This is an avenue in which all stakeholders can articulate their problems and together, they can collectively provide solutions.

An organizer aims to challenge the members to change the way things go about in their respective communities. A form of social change must take place by means of collective action. Tactics and strategies employed by the community organizer are similar to the process of leadership in which the following factors are taken into consideration- understanding the situation, timing the issue, planning for the steps to take, getting the attention of the populace, scouting for the desired solution, and shaping the terms of the decision-making process.

The steps to community organizing are there to guide the organizers. However, the process is seldom neat; it does not always happen in the same flow and predictable steps. The steps can be thought of as a process guide by principles that repeat in a cyclic, rather than linear way. Understanding this helps in planning effective organizing for community action.

Figure 1.1.2: Community Organizing Process



2. Human Rights Based Community Organizing

Human Rights Based Community Organizing aims to organize communities to claim their rights to water. The Human Rights-Based Community Organizing Guidebook serves as guide for community organizers and development program implementers in mobilizing the active and direct participation of stakeholders, particularly the most vulnerable sectors in waterless communities.

The Human Rights Based Community Organizing Framework:

1. Presents and explains human rights based approach facilities organizing and development;
2. Explain that Human Rights based Approach facilities organizing and development; and
3. Describes the organizing phases and strategies using human righst based approach.

The conceptual framework integrates interventions employed during the community organizing phases. Thus, contributes to education by specifying how interventions based on principles and practices of human rights based approach for social change may be effective in providing improved water services with the active participation of persons living in poverty .

Republic Act 6716: the Legal Basis for the Organization of Barangay Waterworks and Sanitation Association

The Philippines passed RA 6716 of 1989 to organize the Barangay Waterworks and Sanitation Association. It provides that the state shall construct water wells, rainwater collectors, develop springs and rehabilitate existing water wells in ALL BARANGAYS through the Department of Public Works and Highways. RA 6716 required the formation and organization of a BWSA in every barangay for O&M of water facilities, thus, promote the quality of life of every Filipino through provision of adequate social services including, but not limited to the provision of adequate potable water supply made conveniently available to every barangay.

This Guidebook uses the term Water Users' Association to refer to organized water users which will operate and manage the water system upon its turnover.

MUST KNOW

The 2010 Baseline Survey identified 36 municipalities as the same water users associations, organized as water service providers separate from the Local Government Units:

- Cooperative, registered with the Cooperative Development Authority;
- or Association, registered with the Securities and Exchange Commission;
- or Association accredited by the Sangguniang Bayani or,
- or Association managing water system as Baranggay LGU-managed

The Human Rights Based Community Organizing Framework (CO Guidebook)

Duty Bearers and Claimholders	Human Rights are the underpinning principles of the state as duty bearers in organizing waterless communities to promote, protect, and fulfill its obligation to the progressive realization of the right to water and sanitation of claimholders. The claimholders within the waterless communities are composed of: i) Residents across socioeconomic groups; ii) Persons with Disabilities; iii) Indigenous People ; iv) Women; and v) People who live in isolated areas. These persons are organized into a community water and sanitation association. They are clothed with the right to demand water and sanitation services as their basic right. Meanwhile, as , it shall serve as conduit, partner and arm of the state to fulfill its obligations to the right to water and sanitation. Claimholders- demand their rights Duty Bearers- comply with their obligations to fulfill
Impact, Effect, and Output	Organizing communities is envisioned to impact on the overall water and sanitation situation of the municipality and ultimately the country as it complies with the MDG commitments of a safe, continuous, affordable, quality drinking water. As a community-managed water system, the will serve the community members themselves. They make accountability more accessible, transparency easily practiced, and demonstrate greater care to ensure safe, continuous, affordable, quality drinking water. Consequently, the actions should lead to improved water services.
Major Inputs	The major inputs to ensure success of enhancing access to and provision of water services with the active participation of persons living in poverty includes: 1) the CO Process, preparatory and organizing phases; 2) capacity building through participation as a strategy; 3) monitoring and evaluation along the whole CO Process; 4) time frame; and, 5) stakeholder-groups.

What are the steps in Human Rights Based Community Organizing?

According to the Human Rights-Based Community Organizing Guidebook, there are **18 steps in the Community Organizing Process:**

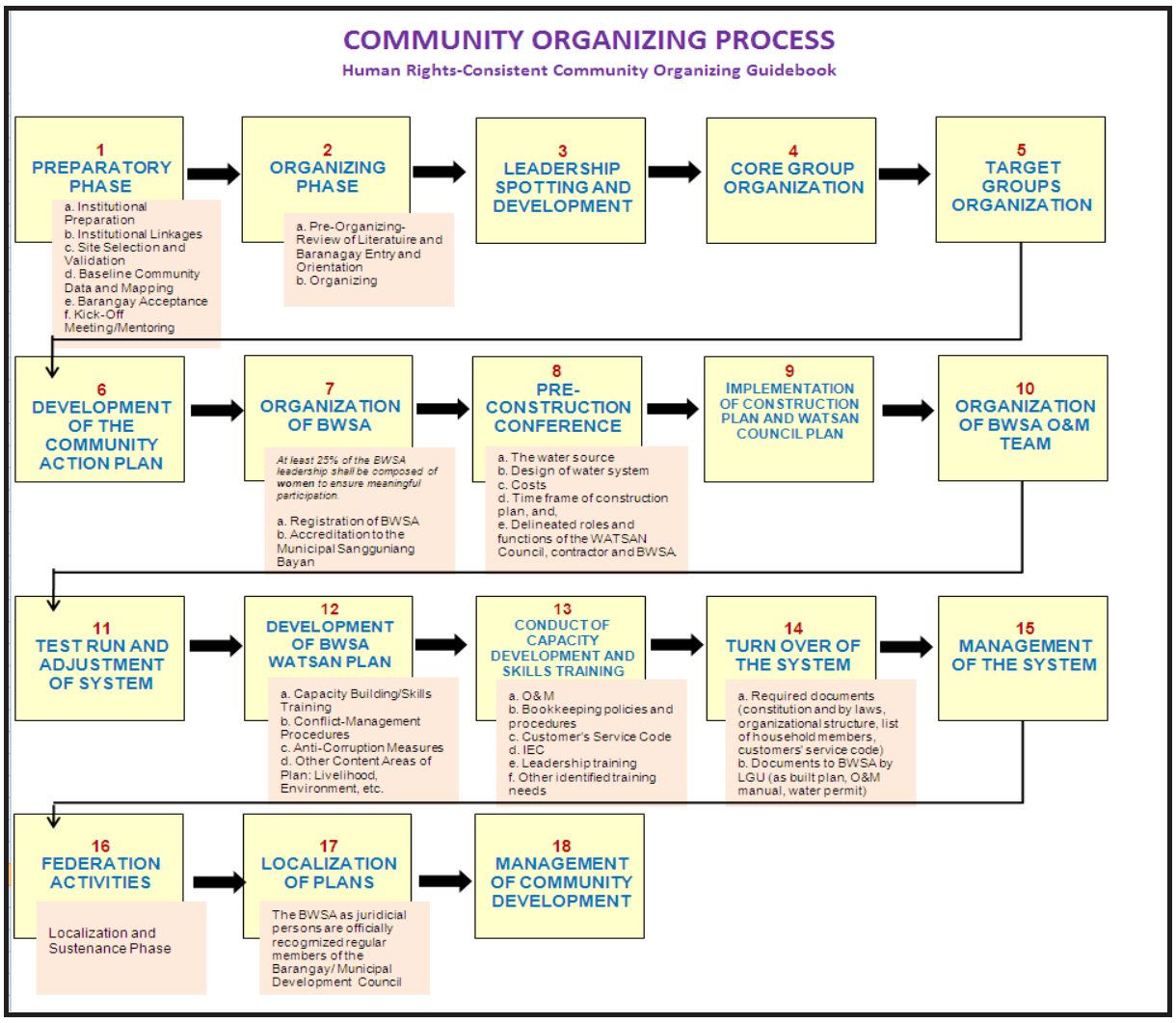
1. Preparatory Phase
    a. Institutional Preparation
    b. Institutional Linkages
    c. Site Selection and Validation
    d. Baseline Community Data and Mapping
    e. *Barangay* Acceptance
    f. Kick-Off Meeting/Mentoring

2. Organizing Phase
    a. Pre-Organizing
        i. Review of Literature (Courtesy Calls and Social Investigation)
        ii. *Barangay* Entry and Orientation
    b. Organizing

3. Leadership Spotting and Development
4. Core Group Organization
5. Target Groups Organization
6. Development of the Community Action Plan
7. Organization of the Community
8. Pre-Construction Conference
9. Implementation of Construction Plan and WatSan Council Plan
10. Organization of O&M Team
11. Test Run and Adjustment of System
12. Development of WatSan Plan
13. Conduct of Capacity Development and Skills Training
14. Turn Over of the System
15. Management of the System
16. Federation Activities
17. Localization of Plans
18. Management of Community Development

The detailed activities for each step of the CO process are discussed in the Human Rights Based Community Organizing Guidebook.

Figure 1.1.3 Human Rights Consistent Organizing Process



SIDE STORY

The BWASA of Sta. Teresa

It takes a sense of community to build community.

Residents of Sitio Bulan-bulan, Sta. Teresa in Jordan, Guimaras province showed exactly how this works by banding together to form their own Barangay Waterworks and Sanitation Association (BWSA) to ensure a reliable supply of safe water.

But this didn't happen overnight. It took a series of training workshops and seminars on good governance and logistical support for communal water system development before Bulan-bulan residents realized the critical importance of working together for water.

Through the Rural Water Supply and Sanitation Sector Project (RWSSSP), a joint undertaking of the Department of Interior and Local Government (DILG), the Department of Public Works and Highways (DPWH), and the province of Guimaras Sitio Bulan-bulan residents crafted a common vision to improve their quality of life through improved access to water.

Residents were guided through the processes of community consultation and consensus building in resolving issues. They were also taught bookkeeping and financial management, how to keep the water supply clean and potable, how to form a water association including documentary requirements like securing a deed of donation and certificates of inspection for the water source.

On November 28, 2001, the Bulan-bulan BWSA was formally recognized as a village level organization with an initial 72 households as members. Each member agreed to pay PhP500 as one-time membership and PhP100 per month for water consumption. A member is allowed to get a maximum of 400 liters every other day from the nearest tap stand. A tap stand leader from a household cluster was

The Different Stakeholders

- Target Groups – smallest unit of the Water Users' Associations composed of households/ residents, women, older persons, persons with disabilities, indigenous peoples organized within the barangay/ municipality, which draw water from the same water system. The vulnerable groups are especially organized as target groups to ensure full representation in meetings and ICDM. The target groups shall engage in local governance processes, ensure the promotion, protection and fulfillment of their members' human rights, especially the right to water, demand accountabilities and promote gender equality. As a general assembly, the target groups shall be the highest policy making body of the association at the same time, perform oversight functions and participate in development activities of the community.

- Water Users Association - shall be composed of the different target groups in the community organized in accordance with their envisaged roles and responsibilities in the water utility. The WUA shall be organized to operate and manage the water system and community development with their Barangays. They shall engage in local governance processes, ensure the promotion, protection and fulfillment of their members' human rights, especially the right to water, demand accountabilities and promote gender equality. As a water service provider, the WUA shall provide safe, affordable, continuous and quality drinking water to all residents of the community and regularly consult and provide information to the community.

- Federation of Water Users' Associations and Water Service Providers – shall be composed of Water Users Associations and Water Service Providers operating within the municipality. The Federation shall act as the umbrella organization of the WUAs and WSPs to perform networking, advocacy, capacity building for officers and members of WUAs/WSPs to engage promotion, protection and fulfillment of the

in local governance processes, ensure the promotion, protection and fulfillment of the human rights of local residents, especially their right to water. The Federation shall identify areas for development and recommendations and represent the resident members in activities that will enhance access to and provision of water services with the active participation of persons living in poverty. The Federation shall articulate the attainment of their shared vision.

- WatSan Council – shall act as local oversight body on water matters, coordinating community meetings and dialogues; promote gender equality in policies and plans; ensure integrity of the local water governance, and promote, protect the rights of the local citizens to water; identify areas for development and recommendations to enhance access to and provision of water services to persons living in poverty; regularly evaluate the organizational capacities of the WUAs/WSPs in terms of providing safe, adequate, affordable and continuous quality water services, and regularly provide information to the community; and conduct regular internal assessment of the roles and capacities of the WatSan Council.

- The Local Government Units through the Water and Sanitation Councils shall act as local oversight body on water matters; support, monitor and train the community towards becoming partner/ water service providers.

3. Ensuring Sustainability

An important aspect of Community Organizing is ensuring sustainability. Factors to ensure sustainability include the following:

- Structure - the organizational structures both in the partnerships formed and in the communities must ensure that the people are capable to influence expansion and the sustainability in the organization as a whole.

elected by the members to ensure that this rule is strictly followed.

Instead of paying PhP20 for every liter of water, now they are assured of safe water at a cheaper cost and they no longer have to walk nearly a kilometer each day just to fetch water.

But the BWSA members did not stop there. With their initial operational costs totalling PhP4,000 per month including honoraria for the caretaker and treasurer at PhP500 each plus the cost of fuel at PhP3,000 and despite some members not paying their dues on time, the BWSA still was able to earn some income. The members decided to invest this in a cow fattening business and in a general assembly hammered out the details of their new business venture.

The business proved to be a success that it has continued to this day. But the members are not resting easy. From the proceeds of the cow fattening business, they ventured into party equipment rental by purchasing plastic chairs, tables, kitchen utensils for rent to interested individuals.

Because they have been trained to hone their networking skills, the association members were able to lobby with the provincial government and the local electric cooperative for the extension of electrical connections from the main road to their source of water. This qualified them in 2003 to shift from a gasoline-powered generator to electric power in pumping water to their water tank. This also allowed several households along the route to avail of electric power, increasing the number of energized households in the area.

The availability of electric power was a big boost to the operation of the association. It practically erased its maintenance budget for the diesel-powered generator translating to more than 50 percent savings in power costs. The savings were partly used to increase the honorarium for the caretaker.

Then in 2006, the association decided to Then in 2006, the association decided to construct another collecting tank near the original water source, increasing the system's stored capacity.

After several consultations with the Provincial Planning and Development Office (PPDO), the association members voted in 2009 to upgrade their system from Level II to Level III. By this time membership has declined to 62 because some of the original members were now able to construct their private water supply system.

The BWSA purchased water meters for installation in individual households. The cost of the water meter was incorporated in the monthly bills of the members to ensure cost recovery. The members shouldered the initial cost of plumbing materials that varied according to the individual needs of the members. While labor was volunteered by the BWSA, the PPDO provided technical support.

Water is now available to the BWSA members 24 hours a day, in unlimited quantity, and piped to their individual households. For this, a member pays PhP100 for the first six cubic meter consumption and P25 for every additional cu.m. While always reminding their members of the importance of conserving water, some households are visibly enjoying the new service, consuming as much as 34 cu.m. a month, and paying every drop of it.

The success of the Bulan-bulan BWSA may be attributed to many factors, among them the presence of a champion in its president who helped the members weather many challenges along the way. There were also those who generously donated the water sources located within their properties and government agencies that provided assistance whenever this was needed.

But it was the members' sense of unity and community that eventually spelled the difference between failure and success for the Bulan-bulan BWSA.

- Skills Development and Technology Transfer - the skills required to carry out the project activities must be fully developed and integrated in the partnership before phase-out. The skills and technology must be preserved in the memory of the organization and its members to ensure sustainability.

- Systems - this includes the systems and procedures needed to formulate policies, plan, and make decisions on the day-to-day operation of the system. Consensus among the members and their responsiveness to the changing times will determine the prospects of sustainability.

- Commitment - the most crucial factor of sustainability is the commitment of its members in achieving its goals. Participation in planning and decision making fosters greater commitment and in addition, it gives community members a true sense of ownership of the program as well

Water is increasingly being managed as an economic, rather than a social good, and decentralization – in various forms has been a useful tool to support this new approach. Governments and other reformers are now trying to link service levels and costs, provide incentives that increase the efficiency of water resource allocation, reduce costs, and increase sustainability of water service systems. This article will focus on some of the lessons from decentralized water supply and sanitation.

A team for Community Organizing in each LGU will be established to be made up of the Focal Person, his/her alternate, Community Organizers, Accounting Staff (for the financial trainings), Health Staff (for environment and sanitation trainings) and Engineering Staff (for Operation and Maintenance trainings). This team will be in in-charge of establishing community water associations and ensuring that these associations will be able to sustain their water supply facilities. For the Small Water Facility group, additional personnel will be trained in Planning & Design, Construction and O&M. Likewise, the personnel trained in O&M under the Small Water Facility group will be part of the Community Organizing Team as the one who will conduct O&M training.

In theory, decentralized water services should improve governments' ability to treat water as an economic good and assess user charges that will create incentives for efficient water use as well as finance improved service delivery. Lower level governments, closer to the beneficiary population, have an informational advantage in identifying citizens' preferences as well as the flexibility to respond to local conditions. As local governments act on this information to improve quality, reliability, and variety of services, claimholders will be willing to pay more for services. These increased user charges can, in turn, be used to finance expansion, improvement, and maintenance of the existing network.

(Source: Local Governance and Rural Empowerment Project LGREP, 2008)

PART 2

GET TOGETHER! PLANNING AND DEVELOPMENT

Definition and Scope

In Part 2 the Claimholder and the Duty Bearer (LGU) come together to concretize the right to water. It is during this stage when the LGU and the community articulate their goals and vision for an improved water supply and sanitation condition through the preparation of a local water and sanitation plan, and other relevant activities that will lead to the eventual enjoyment of the right to water particularly by the most vulnerable. There is continuing learning on the human rights-based local water governance framework as these are built into the various processes that the LGU and the Claimholder will go through. Part 2 is organized as follows:

Chapter 1: **Developing the Local Water and Sanitation Plan -** In this chapter, an LGU wide planning for water and sanitation following a human rights-based approach will be undertaken with the LGU leading the activity. The methodology for developing a local water and sanitation plan called the Municipal Water Supply, Sewerage and Sanitation Sector Plan (MW4SP) is discussed in detail to guide the LGU and the community. Unlike the typical planning tool, the MW4SP ensures a participatory approach and incorporates the fulfillment of the normative content of the right to water.

Chapter 2: **Setting Up the Water Utility -** The discussion in Chapter 2 assumes that the municipality is waterless; hence there is no major WSP that serves the municipality. The various types of WSPs are presented for information and understanding of the Claimholder and the Duty Bearer to enable their decision-making process in the selection of the WSP.

Chapter 3: **Planning and Design -** This chapter discusses the planning and design processes and other activities for a typical water project in the municipality that will be implemented by any of the WSPs in the municipality. Also referred to as a feasibility study planning and design covers the review and assessment of the technical, financial, environmental and institutional aspects of a proposed water project. Aside from discussing the processes, the chapter highlights the human principles applicable to planning and the normative content of the right to water (availability, accessibility and quality) that need to be considered in the design of any water supply project.

Chapter 4: **Construction -** The chapter presents an overview of the construction process in typical water and sanitation project, the approach to be undertaken to address the challenges to good governance particularly those that challenge integrity and ensure that in the end the normative content of the right to water is achieved.

Human Rights Guiding Principles

Following are the human rights principles and guidelines that are to be considered during the planning and development phase. It should be noted that other human rights principles continue to apply; but issues on the attributes of the water service that will be provided and affordability of water services are the ones highlighted in Chapter 2.

Normative Content of the Right to Water

1. Provide at least
   - 20 liters of water per person per day for Level 1 service
   - 40 liters of water per person per day for Level 2 service
   - 80 liters of water per person per day for Level 3 service

2. Comply with the Philippine National Standards for Drinking Water and other water quality standards contained in relevant laws and policies;

3. Observe the minimum standards on appropriate water and sanitation technology contained in relevant laws and policies;

4. Obey the standards relating to domestic plumbing, household water treatment and storage contained in relevant laws and policies;

5. Develop, adopt and implement high quality service delivery standards.

6. Set necessary minimal charges or water tariffs, which are fair and affordable:

   - Ensure that the price of water and sanitation does not reduce a person's ability to buy other essential goods implicit in human rights.

   - When setting water tariffs, integrate an individual's/household's ability to pay as well as direct and indirect costs of water and sanitation.

   - Price water to discourage wasteful consumption.

   - Consider other forms of payment (e.g. payment in kind, in labor or skills provision, Phasing in of connection charges over time) and flexible payment terms.

   - Refrain from profiteering and price-fixing.

Human Rights Principles that Promote Good Governance

The Participatory, Accountability, Non-Discrimination, Transparency, Human Dignity, Empowerment, and Rule of Law (PANTHER) principles shall guide the undertaking in Part 2. The LGU as Duty Bearer shall endeavor to enable the full participation of the community especially in the decision making relating to the level of water service and in the selection of the WSP model.

As the quest for water progresses to Part 2, more and more critical issues arise that challenge good governance such as the issue of corruption and control. Ways on how to address these critical issues are also discussed in the chapter.

Roles and Responsibilities

- **LGU as Duty Bearer** this applies whether the LGU is the WSP or not, and in both cases the LGU as represented by the WatSan Council has the primary responsibility to take the planning and development phase forward. The LGU leads the activity in the development of the local water and sanitation plan and enabling the participation of the community. This role continues until construction if the LGU is also the WSP. If the LGU is not the WSP, it shall take on a more coordinating and informal role of regulator to ensure that a human rights-based approach in local water governance is being adopted by the other actors - WSPs.

- **Community as Claimholder** represented by existing Civil Society Organizations in the municipality or through newly formed Water Users' Associations and/or Claimholder's groups or as representatives in the WatSan Council shall actively participate in the planning and development activities. The community will provide the critical feedback on the performance of the Duty Bearer and other actors (WSPs) and exercise vigilance particularly during the construction phase to avoid the threats of corruption.

- **Other Actors**

The WSPs shall undertake the planning and design of the water system with the participation of the community claimholder. During construction it shall be solely responsible with taking on the community monitoring role.

Target Outputs and Outcome

At the end of Part 2, the following outcomes and outputs are expected:

- Local Water and Sanitation Plan developed by the LGU together with the community that seeks to address the most vulnerable in the community;

- A WSP model selected and decided with the community and set-up with initial assistance from the LGU (WatSan);

- Participatory planning and design for specific projects that were selected for implementation; and

- Constructed water facilities in accordance with human rights principles for good governance.

CHAPTER 1

INTRODUCTION

The LGU shall together with the community develop a local water and sanitation plan that will:

- Determine individuals' roles as Claimholders and Duty Bearers, their human rights and responsibilities, duties and obligations;
- Formulate a shared vision among the communities, LGU and WSP for the provision of and access to water supply and service in line with the priority agenda of their local government unit.
- Clarify roles, responsibilities, and mandates in a water supply and sanitation program;
- Develop local WatSan mission and goals as these connect with the vision including how people can participate in water provision;
- Describe sustaining mechanisms that will enhance sustainability and encourage replication of a WatSan program; and
- Incorporate the results of above tasks and prepare a local water and sanitation plan incorporated within the bigger Comprehensive Development Plan (CDP) of the Municipality. Guidelines for developing a similar local water and sanitation plan called the Municipal Water Supply, Sewerage and Sanitation Sector Plan (MW4SP) can be adopted by the LGU.

The guidelines follow a human rights-based approach to local water governance.

Guiding Human Rights Principles in Planning and Development

Planning and development should be participatory, the community as Claimholder (especially those most vulnerable) and the LGU shall develop a vision and prepare the plans together and in accordance with the human rights PANTHER principles. The plan should be based on participatory/gender assessment and assess the implications on women recognizing that women and men do not always have the same access to and control over resources, and the benefits, disadvantages and impacts may vary across the sexes.

1. Make sure that the plan:

    - Promotes the realization of the right to water and sanitation by addressing all normative elements of the right to water (affordability, access, and availability) and highlighting corresponding obligations and duties;

    - Recognizes and addresses, as far as practicable, challenges that may impact on the realization of the right to water and sanitation;

    - Complies with the existing human rights and legal framework, national regulatory processes and national water policies, plans and roadmaps;

    - Clarifies the division of responsibilities between and among all actors, and establishes effective coordination with national agencies and bodies, and other local government units, to ensure holistic, harmonized and integrated water and sanitation services;

    - Defines specific, measurable, attainable and realistic objectives consistent with the right to water;

    - Establishes accountability mechanisms to ensure implementation; and

    - Identifies needed resources.

2. Establish specific, measurable and time-bounded targets.

3. Use accurate and timely quantitative indicators in planning.

CHAPTER 1 DEVELOPING THE LOCAL WATER AND SANITATION PLAN

INTRODUCTION

The local WatSan plan, also referred to as Municipal Water, Sewerage and Sanitation Sector Plan (MW4SP), is an organized and customized approach to planning that was developed to assist the LGUs, the community and WSPs in developing a long-term plan for the sector. It is supported by a Manual that provides basic planning principles, processes, guidelines, and tools.

A. KEY PRINCIPLES

In preparing a MW4SP, the planning process should be executed within the context of Integrated Water Resources Management (IWRM) and Climate Change Adaptation, specifically adopting the following principles:

- Access to potable water and acceptable sanitation is a basic human right;
- Water should be managed for the common good as it is a finite and vulnerable resource essential to sustain life, development and the environment;
- Water management should be decentralized at the lowest possible level that is transparent and socially accountable;
- Water supply services should be financially feasible and socially acceptable;
- Water supply services should be demand-responsive and gender-sensitive;
- Water supply projects should include capacity building;
- Availability of knowledge management components for the learning experience of claimholders and duty bearers;
- Water supply provision should be a priority component of poverty reduction program;
- The development of water supply sector should contribute to gender equality; and
- Sanitation is directly linked to water supply.

In meeting the abovementioned requirements, planning should be comprehensive and thorough in identifying all alternatives/options and corresponding asset and non-asset solutions. It should be iterative, balancing service needs with cost implications, financial requirements, and social and environmental impacts.

B. STEPS IN DEVELOPING THE MW4SP

The Guidelines for the Preparation and Development of the MW4SP provides the key steps/general work flow below. These steps are summarized in figure 5 with brief description as follows:

1. Data Collection and Analysis; Problems and Service Needs Identification and Priority Concerns

The initial step in the development of a MW4SP is to account for all necessary cross-sectoral data/ information in preparing a technical assessment of the following:

- Existing Water Supply and Sanitation Conditions – involves the technical assessment of conditions relating to water supply and sanitation availability, quality, physical accessibility, information accessibility, affordability, among others. It also includes assessment of existing policy program on IWRM, disaster risk management and climate change adaptation.

  The assessment of the core elements of the right to water supply and sanitation should undergo fine-tuning to capture the actual access thereby aiding in the development and selection of options/strategies.

- Existing Socio-Economic Condition and Stakeholders Analysis – focus on analyzing conditions that has considerable effects on resource allocation, marginalization, and exclusion. Further, involve identification of claimholders, duty-bearer's, and other actors.

  The overall financial and socio-economic framework is premised on the recognition that access to water and sanitation is a basic human right and as such, limited access should be addressed taking into account equitable access for the vulnerable and marginalized sectors of the society, affordability, and equitable cost-recovery.

- Existing Institutional and Organizational Set-Up – assessment of capacity in terms of planning, operation, maintenance, and management of facilities of the LGU as Duty-Bearers and other WSPs.

- Existing Financial Capacity – Assessing the LGUs capacity to finance projects related to water and sanitation. Identification of options for investment financing to include cost recovery.

- Monitoring and Evaluation Practices – assessment of LGUs capacities in M&E and the required adjustments to align the practice to account for human rights principles and standards.

In performing the assessment for the above-mentioned cross-sectoral topics, planners are to proceed with an extensive data collection or baseline survey. This shall be supported by:

- the conduct of participatory planning activities to include FGDs and PRAs; and

- the close coordination with DILG and the LGU to fill-in the data gaps identified during the technical assessment including the finalization of the technical data/information to be used as baseline and key planning parameters for the succeeding tasks.

2. Objectives and Target Setting

This step encompasses the establishment of an overall objective including prioritization of interventions in assuring providing equitable service provisions across all stakeholders. Targets are aligned in meeting the UNDP goals, more importantly the national and regional targets. This shall be undertaken through public consultations and participatory activities.

3. Demand and Supply Analysis; and Future Demand Forecasting

Taking-off from the results of the technical assessment, the tasks shall focus on establishing service needs as it relates to stakeholders requirements. This involves the finalization of key planning parameters and determination of future demand forecast.

4. Development of Options/Strategies for Service Provision

Incorporates all the findings in the previous steps to come up with options/strategies geared towards the realization of water supply and sanitation service provision that is responsive to the needs of the community.

5. Selection of Most Viable Option

In the selection, priority shall be given to strategies that will achieve optimal financial, social, and environmental results. The succeeding step shall involve the formulation of an implementation strategy to assure that the plan shall be carried-out to consider financial considerations.

6. Development of Implementation Strategy

In formulating an implementation strategy, the following consideration should be given to phasing (staging) of the project; service provider implementation targets; funding availability; and the service provider's ability to deliver the capital works program within the designated timeframe.

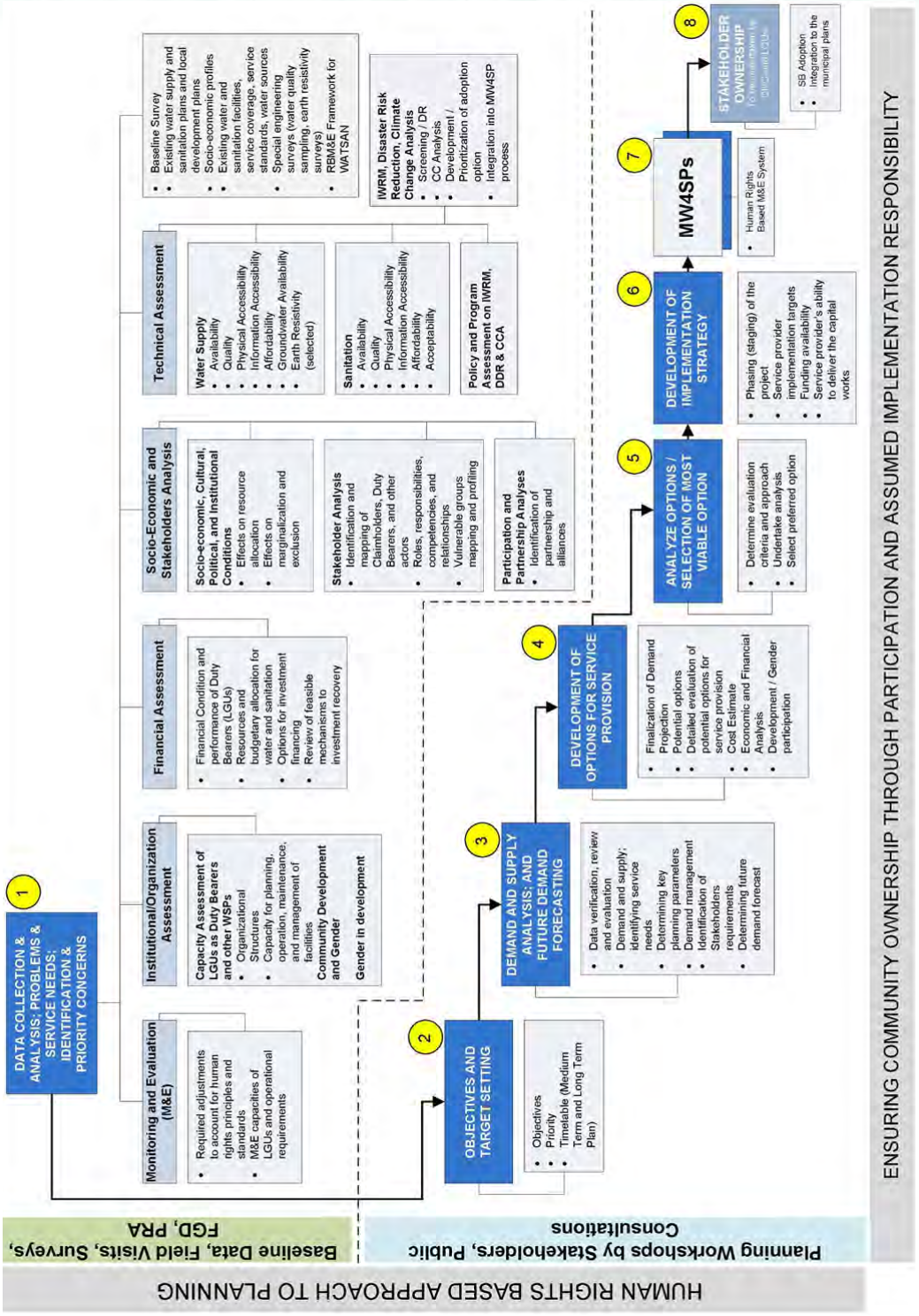
7. Preparation of the MW4SP

The last step before plan adoption, involves the preparation of the planning report. The overall objective is to be able to present all the findings in a manner that shall impart clear and direct information to key decision makers to be able to facilitate the adoption and implementation of the plan.

8. Adoption of the MW4SP

The last step before plan implementation will require the adoption of the MW4SP. The task is to be undertaken by the LGU in direct consultation with the community. The process shall assure stakeholder ownership and will include Sangguniang Bayan adoption of a municipal ordinance and integration into the municipal plan.

Figure 1.2.1: Steps in Developing the MW4SP



C. CONTENTS OF THE REFERENCE MANUAL

The MW4SP Manual is a detailed guide that will enable the LGU, the community and the WSP prepare a local water and sanitation plan following human rights-based local water governance. The Manual consists of the following Sections:

Section 1: Introduction	Provides the rationale and purpose of the manual, including an introduction to the planning process.
Section 2: Planning Framework	Provides an overview of the framework which integrates the Human Rights Based Approach to planning.
Section 3: Regulatory Framework	Gives an overview of relevant regulatory frameworks which applies to water and sanitation service provision.
Section 4: Database Management	Outlines required resources to be allocated in information capture and verification. Further, gives a summary of the physical requirements, data needs, and effective knowledge management for effective planning.
Section 5: Stakeholders Mapping	Provides guidance on stakeholder identification, analysis of their needs and requirements, data needs and requirements. Sets-out approaches and tools on how to involve the stakeholder during the planning process.
Section 6: The Planning Process	Provides an overview of the planning process utilizing a computer-based planning approach with the use of a matrix specifically developed for MW4SP.
Section 7: Problem Identification and Analysis	Gives an overview of required information in identifying existing conditions that will affect the delivery of equitable service provision, environmental, socio-economic, and financial outcomes.
Section 8: Demand and Supply Analysis and Forecasting	Provides technical direction on the assesment of water demand and sanitation facility that will affect delivery of equitable service provision, environmental, socio-economic, and financial outcomes.
Section 9: Vission-Mission Objective (VMO) and Target Setting	Outlines the steps and guidelines in setting future service targets (medium and long term) in the realization of the country's commitment to meet the Millennium Development Goal.

Section 10: Development of Options and Strategies	Gives guidelines and references in developing technically feasible options and strategies to be able to meet the objectives set-forth during the target setting exercise.
Section 11: Analysis and Selection of Most Viable Option	Determines sound strategies that will result in substantial financial and social outcomes. The section provides the methodologies that can be adopted in the selection process.
Section 12: Implementation	Highlights the general criteria in identifying priority project for implementation. Focus is given on how to maximize the advantages that can be benefited with simutaneous implementation of water suppy and sanitation projects.

D. MW4SP - WATER SUPPLY AND SANITATION PLANNING TOOL (WSSPT)

The **"MW4SP - Water Supply and Sanitation Planning Tool (WSSPT)"** is a Microsoft Excel® based computer program developed to assist in the conduct of planning workshops, more specifically during the target setting exercises. The program is divided into four Exercise Modules:

- **Water Supply Planning Module:** used for the formulation of the water supply technical and financial plan;
- **Sanitation Planning Module:** used for the formulation of the sanitation technical plan and corresponding budgetary requirements;
- **Institutional Requirement Planning Module:** used for encoding institutional requirements for the formulation of the Institutional and Sustainability Plans; and
- **Human Rights-Based Monitoring and Evaluation (HRB M&E) Module:** gives a summary of the targets developed in the 1st Module and used for encoding additional requirements for the preparation of the HRB M&E System.

The results of the above Modules will assist planners in the:

- Refinement / finalization of data on existing water supply and sanitation conditions;
- Setting of criteria for prioritization and selection of options;
- Setting of water supply and sanitation improvement targets for all barangays;
- Identification of technical options and indicative costs of feasible options;

- Distributional impacts;
- Identification of institutional (legal framework, human resources, infrastructures and facilities, capacity building, and budgetary) requirements and areas of concerns for the development of the sustainability plan; and
- Initial inputs to the HRB M&E Section of the Master Plan.

A separate document is provided to guide users on how to utilize the WSSPT.

FURTHER READING:

1. Guidelines for the Preparation and Development of the Municipal Water Supply, Sewerage and Sanitation Sector Plan (MW4SP), MDGF 1919, April 2012

2. ADB Guidelines in the Financial and Economic Analysis of Project2.ADB Guidelines in the Financial

CHAPTER 2 SETTING UP THE WATER UTILITY

INTRODUCTION

The type/model of WSP is decided during the planning and development phase by the community and the LGU assuming that a big part of the municipality is not yet being served. The LGU and the community shall study and discuss the various models of WSPs currently operating in the Philippine water sector and the advantages and disadvantages of each type of WSP. The discussion aims to allow the community with the guidance of the LGU to reach agreement on their preferences for their own WSP.

The community could either decide that it shall establish and operate its own water and sanitation association or reach agreement with the LGU that an LGU-run water utility or water district is to be established. Whatever WSP model is decided, under human rights-based local water governance, both the Claimholder and the Duty Bearer shall study the options and make the decision together.

To enable the participation of the community in the selection of the WSP model, the LGU shall conduct an intensive information campaign on the different types of WSP models and how each WSP operates. Even if the LGU has the mandate under the Local Government Code of water and sanitation provision, the LGU should not, under human rights-based local water governance, use its power to control the decision making and decide on its own what WSP to set up.

WATER SERVICE PROVIDER (WSP) MODELS

There are several forms of WSPs in the local water sector namely the LGU-run water utility, Water District, Joint venture with Private Partners and Small-Scale Water Service Providers or SSWSPs which include RWSA, BWSA, Cooperative, privately owned water utility and others. Each WSP model is discussed below:

1. Water District

Water Districts are government owned and controlled corporations created under Presidential Decree 198. They have been granted the power of eminent domain, sale of water and setting of water tariff, protection of waters and facilities of the district, rights of way, management, administration, operation and maintenance of watersheds within its territorial boundaries, fire protection capacity, and money borrowing for its capital improvements. Water Districts possess the authority to exercise the powers, rights and privileges given to private corporations under existing laws, in addition to the powers granted in, and subject to such restrictions imposed under PD 198.

A Water District is headed by a General Manager who runs the day to day operations. The policy-making is vested in the Board of Directors composed of five appointed community sectoral representatives,,

each from the Women's sector, Professional groups, Business associations, Educational sector and Civic organizations, nominated from various community groups. The members of the Board are selected on the basis of their integrity, competence, expertise, civic consciousness, community and gender awareness, and not on their financial capabilities or private interest.

Water Districts (WD) are models of efficient government-owned and controlled corporations (GOCC), independent and self-reliant. WDs depend on their internally generated revenues for their operations, maintenance and improvement, debt servicing and service coverage expansions. WDs do not receive any local or national government appropriation for this purpose. Internally generated revenues are fully and solely used for its operations and maintenance, development and rehabilitation of water sources, replacement of ageing equipment and structures, line improvement and community service expansions, and watershed protection and rehabilitation.

Water Districts have successfully fulfilled their mandate as water service providers to 30 million people in the countryside, without subsidy from the local or national government. There are now more than 500 successful institutions, since having taken over from the defunct NAWASA in 1973 with a handful of operating systems, and the number of WDs is still growing.

The water districts under PD 198 are responsible for providing potable water supply to the population within its area coverage. In reality however, the WDs are generally concerned only with the core area or the poblacion as they are limited by economic considerations. Thus the fringe areas are left to the small scale service providers, etc., otherwise they remain largely unattended. Only very few water districts are able to serve the fringes particularly as service coverage is not also one of those parameters being monitored by LWUA as the regulatory body for water districts.

2. LGU-run water utility

The LGUs are allowed to establish and operate waterworks or water supply systems within their area of jurisdiction as well as to provide for their regulation. LGU-run enterprises are water supply services provided through systems operated by municipal or city engineering departments, or the local waterworks divisions. These WSPs are regulated by the NWRB mainly on a voluntary basis. Compared to other forms of WSP models, the LGU-run enterprise tends to underperform due to technical, financial, human resource and managerial constraints, and serious political influences . Additionally, there is an absence of ring fenced accounts making performance monitoring and audit/ analyses difficult. An advantage to this form of WSP is its eligibility to grants and subsidies of political benefactors. In terms of size, the service connections range from 100 and 5,000 households. Since most connections are unmetered, it is not possible to charge tariffs depending on consumption.

MUST KNOW

Population Served by Level III WSP's and Number of Water Service Providers

WSP TYPE	Population Served by Level III WSPs (2007)		All Water Service Providers (2005)	
	Number	%	Number	%
Water Districts	6,851,487	76%	580[1]	9%
LGU Systems	1,511,680	17%	1,000	16%
RWSAs/BWSAs	296,886	3%	3,600	57%
Cooperatives	100,216	1%	200	3%
Private/NGO	286,007	3%	900	14%
Total	9,046,276	100%	6,280	100%

Source: Philippine Water Supply Sector Roadmap, 2008

1 In 2004, 127 WD's were not operational

Davao City Water District's success story
By Maria Editha C. Monje

A long time ago, the old Davaoeños relied on mother nature - the Davao river and the rain -- for their water needs. Since these were not enough, the first waterworks system came about in 1921. Called the Sales Waterworks System, it tapped the Malagos creek to serve about 10,000 Claimholders. As the populace grew, studies for improvement were made and so in 1968, the water system was placed under the National Waterworks and Sewerage Authority (NAWASA). This signaled the construction of better water facilities. Demand for more potable water proportionately grew with the increasing population.

In 1973, Davao City Water District was created by virtue of Presidential Decree 198. Operating as a quasi-public utility or a semi-government status, DCWD implemented its project in calculated phases and stages. Transmission and distribution lines, sources, pumping stations and reservoirs multiplied in large proportion as DCWD tried to cope with

Davao City's progress. On March 12, 1992, the Supreme Court declared with finality that all water districts in the country (to include DCWD) created under PD 198 are government-owned and controlled corporations (201 SCRA 593). This is now the status of DCWD.

The DCWD has -- ever since its inception -- been the biggest water district in the Philippines, now having over 130,000 active service connections and is still growing. Over three years, it has continuously widened its horizons beyond basic water delivery. The water utility actively networks with many GOCCs, private and public agencies and even private individuals for water and environmental concerns and gender development. It also takes on scholarship and various outreach programs that benefit the less privileged constituents of the city. It has also been a godfather water district to all water utilities in Region 11 and to all its counterparts around the country that come or it may reach for assistance and guidance in operation and technology.

The Local Water Utilities Administration (LWUA) has more than once awarded DCWD as Most Outstanding Water District (very large category), the distinction it holds to this day. In 1996, DCWD also ranked fourth among the 12 Asia-Pacific countries with the most successful efforts in reducing unaccounted-for-water. In addition to its laurels, in 1997, the Asian Development Bank's Second Water Utilities Data Book ranked DCWD number one among 50 water utilities in the Asia Pacific Region.

3. Joint Venture with Private Partners

According to the Implementing Rules and Regulations of the Foreign Investment Act of 1991 (RA 7042) a "joint venture shall mean two or more entities, whether natural or juridical, one of which must be a Philippine national, combining their property, money, efforts, skills or knowledge to carry out a single business enterprise for profit, which is duly registered with the SEC as a corporation or partnership".

Joint venture, within the concept of Philippine law, is organized or established only for some transient or temporary business objective. It is often characterized as being similar to a partnership in the sense that there exists among the joint ventures, commonality of interest and mutual right of control, not to mention the mode by which profits or losses are shared. Joint ventures are usually resorted to by corporations - domestic or foreign-based - which are not allowed to form partnerships or become partners in a partnership.

A joint venture established to operate and manage a water utility shall obtain a Certificate of Public Convenience from the NWRB.

There are a number of Joint Venture agreements currently existing in the Philippines and these have been formed for various purposes (aside from water utility operation and management):

- Bulacan and the Metropolitan Waterworks and Sewerage System (MWSS) - for the development of a P11-billion bulk water supply project with Manila Water implementing the project. MWSS and Manila Water would provide a financial package of an infrastructure grant, a P10-million development assistance and a P10-million royalty fee to the towns of Norzagaray and Doña Remedios Trinidad, which would host the water supply project

- Manila Water has a 70 percent stake in Laguna AAA Water Corp, a joint venture between the provincial government of Laguna and AWC. The joint venture company serves the needs of the city of Sta. Rosa and municipalities of Biñan

and Cabuyao.

- Manila Water and the Philippine Tourism Authority - joint venture called Boracay Island Water Co., Inc. under a 25-year concession agreement, the company has been tasked to develop, operate, and manage the water and sewerage system of the Philippines' most popular tourist spot.

- Manila Water led consortium and the provincial government of Cebu for the joint development and operation of a bulk water supply system in the province. The provincial government and the Consortium will form a joint venture company to serve as bulk water provider, with Manila Water holding a 51-percent stake, while the provincial government holds a 49-percent share.

4. Small-Scale Water Service Providers or SSWSPs

The SSWSP has been loosely defined as a small utility (less than 5,000 connections) which is not the main utility in a city or municipality . These are existing rural and barangay waterworks, small piped network operators, local government-run systems, or systems operated by cooperatives and businesses comprise the biggest groups which are generally cooperatives organized for the purpose of providing water supply services to its members. With a few exceptions, SSWPs operate mostly Levels I and II water supply systems.

Key Features of SSWP

- Small scale piped network
- Operated with very minimal investment
- Operate in a competitive environment
- Operate in areas beyond reach of formal water service providers

Many of these small-scale water utilities are owned by private entrepreneurs who invest capital in tertiary lines, secondary pipes, and deep wells. They can also be unregulated, unlicensed, informal service providers that are routinely able to purchase raw bulk water from major suppliers, which they resell to customers at a premium.

BARANGAY WATERWORKS & SANITATION ASSOCIATION

- **Barangay-Based Water Users' Association (BWSA)** A barangay-based water users' association is formed to manage the community water supply systems, usually point source (Level 1) and communal systems (Level 2). These water system facilities are typically established through government funding, donor-led assistance, NGO partnerships or via community grants/ subsidies. The BWSA is required to register with the city or municipal council. A certificate of public convenience from NWRB is required an additional requirement should the BWSA function as a water utility. This is exclusively composed of member-Claimholders who administer, operate and maintain the completed and registered water facility. The BWSA receives technical assistance from the DILG in terms of organization and planning.

Other Important Things to Know About Cooperatives

Capital*. The minimum paid-up share capital is now PhP15,000 (the minimum under the old law is only PhP2,000), subject to increase by the CDA upon consultation with the cooperative sector and the NEDA. The par value of shares of a primary cooperative shall not exceed PhP1,000. No member of primary cooperative other than cooperative itself shall own or hold more than 10% of the share capital of the cooperative.*

Membership*. New members may only be admitted to the cooperative after undergoing Pre-Membership Education Seminar. The two kinds of members include :*

1. Regular members. Entitled to all the rights and privileges of membership, including the right to vote and be voted upon.

2. Associate members. Has no right to vote nor be voted upon and shall be entitled only to such rights and privileges as the by-laws may provide. However, an associate member shall be considered a regular member if: (a) he has been a member for 2 continuous years; (b) he patronizes the cooperative as its member; and (c) he signifies his intention of becoming a regular member. A member shall be liable for the debts of the cooperative to the extent of his contribution to the share capital of the cooperative.

Tax Treatment of Cooperative*. Cooperatives which do not transact any business with non-members or the general public shall not be subject to any taxes and fees imposed under the internal revenue laws and other tax laws. Cooperatives transacting business with both members and non-members shall be subject to another set of rules, but transactions with members shall remain to be non-taxable.*

Audit*. Audit shall be conducted by an external auditor, who must be a member of good standing of the Philippine Institute of Certified Public Accountants, accredited by the CDA and the Board of Accountancy.*

Penal Provisions. *Anyone who uses the word "Cooperative" without being registered with the CDA is punishable by imprisonment (5 years) and a fine (PhP20,000). Electric cooperatives registered with the National Electrification Administration (NEA) are exempt and may not register with the CDA.*

- **Rural Waterworks and Sanitation Association (RWSA)** RWSA are community-based water users' associations formed to manage piped water supply systems either with house connections (Level 3) or a network of public taps (Level 2) in areas not covered by water districts. Originally, LWUA was responsible for the regulatory and developmental functions over RWSAs.

  RWSAs are under the responsibility of LWUA by virtue of Executive Order 577 which transferred the functions of the defunct Rural Waterworks Development Corporation to the LWUA in 1987. Since then however, LWUA has provided very little support if at all to these small utilities primarily because of economic considerations since these are scattered all over often in remote and inaccessible areas. All others are mostly under the LGUs and operated by the barangay themselves.

- **Cooperatives** Cooperative WSPs are membership organizations formed under the Philippine Cooperative Code of 2008 (Republic Act No. 6938 as amended by Republic Act 9520 on February 17, 2009) for specific purposes including to operate and maintain a water supply system. The cooperative is required to register with the Cooperative Development Authority (CDA).

  By definition (Philippine Cooperative Code of 2008) a cooperative is an autonomous and duly registered association of persons, with a common bond of interest, who have voluntarily joined together to achieve their social, economic, and cultural needs and aspirations by making equitable contributions to the capital required, patronizing their products and services and accepting a fair share of the risks and benefits of the undertaking in accordance with universally accepted cooperative principles.

  The declared principles of cooperativism include *(i) Voluntary and open membership; (ii) Democratic member control; (iii) Member economic participation; (iv) Autonomy and*

economic participation; (iv) Autonomy independence; (v) Cooperation among cooperatives; (vi) Cooperative education; and (vii) Concern for community.

Selecting the WSP Model

In the selection of the WSP model, the LGU and the community should be guided on how each model operates, which agency regulates which WSP and overall, what type of WSP will be appropriate for their needs. For example, while many advantages are attached to a water district, water districts are appropriate only for areas which have level 3 or individual connections to households. If the water systems in the community are level 1 and 2 only, then a BWSA will be a more appropriate choice. It is also important to understand how each WSP obtains financing and how they view provision of agreed levels of service and cost recovery as ultimately these factors will impact on the tariff levels that will be charged.

Comparing the Different WSP Models

The "MUST KNOW" table below shows that different water service providers have various sources of financing including loans/grants from LWUA (for water districts), grants from local government appropriations, and loans from government financing institutions. Except for water districts which have a fixed source of financing, the other utilities need to look for sources of financing. LGU-run water enterprises can borrow from GFIs and PWRF, however there has been limited interest to do so. A significant number of water supply developments for the LGUs have been packaged through DILG which has been able to bring in international donors to finance water supply projects specifically in the rural areas. It is currently working on another proposal for the financing of projects in waterless communities. While the regular sources of financing such as government financing institutions (GFIs) and private financing institutions (PFIs) are available, most of the rural water supply utilities are not eligible for financial assistance as they are not classified as creditworthy. A few SSWSPs operating in the rural areas likewise are able to provide some financing but again these are only for very limited improvements as they too need some support from the sector. In a few cases, some are able to secure funds and dole outs from politicians and local officials but only to finance limited water supply improvement projects. In terms of cost recovery, most of the WSPs have partial to low cost recovery. It is only the water district which has fixed policies on tariffs and cost recovery that recover full costs.

Under the Human Rights-Based Local Water Governance Framework, the appropriateness of the WSP Model is as equally important as ensuring that consensus is reached with the community in the selection process.

Setting Up the Water Utility

As soon as the WSP model is selected, the water utility organization will be set up and necessary organizational and legal processes and procedures will be undertaken. The WatSan Council shall lead the process initially and depending on which model has been selected, the WatSan Council either may take a more supportive role to the community if a community-led WSP model has been selected (which could either be a CBO WSP) or a principal role if the LGU-led model (LGU- run water utility or local water district model) has been chosen.

The following steps describe the processes to be undertaken depending on the governance model: Governance Model 1 (LGU is also the WSP) and Governance Model 2 (WSP is other than LGU).

MUST KNOW

Model	Financing	Cost Recovery
LGU-operated	Substantial allocations from municipal/city and provincial LGU appropriations.	Partial cost recovery. Tariffs are generally not set to fully recover costs.
Water District	Main sources include LWUA, internal cash, ODA programs and local financing institutions.	Generally recovers cost. Tariffs set to cover cash O&M and debt service. But serbvice expansion remains a real difficulty.
RWSA's/ BWSA's	Grants and funding assistance from public, government and international donors.	Low cost recovery and coverage. Affordability and phsyical cost issues.
Cooperative	Cooperative member contrubtions and fees.	Low cost recovery due to low tariffs and majoriyy do not enjoy CPC privileges.

Table 1.2.1: Governance Model and Process to be Undertaken

LGU is also the WSP	WSP is other than LGU
i. If there is an existing LGU-run water utility in the Municipality, evaluate existing organizational set up and functional structure. ii. Review and update organizational structure and determine critical positions to be filled up. iii. Prepare Personnel Plan and Plantilla of Positions requiring apprroval of the DBM. iv. Prepare functional description for each unit and job descriptions for individual positions. v. Prepare a Personnel Budget that is consistent with the earlier local WatSan Program developed and taking into consideration the planned developments in the water system for the next five (5) years. vi. Recruit initially key positions such as Manager, Accountant and Engineer of the Water Utility.	a. If WSP is other than LGU, follow the procedures in CO Guidelines. After the necessary registration and adoption of constitution and by-laws, carry out the following: i. Prepare Personnel Plan. ii. Prepare functional description for each unit and job descriptions for individual positions. iii. Prepare a Personnel Budget that is consistent with the earlier local WatSan Program developed and taking into consideration the planned developments in water system for the next five (5) years. iv. Recruit initially key positions such as Manager, Accountant and Engineer of Water Utility. b. If the WSP is Water District, the LGU has minimal responsibilities as there is the LWUA to take care of the setting up or the water utility.

LGU is also the WSP	WSP is other than LGU
If there is no water system yet, recruit only the Manager and / or the Engineer of the water utility who will assist in the planning and developing if the water system. vii. Otherwise, recruit the required positions that will enable the water utilit to run in an ethical manager.	i. What happens is that after agreement with the LGU Chief Executive and the Sanggunian, the LWUA takes over entirely the responsibility for the water utility establishment, except for the appoinment of the Board of Directors which is done by the local Chief Executive. ii. The mayor receives nominations from five different sectors of the community (business, women, professional, civic, education) and selects and appoints the members of the Board of Directors of the Water District. iii. The LGU shall ensure that other vulnerable groups such as persons with disabilities and older persons are represented in the Board. iv. It shall encourage the formation of Water Users' or Claimholders' Group to participate alongside the Water District in realizing human rights based local WatSan governance. c. For other PSPs such as water cooperatives, private WSPs, the LGU has minimal responsibilities in setting up the water utility. It has to ensure however that community participation is strengthened by enabling the formation of water users' or Claimholders' groups. Through the WatSan Council, the LGU shall monitor the performance of WSP.

Ensuring Human Rights Principles for Good Governance:

In the establishment of a WSP (LGU-managed, water district or whatever type of WSP), the PANTHER principles for good governance shall be adopted through the following:

- Preparation of HR based constitution and by-laws that are discussed and agreed with the community for transparency and accountability;
- Development of water utility operating rules and regulations that are anchored on the right to water and its normative content;
- Carrying out a fair and transparent recruitment process where employees are recruited based on merit and not through a "*palakasan*" system;
- Facilitating the organization of water consumer's group when the WSP is OTHER than the community (Claimholder) to ensure their continuous participation in the planning for the water and sanitation of the LGU; and
- Regular reporting/updating of the community on the status of planning and development activities being undertaken.

CHAPTER 3 PLANNING AND DESIGN

MUST KNOW

The planning and design referred to in this Chapter is for a specific development project in water and sanitation covering a section/s of a municipality.

The guidelines discussed in the succeeding sections can be adopted by:

- A WSP in the planning and development of a proposed project; or

- An LGU that is not necessarily the WSP but the recipient or Executing Agency of a proposed development project.

Some portions of the guidelines are similar to the MW4SP guidelines; the big difference is that the MW4SP is for the comprehensive planning of the entire municipality on water. .and sanitation.

INTRODUCTION

The study and planning of a water supply system under a human rights-based local water governance framework involves the people in the community and the local officials. The process usually starts with the realization of the people that they need potable water for their daily existence and it is their right to have access to potable water as discussed in Part 1.

In Chapter 1, Development of a Local Water and Sanitation Plan, a more comprehensive plan for the entire LGU is prepared. In this chapter, the focus is on priority selected areas where projects will be identified for implementation instead of planning for the entire municipality.

The planning and design task is also referred to as conducting a Feasibility Study and includes evaluating the most feasible option in terms of technical, financial, economic, and environmental considerations. Feasibility studies are commissioned by donor agencies when there is a proposed funding for a project. They are also carried out by the WSP themselves in some instances to support an application for a loan from creditor banks.

The planning or feasibility study process may be adopted by any WSP or several WSPs operating in the LGU. It covers the entire cycle of conducting a survey and assessment of the community's need for water; a study of the existing facilities, if any; determining possible additional sources of supply and finding the source of funds for the implementation of the proposed project.

During this phase, it is should be remembered that PANTHER principles are evident. The survey aims to maximize the participation of the people in conceptualizing the type of water system that they want. There is no discrimination since the survey targets all residents in the community. The results are transparent and can be reviewed by anyone.

NORMATIVE CONTENT OF THE RIGHT TO WATER

In the planning and design, the normative content of the right to water as enumerated earlier in Chapter 1 shall be considered and incorporated in the design process as follows:

(i) Provide at least
- 20 liters of water per person per day for Level 1 service
- 40 liters of water per person per day for Level 2 service
- 80 liters of water per person per day for Level 3 service

(ii) Comply with the Philipine National Standards for Drinking Water and other water quality standards contained in relevant laws and policies;

(iii) Observe the minimum standards on appropriate water and sanitation technology contained relevant laws and policies;

(iv) Obey the standards relating to domestic plumbing, household water treatment and storage contained in relevant laws and policies;

(v) Develop, adopt and implement high quality service delivery standards; and

(vi) Set necessary minimal charges or water tariffs, which are fair and affordable (as defined below):

- Ensure that the price of water and sanitation does not reduce a person's ability to buy other essential goods implicit in human rights;
- When setting water tariffs, integrate an individual's/household's ability to pay as well as direct and indirect costs of water and sanitation;
- Price water to discourage wasteful consumption;
- Consider other forms of payment (e.g. payment in kind, in labor or skills provision, phasing in of connection charges over time) and flexible payment terms; and
- Refrain from profiteering and price-fixing.

A. DETAILED STEPS IN PLANNING AND DESIGN

Step 1: Conduct a Planning Survey

While a baseline survey has been conducted at the start in Part 1, a separate planning survey is needed to get more updated information and in some instances to comply with the requirements set by funding agencies that will finance the project. The Planning Survey includes consultation with the Claimholders, the project proponents and local officials and covers the collection and investigation of socio-economic, technical and environmental data. Its objectives are as follows:

- Determine the type of water and sanitation facilities that the claimholders would like to have;

- Delineate the area to be served by the facilities;
- Determine current water usage, sources of supply and cost of water;
- Determine the willingness of community, LGU-WatSan Teams and WSPs to contribute labor and finances for the success of the envisaged project;
- Identify participation of each group in the operation of and maintenance of the system;
- Determine the type of implementation arrangements acceptable to all; and
- Determine the type of organization and management that the system will have.

Determining Level of Water System

The respondents to the survey will be asked what type and level of water systems (Levels 1, 2 and 3) they would like to have and inform them based on accurate information on the corresponding benefits and cost. It must be emphasized that the higher the level of service, the higher the cost they will have to bear. However, the higher the level of service is, the more convenience will be experienced since carrying and fetching of water from the source to the household will be eliminated.

The survey results will determine who are willing to avail of improved water supply services and those who need improved water services but are not willing because they may not be able to afford the improved water services. This information will assist the planner in delineating the service area which will be served by the water supply system. Judgment and common sense must also be considered in delineating the service area.
The survey results will show how much water is currently being used by the households. It will also show the existing sources of water supply and how water is accessed by the members of the household. The results will also show how much is spent.

The survey results will be able to determine the willingness of the community and others to support the development of the system either by contributing direct labor, money or supporting the tariff and other charges. The survey will initially identify who are willing to participate in the operation and maintenance of the system and what will be their tentative roles.

The survey will also reveal the sentiments of the respondents on the type of implementation arrangements that they will pursue. As Claimholders, they may want direct participation in the implementation to establish ownership by contributing their skills and labor in building the system.

It will also give initial assessment of the type of organization and management that the system will have. The Claimholders may opt to manage the system themselves by forming a cooperative to manage and sustain the system.

Step 2: Determine the Technical Aspects of the Proposed Project

- **Service Area**

After the results of the planning survey have been consolidated, the proposed service area to be served by the water supply system will be delineated. The delineation is discussed and agreed together with the community and local officials. Technical considerations such as location of existing and future water source and location of proposed storage tanks must also be evaluated as early as possible. Right of way must also be established if the pipelines will pass through private property.

- **Population Served and Water Demand**

From the results of the planning survey, the actual population in the delineated existing and proposed service area can be estimated. Population records from the National Statistics Office (NSO) must also be studied to establish the past and future growth rates in the service area.

Based on the data gathered, a population projection for each barangay is calculated using acceptable formulas, methodologies, growth rates and judgment based on the development plan of the community. The service area population can be calculated based on the delineated service area and is expressed as a percentage of the total population. The projected served population is then calculated as a percentage of the service area population.

The water demand in a community will depend on the level of service that the claimholders want to avail of. The higher the level of service, the higher is the per capita consumption that will be used in the water demand projections.

For domestic consumption, about 60 liters per capita per day (lpcd) is used for level 2 systems while 100 lpcd is used for level 3 systems. The consumption may be higher or lower depending on economic factors present in the service area.

Non-domestic use such as commercial, industrial, and institutional are calculated based on the number of establishments in the service area. The estimated consumption for commercial connections is about 1 cubic meter per day (cumd) while 1.5 cumd per industrial and institutional connection may be assumed.

Non-revenue water (NRW) which is water that does not provide income to the water system operator, varies depending on how efficient the water system is constructed and how old the system is. Newly constructed water systems usually have lower NRW of about 10%. As the system ages, the NRW usually goes up, however, this can be mitigated through proper operation and maintenance of the system and through the use of good and reliable materials.

The average day domestic water demand is calculated by multiplying the projected number of population by the projected consumption plus NRW. The average day commercial, industrial and

institutional water demand is calculated by multiplying the number of connections by the projected demand in each category. The total average day demand is the sum of the domestic, commercial, industrial and institutional water demand. The maximum day water demand (MDD) is determined by multiplying the average day demand by a factor of 1.3 while the peak hour demand is determined by multiplying the average day demand by a factor of 2.0.

- **Sources of Supply**

The primary consideration in the study and planning of a water supply system is the determination of quality and quantity of water from existing and future sources.

The quality of water is determined by collecting and testing water samples from each source. The samples should be tested for various characteristics such as physical, chemical, biological and radiological. The results of the testing must pass the Philippine National Standards for Drinking Water (PNSDW). Many methods of determining the quantity of supply are available depending on the type of source facility. Capacity of existing sources may be measure using the production meters installed. Capacity of proposed sources may be measured using various equipment available in the market or through measurement and observation and applying technical formulas.

The usual sources of supply of the water system are groundwater through springs and wells and surface water such as rivers, lakes and reservoirs.

(i) Design Transmission and Distribution Pipe Network - Transmission and distribution pipes are the conduits that carry the water to individual service connections or stand posts. Transmission pipe or mains are the pipes that carry the water from the sources of supply to the distribution system storage tank while distribution pipes carry the water from the storage tank to the households.

Planning and designing of the transmission and distribution network involve the use of computer software to be able to determine the optimum size of the pipelines that will serve the community.

(ii) Storage Tank - The volume of the distribution storage tank ranges from 15 to 30 percent of the MDD for operational storage and additional two hours of MDD for emergency and fire storage.

The design volume of the distribution storage tank depends on the capacity of the water supply source. If the water source can only provide MDD, the volume will be at maximum of about 30 percent; however, if the source can provide all the supply during peak hour demand, the volume of the tank shall be limited to two hours of MDD.

Persons living in poverty *– Based on Republic Act 8425, otherwise known as Social Reform and Poverty Alleviation Act, dated 11 December 1997, the poor refers to individuals and families whose income falls below the poverty threshold as defined by the government and/or those who cannot afford in a sustained manner to provide their basic needs of food, health, education, housing and other amenities of life.*

Poverty Threshold - *the minimum income/expenditure required for a family/individual to meet the basic food and non-food requirements.*

Poverty Incidence - *the proportion of families/individuals with per capita income/expenditure less than the per capita poverty threshold to the total number of families/individuals.*

Poverty Gap - *the total Income/ Expenditure shortfall (expressed in proportion to the poverty threshold) of Families/ Individuals with Income/ Expenditure below the poverty threshold, divided by the total number of Families/ Individuals.*

Step 3: Prepare cost estimates and evaluate technical options based on the least cost option

The cost of the proposed project based on the design parameters that were considered under Step 2 will be determined. It is important that at least three technical options are looked into and compared against each other in terms of cost implications. The least cost technical option shall be considered so as to make water more affordable.

Step 4: Undertake compliance review with social safeguards

In carrying out the feasibility study, the LGU or WSP shall see to it that principles and practices of good governance are ensured. Part of the FS is the conduct of various studies to check compliance with social safeguards relating to gender, indigenous people, environment and climate change, and enabling participation of the community in the design of the water system. These social safeguards are required by donor agencies when they fund development projects. They provide built in checks for ensuring that human rights principles (PANTHER) are considered.

Following is a discussion of each study (based on ADB Guidelines)

- **Social and Poverty Analysis**

A social and poverty analysis is undertaken to establish the demographics of the proposed beneficiaries of the project and takes note of relevant social issues that need to be considered relative to designing a socially inclusive project. Variables include vulnerable groups and indigenous peoples, gender roles and issues, potential resettlement, and affordability and participation concerns. The social and poverty assessment is carried out through socio-economic surveys and interpreting the results of the survey through an agreed framework.

An important part of the social assessment is to identify the vulnerable groups. The vulnerable groups are those who are already so marginalized that without support they may not even benefit from the development project.

The project identifies them to ensure that their needs are also prioritized during project planning and implementation.

Moreover, the project also identifies potential negative impacts of any of its proposed activities on the people. It finds ways to enhance positive impacts especially on vulnerable groups. Examples are indigenous peoples and persons living in poverty including women headed households.

Gender - Part of the social and poverty assessment is to determine the critical gender issues in a project. The survey will help identify and assess the demographics of women participation and gender issues such as unemployment, violence against women, early pregnancy and marriage and others.

If there are gender issues to be addressed, a Gender and Development Plan shall be prepared to ensure that women are not excluded by the project and gender bias is minimized or avoided. The plan shall disclose the threats and opportunities and propose on how women can participate in the project in planning, implementation and O&M activities (water and sanitation).

Poverty – Poverty indicators are established based on the survey results to be used later in monitoring the impact of the proposed Project.

Ethnicity and Indigenous People - A screening is conducted to identify where IPs are and how the project may affect them including the listing of potential impacts, both negative and positive. There shall be sufficient consultations to involve indigenous peoples especially if they are a major beneficiary of the project. This requires the preparation of an IP Plan to ensure that they are not adversely affected and that they benefit from the project implementation.

KNOW MORE

For detailed guidelines in the preparation of financial and economic analyses of projects, there are prescribed guidelines by donor agencies like the ADB. Guidelines can be downloaded from the ADB website

Following is a table that shows the conduct of a social analysis of an ADB-funded project during the design stage and how each social aspect (gender, culture, etc.) is taken into account.

Table 1.2.2: Social Analysis During Project Design

Social Analysis during Project Design (ADB Guidelines)			
Stage	**Purpose**	**Tool/Process**	**Output**
Inception stage	• facilitate ownership of all stakeholders; • confirm IPSA report and TOR ; • review intended project classification; • identify key poverty reduction and social development options; • identify key client groups; • and if needed, prepare and agree on work plans for action/mitigation plans, frameworks, or other measures.	• stakeholder analysis, • stakeholder workshops, • problem analysis, • development of initial DMF, and • risk analysis.	• C&P plan; • design options for field testing • work plan for detailed social analysis and baseline study; • expanded DMF; and • work plans to prepare social action and/or mitigation plans/ frameworks, as needed.
Field investigation	• confirm problem analysis; • rank and review options; • assess needs, demands, and capacities of clients/beneficiaries; • confirm targeting approach • foster maximum positive impact for women/girls; and • develop appropriate and accepted mitigation plans, frameworks, or other measures if negative effects are unavoidable.	• PRA techniques • PIA, for policy-based projects; • gender analysis ; • willingness/ability to pay survey; • client group analysis; • risk-reduction options; and • social analysis focused on affected persons and/or communities.	• client-preferred options; • targeting options • gender plan, if needed • plan for affordable service levels • client-focused options for institutional arrangements; and • draft mitigation plan(s), frameworks, or other measures for consultation with stakeholders
Midterm stage	• ensure all social concerns are addressed in design options, • involve all relevant stakeholders in agreement on preferred design, • maximize poverty reduction and social development impact, and • minimize negative impacts.	• comparison of design alternatives, and • review of action/mitigation plans or other measures.	• midterm report, including draft SPRSS and results of C&P process; • draft gender plan; and draft mitigation plan(s), • frameworks, or other design measures

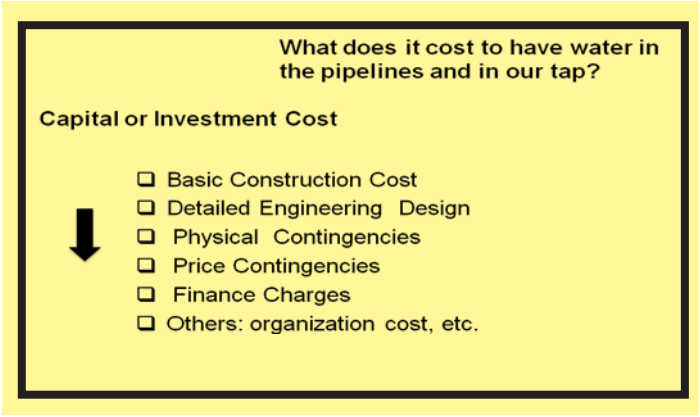
Social Analysis during Project Design (ADB Guidelines)			
Stage	**Purpose**	**Tool/Process**	**Output**
Consolidation	• reconfirm preferred option, and review and consolidate action/ mitigation plans or other design measures.	• field assessment, • stakeholder consultation, and • data review and augmentation.	• draft project design (including DMF, implementation, schedule, and budget); and • social development targets and indicators incorporated in DMF.
Final stage	• facilitate stakeholder ownership of final design, • confirm poverty reduction and social development outcomes in project design, and • confirm alignment with ADB and government policies.	• review of design elements; and • review of project classification and compliance with requirements for action/mitigation plans, frameworks, or other measures.	• agreement from all stakeholders on final design; and • final design documented in draft RR P, including SPRSS , PIA/policy matrix (for policy based projects), and action/mitigation plans or frameworks as needed.

Step 5: Conduct a Financial and Economic Analysis

The other important aspect of planning and designing the water system is determining the financial costs, determining the sources of funding and evaluating whether the proposed water supply system will be financially and economically feasible. This is an important phase that needs the consensus of Claimholders and Duty Bearers, particularly the claimholders who in the end will share in the cost of recovering the cost of the constructed system.

The cost of constructing a water system as shown in the box above includes the:

- **Basic Construction Cost** which is the cost of the civil works, materials, project management cost of implementing the project, institutional, cost and other relevant overhead that are capitalized.
- **Detailed Engineering Design** - after the planning stage, the detailed designs of the project are prepared; including the projected cost of construction supervision.
- **Contingencies** - these include provision for price and physical contingencies which in practice range from nine (9) to thirteen (13) percent.



MUST KNOW

Various ODA-funded programs and projects provide grant financing for water supply provision especially in the rural areas. Loans, coursed through national government agencies (e.g. Department of Interior and Local Government, Department of Agrarian Reform, and GFIs such as the LWUA, Development Bank of the Philippines, Land Bank of the Philippines) are also provided. Funds from the NG and ODA programs/projects often require LGU counterpart funds to increase ownership and accountability. NG-LGU cost-sharing arrangements have been formulated based on the income class of LGUs.

Financing Sources

• National Level Financing

Local Local Water Utilities Administration - The primary source of funds for the water district is the LWUA. LWUA has several financing packages that cater to the specific needs of a newly formed water district. Technical assistance such as the preparation of feasibility studies, planning, design and construction, tariff setting, installation of accounting system, organizational structure and personnel training are among the services provided by LWUA apart from financing.

Government Financing Institutions - Among the government financing institutions that have provided funds to the water districts are the Development Bank of the Philippine and the Land Bank of the Philippines.

Commercial Banks/Private Financing Institutions - Commercial banks are sources of funds for the credit worthy and semi-credit worthy water districts. The Philippine National Bank, Bank of the Philippine Islands and the Banco de Oro has provided funds for financing water supply.

KNOW MORE

If you want to know more about the loan packages being offered by LWUA including loan terms and conditions, you can log on to LWUA's website at www.lwua.gov.ph

• **Project Financing**

When should we think about financing? When can we determine the sources of financing?

During the planning and design phase, the community, the LGU and the water service provider (WSP) will need to talk about how they expect development of their water supply and sanitation facilities to be financed. Some WSPs can readily access sources of financing. For example, water districts can borrow from the Local Water Utilities Administration (LWUA). Other WSPs will need some assistance from the LGU to gain access to possible sources of funds. Sources of project funds are grants from national government, local government, loans from government financing institutions, and the private sector.

(i) Grant Financing - The provision of grants in government programs such as the Salintubig Program is meant to support the government's goal of having water for all and in effect this supports the idea that every Filipino has a right to water. This concessional financing should not be abused and needs to go to appropriate and vulnerable individuals. The duty bearers at both the national and local government need to think of ways to expand grant assistance to social groups or communities or individuals who cannot pay for the full cost of water due to personal situation (older persons , people with disabilities, IPs, persons living in poverty). This is the only way the provision of water becomes non-discriminatory and we attain the water for all objective.

HELPFUL HINTS

There are ways to ensure that persons living in poverty can access water service. One is to allow households which cannot contribute cash as equity, to provide their equity contribution in the form of labor. For Level 3 systems, persons living in poverty may also be allowed to pay the connection fees in installment.

WHAT TO LOOK OUT FOR

Claimholders need to be aware of ongoing programs of the national and local governments. They need to be vigilant in the allocation of these as there are opportunities for corruption in the process. Grants are usually provided where the need for water supply and sanitation services is urgent and the residents cannot afford the more expensive forms of financing like loans. In the Salintubig Program for example, a criteria for the beneficiaries of the program is that they are a waterless municipality or less than 50 percent have access to water in that community. The selection of the beneficiary barangays needs to be transparent and participative reflecting the main criteria for the program.

This could potentially be an area of conflict as different barangays would demand that they become beneficiaries of a grant program as this would definitely result in lower tariffs for their communities.

(ii) Loan Financing - Due to limited grant funds, most of the utilities or WSPs need to borrow to finance their infrastructure development. The discussion above shows that the more common sources of borrowing are:

- the Local Water Utilities Administration (LWUA) for the water districts;
- the government financing institutions (GFIs) such as the Landbank and the Development Bank of the Philippines;
- the private financing institutions (PFIs) such as the Philippine National Bank, Banco de Oro and Bank of Philippine Islands; and
- the Municipal Development Fund Office (MDFO) for LGUs.

To be eligible for borrowing, the WSP needs to demonstrate its ability to repay the loan (loan borrowing capacity). Each lending institution has its own policies and procedures to establish a utility's ability to repay its loans. The most basic criteria are:

- Cash Flow Projections showing that the project can generate revenues to meet O&M and debt service.
- Cost recovery from operations and ability of current assets to meet current liabilities.

Banks usually require that the borrower LGU allows the bank to intercept the Internal Revenue Allotment (IRA) of the Province/Municipality/City equivalent to the amount due in case of default in the payment of loan amortization and/or in the case of unliquidated financial obligations. Other banks require that the borrower makes the bank their depository bank.

More stringent criteria is usually applied for the more expensive infrastructure projects involving multilateral funding from such institutions such as the Asian Development Bank and the World Bank. These banks require a full feasibility study to establish a project's technical, financial and economic viability. To be able to borrow, the WSP needs to demonstrate that during the project life, the project to be funded through the loan will generate sufficient revenues to result in net incomes, positive cash balances, debt service coverage ratios equal/above 1.3 and a financial rate of return which is higher than the weighted average cost of capital.

The WSP needs to be ready at all times to pursue different modes of financing, including loan financing, to improve their service. One basic requirement of all lenders is the submission of updated and audited financial reports (Income Statement, Balance Sheet, and Cash Flow) which report on the water supply and sanitation operations of the WSP. The WSPs need to implement systems to ensure that such reports are prepared, reviewed/studied by management and submitted to the regulatory authority. For LGU run systems, ring fencing of water supply and sanitation accounts is necessary to allow them to prepare relevant reports for monitoring and evaluation, and to make them ready for credit assessment by banks in the event they need to borrow.

KNOW MORE

The Salintubig Program has two major components: a. Infrastructure Investment for Water Supply Systems and b. Institutional Capacity Development. The 2011 General Appropriations Act has appropriated Php1.5 billion to the DOH to carry out the program. This appropriation is a performance based grants facility to the LGUs to develop infrastructure for the provision of potable water supply in the waterless areas. It is expected that by 2015, the following will be achieved:

- Increased water service for the waterless population by 50 percent;
- Reduced incidence of water-borne and sanitation related diseases by 20 percent; and
- Improved access of the persons living in poverty to sanitation services by at least 10 percent.

A total of 455 waterless municipalities are identified for this program. For 2011, the Program covered 115 waterless municipalities, 62 waterless barangays, 55 waterless health centers, and 24 waterless resettlement sites, using the P 1.5 billion released to DBM. For 2012, the Program will be transferred to DILG and will cover 150 municipalities, 43 barangays, 46 health centers, and 12 resettlement sites. The remaining 290 of the 455 waterless municipalities, and a number of waterless barangays, health centers and resettlements sites will be covered from 2013-2016. Each municipality is estimated to receive Php10 million worth each of water system project.

B. TARIFF SETTING

1. When are tariffs determined? The initial determination of tariff is done when a feasibility study is prepared. It is a way of determining how much tariff will be needed to recover the cost of the water system. The costs to be recovered shall depend on the cost recovery framework. After the initial tariff, the next tariff adjustment will be undertaken when the water utility starts operating.

The tariffs that will be set shall ensure the financial (in terms of financial internal rate of return) and economic (economic internal rate of return) feasibility of the proposed project. It shall also consider the affordability of households with persons living in poverty by setting a limit on tariff to not more than five percent of their disposable income.

The tariffs are pre-agreed at the FS stage and are presented in a public hearing for information and consideration of the claimholders. When the agreed tariff is implemented which could be a long time after approval, the Claimholders shall be informed once more on the tariff schedule.

There are various tariff structuring methods as enumerated below, a more detailed discussion is contained in Part 3, the "Work Together" phase

- For WDs which use cash requirement method, the costs shall include the following:

  (i) Operation and maintenance costs
  (ii) Debt service (principal + interest)
  (iii) Capital expenditure

- For other WSPs, the applicable method is the return on investment, and the costs to be recovered from tariffs shall include interest on the loan, operation and maintenance expenses, depreciation expense and a return on investment that shall not exceed the allowable 12 percent as prescribed under the PSL law.

- Still other smaller water utilities like a BWSA / RWSA implement a simpler cash requirement method, or simply divide the expenses by the number of cubic meters consumed (for metered connections) or by the number of Claimholders resulting to a flat rate per user (in case of unmetered connections).

How do we ensure Financial Accessibility/Tariff Affordability?

- Reduce the indirect costs of water, particularly for women and girls;
- Support human rights-based design of tariffs and payment modalities, which accommodates the situation of those living in poverty and its extremes; and
- Base the designs on consultations with those groups, particularly with the women among them.

In tariff determination, the primary consideration of the Duty Bearer is whether it is meeting its obligations per General Comment No. 15 as set out below:

Core	Give priority in all water policies, plans and programs to persons without any basic access through low cost services
Non Discrimination	No disproportionate investment favoring expensive water supply services and facilities
Protect	Adopt appropriate water pricing policies including flexible payment schemes and cross subsidies
	Keep water prices affordable for all
Provide	Subsidies for low income households Provide safe and sufficient water to older persons, persons with disabilities, victims of natural disasters and persons living in disaster prone areas

Essentially, the obligations above refer to affordability where no one is discriminated to avail of water services. If the duty bearer (LGU) is not the WSP, it has to ensure that tariff setting policies comply with the human rights obligations enumerated above. In such cases, the LGU regulator shall define specific tariff setting and cost recovery policies for compliance of WSPs.

2. Meeting the Normative Content for Financial Accessibility

As defined in the early sections of the handbook, Financial Accessibility or Affordability shall mean:

- Affordability for all, particularly for disadvantaged persons and groups.
- Expenses for water and sanitation should not exceed five percent of the income available to a household.

There are various possible ways by which tariff can be made affordable particularly to persons living in poverty:

a. In the selection of the technical options, preference should be given to the design that will meet the minimum requirement for water - hence the least cost option should be considered in most instances. By selecting the most appropriate technology that is also least expensive, the capital cost will be reduced and shall result in a lower tariff. All the options should be properly explained to the claimholders emphasizing corresponding impact on tariff.

b. Conduct studies to ascertain both willingness to pay and affordability of the proposed tariff.

- **Willingness to pay** - This is conducted to assess the willingness of the Claimholders to pay a certain tariff that was determined during the construction stage. A guiding rule that is practiced by some donor agencies is that at least 60 percent of Claimholders that were surveyed accept the tariff; otherwise the proposed project shall not be implemented.

- **Affordability to pay -** the Claimholders are surveyed to determine the income of households with persons living in poverty as basis for tariff setting. The tariff shall not be more than 5% of the disposable income of households living in poverty.

c. Design a tariff structure that considers the affordability of the Claimholders, with focus on persons living in poverty such that the final average water bill shall not exceed 5% of their disposable income of households living in poverty.

3. Tariff Setting Practices to Enable Affordability

Following are existing tariff setting practices that are employed by WSPs in the Philippines to make water more affordable as compared against the requirement of the UN ICESCR

Per UN ICESCR	Suggested Practices	Existing Practices
a. Reduce the indirect costs of water, particularly for women and girls.	**Tariff Design**	
b. Support a human rights-based design of tariffs and payment modalities, which accomodates the situation of those living in poverty.	1. Cross-customers subsidy where domestic users are subsidized by other types of users; hence lower tariff for domestic users. 2. Allowing for a smaller water connection with lower minumun charge for those living in poverty. 3. Lowering the coverage of minimum charge users to life-line tariff. 4. Regulating the profit on water sales.	1. Classification of residential, commercial, industrial and bulk users. 2. 3/8 inch connection which is 2.5 lower than the average 1/2 inch connection. 3. The usual Minimum Charge coverage = 10 cubic meter. This is sometimes lowered to 5 cubic meters which meets the requirements of 20 liters per day capital consumption. 4. Return of Investement (ROI) should not be more than 12 percent for public utilities under the PSC law.

CHAPTER 4 CONSTRUCTION OF THE WATER SUPPLY SYSTEM

INTRODUCTION

The construction phase follows once the proposed project is tendered and awarded to the winning bidder if project is to be executed by a third party contractor. It can also be undertaken by the WSP itself (called construction by administration) once the plan and design of the proposed water project is agreed by the Claimholder and the Duty Bearer (if LGU is WSP). If in case the LGU is not the WSP, it shall continue to ensure that the human rights-based local water governance framework is adopted during construction. This assumes that there is a regulatory body in the LGU that will prescribe human rights practices to be observed during construction.

These human rights practices are the PANTHER principles, the observance of which will enable the construction of water projects that are free of any corrupt practices; that there is complete transparency and integrity and the normative content of the right to water is realized once the project design is implemented in the construction phase.

Tendering and Procurement

The tendering and procurement phase follows the detailed design and feasibility stage. In the Philippines, RA 9184 (Government Procurement Reform Act) governs the procurement of all government projects. Even if funding comes from international financing institutions, RA 9184 takes precedence over other procurement guidelines.

Republic Act No. 9184: AN ACT PROVIDING FOR THE MODERNIZATION, STANDARDIZATION AND REGULATION OF THE PROCUREMENT ACTIVITIES OF THE GOVERNMENT AND FOR OTHER PURPOSES.

RA 9184 was passed on January 10, 2003 to provide for the modernization, standardization and regulation of procurement activities of the government. This act applies to the Procurement of Infrastructure Projects, Goods and Consulting Services, regardless of source of funds, whether local of foreign, by all branches and instrumentalities of government, its departments, offices and agencies, including government-owned and/or-controlled corporations and local government units, subject to the provisions of Commonwealth Act No. 138.

It provides among others that all procurement shall be governed by the following principles:

- Transparency in the procurement process and in the implementation of procurement contracts.
- Competitiveness by extending equal opportunity to enable private contracting parties who are eligible and qualified to participate in public bidding.
- Streamlined procurement process that will uniformly apply to all government procurement. The procurement process shall be simple and made adaptable to advances

in modern technology in order to ensure an effective and efficient method.

- System of accountability where both the public officials directly or indirectly involved in the procurement process as well as in the implementation of procurement contracts and the private parties that deal with government are, when warranted by circumstances, investigated and held liable for their actions relative thereto.

- Public monitoring of the procurement process and the implementation of awarded contracts with the end in view of guaranteeing that these contracts are awarded pursuant to the provisions of this Act and its implementing rules and regulations, and that all these contracts are performed strictly according to specifications.

Definition of Terms:

(a) **Approved Budget for the Contract (ABC)** - refers to the budget for the contract duly approved by the Head of the Procuring Entity, as provided for in the General Appropriations Act and/or continuing appropriations, in the National Government Agencies; the Corporate Budget for the contract approved by the governing Boards, pursuant to E.O.No.518, series of 1979, in the case of Government Financial Institutions and State Universities and Colleges; and the Budget for the contract approved by the respective Sanggunian, in the case of Local Government Units.

(b) **BAC** - refers to the Bids and Awards Committee established in accordance with Article V of this Act.

(c) **Bidding Documents** - refer to documents issued by the Procuring Entity as the basis for Bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and Consulting Services to be provided.

(d) **Bid** - refers to signed offer or proposal submitted by a supplier, manufacturer, distributor, contractor or consultant in response to the Bidding Documents.

(e) **Competitive Bidding** - refers to a method of procurement which is open to participation by any interested party and which consist of the following processes: advertisement, pre-bid conference, eligibility screening of bids, evaluations of bids, post - qualification, and award of contract, the specific requirements and mechanics of which shall be defined in the IRR to be promulgated under this Act.

(f) **Consulting Services** - refer to services for Infrastructure Projects and other types of projects or activities of the Government requiring adequate external technical and professional experts that are beyond the capability and/or capacity of the government to undertake such as, but not limited to: (i) advisory and review services; (ii) pre investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies.

(g) **Goods** - refer to all items, supplies, materials and general support services, except consulting services and infrastructure projects, which may be needed in the transaction of the public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non - personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the procuring entity or such services.

(h) **GPPB -** refers to the Government Procurement Policy Board established in accordance with Article X of this Act.

(i) **Head of the Procuring Entity-** refers to: (i) the head of the agency or his duly authorized official, for national government agencies; (ii) the governing board or its duly authorized official, for government-owned and/or-controlled corporations; or (iii) the local chief executive, for local government units. Provided, that in a department, office or agency where the procurement is decentralized, the Head of each decentralized unit shall be considered as the Head of the Procuring Entity subject to the limitations and authority delegated by the head of the department, office or agency.

(j) **Infrastructure Projects** - include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings and other related construction projects of the government.

(k) **IRR** - refer to the implementing rules and regulations to be promulgated in accordance with Section 75 of this Act.

(l) **Portal** - refers to a website that aggregates a wide variety of content for the purpose of attracting a large number of users.

(m) **Procurement** - refers to the acquisition of Goods, Consulting Services, and the contracting for Infrastructure Projects by the Procuring Entity. Procurement shall also include the lease of goods and real estate. With respect to real property, its procurement shall be governed by the provisions of Republic Act No.8974, entitled "An Act to Facilitate the Acquisition of Right-of -Way Site or Location of National Government Infrastructure Projects and for Other Purposes" and other applicable laws, rules and regulations.

(n) Procuring Entity - refers to any branch, department, office, agency, or instrumentality of the government, including state universities and colleges, government-owned and/ oor - led corporations, government financial institutions, and local government.controlled corporations, government financial institutions, and local government.

Ensuring Integrity at pre-construction and construction stage

From the pre-construction phase (the tendering and procurement part), integrity becomes a critical issue as there are a lot of opportunities for corrupt practices to happen. Presented below are the threats and risks of corruption and suggested measures to mitigate and control these risks:

1. Tendering and Procurement

Between Public - Public

Threats and Risks	Control and Mitigating Measures
a. Administrative corruption (fraud, falsification of documents, silence payments).	Minutes for all important decisions and purchases should be made available and intelligible to community stakeholders or consumer representatives, and be accounted for by LGU management and the project proponents / WSP. Stricter implementation of "RA 9184 - The Government Procurement Reform Act" through a multi-stakeholder committee that provides a seperate, independent evaluation or inspection of the process. Frequent rotation of members from Bids and Awards Committe (BAC) in order to avoid collusive behavior and discreet relations or deals.
b. Inter-department / agency collusion over corrupt procurement, fraudulent construction.	
c. Cover up and silence payments linked to corrupt procurement.	
d. Kickbacks in cash or jobs to help politicians secure preferred contractors.	Information is given to all concerned on the quality and quantity of materials needed and purchased. While procurement contracts constrain discrepancies in quantity, quality monitoring on the other hand must receive more attention from stakeholders. Guidelines on construction works, purchase of materials and audits, including formats for each, are given through rapid, on-site training procedures. This ensures parity among WSP project managers, LGU officials and the community. Exploration and inspection of local market and companies to secure atual pricing of bulk purchases. Materials purchase through quotations approval by a committee after having conducted comparative study.
e. Bribery / kickbacks to influence contract / bid organization.	
f. Kickbacks to win large scale projects: to secure contracts, to influence negotiations, for information.	

Public - Users / Citizens Claimholders

Threats and Risks	Control and Migating Measures
g. Corruption in supply procurement / inflated estimates for capital works, supply of chemicals, vehicles or equipment.	Contractors are not engaged for the entire body of work, but instead suppliers are contracted only for specific inputs and activities. There must be direct supervision by trained project community representatives, private or civil organizations as well as technical committees at the LGU level. Purchase of materials must be as stated in the planning proposal and technical specifications report that has been deemed viable and approved by the Programme Management Unit (PMU), and by joint stakeholder committees.
h. Corruption in delegating O & M: awarding contracts, overestimating assets, selection type, duration of contract, exclusivity, tariff / subsidy decisions.	In household workshops and consumer representative meetings, participants review technology options, costs and cost-sharing arrangements with technician. Agreements can be signed upon reaching a reasonable consensus.
i. Corruption in local government department planning and budget management.	Guidelines on construction works, purchase of materials and audits, including formats for each, are given through rapid, on-site training procedures. This ensures parity among WSP project managers, LGU officials and the community.

2. Construction

Public - Private

Threats and Risks	Control and Migating Measures
a. Bribery to shift design to increase potential for kickback and fraud.	Community representatives and deputized Task Managers (technically trained volunteers) are responsible for overseeing the purchase of materials and account for all obligations proper to end-user households and WSPs. Community members should be aware on how prevention of malpractices reduces the amount they must pay and improves the quality of the work and therefore, the service. Strict monitoring evaluation, and reporting of accredited suppliers, which indicates information on their operating history, previous and ongoing projects, organizational / business profile and legal underpinings, must be ascertained at procurement and construction stages.

Public - Users / Citizens Claimholders

Threats and Risks	Control and Mitigating Measures
a. Influence decision making to benefit some users (project level site selection, equipment, construction).	Consumer representatives or committees are informed about and can countercheck the technical details and the quality standards of materials during construction of the WSS facilities. Community representatives and deputized Task Managers (technically trained volunteers) are responsible for overseeing the purchase of materials and accounts for all obligations proper to end-user households and WSPs. Community members should be aware how prevention of malpractices reduces the amount they must pay and improves the quality of work and therefore, the service.
b. Bribery to distort water management sequencing to benefit rich or powerful users.	

2. Construction

Public - Private

Threats and Risks	Control and Mitigating Measures
a. Bribery and Fraud in construction - not building to specification, concealing substandard work, unspecified materials, underpayment of workers.	Strict monitoring evaluation and reporting of accredited suppliers and contractors, which includes information on their operating history, previous and ongoing projects, organizational / business profile and legal underpinnings, must be ascertained at procurement and construction stages. Quality assurance measures include: using (generally) locally available, DTI or officially approved materials, publishing rates on a notice board, ensuring quotations for all main purchases, extracting guarantees for pipes and pumps, ensuring a well-written agrrement and scheduling payment of a maximum of 80% on delivery and 20% after construction. These should all take guidance from RA 9184. Model sanitary and water supply facilities are constructed as part of a template / benchmark from which communities can conclude if desired quality of materials and products had been met. An exhibition of construction materials is orgabized such that participating suppliers and BACA members can commend and comment on the quality of selected items.

b. Failure to complete works, delays.	Local community representatives may contribute to labor and work, and to participate in ensuring the quality of materials used and to determine timeliness of work program.
c. Fraudulent invoicing marked-up pricing, over-billing by suppliers.	Treasurers and project finance staff from the community will have sufficient knowledge of the detailed accounting procedures and price specifications of raw materials. Raw materials are returned if they do not meet the agreed upon and prescribed standard. The materials will not be paid for, while the supplier will be barred from bidding in future tenders in the locale. Spot checks will be deployed to inspect receipts, storehouses, tenders, household receipts and government records. Program maybe put on hold if deliberate fraud or misrepresentation occurs.

Public - Users / Citizens / Claimholders

Threats and Risks	Control and Mitigating Measures
a. Corruption in community-based construction (with similar types of practices as for public - private interactions).	Guidelines on construction works, purchase of materials and audits, including formats for each, are given through training on procedures. Generally, officials handled these details. The community must also know the procedures and handle some of them. Construction cannot take place without resident project supervisor not having undertaken or met criteria / qualifications - i.e., education seminars, project development and administration briefs, stakeholders meetings, and others. Community people tapped for the project are involved as knowledgeable laborers in the project. A trained voluntary task manager from the community will also assist in overseeing construction.

A. INTRODUCTION TO CONSTRUCTION

Following is a discussion on the basic facts about construction management and supervision that a WSP has to learn. More materials are available for further reading in the Tubig Yaman toolbox.

The construction management and supervision for projects shall be undertaken in accordance with the generic guidelines and procedures of construction supervision. Construction management activities shall cover the pre-construction, during construction and post construction stages.

A Construction Management Unit (CMU) shall be established within the WSP to evaluate and control the implementation of the construction supervision for sub-projects to ensure compliance with approved designs and contract requirements.

The Construction Management Unit must be thoroughly familiar with the contract documents, drawings, specifications and be in agreement with the interpretation of the contents thereof. It shall be headed by a Project Manager (PM) with Resident Engineers (RE) duly assigned and authorized by the head of the WSP. The PM/RE shall be assisted by qualified and full-time Project Inspectors in all phases of the project as necessary.

B. STEPS AND PROCEDURES

1. Pre-Construction Stage

The PM/RE shall prepare the Project Management Plan/Schedule which shall serve as a guide in the execution of the project.

a. Notice To Proceed (NTP)

The PM/RE is tasked to assist in the tendering and contract evaluation of qualified contractors. After bid evaluation and selection of contractor/s, the winning contractor shall be issued its Notice to Proceed (NTP).

Definition of Terms

1. Construction Contract
   - Agreement between the Owner and the Contractor to build or construct a facility. A facility may be a building, utility structure, or system such as water supply.

2. Contractor
   - The contracting party which will build or construct the facility.

3. Construction Supervision (CS) Contract
   - Agreement between consultants (for construction supervision) and the Owner (the Customer) of the facility to be built by the Contractor.

4. Construction Supervision Consultant
   - The party contracted by the Owner to act as his/her representative and to supervise construction activities.

5. Project Inspector
   - A qualified professional engineer appointed to conduct project inspections.

6. Inspection Punch List
   - A list of deficiencies found by the Project Inspector during pre-final inspection.

7. Pre-Final Inspection
   - Inspection performed when the Contractor has substantially completed the work under the terms of the Contract

8. Final Inspection
   - Inspection performed when all items of work in the construction contract including the approved changes, additions and/or deletions are completed. The purpose of the final inspection is to verify that all required work items of the construction project are undertaken in accordance with plans and specifications.

9. Contract Specifications
   - All specifications (General, Technical, etc.) that are part of or included in the Contract between the Owner and the Contractor.

10. Conditional Project Acceptance
    - Decision/ruling of the CS Consultant to conditionally accept the project when the project is substantially complete.

11. Substantially Complete

- When the work done substantially meets the requirements of the project and the remaining works do not significantly affect the functionality or safe operation of the system or facility.

12. Acceptance Testing

- Formal testing conducted to determine whether or not a system/facility satisfies its pre-defined acceptance criteria, and to enable the client to determine whether or not to accept the system/facility.

13. Accepted

- The recorded decision or formal sign-off by the client that an output or sub-output has satisfied the documented requirements and may be delivered to the client or used in the next part of the process.

14. Stage

- A major segment of a project with outputs and outcomes at the end.

15. Pre-Construction Stage

- The stage where planning decisions are made at the top management level. This stage involved preparatory works including review of contract documents; review of the performance criteria, putting together of jointly-authored documents that define the project, and ensuring that the defined project scope is the same as the one with the project cost estimates and plans.

- This stage also includes activities such as project data familiarization, preparation of construction supervision plan, project administrative requirements and coordination, and holding of pre-construction conference.

16. Construction Stage

- Stage where the actual building/system/facility that the owner needs is built or constructed. Activities during this stage involve controlling of onsite construction, holding progress meetings, writing progress reports, reviewing shop drawings, taking construction photos,

The contractor shall not be allowed to commence work even at its own risk prior to the issuance of the Notice to Proceed (NTP) for obvious legal and technical reasons.

Contract time shall be reckoned from the date of receipt of the Notice to Proceed (NTP) by the contractor or as provided in the Contract Documents.

b. Pre-Construction Meeting

Before the start of construction activities, a pre-construction meeting will be held for the purpose of reviewing the contractor's work program and establishing procedures for the smooth execution of the project. The pre-construction conference shall be attended by the following:

- Consultant's PM/RE and Project Inspectors
- Contractor's Project Manager, General Superintendent and Materials Engineer
- Customer's/Owner's/Implementing Agency's Representative.

The proceedings of the pre-construction conference, particularly the agreements among the parties, should be recorded in the official minutes signed by the contracting parties.

c. Review of Project Documents

The Construction Supervision Team shall conduct a review session before the pre-construction meeting with the Contractor to discuss the following:

- Contract Documents
- Contract Plans
- Technical Specifications

d. Project Coordination

The Construction Supervision Team shall identify

the concerned parties and key stakeholders that will be directly involved and affected during the execution of the work. Then the team shall make courtesy calls on the concerned parties and describe to them the project and its benefits. The team shall also discuss any right of way issues that will affect the project.

e. Office and Logistic Set-up and Administration Requirements

Before the start of construction, the Contractor should establish an office and set up the logistic and administrative requirements for the smooth operation and implementation of the work. The Contractor must ensure that all supplies and equipment required for the proper construction supervision are available to its staff.

2. Construction Stage

Construction shall be supervised by the PM/RE with the assistance of the Project Inspector/s and the respective Owner's/Client's Supervisors/ Engineers. The PM/RE shall oversee the assignments and activities of the Project Inspectors who will be deployed full time to the construction site.

The PM/RE shall be responsible for the following:

a. Control of On-site Construction

Prior to the start of any definable feature of the work, the PM/RE shall see to it that the contractor performs and complies with the following:

(i) Review of Contract documents to make sure those materials, equipment and products have been tested, submitted and approved.

(ii) Review of Contract Plan in detail so that the construction shall be done in accordance to plan.

conducting tests/inspection, witnessing facility commissioning, construction inspection, and checking/reviewing operation and maintenance (O&M) manuals.

17. Post-Construction Stage

- Stage where the construction of the facility/ system/building is completed and documented and the completed facility/building/system is transferred to the care, custody, and control of the owner.

18. Shop Drawings

- Construction drawings including detailed design calculations, graphs and others.

19. As-Built Drawings

- Drawings and plans to be submitted by the contractor showing accurate changes or deviations from the contract drawings and indicating the work as actually installed.

20. Construction Supervision

- Inspection of actual construction works based on the contract documents, approved shop drawings and in accordance with the technical specifications.in accordance with the technical specifications.

MUST KNOW

To realize the right to water, facilities must be designed and constructed taking into account women's uses of water and differential requirements of children, older persons, those chronically ill and persons with disabilities. To ensure safe access, water taps should be located in areas with sufficient lighting and away from any human, animal or threats to personal security or safety.

(iii) Physical examination of materials and equipment to assure its conformity to the specifications, plans, shop drawings and other data.

(iv) Conduct of initial inspection, as soon as the work has been started, to check and review the workmanship in compliance with the contractor requirements for a particular item of work, and continued until completion. Regular inspection should be undertaken to closely monitor the project and assure compliance with plans and specifications.

(v) Lay out of the Contractor's work from established baselines and benchmarks indicated in the drawings and all measurements in connection therewith. The Consultant shall see to it that the lines and grades shall conform to the plan.

(vi) Regular updating of monitoring charts, i.e. S-curve, maps etc., are updated regularly, or whenever substantial changes have been accomplished.

(vii) Supervision and/or conduct of tests necessary to ensure that materials used and construction performed are in conformity with the plans and technical specifications.

(viii) Implementation of safety, sanitation and security measures in the construction area.

b. Progress/Coordination Meetings

The PM/RE shall preside over progress/coordination meetings in the presence of the Owner's representative/s, Contractor's Project Manager, Sub-contractors and others as may be deemed necessary in the proper execution of the project.

The progress/coordination meetings shall be held at least once a week. The PM/RE shall:

- Designate the time and place of the meeting.
- Prepare the agenda of each meeting; and
- Record the minutes of the meeting.

Decisions and instructions agreed upon during the meetings shall be binding and conclusive on the contract and shall be recorded in the minutes of meetings. Minutes of the meetings shall be signed by all attendees with copies furnished to all concerned.

c. Progress Report

The PM/RE shall prepare and submit progress reports to the Owner/Implementing Agency with copies furnished at the end of each month of the project up to its completion.

The progress report shall include, among others:

- Contractor's activities – work completed, remaining works to be done, the status of construction equipment and materials on site; and

- Consultant's activities – manpower utilization schedule, description of accomplishments, time-elapsed, financial accomplishment, schedule of activities for the next reporting period, results of testing, and problems encountered and recommendations.

d. Shop Drawings

Whenever necessary, the PM/RE shall require the Contractor to submit and furnish shop drawings and samples together with transmittal forms in accordance with the provisions of the Conditions of the Contract.

The PM/RE shall check and evaluate the shop drawings and return to the contractor with notations. The Contractor shall revise said drawings per noted comment or corrections and shall submit revised drawings to the Consultant for approval. Re-submittal procedure shall follow the procedure of the initial submittal.

e. Construction Photographs

All progress photographs shall be taken after completing substantial change/s in any item of work for one month. The photographs shall be properly labeled indicating the date of exposure, project name and direction of view.

f. Progress Payment and Accomplishment

The PM/RE shall evaluate the Contractor's Progress Billing before recommending payment. The basis for payment is the agreed work item with corresponding cost and weight percentage. A thorough review of all items shall be undertaken prior to the finalization of the billing.

Progress accomplishment shall indicate whether the project is delayed or ahead of schedule vis-avis the programmed accomplishment.

The PM/RE must strictly monitor the status/progress of the work especially when the Contractor is incurring negative slippages.

The PM/RE shall initiate the contract closeout procedures. After the project completion, the following documents shall be submitted to the Owner Implementing Agency:

(i) A set of As-Built Drawings showing accurate records of changes or deviations from the contract documents and the shop drawings indicating the work as actually installed;

(ii) The Final Report containing, but not be limited to the following:

- Location Map
- Introduction
- General Information of the Project
- Construction History
- Maintenance Requirements, if applicable
- Final Project Accomplishment Report
- Selected Project Photographs
- Program Bar Chart/S-Curve
- Test Results
- Letters/Communications

(iii) A Maintenance Manual, if necessary and applicable, covering the do's and don'ts in the proper operation of the project, tasks to be done, the manpower requirement, and the logistics needed; and

(iv) Other documents that be may required under the Conditions of the Contract.

PART 3

Work Together! OPERATING AND MANAGING THE WATER UTILITY

INTRODUCTION

Definition and Scope

Part 3, which is also called the "Work Together" phase is when the provision of water supply is realized and the right to water begins to be fulfilled. During this phase, there are two parallel undertakings that shall operationalize the human rights-based local water governance framework.

The first undertaking involves the LGU carrying out the primary role as Duty Bearer/policy maker and in part assuming its role as overall regulator in the area/municipality. Its tasks are:

• Ensure the implementation of the "Protect, Respect and Remedy" Framework (Ruggie Framework).

• Monitor and assess compliance of WSP/s with the Ruggie Framework.

The second part involves the WSP who takes the lead in water service delivery and undertakes the following steps:

- Review the organization and personnel requirements; recruit and undertake training of personnel.
- Implement and install appropriate systems and procedures.
- Prepare a business plan and set tariffs.
- Adopt a Localized Customer Service Code.
- Operate and manage the water utility.
- Measure results and communicate to the public.

Part 3 is organized into the following chapters that correspond to each of the major steps above:

Chapter 1: **Setting up Systems and Procedures** - This chapter concerns both the LGU as policy maker/regulator and the WSP. It involves defining the organizational structure, the staffing pattern and salary structure; processes and procedures in undertaking water service delivery. The systems and procedures will cover the technical, financial and management aspects of the operations and for the LGU a mechanism for ensuring that the Ruggie Framework is incorporated in the WSPs operating systems.

Chapter 2: **Business Planning and Tariff Setting -** The chapter discusses the importance of planning the operations of the water utility and how it is to be undertaken in a participatory and transparent manner. It includes a discussion on tariff setting and how to make tariff affordable. The WSP shall take cognizance of its obligation to ensure that the guidelines of the "protect, respect and remedy" framework are well incorporated in the business planning and tariff setting framework.

Chapter 3: **Development of a Localized Customer Service Code** - The chapter puts emphasis on how to make the operation and management of the water utility compliant with a human rights-based framework through the adoption of a social contract - the localized customer service code between the Duty Bearer, the Claimholder and other actors (WSPs). The process on how the LCSC is developed and adopted is also discussed in this chapter.

Human Rights Principles that Promote Good Governance

In the operation and management of the water utility, the Duty Bearer (the LGU either as WSP or regulator) shall see to it that the human rights principles of water governance (PANTHER) are fully integrated. Correspondingly, it is expected that the Claimholder carries out his or her human rights responsibilities in water such as paying for the cost of water services and participating in ways that promote water sustainability.

The following shall guide the operation and management of the water utility:

- The water utility operates in a transparent and accountable way, where there are clearly defined systems and procedures covering all aspects of operations including the accountabilities of each officer and staff. There shall be management reports on the performance of the water utility and these reports shall be made public. (transparency and accountability)

- The WSP shall conduct its operations in accordance with agreed parameters of service delivery that were previously discussed and agreed by the WSP and the Claimholder and are contained in a Localized Customer Service Code (participation, rule of law and empowerment).

- The Claimholder as consumer participates actively in the operation of the water utility by providing timely feedback on the utility performance, and supporting its activities. (participation, empowerment, non-discrimination).

- The WSP is held accountable by the Duty Bearer (the LGU) for complying with the service obligations through a system of regular monitoring and review (accountability, rule of law).

- It is the goal of the WSP to provide sustainable water service in the most efficient and economical way while at the same time ensuring that the normative content of the right to water is being met. To ensure sustainable operations and continuous protection of the right to water, the water utility shall be managed as an economic enterprise with human rights duties and without prejudice to the human right principle that water is also a social good. It is necessary for the water utility to be financially viable so that it will have enough funds to maintain the water system and expand coverage to serve more people. (Efficiency and non-discrimination).

Guiding Principles for the Implementation of the "Protect, Respect, and Remedy" Framework

The LGU as Duty Bearer shall be guided by the following key principles: (Based on the UN's Guiding Principles for the Implementation of the United Nations" Protect, Respect, and Remedy" Framework (Ruggie Framework).

For the LGU as Duty Bearer:

1. The LGU must protect the claimholder against business-related human rights abuse within their territory and/or jurisdiction by taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, regulation and adjudication.

2. The LGU should encourage business enterprise domiciled in their territory and/or jurisdiction to respect human rights throughout their global operations, including those conducted by their subsidiaries and other related legal entities.

For the Business Enterprises - The WSPs

- Business enterprises shall respect human rights, which means avoiding infringing on the human rights of others and to address adverse human rights impacts they may cause or contribute to.

- In order to meet their responsibility to respect human rights, business enterprises shall have in place policies and processes appropriate to their size and circumstances that enable them to identify, prevent, mitigate, and remediate any adverse impacts they cause or contribute to through their activities and relationships, and to account for their human rights performance.

Roles and Responsibilities

LGU as Duty Bearer - The LGU being the Duty Bearer (as represented by the WatSan Council) shall act as regulator and monitor the performance of the WSP. It shall ensure that a human rights-based framework governs water service delivery and particularly its obligations to "protect, respect and remedy" are well incorporated in the operation and management of the WSPs.

Community - Claimholder as represented by existing Civil Society Organizations in the municipality or through newly formed Water Users' Associations and/or Claimholder's groups shall actively participate in initiatives to define the goals and vision for the sector that will lead to realizing the right to water.

Other Actors - As WSPs shall carry out the operation and management of the water utility in accordance with the agreed parameters set out in the LCSC and in full compliance with the human rights principles for good governance and the framework to "protect, respect and remedy."

Target Outputs and Outcome

It is targeted in Part 3 that there is progressive realization of the right to water as made manifest in the following:

- The Claimholder, the Duty Bearer and the other actors (WSP) are working together to realize the right to water, with each party carrying out its duties, obligations, and responsibilities.

- The institutional arrangement for water and sanitation is defined; with operational WSPs that bring access to water to more than 50 percent of the population; Claimholders organized into water users' groups taking active part in policy making/regulation as representatives in the WatSan Council; and an independent regulatory body set up within the LGU.

- There is continuing capacity building on human rights-based local water governance.

CHAPTER 1 SETTING UP SYSTEMS AND PROCEDURES

INTRODUCTION

The setting up of systems and procedures in this Chapter are the primary concerns of two parties - the LGU as Duty Bearer involved in policy making and regulation and the WSP in the operation and management of the water utility.

Chapter1A discusses the role and functions of the LGU as policy maker and regulator and the mechanisms and processes that it needs to implement to ensure that the full spirit of a human rights-based local water governance framework is considered with focus on the obligation to "protect, respect and remedy" framework.

Chapters 1B to 1E discusses the systems and procedures in operating and managing the water utility and involves primarily the WSP.

The systems and procedures that must be adopted and installed in a water utility are in the areas of:

- Operations and Maintenance
- Financial Management
- Commercial Operations
- General Administration and Management

A. HUMAN RIGHTS GUIDING PRINCIPLES FOR OPERATING AND MANAGING THE WATER UTILITY

The water utility shall be operated and managed in accordance with the human rights-based local water governance framework that seeks (i) to meet the normative content of the right to water; (ii) observe the human rights principles (PANTHER) that promote good governance; and (iii) comply with the guiding principles of the UN's "Protect, Respect and Remedy" Framework. The LGU as Duty Bearer, the WSP and the Claimholder shall observe their respective obligations, duties and responsibilities respectively.

Meeting PANTHER Principles:

The water utility operates in a transparent and accountable way, where there are clearly defined systems and procedures covering all aspects of operations including the accountabilities of each officer and staff. There shall be management reports on the performance of the water utility and these reports shall be made public.

1. PANTHER Principles

PANTHER stands for Participation, Accountability, Non-Discrimination, Transparency, Human Dignity, Empowerment and Rule of Law and was developed by the Food and Agriculture Organization (FAO).

In the operation and management of the water utility, systems and procedures are necessary for each set of tasks. These systems enable the efficient operation of the water utility and the timely delivery of water services. They provide a system of check and balance and controls which are the basic elements for ensuring transparency and accountability. With appropriate and sound systems, the risks for potential corruption are mitigated and controlled. The implementation of systems and procedures also enable the measurement of performance and reporting of results to the claimholders.

Well defined systems and procedures provide a good basis for following the "rule of law" and sets in place an organized and efficient way of running the water utility.

2. Normative Content of the Right to Water

When the water utility prepares the Service Obligations Agreement that embodies the committed levels of service, it shall bear in mind that at the minimum it has to meet the normative content of the right to water as follows:

- Provide at least
  (i) 20 liters of water per person per day for Level 1 service
  (ii) 40 liters of water per person per day for Level 2 service
  (iii) 80 liters of water per person per day for Level 3 service

- Comply with the Philippine National Standards for Drinking Water and other water quality standards contained in relevant laws and policies;

- Observe the minimum standards on appropriate water and sanitation technology contained in relevant laws and policies; and

- Obey the standards relating to domestic plumbing, household water treatment and storage contained in relevant laws and policies.

3. UN "Protect, Respect and Remedy" Framework

The foregoing is a discussion based on the UN (Ruggie Framework) to Protect, Respect and Remedy" Framework. For purposes of discussion in this handbook, it is assumed that the State referred to is the LGU (Duty Bearer) and the Business Enterprise (WSP). The LGU shall comply with this obligation through a regulatory mechanism that will be instituted within the LGU. It shall be the overall regulator of the entire area/municipality/city and/or a regulator for specific WSPs (LGU-run water utilities).

The WSP shall adopt and install systems and procedures that are rooted in the Ruggie Framework.

a) The State Duty to Protect

The first pillar of the UN Framework is the state's duty to protect against human rights abuses committed by third parties, including business, through appropriate policies, regulation and adjudication. It highlights that states have the primary role in preventing and addressing corporate-related human rights abuses.

PRINCIPLES	PRACTICE
(i) States must protect against business-related human rights abuse within their territory and / or jurisdiction by taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, regulation, and adjudication.	The LGU shall undertake the following: (i) Formulate and pass laws that require the WSPs to respect the right to water. These laws shall be part of the regulatory guidelines governing WSPs. (ii) Require WSPs to develop and adopt a Service Obligation Agreement (contract between the WSP and the LGU / Regulator) that is grounded on human rights-based local water governance and includes a policy statement on the corporate responsibility to protect. (iii) Implement a system of public reporting of WSPs on their human rights performance in water.
(ii) States should ensure that governmental departments, agencies and other State-based institutions that shape business practices, at both the national and sub-national levels, are aware of and observe the State's human rights obligations in fulfilling their respective mandates, including providing them with relevant information, training and support.	
(iii) As part of their policy and regulatory functions, States should set out clearly their expectation for all business enterprises operating or domiciled in their territory and / or jurisdiction to respect human rights, and take the necessary steps to support, encourage and where appropriate require to do so, including by: • Enforcing laws that require business enterprises to respect human rights. • Encouraging, and where appropriate requiring business enterprises to provide adequate communication on their human rights performance.	

b) The Corporate Responsibility to Respect

The corporate responsibility to respect human rights means acting with due diligence to avoid infringing on the rights of others, and addressing harms that do occur. The term "responsibility" rather than "duty" is meant to indicate that respecting rights is not currently an obligation that international human rights law generally imposes directly on companies, although elements of it may be reflected in domestic laws. It is a global standard of expected conduct acknowledged in virtually every voluntary and soft-law instrument related to corporate responsibility, and now affirmed by the Human Rights Council itself.

A company's responsibility to respect applies across its business activities and through its relationships with the Duty Bearer, Claimholder and other actors and other non-State actors and State agents.

PRINCIPLES	PRACTICE
(i) Business enterprises should respect human rights, which means to avoid infringing on the human rights of others and to address adverse human rights impacts they may cause or contribute to.	The WSP shall develop and prepare a Service Obligation Agreement (counterpart document of Localized Customer Service Code) which will serve as the contract between the WSP and regulator / Duty Bearer (LGU). The Service Obligation Agreement shall contain among others the following: 1. Description of the Levels of Service that it will provide. The Levels of Service shall meet the minimum requirements for the normative content of the right to water - which includes accessibility, availability and quality. 2. Policy Statement clearly stating that the WSP is bound to address the right to water of the most vulnerable sectors of the community. In which case, it will progressively seek to expand its services targeting the most vulnerable and ensure that the realization of the right to water os respected at all times.
(ii) In order to meet their reponsibility to respect human rights, business enterprises should have in place policies and processes appropriate to their size and circumstances that enable them to identify, prevent, mitigate and remediate any adverse human rights impacts they may cause or contribute to through their activities and relationships, and to account for their human rights performance.	
(iii) Business enterprises should express their commitment through a statement of policy that: • Is approved at the most senior level of the business enterprise; • Is informed by appropriate consultation with relevant internal and external expertise;	

PRINCIPLES	PRACTICE
• Stipulates the enterprise's expectations of personnel and business partners; • Is communicated internally and externally to all personnel, business partners and relevant stakeholders; and • Is reflected in appropriate operational policies and procedures to embed it throughout the business enterprise.	3. The systems and procedures in the operation and management of the water utility shall enable the most humane way of water service provision and shall promote the PANTHER principles of good governance. 4. The service Obligations Agreement shall also provide for a mechanism of redress of grievances. The agreement shall include a reporting system on how the WSP has performed its responsibility to respect human rights.
(iv) In order to identify, prevent and mitigate adverse human rights impacts, and to account for their performance, business enterprises should carry out human rights impacts with due diligence. The process should include assesing actual and potential human rights impacts, integrating and acting upon the findings, and tracking as well as communicating their performance.	
(v) In order to verify whether adverse human rights impacts are being effectively addressed, business enterprises should track their performance.	

B. OPERATION AND MAINTENANCE SYSTEM

An operation and maintenance system is crucial to ensure safe and continuous supply of uncontaminated water. In the Bicol region, "contaminated water killed three persons and struck ill dozens of other residents of several villages in two provinces where people relied heavily on deep wells for water." (Juan Escandor Jr. and Mar Arguelles, "Dirty Water Kills 3, Downs 139 Villagers," Philippine Daily Inquirer, 24 May 2012). This could have been avoided had those responsible for providing water adopted and strictly followed an appropriate and effective operation and maintenance system.]

1. Operation and Maintenance of Newly Constructed Water Supply System

The operation and maintenance of the water supply system depends on the type and component facilities constructed. If a private Contractor is involved in the construction of the system, there is usually a commissioning stage wherein the employees and management of the system are trained on the actual operation and maintenance of the equipment and components of the system prior to turn over. Equipment brochures and operating manuals are discussed and filed where they are needed.

Maintenance of the system can be classified into two; a) preventive maintenance and b) reactive maintenance. Preventive maintenance or routine maintenance is carried out continuously according to pre-established schedules or to rational considerations such as the manufacturer's recommendations for servicing equipment. Once planned, these schedules need to be kept and the results recorded. Reactive (also called unscheduled repair) maintenance is employed where past preventive maintenance has been inadequate, after accidents and where the facilities are aging. All interventions have to be analyzed and the causes of malfunction or breakage recorded, to serve as guide in future procurement decisions and help in deciding whether part or all of a network or plant should be upgraded or replaced.

a. Operation and Maintenance of Deep Well Pump, Motor and Pump Station

The pump operators are provided with an operation and maintenance check list that must be implemented daily, monthly, quarterly, semi-annually and annually. The list consists of items that must be checked and inspected by the operator.

b. Operation of Water Treatment Plant

Water treatment plant operators are also provided with an operation and maintenance checklist that must be followed daily.

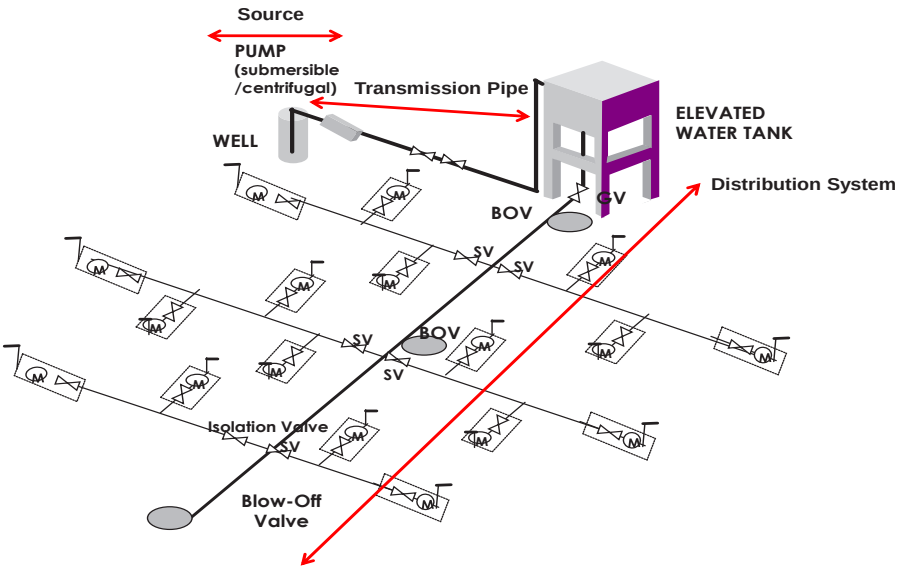
c. Operation and Maintenance of Spring Sources

Maintenance of spring sources usually involves cleaning of the spring box and the surrounding area to ensure that no debris and surface run-off will enter the box and contaminate the supply.

d. Operation and Maintenance of Disinfectant Facilities

Most disinfection facilities available are hypo-chlorinator for deep wells and drip-type chlorinators for spring sources since these are the most cost effective. If properly maintained, they also provide adequate

Figure 1.3.1: Typical Level II System Layout (with Elevated Storage Tank)



disinfection of the water supply. The operation and maintenance of these facilities are usually contained in accompanying brochures that the operators can easily follow.

e. Maintenance of Pipelines and Appurtenances

The general objectives of operating and maintaining a good distribution system are the following:

- Ensure adequate pressure in the system 24/7.
- Minimize non-revenue water (NRW).
- Ensure that water delivered is potable.

Maintenance of the pipelines includes regular flushing to make sure that there is no deposition of unwanted materials such as silt and sand. Blow-off valves and hydrants must be metered to account for the water being used in flushing and fire protection. Regular exercise of gate valves must also be undertaken at least twice a year to maintain their proper function. Positive pressure must also be maintained in the system to avoid contamination.

f. Storage Tank Maintenance

Maintenance of storage tanks usually involves cleaning of the exterior and interior of the tank at least once a year. After cleaning, the interior of the tank must be properly disinfected prior to putting it back in operation. For steel tanks, regular inspection of welded portions and paint must be undertaken. Rust

must be arrested from the beginning to avoid further damage to the tank.

g. Service Connections

In general, domestic meters should be taken out of service every five to seven years and completely overhauled. An important aspect of routine maintenance is the systematic inspection and replacement of consumption meters. This usually requires a meter repair shop for cleaning, repair, and testing. Information on the condition of meters is vital for future protective and procurement purposes.

C. FINANCIAL MANAGEMENT SYSTEM

Financial management system covers the entire system of recording and reporting the financial performance of the utilities as well the financial planning and controlling aspects. Of all the systems that need to be in place, the FMS is the most critical in ensuring transparency and accountability and for measuring performance. It enables the recording of financial transactions, discloses the receipts and uses of funds and reports on the financial condition of the water utility. It enables a human rights-based governance framework and helps the WSP address critical challenges such as corruption and control in water. With an appropriate and sound financial system in place, the risks of corrupt and fraudulent practices are at least minimized if not avoided altogether.

1. Ensuring PANTHER principles in FMS

The installation of a financial management system is an important mechanism that promotes PANTHER principles in the operation of a water utility:

- FMS allows the recording and reporting of the results of operations (transparency) and holds the management and staff accountable for the utility performance (accountability). When there is sufficient transparency and accountability, the risk of corruption and fraudulent practices in the water utility are minimized or avoided.

- Information is made available to the public through the financial reports (except if the WSP is privately owned where availability of information could be limited). The results shall be posted in public places and disclosed in community meetings that are organized for the purpose (transparency and/or accountability and empowerment).

- When the community is informed on the utility performance, it can hold the WSP accountable if it is not performing well and request an explanation for performance shortfalls. The community and the WSP shall discuss together how the utility performance can be improved and what the community can do to help the WSP (empowerment, participation).

2. Key Components of a Water Utility Financial Management System

a. General Accounting and Financial Reporting - This component of FMS relates to the recording, summarizing and reporting of financial results in the form of financial reports (called Income Statement, Balance Sheet, etc.) The process of recording and gathering this financial information is performed in conformity with generally accepted accounting principles or GAAP. These principles are established by the Financial Accounting Standards Board (FASB) which is a non-governmental agency funded by the

accounting profession and contributions from business organizations.

General Accounting and Financial Reporting system covers different aspects of financial operations such as:

- Recognition of revenues from water sales
- Recording of expenses incurred in the operation and maintenance of the water utility
- Accounting for the use of fixed assets
- Recording of receipts and disbursements
- Summarizing results, making adjustments and preparing financial reports such as Income Statement, Balance Sheet, Statement of Retained Earnings and Cash Flow Statement

The recording of transactions can make use of either a single entry or double entry system and could either be cash or accrual basis. Either system will produce results that will show among others the following:

- How much water sales were generated
- How much cost the utility incurred in providing service
- How much funds it has (cash on hand and in banks, etc.) or in other long-term deposits
- How much money it owes its creditors, if any
- Whether the water utility is financially sound to provide water services in the long-term

The above information is important when the WSP makes important decisions such as expanding and/or improving its services, and is useful in giving indicators on how well the utility performed.

Financial transactions are kept and recorded in the utilities' books of accounts. The basic books of accounts maintained by a typical water utility are as follows:

• **Cash Receipts Book/Register** – this is where all daily cash transactions are recorded wherein the original source documents are the official receipts or the daily collection report prepared by the cashier.	• **General Ledger** – this is the nominal ledger wherein the summary transactions for all accounts are recorded. This book of account determines the correctness of account balances.
• **Cash Disbursement Book/Register** – this is where all daily expenses are recorded wherein the original source documents comes from the voucher register.	• **General Journal** – other transactions not recorded in the regular books of accounts are recognized or entered in the general journal. Corrections or adjusting entries are also recorded in this book.
• **Sales Book/ Billing Register** – this is where the water bills are recorded, the original source document is daily billing summary prepared by the billing clerk.	• **Subsidiary Ledger –** this book is maintained to support account balances posted in the general ledger

The end result of all the recordings are financial statements consisting of the following:

- Balance Sheet, a statement that gives information on the company's resources at one given time. This is divided into three parts: Assets, Liabilities and Capital or Stockholder's Equity.

- Income Statement (also called a Statement of Earnings, Statement of Operations, or a Profit and Loss Statement) is a report that shows the flow of revenues (amounts earned from business activity) and expenses (amounts paid in the course of operations) over a given period of time, typically a month, quarter, or year.

- Statement of Cash Flow this shows the movement of cash of an enterprise through a certain period of time.

b. Financial Planning and Control - Financial planning and Control as another component of FMS is equally important in guiding the water utility in its decision making process. After the results of operations are summarized in the financial statements and reported, they are then analyzed and used as a tool for planning and controlling. The Financial Statements when carefully interpreted and analyzed will help in setting future targets and aid in the development of a performance improvement plan of the water utility.

Financial Analysis

Financial Planning and Control is essentially about conducting a financial evaluation of the water utility performance (thru a financial analysis) and using the evaluation in preparing a financial plan and budget. In financial analysis, there are certain indicators which help measure performance. These are commonly referred to as key performance indicators. Analysis is being done to measure financial performance, production efficiency, collection efficiency and personnel management. This measure of performance is expressed in terms of ratios or percentages and results are compared to the levels prevailing in the industry. Financial performance is measured in terms of liquidity, profitability, cost control and sustainability.

When is a Financial Analysis conducted?

A Financial Analysis is a regular procedure undertaken to monitor the financial performance of the water utility. It can be done anytime but is a must when there is a proposed expansion and/or improvement of the water system. The financial feasibility of a proposed project is evaluated through the conduct of a financial analysis and determining the project's financial internal rate of return or the so called "FIRR". A third party or an independent body (usually a consultant) undertakes a financial analysis to determine a project's financial feasibility. (A more detailed discussion of the financial analysis can be found in Part 2: Planning and Development.)

3. Financial Management Systems of Various WSPs

Financial management systems vary among WSP models. LGU managed water utilities follow the government system (NGAS) while the non-LGU WSPs such as water districts, cooperatives, CBO WSP are based on the commonly practiced accounting system for commercial enterprises. The complexity of the systems varies depending on the size of the water utility and the volume of operations.

The accounting system adopted by each WSP depends on the type of management model, as summarized below:

Table 1.3.1:Accounting System and Management Model

TYPE OF WSP	ACCOUNTING SYSTEM	FEATURES
LGU-run water system	New Government Accounting System	One Fund Concept (General Fund) Modified Accrual Basis of Accounting Water System as an Economic Enterprise (Many LGUs have adopted the ring-fencing of water utility accounts.)
Water District/s	Commercial Practices System	On the job training conducted by LWUA which includes organizational set-up, hiring of personnel, introduction of billing and collection system, availability of documents, and record-keeping procedures, Financial Reports
Cooperatives	Cooperative Accounting Manual	Chart of Accounts Financial Reports

a. Accounting System for BWSA - The New Government Accounting System prescribes the policies and procedures in the management of barangay funds and properties. The NGAS Manual for barangay fund management provides for the detailed narrative procedures on operating, recording, and reporting systems. The major financial transaction of the barangay includes:

- Receipts and Deposits
- Appropriation and Commitments
- Disbursements
- Inventory, Property, Plant and Equipment, Public Infrastructures and Reforestation Projects

The Accounting Manual for Barangays prescribes the books of accounts to be maintained and the financial reports to be generated. Receipts and disbursement transactions are handled by the Barangay Treasurer. The financial records of the barangay are also under the responsibility of the

Barangay Treasurer. The Sangguniang Barangay may authorize the Barangay Treasurer to make any direct purchases. All collections shall be deposited with the City/Municipal Treasury or in the depository account maintained in the name of the barangay.

BLGU-managed water systems are considered local economic enterprise (LEE) whose accounting and financial information are integrated with the barangay financial reporting system. Like most MLGU-managed water system, no separate financial reporting for LEEs (like water systems) are maintained.

Apart from establishing and imposing the correct tariff structure, the lack of accurate financial data is one of the many problems that beset most LGU-run/managed water system. Financial reports are good sources of information for performance evaluation and also an important tool for sustainability of operations. In response to this problem, the Ring-Fencing of LGU-run water system has been designed and is currently being piloted and being proposed to local government units (priority given to the 36 municipalities included in the Salintubig).

KNOW MORE

The Manual for Ring Fencing of LGU-Run Water Utility provides for the segregation of shared cost (Personal Services) and other operational expenses (MOOE), and the preparation of Financial Reports reflecting the result of operation of the water utility.

b. Financial Management System of LGU-run water utilities: New Government Accounting System (NGAS) – The financial management system of LGU-managed water utilities follows the new government accounting system for LGUs and is centralized in the LGU. Implementation of the system is supported by the NGAS manual that was adopted on January 1, 2002. The New Government Accounting System Manual presents the basic policies and procedures; the new coding system and chart of accounts; the accounting books, reports/forms and financial statements, and illustrative accounting entries. The objectives of the Manual are to prescribe the following:

- Uniform guidelines and procedures in accounting for government funds and property;
- New coding structure and new chart of accounts; and
- New accounting books, reports/forms, financial statements and accounting entries.

c. Financial Management System of Water Districts - The Water Districts implement the CPS or commercial practices system. The CPS is the standardized financial reporting and commercial

commercial operations system that was developed for water districts. It covers the LWUA-prescribed standard systems and procedures, to effectively account for all transactions, safeguard the assets, promote operational efficiency and provide uniform management information and reporting.

The prescribed systems and procedures are installed as part of LWUA's services for the Water Districts' institutional development. Commercial practices systems (CPS) installation is done through on-the-job training of water district personnel on procedures related to commercial operations, documentation of transactions, bookkeeping procedures and the preparation of the financial statements and other reports. The appropriate organizational structure, personnel placement and the most efficient distribution of workload are determined in the process.

Pre-installation of the CPS:

During the the pre-installation of the CPS, qualified personnel are hired and their functions and responsibilities are defined. Job decriptions are prepared and the staff are oriented on their assignments. These are printed or reproduced to facilitate the installation of the system and procedures; and the personnel are trained on the job on the system. At the same time, the basic billing and collection procedures are introduced and implemented.

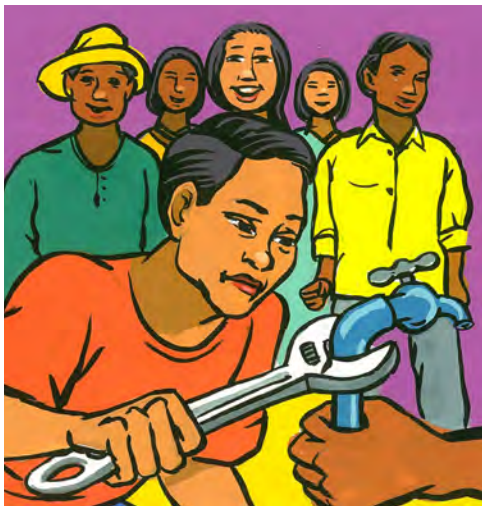


Table 1.3.2: Commercial Practices System Phases

CPS Phase - I	CPS Phase – II
• General Accounting and MIS - describes the flow of transactions and the preparation of the required financial and accounting records and reports; • Chart of Accounts - provides the prescribed accounts to be used to record the various transactions of the water districts to ensure uniformity of reporting; • Billing - describes the systems and procedures that account for the quantity and amount of water sales, penalty and other charges, billing adjustments, meter reading procedures and general maintenance of customer records; • Collection - describes the systems and procedures that account for and safeguard all collections amd provide an accurate basis for determining the collection performance of the water districts; • Disbursements - describes the procedure that take up/recognizes expenditures and liabilities of the water districts and the manner they are settled or paid; • Other Transactions - describes the procedures for taking up in the books nonrecurring transactions such as the recognition of depreciation, bad debts, loan accounting and adjustments; and • Budgeting - describes the procedure on how to develop / prepare a realistic amd workable budget.	• Inventory - describes the procedure used to monitor receipt and issuance of materials and supplies and to maintain an accurate inventory record; • Fixed Assets - describes the procedure used to account for and monitor the status of water district's physical facilities; • Payroll - describes the forms and the records to be maintained with regard to the employees, earnings and earned leave credits; • Purchasing - describes the procedure of procurement and other acquisitions through purchases; and • Construction / Work Order - desccribes the procedures for monitoring and controlling project costs and construction works in progress.

d. **Commercial Operations System -** Commercial Operations System refers to the processes and procedures relating to the generation of water sales (meter reading, billing, and collection) maintenance of customer account records, and all other activities that relate to the customers such as application for new connections, reconnections and disconnections, processing of customer complaints and requests.

Basic Modules of Commercial Operations System

The two basic modules that a water utility should implement are (i) Billing and Collection System; and (ii) Customer Service. Presented below is an overview of a billing and collection system that is applicable to metered connections:

Billing and Collection System

The system that is discussed in the succeeding sections applies to the billing and collection system of a small water utility under a Local Government Unit (LGU). The system which is based on a cycle billing concept may also apply to other economic enterprises whose revenues are generated on a periodic and regular basis and whose recognition is on accrual basis.

The working assumption is that a water utility operating as an economic enterprise will handle its own billing activities and their collection activities will be handled by bill collectors under the Treasurer's Office of the Local Government Unit. Under the existing accounting practice in the local government, business income derived from an economic enterprise is recognized only upon collection. It does not recognize revenues that are actually realized but are not yet collected. With the suggested system, the accrual basis of recognizing revenues was adopted. Revenues are recognized at the time the water is billed and shall form part of the income of the enterprise.

In the subsequent reporting of revenues, income will be recorded as they are earned. Accounts Receivable account will be set up and individual customer accounts will be monitored. The billing activities are carried out initially by the billing/posting clerk and the meter readers. The collection procedures are undertaken by the bill collectors/cashier and by the billing/posting clerk. The transactions being carried out under the billing and collection process shall all pass through the Department Heads for checking and proper approval.

Basic Features of the Billing and Collection Cycle

- **Meter Reading -** The head of the operations should take into account the average number of water meters which can be read within a day's time per service area or barangay. This shall be done by grouping the concessionaires within a service area or barangay in a way that the water meters are read within the day. The meter reader shall read the meters monthly in each service area on a scheduled date.

The meter reader informs the customer of its water consumption based on the number of cubic meters and also the corresponding peso amount. Based on the water bills and customer water service record, any material fluctuation in the consumption should be properly investigated on sight. This could be checked by making a second reading.

Any observed defects, like leaks, defective meters, defective pipes or connections, should be properly noted. A maintenance order form is prepared and accomplished for the purpose. This form is also used to initiate action on routine maintenance and testing of installed water meters. This is also a useful tool to document any disconnection as a result of non-payment of water bills by the Claimholders within the allotted time.

- **Billing -** Pre-addressed water bills are prepared prior to meter reading. The Billing and Posting Clerk checks total number of water bills prepared against the total number of service connection shown in the master list of service connection or customer water service record for accuracy.

  The Billing and Posting Clerk prepares a Daily Billing Summary which contains the total number of water consumption, the total amount including penalties and the total number of customers billed for each zone or barangay.

  The Daily Billing Summary together with the water bills are then forwarded to the Department Head (DH). The DH test checks the accuracy of the said report by matching it against the Master List of Service Connection or the customer water service record.

  The Billing and Posting Clerk documents any corrections on water bill through the issuance of Debit/Credit Memo. Any contested bill should be properly investigated and any adjustments should be duly approved by the Department Head. All memos are summarized monthly for recording in the General Ledger and in the Consumer Water Service Record.

- **Collection -** The collection of water bills is scheduled on specific dates during the month and payments should be done either at the water systems office or at the Treasurer's Office. Due dates usually remain the same every month and a grace period of five days from due date is usually given.

  All collection activities of the water utility are carried out daily within the Treasurer's Office (TO). The functions of the bill collectors aim to augment the TO's responsibilities as far as collection of water bills is concerned and is not to be construed as a replacement. The role of the water utility as an economic enterprise is centered on the monitoring of its daily collections, following up on delinquent accounts and in the preparation of daily and monthly reports on the revenues raised and collected as well as the status or ageing of its accounts receivables.

  The Billing and Posting Clerk files/arranges the water bills according to account number and by due dates (or by zones). The due dates of claimholders which were grouped according to their

service area or zone usually fall on the same day. If the bills remain unpaid after the five day grace period, disconnection notice will be served and implemented. All accountable officers and employees should be bonded. Official receipts are issued by the Bill Collector/Cashier on all payments. All collections are to be turned over to the City Treasurer's Office and deposited in the bank daily.

- **Customer Complaints and Service Requests -** The water utility shall set up a Customer Service Center or unit where the users/claimholders can file their complaints or request for assistance. The unit shall be manned on 3 shift basis for 24 hours, seven days a week. After office hours, complaints and/or request for assistance can be lodged through a hotline of the water utility.

  It is the goal of the WSP to ensure continuous service hence; it shall ensure to address all complaints in the quickest possible time. Part of the monitoring system of the water utility is tracking how fast it responds to customer complaints so that it will have a basis to improve its services.

- **Contested Billing** - When the User/Claimholder files a complaint on his/her water bill that is questionable (erroneous or high billing), the water utility shall conduct an investigation of the complaint and if found to be justified will adjust the contested water bill. In the same manner any other complaint related to billing and collection shall be dealt with immediately by the WSP.

- **Use of Account Number -** An account number is assigned to each concessionaire in order to readily identify its location, classification, meter size, and account number. The assignment of account number also facilitate the preparation of consolidated reports like the annual metered consumption and billing summary by classification and meter size.

  The water bills are arranged in accordance with the most convenient reading route. This in a way eliminates the back tracking of the meter readers as they go along with their readings. The Customer Ledger Cards are subsequently arranged in the same manner. This facilitates posting and updating. If the systematic arrangement of the Customer Ledger Cards is already in place then the assignment of account numbers can be undertaken.

The account number consists of eight digits (000-00- 000). These are as follows:
- The first three digits represent the zone number (or barangay)
- The fourth digit represents the consumer Classification Code
- The fifth digit represents the meter size code
- The last three digits represent the customer account number

- **Classification of Service Connection -** The classification of water service connection is basically divided into four groups: Residential, Domestic, Commercial and Industrial. The definition varies among utilities but can be generally defined as follows:

(i) Residential pertains to private household establishments which consume water for their daily household activities like drinking, washing, cooking and laundry.

(ii) Government connections refer to government offices that are connected to the water utility and consume water in the daily discharge of their functions.

(iii) Commercial connections pertains to establishments wherein the activities are undertaken for a profit. This may also include non-residential or non-industrial business enterprises and other establishments whereby the Government, by notification, declared such establishment as commercial.

(iv) Industrial connections pertain to manufacturing or construction firms. This may also include mining, fishing, and forestry establishments based on the above classification, the water utilities correspondingly use the appropriate meter sizes in order to efficiently deliver the service.

Further classification can be done to categorize or sort customers according to meter sizes, ½, ¾. 1, 1 ½, 2, 3, or 4.

Certain water utilities offer other types of service to a particular group of claimholders. They can be classified as wholesale or bulk sale and fire protection service. Wholesale or bulk sale is a service given to an individual with the purpose of resale to other individual claimholders within the service coverage area. The fire protection service is the readiness to distribute bulk water or large quantities of water in the transmission lines in the event of fire or calamities. It is a service provided which is stand-by in nature.

Incorporating Human Rights Principles and Practices in the Commercial Operations System:

The Commercial Operations System involves a direct relationship with the Claimholder and it is an area where human rights principles can be effectively applied. Following are ways by which the Commercial Operations System can be aligned to be HR-responsive and ensure that the WSP complies with its corporate responsibility to respect the right to water under the Ruggie Framework:

Billing and Collection System:

- The Billing and Collection System shall be predictable and constant. Once it is adopted, the relevant sections of the system to the Claimholder shall be incorporated in the Localized Customer Service Code. It shall be part of a continuing program to inform the Claimholder of their rights and responsibilities as consumers. (Transparency)

- The system which is cycle based shall afford the Claimholder sufficient time to be informed of their water bill, and to pay it before due date. Information on the deadlines, due dates shall be indicated clearly on the water bill. (transparency, rule of law, non-discrimination)

- Contested Bill: There shall be provisions in the system by which Claimholders can clarify a questionable water bill and have it adjusted if justified. (transparency, accountability and the rule of law).

- Disconnection: Claimholders shall not be deprived of water service because of non-payment of water bills. They will be given sufficient notice and time before a disconnection will be effected. Disconnection will be effected only during the second time that the Claimholder fails to pay his/her water bill or when the water bill has accumulated to three months' consumption.

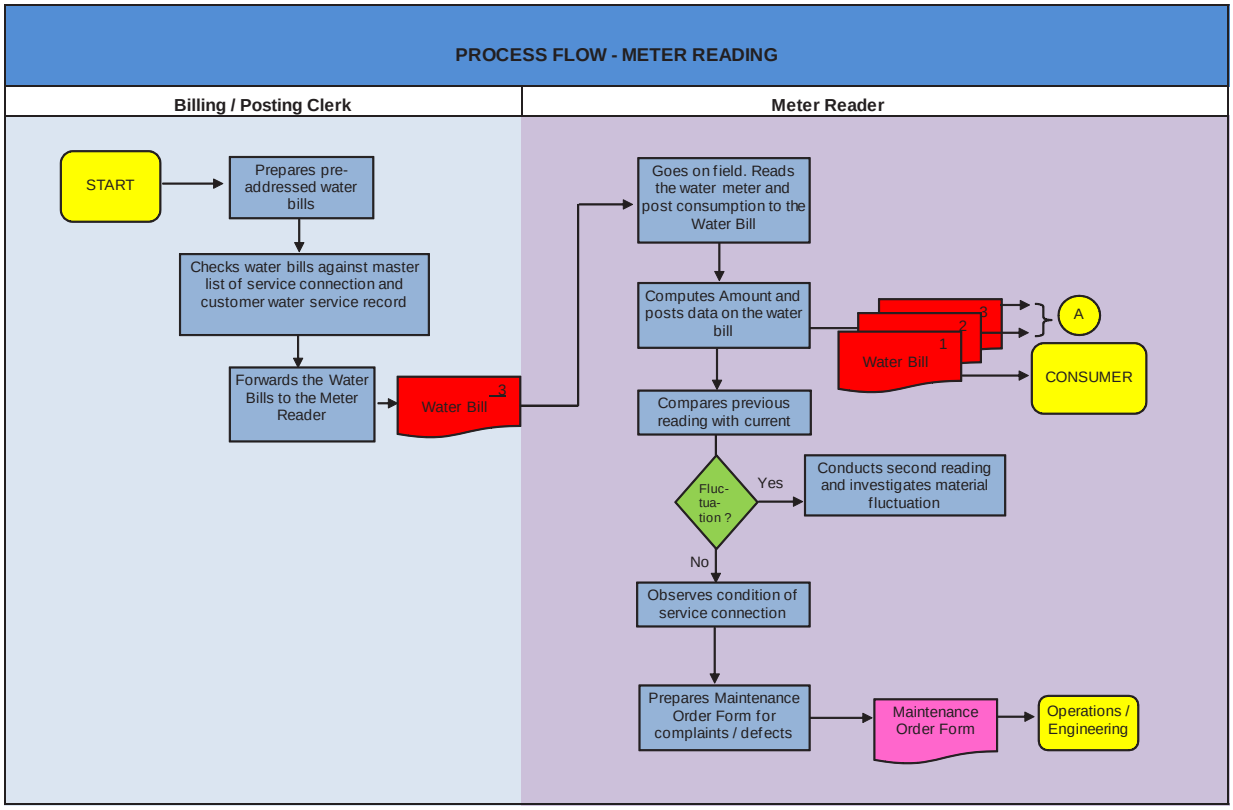
Customer Service:

- The WSP shall provide a system where users/Claimholders can file complaints and/or request assistance from the WSP regarding their water connections. This will be in the form a customer service system consisting a 24/7 Customer Assistance Counter that addresses the needs of the claimholder.

- The Customer Service system shall enable the monitoring of WSP response to customers' requests and complaints. The average time it takes to respond/act on a customer service request or complaint shall be monitored and measured. The results shall be made public (access to information).

- Part of the system is the provision of continuing information on the utility performance particularly on matters affecting the users/claimholders. on matters affecting the users/claimholders.

Figure 1.3.2: Process Flow - Meter Reading



D. GENERAL ADMINISTRATION AND MANAGEMENT

1. Meeting the Human Right Principles for Good Governance

a. Review and update the organization structure and personnel requirements - An important aspect of accountability is having well-defined roles and responsibilities in water utility. Hence, upon the establishment of the water utility and/or after the construction of the water system, the WSP shall prepare itself for the turn-over of the system and its subsequent operation and management. When the water utility is not yet operational, the first thing to consider is the organization structure and staffing of the water utility organization. The structure has to be updated, necessary personnel shall be recruited and trained and the policy-making body of the water utility should be established.

b. Establish a policy making body - Regardless of the type of WSP model, policy making and operations/management shall be segregated as enumerated in the following table:

Table 1.3.3: Roles and Functions in a typical Water Utility

WSP Model	Policy Making	Operations and Management
LGU run water utility	WatSan Council and Mayor, Sanggunian	A distinct unit within the Economic Enterprise Dept. of the LGU
Water District	Board of Directors (appointed by the Mayor)	Personnel hired subject to the rules of CSC and DBM; headed by a General Manager
Cooperatives	Board of Directors (elected by the General Assembly)	Personnel hired subject to the rules of CDA
BWSA / RWSA	Board of Directors elected by the General Assembly	Personnel to come from the community

The Board of Directors and key management staff are usually recruited during the planning and development stage. However, there are some cases when there is no Board yet even after construction is completed. It is important to note that there should be a policy making body and that there should be clearly written constitution and by-laws that define among others the functions of the Board and that of Management. The Board should also be oriented on their functions and be provided training on how they can effectively discharge their functions.

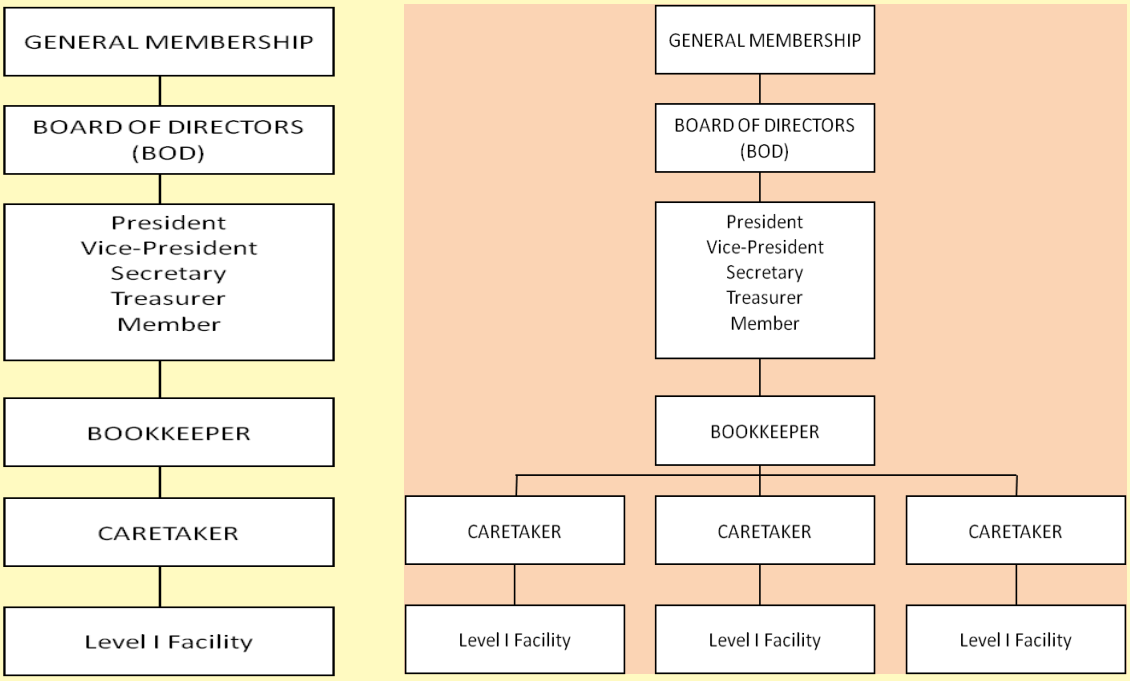
MUST KNOW

There are two types of organizational structure of BWSA according to the number of facilities, as shown in Figures 1.3.3 and 1.3.4 below. As can be gleaned in the structure the accounting responsibilities rest with the bookkeeper who is directly under the board of directors.

Figure 1.3.3: Organizational Structure of BWSA with one facility

Figure 1.3.4: Organizational Structure of BWSA with two or more facilities

Source: Baseline Survey Report



c. **Recruit the Water Utility Staff -** A multitude of activities happen in the water utility before water gets into the tap and after payment of water bill by the Claimholders. In undertaking these activities, the WSP needs qualified personnel with a set of skills and training in each aspect of operation as enumerated in the whole cycle of water generation, production, transmission up to reporting of results and monitoring and controlling as shown in the table below.

Operations and management is classified into usually four basic functions: Engineering (Technical), Finance, General Administration and Commercial operations.

Depending on the size of the Water Utility, there could be a minimum of one unit without any departments or there could be up to four departments (as they relate to the basic functions.) Usually, the functions of Finance and Administration are combined and lodged under one department as shown in the following functional chart.

Table 1.3.4: Typical Water Utility Functions

Technical/Engineering	Commercial	Finance and Administration
Production/Generation	Meter Reading	Bookkeeping/Transaction Control
Treatment	Billing and Collection	Accounting and Financial Reporting System
Transmission and Distribution	Tariff Setting and Structuring	Human Resources Management
Repairs and Maintenance	Service Connection Installation	General Administration
Construction	Disconnection	Management Information System
Planning and Design	Reconnection	Public Information
Research and Development	Customer Relations	Fixed Assets Management
	Customer Complaints	Inventory Management

d. Train the Board and Water Utility Staff - The Board and the Water Utility Staff shall be provided staff development on their key functions and responsibilities. Water supply and sanitation provision requires a certain set of technical and managerial skills that are unique to water utility operation.

The DILG carries out trainings on water utility operations and management. LWUA and some water districts provide mentoring assistance and there are also accredited Training Service Providers by the National Water Resources Board.

2. Specific Ways to Ensure PANTHER Principles

There are specific ways on how selection, recruitment and appointment of board members and key officers of the water utility shall be carried out in compliance with the human rights principles for good governance. These can be done through the following:

- Having well-defined qualification standards and overall a transparent recruitment system (transparency and accountability)

- In the selection of the members of the Board in a water district where the LGU (mayor) appoints the board members - There shall be a participatory and transparent process where the community submits a shortlist of candidates to the Mayor based on qualification standards for each representative coming from the women, business, professional, civil society organizations. The Mayor shall select the representative from among the names submitted to him/her. The names of selected representatives to the Board of Directors shall be published for the information of the community (non-discrimination, participation, transparency).

- A member to represent persons with disabilities shall be included in the board without increasing the members.

- The selection and appointment of the head of an LGU-run water utility shall be carried out through the regular recruitment process and on the basis of merit and qualifications. The head or manager of the water utility shall have the appropriate qualifications. Equal opportunities for all shall be encouraged and no one shall be disqualified because of sex, age, religion and status (transparency and non-discrimination).

- The LGU shall require the training of the staff, management and board of the water utility (if LGU on HR-based LWG); if not, the LGU shall advocate the human rights-based approach to local water governance among various WSPs in his / her municipality.

E. ENSURING INTEGRITY IN OPERATION AND MANAGEMENT

Following is a summary table of threats or risks of corruption and suggested ways to control and mitigate its effects during the operation and management phase of the water utility.

Public - Private

Threats and Risks	Control and Mitigating Measures
a. Over - billing by suppliers / theft, diversion of inputs.	Quality assurance measures include: using (generally) locally available, DTI or officially - approved materials, publishing rates on a notice board, ensuring quotations for all main purchases, extracting guarantees for pipes and pumps, ensuring well-written agreements and scheduling payment of a maximun of 80% on delivery and 20% after construction. These should all take guidance from RA 9184. In consumer representative meetings, workshop participants are allowed to review technology options, costs and cost-sharing arrangements with technicians. Agreements can be registration of beneficiaries, stock register, agreement forms, vouchers and receipts, bank pass book quotation notices and all received quotations and technical verification notes.
b. Avoiding compliance with regulations, specifications, health, and safety rules.	

Public - Claimholders / Civil Society

Threats and Risks	Control and Mitigating
a. Administrative corruption for water (access to water - installing / concealing illegal connections, avoiding disconnection, illicit supply, using utility vehicles).	All beneficiaries are paying for the capital cost as well as the full O&M costs. Costs have been publicly calculated and signed for in the agreement. Construction starts only after all payments are made. Socialized payments may be adopted; for instance, instance, persons living in extreme poverty may be asked to contribute 10 percent of capital of WSS facilities, while all others may be asked to pay 15 percent of capital costs. Socioeconomic criteria must be well-defined for such incentive schemes to work.

Threats and Risks	Control and Mitigating Measures
b. Administrative corruption for speed (or preferential treatment) - new connections.	Only identified / marginalized households are qualified for sanitary / latrine and related subsidies (i.e., lifeline claimholders). No money is given, but these households get free-of-charge construction service for these sanitary facilities by trained workers. Allocations of such subsidies or privileges are verified by displaying lists for public review. Joint bank accounts are opened by stakeholder and client representatives to improve risk monitoring, on-site monitoring and accountabilty.

PAYMENT OF SERVI CES
Public – Private

Threats and Risks	Control and Mitigating Measures
a. Bribery for excessive extraction by industry.	Institution of an independent Ombudsman on a retrainer basis, who will adjudicate over pressing governance / legal issues concerning management and the WSS organization. Only a special committee can exempt households living in extreme poverty from cash payments for construction. he special committee may also allow persons living in poverty to make payments in kind (through labor) or in cash. All decisions are fully documented and made public. Comprehensive registers must be kept, where applicable to avoid fraudulent behavior: a master roll, registration of beneficiaries, stock register, agreement forms, vouchers and receipts, bank pass book, quotation of notices and technical verification notes. Record of monthly payments and remittances / transfers must be impeccable and updated regularly.
b. Bribery, collusion in falsified billing in commercial irrigation and industry.	

Public – Claimholders/Civil Society

Threats and Risks	Control and Mitigating Measures
a. Administrative corruption: – repayment/billing for WSS.	Bank accounting will be transparent, verified by non-beneficiary groups and audited by external auditors. Zero tolerance policy for fixers must be enforced. Only a special committee can exempt households living in extreme poverty from cash payments for construction. The special committee may also allow persons living in poverty to make payments in kind (through labor) or in cash. All decisions are fully documented and made public
b. Fraudulent meter reading, avoidance or partial payment, overcharging.	Minutes for all important decisions and purchases should be made available and intelligible to community stakeholders or consumer representatives, and be accounted for by LGU management and the project proponents/WSP. External, independent audit of accounts is performed, where negative audit results are referred to LGU staff, NGOs and the community. No money will be released until the situation is rectified. Spot checks will be deployed to inspect receipts, storehouses, tenders, household receipts and government records.

CHAPTER 2 BUSINESS PLANNING AND TARIFF SETTING

INTRODUCTION

A common concern among LGU-managed water utilities is the lack of funds to keep the operations sustainable. Many of these utilities are subsidized, for they lack enough funds to cover routine operation and maintenance expenses. This situation is also true in other smaller utilities, particularly those that are not being managed in a financially sustainable way.

For the LGU as the Duty Bearer, especially when it is also the service provider, it is important that it is able to recover the cost of service delivery from the tariffs that are paid by the Claimholder. Otherwise, it will not have the funds to continue operating the water utility and will be forced to stop its operations.

This situation is common among water utilities which barely plan their financial operation least of all prepare a business plan that considers long term targets. The closest exercise that can be deemed as a business planning exercise is perhaps when financial projections are prepared to support a tariff proposal. The competency for Business Planning is also cited under the Capacity Assessment Report as a key area for capacity building for the LGU WSP. It was suggested that a separate module on Business Planning be developed.

Guiding Principle No. 6

It is the goal of the WSP to provide sustainable water service in the most efficient and economical way while at the same time ensuring that the normative content of the right to water is being met. To ensure sustainable operations and continuous protection of the right to water, the water utility shall be managed as an economic enterprise with human rights duties without prejudice to the human right principle that water is also a social good. It is necessary for the water utility to be financially viable so that it will have enough funds to maintain the water system and expand coverage to serve more people (efficiency and non-discrimination).

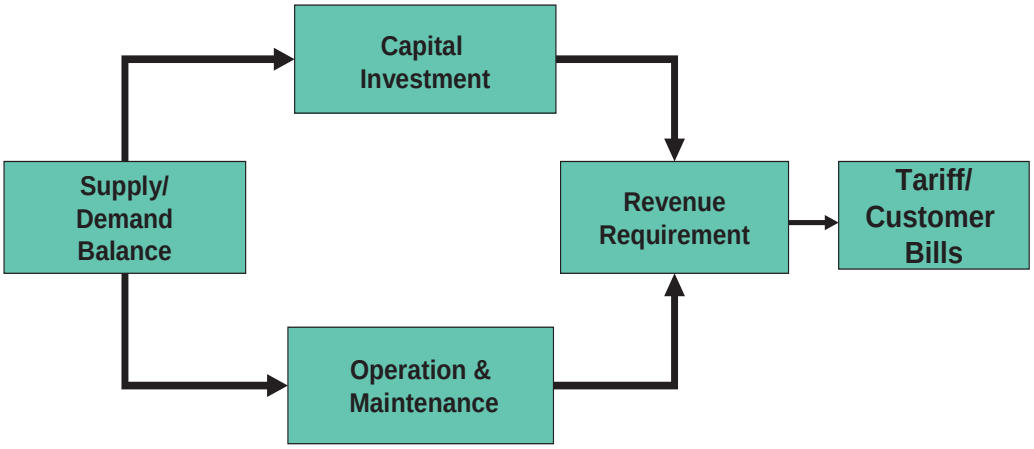
The following discussion on Business Planning addresses the need for a framework and module that enables rights-based local water governance especially in a governance structure where the LGU is the WSP. The module encourages a participatory approach, and makes use of a systematic and organized approach to setting and realizing targets. The overview of the Business Planning Module is presented below:

A. WHAT IS A BUSINESS PLAN

By definition, a Business Plan is a quantified statement of how a company will achieve its targets over a given period of time. It shows the strategies and programs and the corresponding cost of delivery of the strategies.

For a water utility, a Business Plan as shown in the following diagram includes defining the levels of services and how this could be achieved through (i) an evaluation of the supply and demand balance; (ii) determining the required capital investments and corresponding financial requirements to cover the required investment; (iii) determining the required operation and maintenance expenses; and (iv) forecasting the revenue requirements and adapting an appropriate cost recovery strategy and tariff setting policy.

Figure 1.3.5: Business Plan for Water Utilities



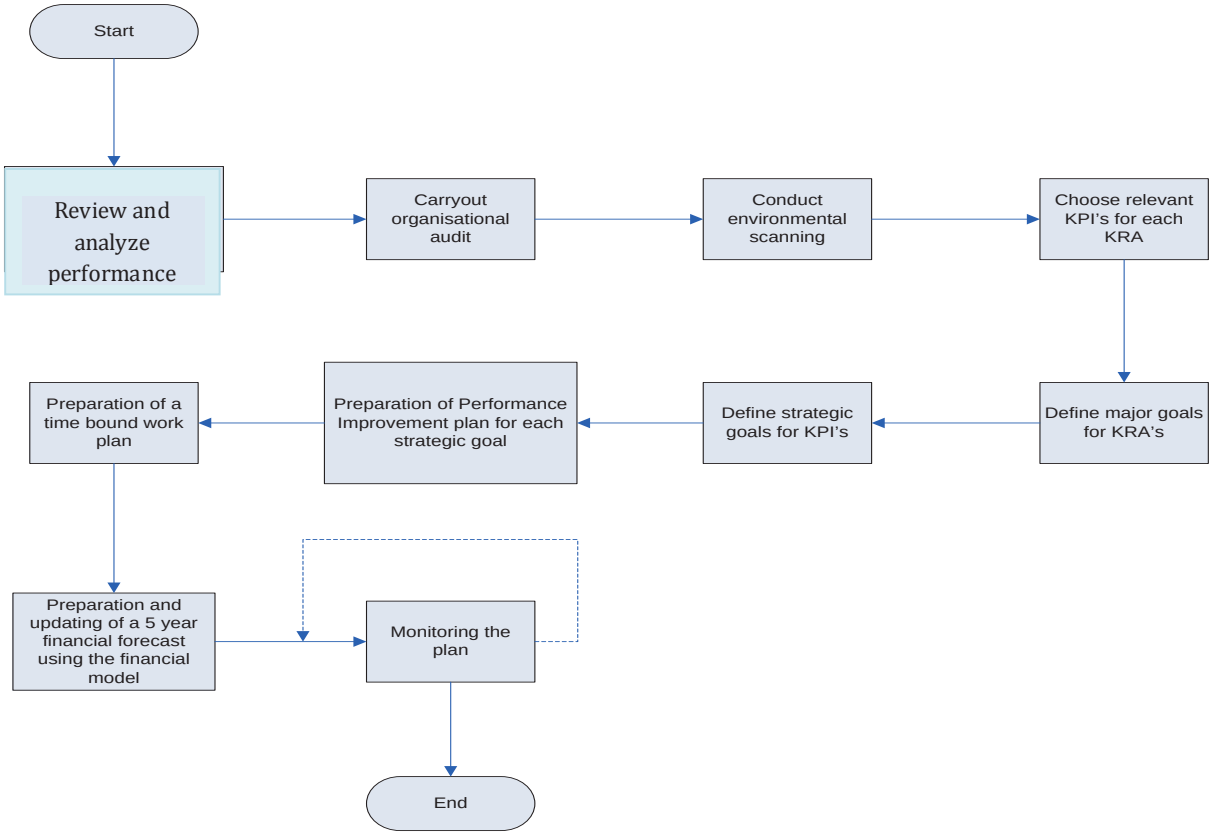
A Business Plan is necessary to articulate the goals and objectives of the water utility which could either be in the short-term (Annual Corporate Plan) or in the medium-term/long-term (Five to Fifteen Year Plan). It consists of two parts – the Strategic Plan and the Financial Plan that translates the strategic plan. To facilitate the preparation of a Financial Plan, it is usually supported with the use of a simple and easy to use computer based financial model.

With the step by step illustration, the water utilities shall be guided on how it will define its targets for the projection period and translate these targets into financial projections.

Contents of a Business Plan:

1. General Description
2. Mission Statement
3. Strategy and Goals
4. Water Demand Management Analysis/Forecast
5. Performance Improvement
6. Capital Investment (Asset Management Plan)
7. Organizational Structure and Staffing
8. Operations and Maintenance Budget
9. Revenue Needs/Tariff Analysis/Pricing Strategy

Figure 1.3.6 : Steps in Business Planning for Water Utilities



B. PARTS OF A BUSINESS PLAN

1. Participatory Strategic Plan

The Participatory Strategic Plan articulates the goals and objectives of a water utility during the projection period (5 – 15 years) depending on the need of the water utility. Enumerated as follows are the steps to be undertaken during strategic planning.

A participatory approach in the development of the Participatory Strategic Plan promotes transparency and ownership of the plan by the community. In the development of the SP, representatives from the community shall participate where they will contribute their views on how the water utility shall move forward, and shall be informed of their responsibilities as users/claimholders.

The involvement of the community in the development of the strategic plan should be encouraged. Representatives of community groups shall be invited to participate in the preparation of the strategic plan and the current condition of the water utility; the immediate plans to improve its operations shall be discussed with them. The process involved in strategic planning is not complicated nor too technical, hence it will be not be difficult to discuss said things with the community.

When the community participates in the goal setting for the water utility, there is ownership of the process and the community's sense of responsibility is reinforced.

2. Financial Plan

The financial plan is a translation of the goals and objectives into quantifiable targets. The output is a set of projected financial statements consisting of a Projected Income Statement, Projected Balance Sheet, Projected Cash Flow and Key Performance Indicators. The WSP shall prepare a draft financial plan and present it to the community for review and comments.

Parts of a Financial Plan

- *Inputs and Assumptions*
- *Demand and Production*
- *Financing Plan*
- *Operation and Maintenance Expenses*
- *Cost Recovery and Pricing Strategy*
- *Projected Financial Statements*
- *Key Performance Indicators*

C. DETAILED STEPS AND PROCEDURES OF A BUSINESS PLAN

1. Preparing a Strategic Plan

Steps 1 to 3 of the strategic planning phase involve the diagnosis of the organization and its internal and external environment.

Step 1: Review and analyze performance.

To understand the current situation of the water utility and have a basis for determining what improvement measures are needed, the WSP shall compile the reports on the utility performance (to include reports and documents such as financial and production reports, annual reports, organization structure and staffing/payroll, billing and collection data).

It shall summarize these reports and present them to the community in a workshop where the WSP and the claimholders (represented by water users' or consumers' groups) shall analyze the results.

Business planning becomes an effective exercise when the Claimholders/community/users are involved and understand what is happening in the water utility and take responsibility for the improvement in performance. The following steps shall be undertaken during the strategic planning workshop.

- Conduct where possible an Operations Review covering technical, financial, commercial and organization and management aspects. If an in-depth review is not practical and possible, conduct a high spot review by determining the most urgent issues and problems in each KRA and then rank them by order of urgency.

- Determine and compile key result area, Key Performance Indicators (KPIs) in key result areas. Key Result Areas or KRAs are aspects of operations which have a significant impact on overall performance and which top management are expected to invest most of their resources during their period of commitment.

- Compare results against established standards to see how well the water utility has performed. Identify the reasons and factors that contributed to the results.

Step 2: Conduct organizational audit.

This is conducted in order to identify the strengths and weaknesses of the organization, determine the adequacy of personnel complement and form a basis for manpower planning.

Step 3: Conduct environmental scanning.

An external environmental scan requires identifying the external factors that will affect the business including any potential threats and opportunities. The results of the environmental scanning shall form part of the assumptions when preparing the strategic plan.

It also includes an assessment of the human rights impact that the water utility has over the Claimholders in their quest for water service. The assessment of the human rights impact will:

- Measure the extent to which the water utility has contributed in serving the needs for water service of the most vulnerable sector of the community in terms of increase in service coverage. Baseline data on the vulnerable sectors (women, children, persons living in poverty, persons with disabilities, indigenous people, older persons, etc.) shall be established to have a basis for measuring impact.

- Determine the extent to which operations and management of the utility applied the human rights principles of good governance through a qualitative assessment of the utility's compliance

- Determine any infringement on human rights with regard to water provision.

Steps 4 to 6 of the strategic planning process involve the setting of goals and objectives for the water utility and defining how these objectives will be achieved. Start the process of goal setting by selecting the performance indicators in key result areas that will define the levels of service to be provided and/or priorities for improvement. These include KPIs for KRAs such as service levels, technical/ operational, financial, organizational development and customer services.

Step 4: Define major goals for KRA's and strategic goal or goals for each KPI.

Based on the review and analysis of the performance of the water utility, define the major goal for each of the KRA within the overall goals of the municipality. Specifically, establish the levels of service that will be provided to its users/Claimholders. For the other KRAs, identify the primary areas needing improvement and/or strengthening.

After the major goal for each KRA has been defined, define a strategic goal or objective for each selected KPI in each KRA. The strategic goal is to be expressed in quantitative terms that will be achieved at the end of the projection period and the attainment of the goals on a staggered basis (annual targets).

Step 5: Prepare an Action Plan for each strategic goal.

Determine how each strategic goal per KPI will be achieved by defining the activities that will be undertaken. These activities shall be summarized in an action plan for each strategic goal.

Step 6: Prepare a time-bound Work Plan.

Summarize the action plans into a Work Plan that indicates the timing of the various activities to be undertaken.

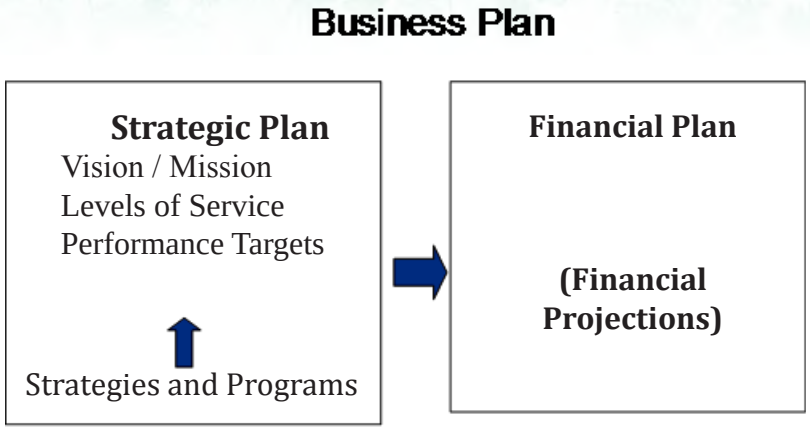
2. Preparing a Financial Plan

The financial plan involves the preparation of financial projections based on the proposed activities that were outlined in the strategic plan and the projected costs of undertaking these activities. It shows in terms of projected financial statements what the expected performance of the utility will be and how its financial condition would look like during the projection period.

Step 1: Prepare the Input and Assumptions Table.

The input table shall include historical data obtained from the various financial and management reports of the water utility and from the results of the diagnostic review that was conducted.

A sample Input and Assumptions table is shown on page 133:



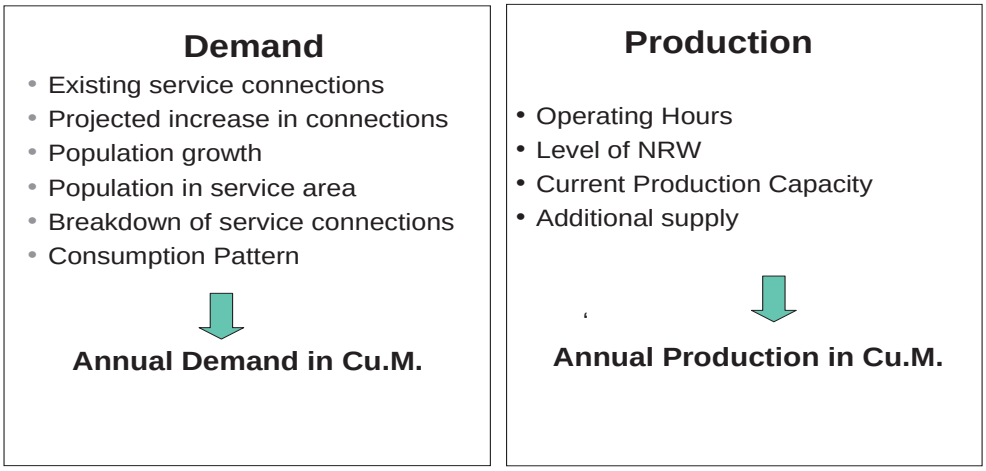
SAMPLE INPUT

Inputs	Assumptions
• Population and Population Served • Production • Consumption • Financial Performance (Income Statement and Balance Sheet) • Current and completed investment projects • Human Resources • Other relevant inputs	• Service Coverage • Operating Hours • Population Growth • Price Escalation • Organization growth • Performance improvement measures • NRW • Proposed investments • Growth in service connections • And others

Step 2: Prepare Demand and Production Table.

The targeted levels of service in the strategic plan are translated into projected water demand and production. The projected water demand is compared against current water production. Any projected shortfalls or excess production shall be determined and the water utility shall establish measures to meet the shortfall or use excess capacity. Projected demand and production shall be linked with investments in infrastructure.

To prepare the demand and production table, following is a list of information that shall be gathered and determined:



Step 3: Prepare the Investment Plan and Fixed Assets Schedule.

The investment plan is a listing of priority investments during the period. It includes investments in infrastructures that are required to meet the projected levels of service and the costs of investments to undertake proposed institutional improvement measures.

In the preparation of the investment plan covering infrastructures, ensuing activities relating to fixed assets need also to be undertaken. The assets that will result from the investment shall be added to the current list of fixed assets and depreciation on these additional assets shall be determined.

The investment plan shall provide the following information:

- Categories of assets
- Projected acquisition period and entry into the system
- Useful life and salvage value of incoming assets

Fixed Assets Schedule

Prepare the Fixed Assets Schedule to establish the total fixed assets, (current and incoming) during the projection period. The schedule shall include the calculation of depreciation expense which is part of the costs to be recovered from water sales. The depreciation expense is also an input to the Projected Income Statement.

Step 4: Prepare the Financing Plan.

Determine the corresponding cost of proposed investments, the sources of funds and the terms and conditions with which the funds will be acquired. Following is a step-by-step procedure on how the financing plan shall be prepared:

• Define sources of funds	(i) Loans (ii) Grants (iii) Internally generated funds
• Terms and Conditions of Loans	(i) Interests and repayment period (ii) Capitalization of interests and grace period (iv) Equity portion
• Prepare amortization schedule	(i) Consider the terms and conditions

HELPFUL HINTS

In the preparation of the financial plan, it is necessary to consider that the financing of the proposed project/s shall not result in expensive water; hence unaffordable tariffs. There are ways by which financing will not be very high, such as:

- Mix of grants and loan and softer loan terms and conditions
- Equity to be provided by the community in terms of labor contribution (cash for work)
- Staggered implementation of projects so as not to overburden the community/claimholders

Step 5: Prepare Projected Operation & Maintenance Expenses

Determine the corresponding costs of providing the projected level of service by calculating the projected operation and maintenance expenses. Suggested basis for forecasting operation and maintenance are:

Power and Chemicals	• Based on projected production (in cu.m.)
Personnel Expense	• No. of staff based on increase in service connections and other criteria
Maintenance	• As a % of Utility Assets
Administrative and General Expense	• As a % of Direct Cost

Step 6: Cost Recovery and Pricing Strategy.

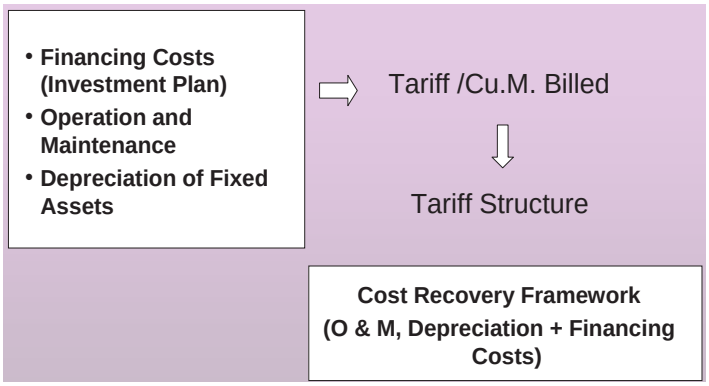
Summarize the various costs to be recovered (O & M, capital investments, financing costs, depreciation). Determine the extent of cost recovery by undertaking the following:

- Determine the revenue requirements by tabulating all costs of services, incorporating the targeted collection performance and considering other sources of revenues.
- Calculate the required tariff per cubic meter to be sold by dividing the revenue requirements by the projected sales volume;
- Compare the existing tariff per cubic meter against the required tariff.
- Determine required levels of tariff increases to meet the revenue requirements.
- Depending on the existing tariff policy and tariff structure, develop a tariff structure based on the required tariff increases.

KNOW MORE

In undertaking Step 6, the WSP shall remember that financial accessibility or affordability of tariffs shall be the primary consideration under a human rights based local governance framework. The WSP shall consider ways to make tariff affordable especially for the most vulnerable groups in the community. (Please refer to discussion in Part 3, Planning and Development on tariff setting). The proposed tariff shall be explained and the calculation should be made transparent to the community.

Figure 1.3.7: Cost Recovery and Financial Strategy



Step 7: Preparing the Projected Financial Statements.

After determining the required tariff expressed as an average tariff per cubic meter, the projected financial statements consisting of the following shall be prepared.

Income Statement - the projected O & M prepared under Step 5 is obtained and the revenues from water sales are calculated using the required tariff under Step 6. The projected Income Statement is prepared based also on other assumptions contained in the input and assumption sheet.

Balance Sheet - it is prepared alongside the Income Statement and is aimed at showing the overall financial condition of the utility. To facilitate the preparation of the Balance Sheet, it is helpful to include a movement sheet that shows the changes in assets, liabilities and capital.

Cash Flow Statement - it shows the changes in the cash inflows and outflows and is determined based on the given assumptions.

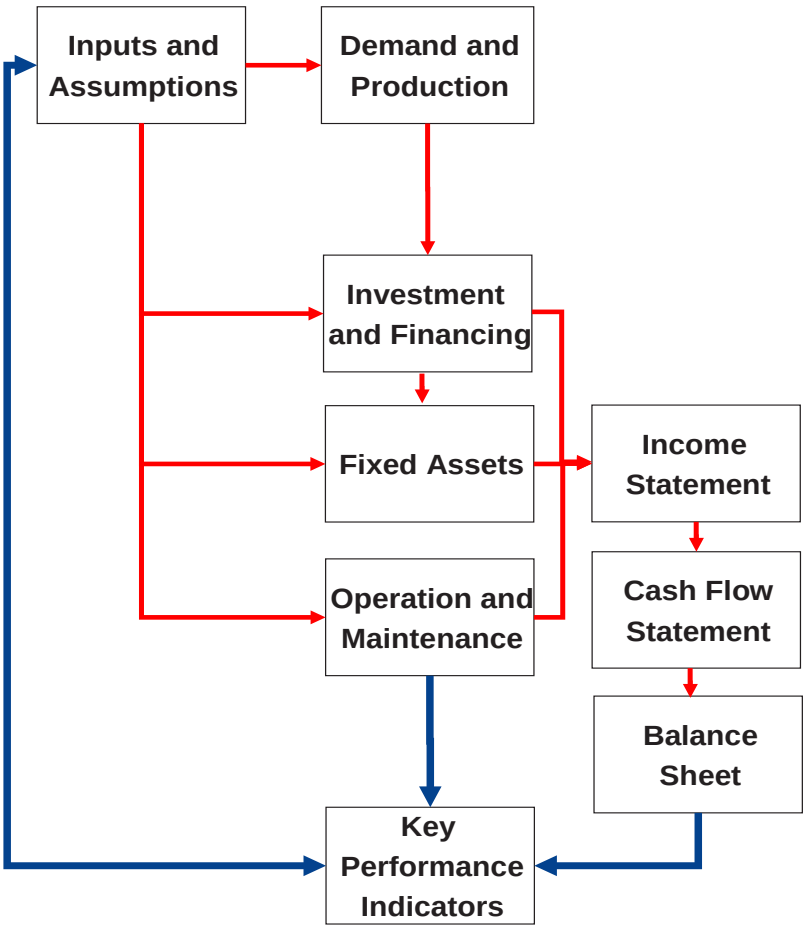
Step 8: Key Performance Indicators.

Based on the agreed KPIs for monitoring, determine the KPIs during the projection period. The KPIs summarize and highlight the projected results of operations in the various key result areas (technical, customer, financial and organizational). The performance of the utility shall be evaluated based on the attainment of the target KPIs as set out in the strategic plan.

Computer-based Financial Model

To facilitate the preparation of the Financial Plan, an Excel-based financial model can be used. The financial model comprises several worksheets that correspond to each of the detailed steps in financial planning shown in the schematic diagram in Figure 13 below. The model is developed as a tool for financial planning and is flexible enough to be adjusted to the specific needs of each water utility.

Figure 1.3.8: Financial Planning Process



Computer-Based Financial Model

The financial model could consist of the various worksheets that correspond to the different steps in financial planning as shown in Table 3.5

Table 1.3.5: Computer-Based Financial Model - Summary of Work Sheets

Worksheet No.	Title	Description
1	Inputs and Assumptions	Historical data on the water utility and other relevant general information
2	Assumptions	Levels of Service and Performance Targets
3	Demand and Production	Projected production and consumption
4	Investment and Financing	Details of investments and source of financing
5	Fixed Assets	Schedule of Existing and Incoming Assets including Depreciation
6	Cost Recovery	Projected Revenue Requirements and calculation of required water tariff
7	Financial Statements	Income Statement, Cash Flow and RE Balance Sheet
8	Key Performance Indicators	Shows the resulting KPIs
Supplemental Sheets		
1	Statement of Income and Expenditures	Detailed Income and Expenditures Statement
2	Investment Plan	Listing of Capital Expenditures

D. DEFINING THE LEVEL OF SERVICE

After the construction of the water and/or sanitation system is completed, the WSP has to confirm the kind of service that it will provide to its customers. This is called the level of service or the elements of the right to water as earlier described in the Handbook. The level of service is one of the items that will be contained in a "localized customer service code" later on when the WSP prepares and implements is own code.

HELPFUL HINTS

Level of Service (LoS) = Accessibility + Availability + Quality that is provided at a certain price (or tariff)

MUST KNOW

What should be done:

1. Define the number of operating hours, pressure at which water will be provided and the quality of treated water.
2. Compute the costs of operation and maintenance.
3. Determine the water tariff that will be charged based on each "level of service".
4. Consult claimholders and agree on the level of service.
5. Together with the community/ claimholders, enter into an agreement on the levels of service and adopt a "Localized Customer Service Code".

Determining the Level of Service is also an essential part of Business Planning. In the target setting during the strategic planning phase of Business Planning, the Level of Service (LOS) is the first key target outcome that is defined. The water utility has to define what kind of service it will provide to its claimholders.

Levels of service (LoS) is the collective term for the aspects of the quality of service provided by WSP which have a direct impact on customers. There are three categories of LoS:

- Water supply services include the aspects of service quality related to the provision of water supply;
- Wastewater services include aspects of service quality related to the provision of wastewater, sewerage and sanitation services; and,
- Customer services include aspects related to the interface between the water supply and/ or wastewater service provider and the customer.

MUST KNOW

General Comment No. 15, paragraph 16

Whereas the right to water applies to everyone, States parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum seekers, internally displaced persons, migrant workers, prisoners and detainees. In particular, States parties should take steps to ensure that:

i. Children are not prevented from enjoying their human rights due to the lack of adequate water in educational institutions hence the provision of adequate water to educational institutions currently without adequate drinking water should be addressed as a matter of urgency.

ii. Rural and deprived urban areas have access to properly maintained water facilities.. Deprived urban areas, including informal human settlements, and homeless persons, should have access to properly maintained water facilities. No household should be denied the right to water on the grounds of their housing or land status.

iii. Indigenous peoples' access to water resources on their ancestral lands is protected from encroachment and unlawful pollution. States should provide resources for indigenous peoples to design, deliver and control their access to water.

iv. Nomadic and traveler communities have access to adequate water at traditional and designated halting sites.

v. Refugees, asylum-seekers, internally displaced persons and returnees have access to adequate water whether they stay in camps or in urban and rural areas.

vi. Prisoners and detainees are provided with sufficient and safe water for their daily individual requirements.

vii. Groups facing difficulties with physical access to water, such as older persons, persons with disabilities, victims of natural disasters, persons living in disaster-prone areas, and those living in arid and semi-arid areas, or on small islands are provided with safe and sufficient water.

1. Water Supply Services

The human rights-based local water governance framework refers to the levels of service as the normative content of the right to water and includes availability, accessibility and quality. These three

a) Availability, Adequacy and Reliability – for water supply, it is the amount of water that will be made available expressed in terms of number of operating hours at a given pressure. For example, a WSP could propose to provide treated water continuously for 24 hours at a good pressure at a price that has to be communicated and consulted with the users/claimholders.

Availability is expressed in terms of[1]:

Water Supply Coverage - Coverage is generally expressed as the percentage of the total population with access to water services and it measures the extent to which water supply is provided within the area. Under the human rights-based local water governance framework, this aspect of service provision is the most important as it establishes if there are Claimholders excluded from service provision. Coverage is refined to determine coverage of the most vulnerable sectors of the community. On a year-on-year basis, water supply coverage shall show improvements in total coverage and coverage of the most vulnerable (particularly persons living in poverty, persons with disabilities, indigenous people, etc.)

Pressure - Pressure is the measure of effectiveness of the water distribution system including the pipework and any pumping and booster facilities in delivering water to customers at a satisfactory pressure. A minimum figure of 6 psi measured at the user's tap is generally considered a reasonable minimum target pressure.

Continuity - Water service continuity measures the average number of hours of water supply provided per day at positive pressure at the user's tap. The provision of uninterrupted water supply is important not only for continued supply but it also reduced the risk of back-syphonage of polluted groundwater, canal water or flood water in the mains system.

b) Accessibility – this means that water should be within easy reach of the consumer, and with provisions to facilitate access for disadvantaged groups (especially older persons, women, children and persons with disabilities.). Accessibility will depend on the level of system chosen (Level 1, 2 or 3) and shall include physical, geographical, and financial accessibility and access to information.

- **Geographical and physical accessibility** - Within, or in the immediate vicinity of, each household and workplace. Reasonable access to water: not more than 1000 meters from a house to a public stand post or any other improved drinking water source and collection time must not be more than 30 minutes. If people must walk for hours to get water, then they are not enjoying their right to water
- **Access to information** -The right to seek, obtain and impart information; the ability of citizens to obtain water-related information in the possession of public authorities . Broad access to information about water quality allows people to find out whether they can use the water available use the water available to them for drinking, swimming, irrigating their crops, or fishing. With that knowledge, people can make informed choices regarding health, livelihoods choices, risk avoidance, among other factors. Information about water quality may also mobilize public opinion and urge polluters and governments to

1 ADB, Introduction to Economic Regulation of Water Supply and Wastewater Utilities

SOMETHING TO PONDER MUST KNOW

Philippine National Standards for Drinking Water Quality

Mandatory standards for drinking water in the Philippines are set out in the 1993 Philippine National Standards for Drinking Water (PNSDW). The standards specify the acceptable values for drinking water quality parameters for the bacteriological, physical, chemical, radiological composition of water supply. The standards set out values required to address the medical and health implications of the parameters as well as values to satisfy aesthetic requirements. The PNSDW also identify the required number and frequency of sampling, define standard laboratory and other alternative methods for water analysis and include a recommended format for reporting.

The PNSDW standards generally conform with the 1993 WHO Guidelines for Drinking Water Quality although the required methods for water quality analysis were adopted from the 1989 Standard Methods for the Examination of Water and Wastewater and the United States Environmental Protection Agency (USEPA) procedures.

reduce pollution and to improve water quality.

- **Financial accessibility** - Meaning (i) affordability for all, particularly for disadvantaged persons and groups and (ii) Expenses for water and sanitation should not exceed five percent of the income available to a household

c) Quality – Water quality requirements are set out in national standards designed to protect public health. In the Philippines, the WSPs should meet the criteria set under the Philippine National Standards for Drinking Water which defines the typically maximum allowable limits for specified bacteriological, physical/chemical and aesthetic parameters

Derogations in Water Quality

Although the primary parameters associated with bacteriological contaminants should not be compromised, some exceptions can be made for other parameters provided this does not threaten public health. Where non-bacteriological (i.e., physical, chemical, or aesthetic) standards cannot be met due to inadequate treatment technology or problems within the distribution network, service providers may be allowed adequate time to implement the necessary capital investment measures to achieve compliance. The derogation from the standard must be fully documented, specific to the affected parameters, not affect public health and give a specific deadline for compliance. Where this is due to the introduction of a new standard or stricter limit, a reasonable timetable for service providers

to achieve legislation should be put in place. For example, the EU Drinking Water Directive allows derogations of three years, which can be extended to six years in certain "exceptional circumstances." Longer-term derogations (up to 15 years) are allowed for compliance with tighter standards for lead,

trihalomethanes and bromates[1].

d) Emergency provisions of water supply. Another important aspect of water services is the ability to provide supplies in times of emergencies and calamities. This can be achieved by ensuring sufficient water is available for fire-fighting, and for providing water other than via the water main (such as by water tankers) during interruptions or emergencies caused by man-made or natural disasters (floods/typhoons). The WSP shall ensure the provision of the following:

Fire Hydrants - A good number of fire hydrants in working condition shall be provided by the WSP. The number and condition of hydrants shall be documented and reported by the WSP.

Alternative Water Provision - WSPs shall provide alternative non-piped water supplies during prolonged interruptions (over 24 hours) or emergencies usually in the form of tankers. This is to ensure that the vital need for water is met.

2. Wastewater Services[2]

Wastewater services cover the collection of domestic and industrial sewerage either by a network of sewers (sewerage) or individual or communal septic tanks. Few urban areas in developing countries are served by sewerage systems. Even where sewerage systems do exist, wastewater treatment facilities are often overloaded, limited in scope or non-existent. In the absence of long-term capital investment in sewerage, septic tanks are the only facilities that treat or partially treat domestic sewerage for many of the urban population. However, if they are poorly maintained, they may give rise to significant public health risks and environmental degradation of the receiving waterways.

Some of the aspects of water supply services also apply to wastewater services such as coverage. Other aspects of wastewater services include:

a) Septic tank emptying. The extent of septic tank emptying services actually provided by the WSP is largely related to the demand for these services. They need to be emptied periodically (typically every five to six years depending on the capacity). The WSP's compliance with this obligation is measured in terms of times offered to the users and not on the actual times of emptying because many users are reluctant to pay for these services.

b) Wastewater effluent standards. Wastewater effluent standards are also set by national regulations. They take into account the receiving water's capacity to assimilate the pollution load. In many countries, effluent quality standards are set at stringent levels, but they are not always enforced due to the high cost of building wastewater treatment plants to achieve these high standards.

Sampling frequencies for wastewater effluent quality and other procedures, e.g. location of samples and analysis techniques, are usually specified in national standards.

1 ADB, Introduction to Economic Regulation of Water Supply and Wastewater Utilities
2 ADB, Introduction to Economic Regulation of Water Supply and Wastewater Utilities

3. Customer Services[1]

Customer services concern the performance of the service provider in the provision of customer-interfacing activities. It relates to all areas where there is a direct relationship between the service provider and the user/claimholder. Agreements on the aspects of customer service to be expected from the service provider are key points in the Localized Customer Service Code.

Customer services statistics can be valuable to:

- Assist in developing priorities for the capital investment program and the capital maintenance program;
- Provide useful information on the condition and performance of assets (particularly underground assets);
- Anticipate trends in deterioration of service delivery and enabling the service provider to take remedial actions in a timely fashion; and
- Check on the validity of other reported levels of service.

Some of the customer service aspects are :

(a) Response to complaints. The quality of the customer services provided by the service provider is often reflected in the response time by the service provider to complaints from customer. The most common types of complaints relate to service delivery and billing problems. For example:

- Service delivery complaints:
  - Pressure complaints (usually low pressure)
  - Coverage complaints (by unserved customers)
  - Continuity complaints (usually due to excessive interruptions in supply)
  - Water quality complaints (usually aesthetic aspects)
  - Leakage complaints (especially major bursts that affect service or create inconvenience)
  - Delays in connection times.

- Billing complaints
  - Incorrect measurement (often due to problems with meter inaccuracy)
  - Incorrect charging (often due to errors in tariff category).

It is the responsibility of the WSP to record all genuine complaints, whether or not it has the ability to implement effective remedies in the short term. The WSP should inform cannot address the problem over the short-term, and indicate whether it will be addressed at a future time (e.g., as part of a future infrastructure development project. The service provider should maintain records of the complaints received and document how they are addressed.

1 ADB, Introduction to Economic Regulation of Water Supply and Wastewater Utilities

(b) Response to requests for new connections - This refers to the ability of the service provider to respond to a request for water or a sewerage connection. This is measured in terms of (i) actual service connections processed and installed as against the requests filed, and (ii) number of days to process and install the connection as against standard time for said activities.

(c)Repair of disruptive mains failure. This aspect of customer service reflects the ability of the service provider to respond to a major disruption in supply arising from a pipe burst. It is linked to the burst frequency indicators as well as to the pressure and continuity indicators and is measured in terms of the number of disruptive mains failures and the speed of the response.

There could be a range of services to be provided from minimum requirements and beyond depending on how much the Claimholders can afford and would be willing to pay. Better quality of water could mean higher costs to produce and hence higher water tariffs for the Claimholder. If there are Claimholders who are willing to pay for better quality such as 24 hours service at a good pressure, this is still meeting the human rights to water as long as the WSP is still meeting the minimum requirements for water at a much more affordable price.

SOMETHING TO PONDER

Water is free but funds are needed to bring water from the source to the individual.

As contained in the Working Framework on Human Rights in Local Water Governance (Diokno, 2011), "while the claimholder has the right to water, this right should also be exercised responsibly by paying in cash or in kind, for water and sanitation services, subject to equitable and affordable rates and charges".

The level of service should be agreed between the consumer and the WSP. This should be contained in the "Localized Customer Service Code" and/ or a "Service Obligation Agreement".

In setting the levels of service, no Claimholder/ User shall be discriminated. The level of service is being set to provide a basis with which the performance of the WSP will be assessed. The levels of service are a range of water services that will be provided by the WSP; the minimum of which shall be meeting the minimum requirements for water such as availability and quality.

MUST KNOW

What is important is that the Claimholder is informed about the kind of service that will be provided at a certain price. This information and agreement should be contained in a "localized customer service code".

E. COST RECOVERY AND TARIFF SETTING

Water utilities must recover their costs in order to ensure sustainability of operations. The imposition of water tariffs is the most common way to raise revenues to cover all cost or part of the cost of a newly created or existing water system. Having the correct water tariff is also a way of ensuring that a water system

will continue to work after construction. Water tariff should be sufficient to cover not only cost of operation and maintenance but also cost for expansion and development.

The crucial point is the proper identification of all costs involved to be able to formulate the correct water tariff. According to IRC -International Water and Sanitation Centre study by Catarina Fonseca, "sustainability requires the matching of ALL costs related to providing a sustainable service, with ALL the available sources of funding". Thus, it is essential to identify all activities that have cost implication in the tariff setting methodology.

1. Principles, Concepts and Definitions

What are Tariffs? The term tariff is being used to refer generally to the prices users pay for services.

Understanding the Need to Pay for Water and Setting Policies

There are several approaches to setting tariffs but all of these involve computing the revenue requirements based on cost recovery policies. Policies are usually set at the planning and design phase. During this phase, the community discusses its responsibilities as Claimholders, the responsibility to operate, maintain and sustain their water supply and sanitation systems.

Anecdote:

During an Indigenous People's Participation workship in the municipality of Mutia in Zamboanga del Norte, participants said they don't have enough cash income and that they depend on backyard gardening to survive, Paying P1 a day for water is even unaffordable.

"Why Pay For Water?"

Water is free but the development of sources whether they are springs, rivers, groundwater as well as laying of pipes to deliver water to the household involves substantial investment. The daily operation of pumps as well as treatment of raw water need budgets to ensure smooth operations. The community needs to understand this and to decide the level of prices they are willing to pay for water services.

Who Will Pay For Water?

The traditional concept is that the government needs to pay for water. This has resulted in many waterless areas where obviously the government resources were not sufficient to bring water to the communities. The communities now need to recognize their right to water carries responsibilities to seek solutions to their water problems. Solutions may include paying for the water service they receive.

There are two concepts related to tariff setting and these are willingness to pay and affordability. Affordability is estimated in the sector based on the guidelines that a household should not pay more than five percent of its income for water. Willingness to pay is established by conducting a survey to ask "How much are you willing to contribute to the project", "How much are you willing to pay

monthly for water service?" Many times willingness to pay than affordability. This is largely due to the idea that water concepts need to be discussed so that the community has a common understanding of the concepts and an agreement on how much they are willing to pay for water.

Issue: Since provision of water should not be discriminatory, it should include even the groups which cannot pay for water. How do we factor this in the agreement of the community for policies related to the payment of water?

MUST KNOW

While the Duty Bearer has to comply with the obligation to fulfill the right to water, the community has the responsibility to support the WSP by paying the appropriate water tariff on time. Paying the appropriate levels of tariff also promotes the conservation of water and contributes to water sustainability

One way to resolve this is to include in the survey a question asking the individuals who cannot pay a one time connection fee (that could be substantial) if they are willing to render services to the WSP in exchange for the connection fee. The services can be rendered as part of the construction stage or the operations and maintenance stage. Another way is that a lower level of service is provided such as public faucets.

The question on "How much are you willing to pay monthly for water service" should be part of a bigger discussion on levels of service. A community needs to agree on levels of service. Do they want individual connections? 24-hour service? Water pressure that reaches the second floor? They need to understand that a high level of service will cost them more than a low level of service.

Some guides on visioning are provided in the toolbox. This visioning exercise also establishes what are the levels of service the community expects as a minimum and on this basis, how much they are willing to pay. For example, if a community would like to have 24 hours service, they need to realize that this will imply a higher tariff.

2. Tariff Setting

When setting tariff, the WSP needs to define the reasons behind the proposed tariff structure and levels. More importantly it has to bear in mind, that in determining the tariff, the element of financial accessibility/affordability (element of right to water) shall be equally considered alongside cost recovery.

The cost recovery framework shall be pre-determined and agreed with the community in a participatory approach. The process by which the tariff will be set and implemented has to be transparent and well explained to the Claimholders.

Goals in Tariff Setting

According to the "ERD TECHNICAL NOTE NO. 17 of the ADB Study on SETTING USER CHARGES FOR URBAN WATER SUPPLY: A CASE STUDY OF THE METROPOLITAN CEBU WATER DISTRICT IN THE

PHILIPPINES, the goals of tariff setting shall be:

- Good governance: be simple, transparent, and predictable.
- Financial sustainability: ensure the financial sustainability of the enterprise without subsidies, with a few exceptions.
- Distributive justice: help the persons living in poverty satisfy their basic needs, when other ways are not available.
- Economic efficiency: promote efficient use of resources.
- Fair pricing: avoid cross-subsidies, especially those that affect economic efficiency

The above goals in tariff setting when considered is a good way of achieving good governance in water as the principles of transparency, equity, rule of law are enabled.

Cost Recovery Framework

The level at which costs will be recovered or the "cost recovery framework" is one of the items in the "Localized Customer Service Code" that should be set and agreed between the WSP and consumer.

Depending on the capacity of the Claimholders and the levels of service, the tariffs will be set based in the following cost recovery framework:

What costs will be recovered?

- Operating and maintenance costs – partial cost recovery.
- Operating and maintenance costs plus capital costs (including debt repayment) full cost recovery.
- Operating and maintenance costs plus capital costs (including debt repayment) – full cost recovery plus return.
- Full cost recovery plus return is a typical tariff setting approach for private utilities. The communities need to understand this. This approach usually results in a high level of tariffs.
- And shall impact on the financial condition of the water utility. If the WSP is an LGU-run water utility that opted for partial cost recovery, then any deficit has to be borne by the LGU thru a subsidy.

Major Steps and Considerations in Tariff Setting

MUST KNOW

The NWRB Tariff Methodology describes the approach and procedure for calculation of tariffs using the return on investment method.

i. Understand the national context. The roles of various institutions involved in water supply are described, together with the relevant national water pricing policies.

ii. Understand the local context. A broad range of factors are outlined which tariff reformers may wish to consider to better understand their local context. These include the local institutional, historic and economic water resources context, the consumer market, and the costs of supply, revenues and current tariffs. Given the political nature of tariff-setting, practitioners are strongly advised to undertake a Claimholder analysis.

iii. Set pricing goals, establishing principles and develop performance indicators. Practitioners are advised to define pricing goals and to prioritize or weigh these as far as possible. A basic set of principles are proposed for good tariff practice. Various practical indicators are proposed with which to measure organizational performance.

iv. Make some preliminary choices. The possible components of the water tariff are described, including development charges, connection charges, fixed fees and volumetric tariffs. Two approaches are described for determining tariff levels: the revenue requirements approach and the marginal costs approach. The user is advised to consider the impact of future supply costs and climate and to examine the scope for cost reductions when determining

Kinds of Tariff

The two most commonly used tariff structures are the simple linear tariff and multi-part or two-part tariff.

Simple Linear Tariff

Average tariff per cubic meter

$$= \frac{\text{Total Revenue Requirement}}{\text{Total Quantity Billed}}$$

- Simple to implement and administer
- Highly certain to recover costs

Two-part or Multi-part Tariff

Fixed or minimum charge + Commodity or volumetric charge

eg: Fixed Charge - Php 100 (0 - 10 cm^3)

Commodity Charge Php 15.00 /m^3 (11 - 20 cm^3)

25.00 /m^3 (24 - 40 cm^3)

40.00 /m^3 (over 41m^3)

The formulation of the correct tariff is only one side of the situation. Another important point to be considered is the political will of the local government units to impose or increase water tariff in their locality.

revenue requirements. A set of guidelines are provided to assist with these choices, covering universal cases and specific conditions.

v. Define the tariff structure and set tariff levels. Users are advised to establish a tariff policy framework on the basis of the selected goals, and to use this for further consultation.

vi. Discuss the proposed tariffs and evaluate its potential impact together with the community. The likely impacts of tariff reform should be evaluated before approval is sought. Depending on the outcome of the stakeholder analysis, and the extent of the proposed tariff reform, it may be necessary to consult stakeholders prior to seeking political approval. Long term evaluation procedures should be set up to establish whether the tariff reforms are achieving the desired pricing goals.

vii. Refine tariffs. Users are advised to undertake incremental reforms to tariff structures and levels until they achieve desired goals and adhere to best practice principles.

KNOW MORE

Tariff Policies in the Philippines

Manila Water (One of the MWSS Concessionaires), The customer's final bill (excluding VAT tax) consists of three components: water tariff, an environmental charge (10 percent of the final water bill) and an asset maintenance charge (based on meter size). Different water tariffs apply to residential, semi-business, and business group. The water tariffs are based on the original bid price adjusted in accordance with the provisions of the Concession Agreement. The first 10 cubic meters in each group includes a tariff that incorporates fixed costs.

Water Districts. The Water Districts apply a two-part tariff consisting of a standing charge and a volume based consumption charge. The tariffs are based on a revenue requirement that is computed from a RoR of 15 percent, OPEX, economic depreciation and loan repayments. They also use an increasing block tariff structure for the volume based consumption charge.

Local Government Unit run water utilities - Most LGU enterprises apply a linear (flat rate) tariff that is revised every four years when the LGU revises its revenue code. The tariffs are not cost reflective and are highly subsidized from general local government revenue.

Source: ADB Introduction to Economic Regulation of Water Supply and Wastewater Utilities

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See INTRODUCTION TO ECONOMIC REGULATION OF WATER SUPPLY AND WASTEWATER UTILITIES which provides guidelines on the regulation of tariffs, levels of service, operational performance and customer services.

CHAPTER 3 DEVELOPING AND ADOPTING A LOCALIZED CUSTOMER SERVICE CODE

INTRODUCTION

After a Business Plan has been prepared by the WSP and proposed tariffs are determined, this is the time to present and discuss the draft Participatory Business Plan with the community and provide them an understanding of the service obligations of the WSP and the rights and responsibilities of the Claimholder .

The draft Business Plan is explained to the community which includes the assumptions behind the projections in the Plan and how it will impact on future water service delivery and the tariff that the community will pay. The WSP shall enable a free and well-informed discussion on the Plan. Part of the Plan is a statement of roles and responsibilities of the Claimholders and the WSP. These are presented and agreed with the Claimholder. After consensus is reached between the WSP and the community, the service obligations of the WSP and the rights and responsibilities of the Claimholder are summarized and translated into a Code. The draft code goes for approval of the Sanggunian and adopted as the social contract between the Claimholders and the WSP.

When adopted, the code shall be named as the Localized Customer Service Code for a particular LGU and will be the basis for all agreements between claimholders and other WSPs in the municipality.

Guiding Principle No. 2

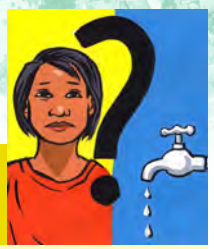
The WSP shall conduct its operations in accordance with agreed parameters of service delivery that were previously discussed and agreed by the WSP with the Claimholder and are contained in a Localized Customer Service Code.

A. PURPOSE AND CONTENTS OF THE CODE

The Localized Customer Service Code which was developed and institutionalized under MDGF1919 highlights the importance of joint responsibility of the WSP and claimholder/users to ensure the sustainability of the water supply service.

It was developed to:

- Guide Water Service Providers (WSPs) in operating and managing the water system;
- Define the rights and obligations of WSPs and rights and responsibilities of customers;
- Facilitate agreement on expected levels of service and tariffs; and
- Enable customers to have an active role in the operation and management of the water supply system.



SOMETHING TO PONDER

The Localized Customer Service Code (LCSC) is a social contract among water users residing in a particular barangay/community. Its primary purpose is to promote the realization of the right of water user/members to water and sanitation by addressing the normative content of the right to water and sanitation, and by emphasizing the human rights responsibilities of the barangay/community water users association.

As a Social Contract, the Localized Customer Service Code incorporates the human rights PANTHER principles in the processes by which it is formulated and developed. The features of the LCSC include the following:

- It incorporates the community's consensus arrived at through the active and meaningful involvement of water-user members themselves (participation);
- It represents the responsibilities and commitments water user members willingly undertake (accountability);
- It applies to all water -user members regardless of sex, age, political opinion or belief, disability, and other prohibited grounds of discrimination (non-discrimination);
- It is written in simple language clearly understood and used by water -user members and includes measures that prevent and address corruption (transparency);
- It respects the human rights of all, pays special attention to those most vulnerable especially those without access to water and sanitation, includes incentives and special assistance measures for those most vulnerable and the climate change (dignity);
- It is developed, written, owned and ratified by water-user members themselves and address power imbalances in water supply, provision and access (empowerment); and
- It provides for fair and effective redress/complaints mechanisms and conflict resolution (rule of law).

B. BENEFITS OF HAVING A LOCALIZED CUSTOMER SERVICE CODE

- Promotes better understanding of the roles, responsibilities and rules governing the operation of the water supply system at the community level;
- Helps institute systems and procedures to ensure efficient, effective and sustainable water service delivery;
- Prepares the WSP and the customers to upgrade their service levels from Level II (communal faucets; unmetered systems) to Level III (household level metered connections);
- Improves appreciation of the importance of water resource management; and
- Serves as a guide in the co-management of their water system.

MUST KNOW

The Code promotes the following principles of good governance in water:

- Equality and non-discrimination;
- Customer participation and empowerment;
- Integrity, accountability and transparency;
- Protection of human rights and dignity; and
- Justice under the rule of law.

C. DEVELOPMENT AND ADOPTION OF A LOCALIZED CUSTOMER SERVICE CODE

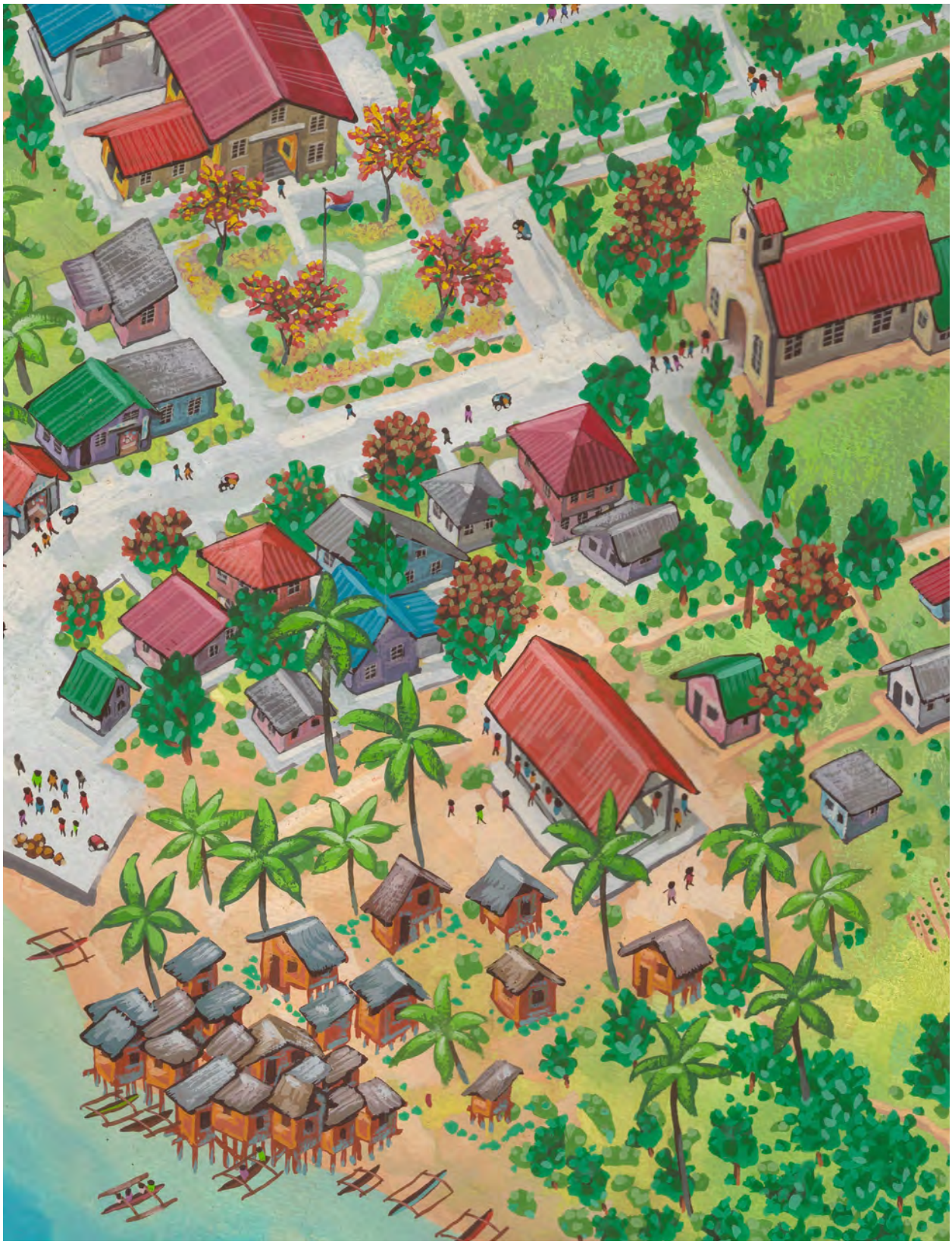
The draft Customer Service Code will be prepared together by the community and the WSP based on the guidelines for human rights-based LCSC code and will contain the following:

- Vision, Mission and Goals/Objectives
- Membership
- Service Delivery
- Remedies

It will be adjusted to suit the specific features and needs of the WSP, the community/user.

FURTHER READING:

- Guidelines for Human Rights Based Localized Customer Service Code, (Ma. Socorrro Diokno/ UNDP), Sept. 2011



PART 4

Move Forward! ENSURING WATER SUSTAINABILITY

INTRODUCTION

Definition and Scope

In Part 4, *"MOVE FORWARD! ENSURING WATER SUSTAINABILITY,"* the WSP and the LGU are constantly challenged by cross-cutting issues such as climate change and conflict in water use, financing (cost), lack of capacities, political control and other related issues. The presence and/or the lack of these factors affect sustainability and when they are not addressed immediately will jeopardize the continuity of water and sanitation provision. Sustainability of water utility operations and sustainability of water resources go together. They are interdependent of each other, such that when the sustainability of water utility operations is jeopardized, water availability is also compromised.

Sustainability in water management according to reports/studies published (one of them is the Bruntland Report, 1987) is about managing our water resources while taking into account the needs of present and future users. This is about ensuring that while we enjoy water services today, everyone has the obligation to participate in ensuring that those who come after us will continue to have water supply services.

The International Hydrological Programme, a UNESCO initiative, noted:

"It is recognized that water problems cannot be solved by quick technical solutions. Solutions to water problems require the consideration of cultural, educational, communication and scientific aspects. Given the increasing political recognition of the importance of water, it is in the area of sustainable freshwater management that a major contribution to avoid/solve water-related problems, including future conflicts, can be found."

Sustainability shall take into account the various sectors affecting water use, including political economic, social, technological and environmental considerations.

The current understanding of sustainable water management which is based upon the principles devised in Dublin during the International Conference on Water and the Environment (ICWE) in 1992, are:

1. Freshwater is a finite and valuable resource that is essential to sustain life, the environment and development.
2. The development and management of our water resources should be based on a participatory approach, involving users, planners and policy makers at all levels.
3. Women play a central role in the provision, management and safeguarding of water resources.
4. Water has an economic value and should therefore be seen as an economic good.

These principles reflect the importance of water in our daily lives and the need for proper communication, gender equity, and economic and policy incentives to manage the resource properly.
These principles reflect the importance of water in our daily lives and the need for proper communication, gender equity, and economic and policy incentives to manage the resource properly.

Human Rights Guiding Principles

The LGU at this stage in operationalizing the Human Rights-Based Local Water Governance Framework, shall focus on complying with the following obligations. Other core obligations shall continue to be relevant, except that in Part 4, the activities that shall be undertaken shall give more weight towards realizing the obligations enumerated below.

Progressive realization	Adopt and implement an integrated water resource management and water efficiency plans.
	Eliminate depletion of water resources due to unsustainable extraction, diversion, and damming.
	Conserve and rehabilitate natural resources.
Non-Discrimination	Protect access to traditional water sources in rural areas from unlawful enroachment and pollution.
	Provide resources to indigenous peoples to design, deliver and control their access to water resources on ancestral lands.
International assistance and cooperation	Extend and receive disaster relief amd humanitarian aid.
	Not use water as instrument of political and economic pressure.
	Include right to water in international agreements and trade arrangements.
Respect	Provide effective remedies for violations of right to water.
	Refrain from unlawfully diminishing or polluting water resources (waste disposal from state run enterprises).
	Not destroy or limit access to water services and infrastructure.
Protect	Adopt appropriate water pricing policies including flexible payment schemes and cross subsidies.
	Set and enforce water quality standards based on WHO guidelines.
	Control pollution of water resources (surveillance, disincentives or pollution penalties).
	Keep water prices affordable for all.

The LGU (Duty Bearer) and the Claimholder shall continue to be guided by the PANTHER principles in Part 4. The Duty Bearer shall ensure the full participation of the community and work with the community as partner in achieving water sustainability.

To guide the LGU, WSP and the community in realizing the above obligations, Part 4 is organized into the following sections:

Chapter 1: **Monitoring and Evaluation** - this chapter discusses the importance of monitoring and measuring the performance of the water utility and project implementation. It presents the human rights-based monitoring and evaluation guide for projects (which was one of the outputs under MDGF 1919) and industry practices in monitoring water utility performance through the use of key performance indicators.

Chapter 2: **Adoption of Sustainability Measures** - this chapter discusses the measures that promote sustainable water supply such as integrated water resources management and the implementation of a regulatory system. It presents the varying roles among other actors (WSPs), Duty Bearer and Claimholder in attaining water sustainability.

Roles and Responsibilities

- **LGU as Duty Bearer** - The LGU as the Duty Bearer shall take (as represented by the WatSan Council if already in place) on a regulatory role to be more effective in complying with the obligation to protect. In instances where the LGU is the WSP (in the city or municipality), there should be a separate and independent body that could come from the provincial government. (At present, there is no existing legislation yet that requires the creation of regulatory bodies nor defines clearly the roles of policy making, regulation and water service provision in the water sector at the local level.)

- **Community** - The claimholder as represented by existing Civil Society Organizations in the municipality or through newly formed Water Users' Associations and/or Claimholders' groups shall actively participate and work with the LGU and the WSP in their initiatives to promote water sustainability. The responsibilities of the Claimholder relating to water conservation and supporting the water utility with the timely payment of water bills gain more impetus during Part 4.

Target Outputs and Outcome:

At the end of Part 4, the following outcome and outputs are expected:

The LGU (Duty Bearer), WSP/s and the Claimholder are working as partners in attaining water sustainability through a water utility that is characterized by the following:

- It is functioning and being used;

- It is able to deliver an appropriate level of benefits (related to quality, quantity, convenience, comfort, continuity, affordability, efficiency, equity, reliability, health);

- It continues over a prolonged period of time (which goes beyond the life cycle of the equipment);
- Its management is institutionalized (goes beyond the key people involved now and will continue once those people are not involved);
- Its operation, maintenance, administrative and replacement costs are covered at local level (through user fees for example);
- It can be operated and maintained at the local level with limited but feasible external support (for technical assistance, training and monitoring); and
- It does not affect the environment negatively.

The WSPs, the LGU (duty bearer) and the Community work to achieve water sustainability as defined above and following the human rights-based local water governance framework.

CHAPTER 1 MONITORING AND EVALUATION (M&E)

Introduction

Monitoring and Evaluation as discussed in this Handbook shall cover the monitoring and evaluation of a (i) project, in this case following the MW4SP M & E system, (2) operations of the water utility to check the attainment of its goals that were set in the Business Plan and (3) Duty Bearer's compliance with its obligations arising from the right to water.

- Identify the rights holders and duty bearers who will contribute to the monitoring and evaluation system.
- Bring them together in a participatory process.
- Ensure access to available information and data on the time.
- Bring specific tools unique to this framework: ensure that monitoring is focused on efforts of duty bearers to comply with their obligations and rights holders to claim their rights and consider how these efforts are consolidated into outcomes.
- Adopt specific indicators and information embodied in a specific format: use human rights principles and standards as a guide to the selection of human rights through development. The selection of indicators and the actual monitoring should be participatory allowing stakeholders to assess progress.

In addition to the description of the M & E processes, this chapter looks at how monitoring and evaluation shall be carried out based on a human rights framework. The UN suggests the following guidelines to devise a human rights-based monitoring and evaluation system:

A. HUMAN RIGHTS BASED MONITORING AND EVALUATION OF A PROGRAM OR PROJECT

The Monitoring and Evaluation System of the Municipal Water Supply, Sewerage and Sanitation Sector Plans (MW4SP) aims to assist LGUs in the monitoring and evaluation of its performance in implementing the plan, ensure awareness on the factors affecting progress, and create remedies or corrective measures through practical, participatory and sustainable approach. An overview of the M & E System is presented below. The detailed M & E system is available in the Tubig Yaman Toolbox.

1. Bases for Setting-Up M&E Mechanism

Monitoring and evaluation is a critical component of the sector plan. When properly designed, managed, and given wide importance, M&E is perceived to build efforts of different players to robustly move interventions or projects identified in the plan.

Table 1.4.1: PANTHER Principles for Setting-Up M&E Mechanism

Principles	Concrete Actions Required / Standards
Participation	(i) All claimholders involved / represented / participating in all aspects and levels of M&E including the: (a) design of M&E; (b) project monitoring committees; (c) conduct of ocular visits; (d) problem solving sessions; and (e) report writing validation. (ii) All monitors trained on HRBA
Accountability	(i) Progress reported by duty bearers (ii) Reporting by claimholders
Non-discrimination	(i) Representation of different groups (claimholders, NGAs, NGOs, etc.) in monitoring committees (ii) Database on the profile of target and existing beliefs
Transparency	(i) Dissemination of reports, internet, LGRC, municipal buildings, etc. (ii) Problems solving sessions
Human Dignity	(i) Participation of beneficiaries in focus group discussion improves their self esteem and dignity
Empowerment	(i) Problems solving sessions
Rule of Law	(i) Problems solving sessions (ii) Compliance with existing laws, rules (iii) Referral to the Office of the Ombudsman)

Note: Details of HRBME provided in HRBA Toolkit (Human Rights Based M&E)

The M&E mechanism for the plan lays heavy emphasis on (i) results of the "Research Study on Existing M&E Mechanism and Requirements at the Local Level", which was conducted by the Department of Interior and Local Government (DILG) in 2010; and (ii) application of human rights based approach to M&E, which is advocated by the United Nations Development Programme (UNDP) to be an integral component of MW4SPs. An overview of the bases for setting-up of M&E mechanism for the MW4SP is presented below.

2. Human Rights Based Approach to M&E

The human rights-based approach to monitoring and evaluation for the MW4SP requires the involvement of the municipal government (Duty Bearer), representatives of beneficiaries (Claimholders) and other actors (e.g., NGOs, funding institutions, people's organization, etc.) in designing and implementing the M&E mechanism for the MW4SP. It also introduces the PANTHER principles in the design and implementation of the M&E mechanism as briefly described in the table below:

In order to build human rights based M&E (HRBME), the Human Rights Based Approach toolkit further suggests the seven strategies enumerated and briefly described below.

- **Establish the subject matter framework.** Setting-up of HRBME mechanism takes-off from ensuring clarity on what will be monitored / evaluated and why. These are discussed in the HRBA toolkits on (i) Human Rights Based Outcome and Goal Setting, and (ii) Human Rights Based Strategy Development. The former guides setting of outcome and goal on account of addressing the human rights violated referred to as "baseline data" or scenario without further interventions. The latter on the other hand provides emphasis on defining what should be done and put in place in order to achieve desired outcome and goal.

- **Establish the data framework**. This requires identification of the data / information needed and where these can be collected. These are clarified in the HRBA Toolkit Chapter on "Human Rights Based Targets and Indicators Setting".

- **Adopt an Approach.** Two options are introduced namely; (i) violations approach that looks at the current state of fulfilling human rights (e.g., right to water); and (ii) progressive approach that looks at the state of fulfilling human rights as interventions progress in relation to past status.

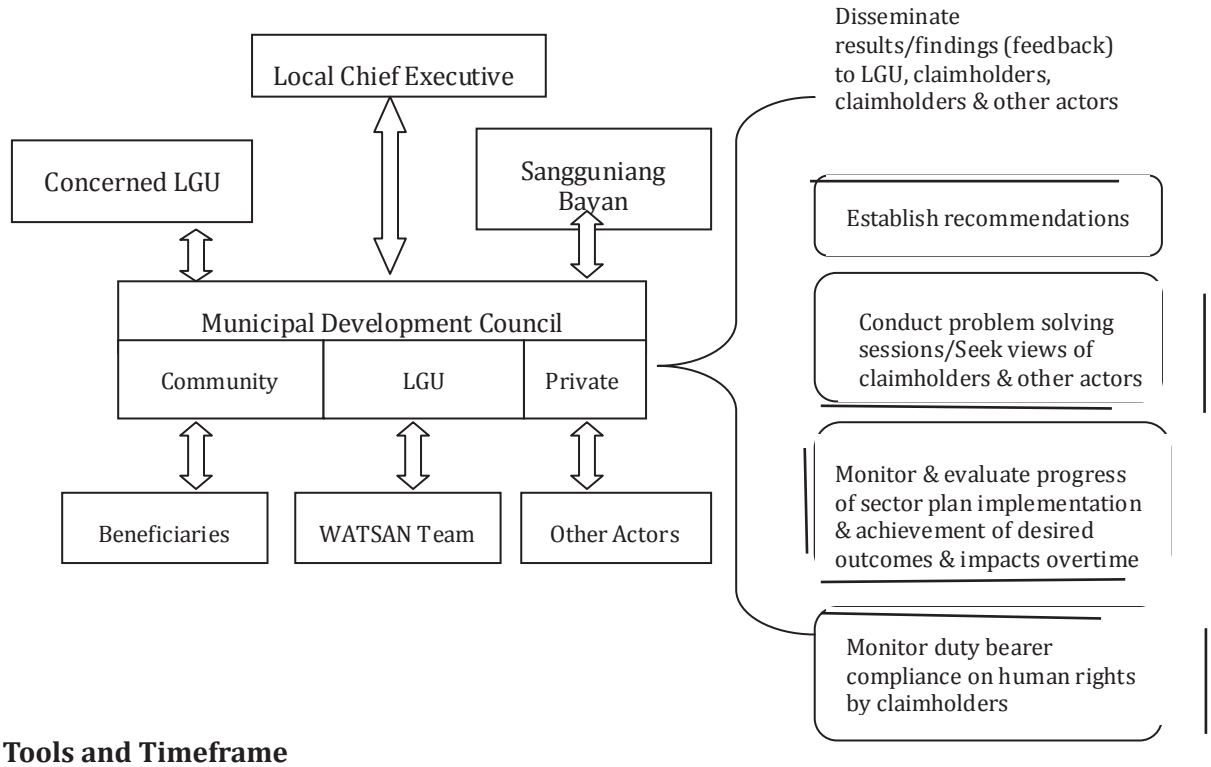
- **Ensure that approach is participatory, transparent and empowering.** This requires identification of who should be involved in M&E; defining mechanism to ensue active participation of claimholders, duty bearers and other actors; and making M&E process transparent.

- **Define M&E tools** (e.g., interview, FGD, data capture forms, progress reports, databank, others).

- **Set the timeframe for M&E**. This determines the need to institutionalize the frequency and specific period for the M&E process such as data collection; processing, interpretation, analysis and reporting shall be done.

- **Define how findings should be used and by whom**. This requires clarity on the feedback mechanism flow and strategies aimed at maximizing the roles or contribution of decision makers to steer the direction of WatSan projects towards desired results (outcomes and impacts).

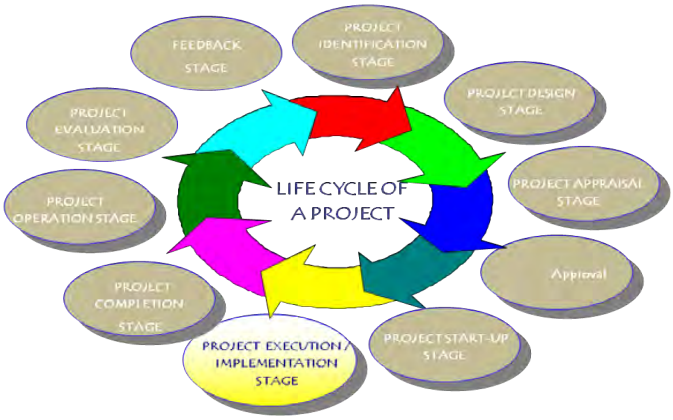
Figure 1.4.1: HRBME Collaboration Involving Duty Bearer, Claimholder and Other Actors



3. Tools and Timeframe

The MDC shall employ various tools with prescribed timeframe to perform data gathering and reporting to (i) higher authorities in the LGU e.g., local chief executive; and Sanggunian Bayan; (ii) Funding Authorities in case they availed of fund support to realize projects; (iii) Provincial LGU; (iv) DILG Regional Office (going to DILG Central Office); (v) stakeholders (claimholders) and (vi) others. The M&E tools shall cover the implementation of the sector plan in moving various projects / interventions in the context of Project Cycle Management (PCM). The stages of the PCM are shown in Figure 15. For this MW4SP, M&E actions for projects shall proceed after establishing the feasibility in the project development of design.

Figure 4.2: Project Lifecycle



B. HUMAN RIGHTS BASED MONITORING AND EVALUATION OF UTILITY PERFORMANCE

The Duty Bearer has the prime responsibility to carry out an M & E through the WSP to ascertain primarily whether the operation of the water utility has resulted in the realization of the right to water. From a human rights-based perspective, the M & E of a water utility performance is aimed at the following:

- Establish whether the WSP has acted in accordance with the Localized Customer Service Code and in what areas it has succeeded and failed to comply.
- Assess to what extent the normative contents of the right to water such as availability accessibility, affordability and water quality have been achieved.
- Identify whether any vulnerable individual or groups have been discriminated in the provision of water.
- Assess overall performance of the water utility in relation to achieving water sustainability.

1. Who will monitor and evaluate?

The WSP shall monitor and evaluate its performance periodically to assess if there are needed improvements or weaknesses in operations that should be addressed. Ideally, there should be an external body that shall undertake the monitoring and evaluation of the WSP's performance – this could be the independent regulator that is appointed by the government or a third party appointed by the regulatory body other than the LGU to assess how well the LGU as duty bearer complied with its obligations on the right to water.

In the absence of a regulator in the LGU, the monitoring and evaluation role can be undertaken by the WatSan Council or the WSP can self-regulate. To carry out monitoring and evaluation of the water utility performance, the WSP can make use of more commonly adopted performance indicators and/or use financial and operating reports to assess its performance.

2. M & E Mechanisms

Internal Monitoring Unit - The WSP can establish an internal monitoring unit within the water utility. This could be the internal audit division or a unit within the corporate planning or management services division whose basic function is to monitor the performance of the utility through periodic management reports such as monthly financial statements, operations report (production and sales reports) and others.

In small water utilities, the establishment of a separate monitoring unit is not practical and hence the periodic review and assessment is seldom undertaken. What the WSP can do instead is to have the

Board monitor the performance of the water utility through the submission of monthly financial and operating reports.

Additionally, the WatSan Council shall request periodic management reports from the WSP to include but shall not be limited to basic financial statements and an operations report highlighting key financial technical and commercial results. These reports shall be published by the LGU for public information.

External Party Evaluation - An external party evaluation of the water utility is carried out for specific purposes such as the overall assessment of how effective is the adoption of a human rights based local governance framework in the LGU. Other external party evaluation could be for the conduct of a statutory audit or review by an external auditor or any third party other than the WSP.

Regulatory Review - A regulatory review is undertaken periodically by an appointed regulator. In the case of an LGU WSP, it can opt to be regulated by the NWRB or it can self-regulate. The Regulator could be the WatSan Council or another body that is established within the provincial government. The Regulator shall monitor and review the financial, technical, commercial aspects of operations and the overall compliance with the good governance framework.

3. Key Performance Indicators and Benchmarking

The use of Key Performance Indicators (KPIs) is suggested to make monitoring and evaluation simple and more focused. The KPIs that are preselected/agreed with the community and are contained in the Localized Customer Service Code shall be the basis for assessing the performance of the WSP by the User/Claimholder, the Regulator and the LGU (as policy maker).

a. What are KPIs?

They are quantitative measures of a particular aspect of a water service provider's performance and are linked to standards or target regime. There are KPIs for each key result area (KRA) such as technical, customer service, and financial.

There are many KPIs that are currently used in the sector. However, only a few of these indicators relate directly to the normative content of the right to water. Most of these KPIs measure the efficiency and effectiveness of water utility operations which by and large are by themselves, indicators of efficiency and sustainability - factors that contribute to the realization of the right to water.

b. Commonly Used KPIs

Following are a few selected KPIs that may be used in monitoring the performance of a water utility and measure performance across different water utilities in the municipality:

Table 1.4.2: Key Performance Indicators

1.	Water Supply coverage (%)	[(number of HC x persons per HC) + number of PT x persons per PT)] x 100 / [total population in service area]
2.	Per capita consumption (1/c/d)	[total annual domestic consumption (m3) x 1,000/365] / [number of people served]
3.	Production / population (m3/d/c)	[annual production volume (m3) / 365] / [number of people served]
4.	Unaccounted-fot water (%)	[total annual revenue from tariff (Php)] / [total annual consumption (m3)] x 100/[total annual (m3)]
5.	Average tariff (Php/m3)	[total annual revenue from tariff (Php)] / [total annual consumption (m3)]
6.	Unit production cost (Php/ m3)	[annual O&M cost (Php)] / [total annual production (m3)]
7.	Operating Ratio	[annual O&M cost (Php)] / [annual revenue (Php)]
8.	Revenue collection effeciency (%)	[total annual collections (Php) / total annual billings (Php)] x 100
9.	Cost of water for domestic use (10,20,30 and 50 m3 per month)	use the corresponding tariff structure provided for each water utility.
10.	Staff/1,000 connections ratio	[number of utility staff] / [number of utility connections / 1,000]
11.	Accounts Receivable	[total accounts receivable (Php) / total anual billing (Php) x 12

c. H-Based KPIs

KPIs 1, 2, and 5 can be used as indicators of realization of the normative contents of the right to water, while the rest (3,4, and 6 to 11) measure operational efficiency and financial performance. These KPIs (1, 2 and 5) are expanded and adjusted to allow the assessment of how well the normative content of the right to water is achieved.

Indicator of Coverage of Most Vulnerable Sectors

1	Water Supply coverage (%)	[(number of HC x persons per HC) + (number of PT x persons per PT)] x 100/ [total population in service area]

This indicator measures coverage in the service and makes no distinction between most vulnerable and non-vulnerable groups. It could be expanded to distinguish coverage of the most vulnerable groups provided there are available information on these groups in the LGU. See revised formula below:

1	Water Supply coverage (%) of vulnerable sectors	[(number of HC (in most vulnerable sectors) x persons per HC) + (number of PT x persons per PT (in most vulnerable sectors)] x 100/ [total population (most vulnerable sectors) in service area]

Indicator of Water Availability

2	Per capita consumption (l/c/d)	[total annual domestic consumption (m3) x 1,000/365] / [number of people served]

The per capita consumption shall indicate whether the normative content of availability is being met as follows:

- 20 liters of water per person per day for Level 1 service
- 40 liters of water per person per day for Level 2 service
- 80 liters of water per person per day for Level 3 service

Indicator of Affordability

5	Average tariff (Php/m3)	[total annual revenue from tariff (Php)] / [total annual consumption (m3)]

The average tariff when multiplied by the average consumption shall be compared against the five percent of the disposable income of a household living in poverty. If the monthly bill is within the five percent limitation, then it is assumed that the affordability aspect of the right to water is met.

d. Benchmarking

Benchmarking constitutes the search for best practice within a class, and therefore, employs a relative, rather than an objective, assessment technique. This means that the performance of a utility is compared with those of other participating utilities and not to any objective norm, such as national or international standards. Performance of utilities can also be assessed based on their progress over time where current performance is compared against historical results.

Performance can also be compared with the industry average published by LWUA for water districts, which in 2002 comprised over 80 local water districts, ranging from small to very large. Other tools are available to assist utility performance analysis, for example, the ADB Evaluation Criteria using a scoring framework rather than a ranking and comparison of utilities.

Benchmarking within the LGU

Within each LGU, where there are more than two WSPs , benchmarking of performance among the different WSPs will be useful in ensuring that each WSP complies with service obligations and performance targets. The LGU is informed which WSPs are performing well and are compliant with service obligations and which WSPs are not. On the other hand, the WSPs are pressured to perform well when their performance is reported to the public and compared against each other

Database set up and management

Aside from monitoring performance, benchmarking enables the maintenance of key water utility data that are useful for the LGU in planning. The LGU can start its own benchmarking and data base set up with a few participating water utilities within the municipality. The more critical information that the LGU shall establish is the data on the number and types of existing WSPs in the municipality which could be obtained already during the conduct of the baseline survey. If the LGU has not yet conducted a baseline survey, it could require the registration of all WSPs within its jurisdiction. To encourage registration of all WSPs, the LGU can explore offering incentives to the WSPs or other means. Initial information that should be established:

- Name of WSP, Address, Date Established/ Incorporated
- Contact Name and Address
- Level of System, No. of Service Connections
- Water Tariff Schedule

The benchmarking of WSPs has been started by the NWRB and there are existing systems and processes on how to implement a benchmarking system.

Refer to Philippines Small Water Utilities Data Book – World Bank/ WSP

C. ATTAINING SUSTAINABILITY IN OPERATIONS

The task of ensuring sustainability as discussed earlier is not something done at a certain point in the operation and management of a water utility. It is a continuing process that is integrated in the routine operations of the utility. To highlight the steps and processes that are suggested to be undertaken by the WSP, ensuring sustainability is discussed as a separate section here.

1. Implement Performance Improvement

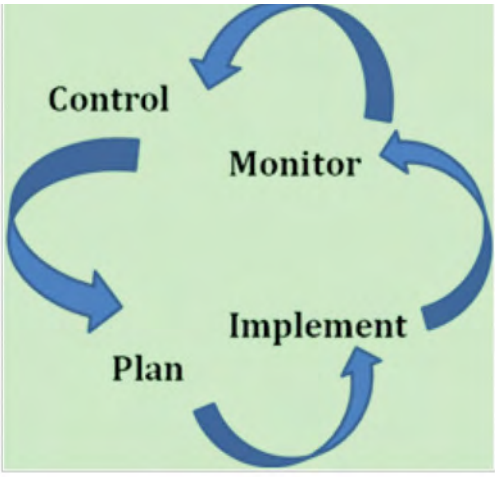
Ensuring sustainability is part of a cycle of planning, implementation, monitoring, evaluation and then controlling. When the WSP has undertaken the monitoring and evaluation phase, it shall be able to identify the strengths and weaknesses of the water utility. It is assumed that the monitoring and evaluation part is undertaken the month following the end of each fiscal year. Following the results of the evaluation phase, the next step for the WSP is to prepare an Annual Corporate Plan. Part of the Corporate Plan is a Performance Improvement Action Plan (PIAP) that indicates the concrete steps to be undertaken to improve performance and the supporting budget to implement the plan.

The basis for evaluation whether targets have been achieved is the Business Plan that was adopted earlier by the WSP. The Business Plan becomes a rolling plan as adjustments are made to address the current issues/concerns faced by the water utility.

2. Monitor, Evaluate and Control

The WSP shall, on a periodic basis monitor the performance of the water utility and evaluate its performance against that targets that were set. The use of Key Performance Indicators "KPIs" will be useful in highlighting important aspects of operations.

The results can be compared or benchmarked against the utility's previous performance or against established industry averages. After analyzing the results, the WSP shall target to improve its performance.



CHAPTER 2 ADOPTION OF SUSTAINABILITY MEASURES

INTRODUCTION

The task of achieving sustainable water supply requires concerted and collaborative efforts in the local level among the different LGUs and the national government. An LGU (as Duty Bearer) together with the Claimholder shall plan, develop and operate its water resources following an integrated approach to water resources management.

MUST KNOW

It was agreed that water is a finite and economic commodity taking into account affordability and equity criteria in the Dublin Statement and in order to emphasize on its scarcity:

1. *Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.*
2. *Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.*
3. *Women play a central part in the provision, management and safeguarding of water.*
4. *Water has an economic value in all its competing uses and should be recognized as an economic good, taking into account of affordability and equity criteria.*

A. ADOPTING AN INTEGRATED WATER RESOURCES MANAGEMENT APPROACH

1. What is Integrated Water Resources Management (IWRM)?

Historically, managing water resources has always been done in a fragmented and uncoordinated manner. And the results often brought costly social conflicts and irreparable damage to the ecosystem where the natural cycle of water flows within certain hydro-geological boundaries.

So often, people also heard stories of conflict between users in the upstream and downstream parts of a body of water. Actual cases of conflict likewise happened between those who use water for food production through irrigation and those who use it for domestic use.

Moreover, many government water supply systems in the past focused only on the supply side, failing to foresee how those wastewaters will be treated and managed. In fact, this situation is one of the reasons why the Philippines lagged behind in Asia, with the country's population having one of the lowest access in the region to sewage treatment facility.

But things have changed.

Ever since experts on water resources management around the world met in Dublin, Ireland, in 1992 for the International Conference on Water and the Environment (ICWE), various measures were initiated to manage water resources in a more holistic and integrated way.

This “new way” is called Integrated Water Resources Management (IWRM) which has been defined by the Technical Committee of the Global Water Partnership (GWP) as "a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems." Operationally, IWRM approaches involve applying knowledge from various disciplines as well as the insights from diverse stakeholders to devise and implement efficient, equitable and sustainable solutions to water and development problems. As such, IWRM is a comprehensive, participatory planning and implementation tool for managing and developing water resources in a way that balances social and economic needs, and that ensures the protection of ecosystems for future generations. Water’s many different uses—for agriculture, for healthy ecosystems, for people and livelihoods—demands coordinated action. An IWRM approach is an open, flexible process, bringing together decision-makers across the various sectors that impact water resources, and bringing all stakeholders to the table to set policy and make sound, balanced decisions in response to specific water challenges faced.

IWRM is a systematic, collaborative and multi-stakeholder process, which promotes the coordinated development and management of water, land and related resources within hydro geological boundaries, in order to maximize the resultant economic and social welfare in an equitable manner and without compromising the sustainability of vital ecosystems. It links water and water-related policy, objectives, and uses to improve planning and decision making in the operation and management of natural resources and environmental systems and in the design and implementation of relevant policies.

The principal components of an IWRM system are:

- River basin/watershed approach to water resources management, including integration of land water resources, upstream and downstream, groundwater, surface water and coastal resources.
- Supply optimization, including assessments of surface and groundwater supplies, water balances, wastewater reuse, and environment impacts of distribution and use options.
- Demand management, including cost-recovery policies, water use efficiency technologies, and decentralized water management authority.
- Equitable access to water resources through participatory and transparent management, including support for effective water users association, involvement of marginalized groups and consideration of gender issues.
- Improved policy, regulatory and institutional frameworks, such as market-based regulatory mechanisms.
- Intersectoral approach to decision-making, combining authority with responsibility and accountability for managing water resources.

2. The Philippines IWRM Plan Framework

The Philippines IWRM Plan Framework is a directional plan. It is intended to guide the different stakeholders involved in water resources management, at different levels, to either prepare their respective IWRM plans, update/enhance their existing IWRM related plans or make IWRM an integral part of their development plan/s.

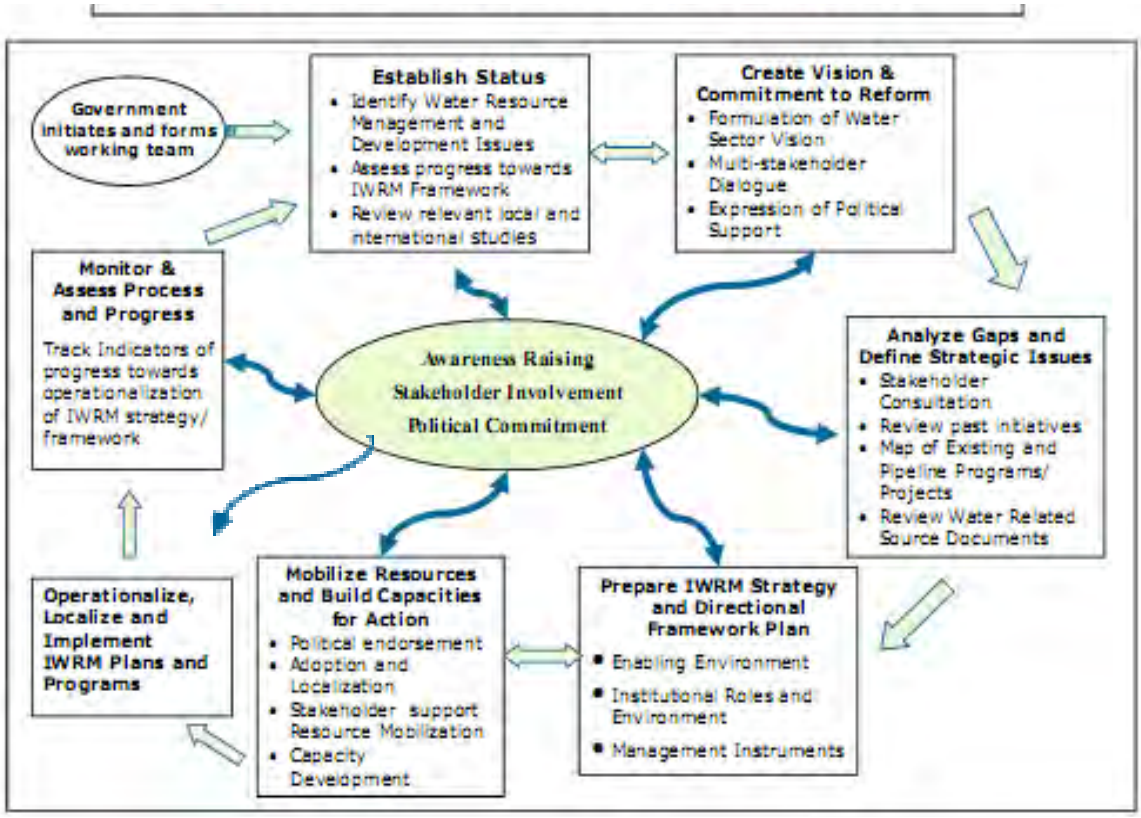
It provides a clear roadmap and a collaborative platform for all stakeholders and water-related agencies to effectively work together to achieve water for all in a sustainable, equitable and ecologically balanced manner.

This directional plan framework also seeks to enable and encourage a wider adoption and localization of IWRM, across different stakeholders, at different levels. It will guide water-related government agencies and other stakeholders in ensuring that water and IWRM are mainstreamed and integrated in their respective plans, and projects. It will likewise be the take-off in the preparation of regional and local IWRM Operational and Action Plans.

The IWRM Plan Framework has the following distinctive features:

- A Broader focus: It looks at water in relation to other dimensions needed to achieve larger development goals and meet strategic water related challenges
- Dynamic and adaptive: It provides a framework for a continuing and adaptive process of strategic, integrated and coordinated action in all levels.
- Integrated and holistic: All the different uses of water are considered together. Water allocation and management decisions consider the interrelationships and effects of these various uses. They are not viewed purely from a sectoral or project focus.
- Multi stakeholder engagement and involvement in all stages and key processes: Includes government agencies, non government organizations, private/ business sector, academe and civil society organizations working in the areas of health, environment, energy, finance, agriculture and education; tourism and disaster management.

Figure 1.4.2: IWRM Implementation in the Philippines



2. Supporting and Adopting Philippine Integrated Water Resources Management Plan

The LGU (as Duty Bearer) and the community in their planning for the water sector shall consider the following goals under an integrated approach to water resources management. These goals and objectives shall form the bases of the local water and sanitation plan.

- Effective Protection and Regulation for Water Security and Ecosystem Health by:
  - (i) Ensuring Rational, Efficient and Ecologically Sustainable Allocation of Water
  - (ii) Enhancing Effectiveness in Groundwater Management and Aquifer Pro tection
  - (iii) Achieving Clean and Healthy Water
  - (iv) Managing and Mitigating Risks from Water Related Disasters and Climate Change

- Sustainable Water Resources and Responsive Services for Present and Future Needs by:
  - (i) Promoting Water Conservation/Stewardship and Improving Water Use Efficiency
  - (ii) Expanding Access and Ensuring Availability of Affordable and Responsive Water Supply and Sanitation Services

- Improved Effectiveness, Accountability, and Synergy among Water Related Institutions and Stakeholders by:
  - (i) Promoting Participatory Water Governance and Supportive Enabling Environment
  - (ii) Strengthening Knowledge Management and Building Capacity for IWRM

- Adaptive and Proactive Response to Emerging /Future Challenges by:
  - (i) Exploring Innovative Pathways: Water Sensitive Design and Water Rights Trading

B. ENSURING WATER SECURITY

1. Water Security

Water security involves protection of vulnerable water systems, protection against water related hazards such as floods and droughts, sustainable development of water resources and safeguarding access to water functions and services.

It is primarily concerned with human interventions in water systems. These are aimed at the enhancement of the beneficial and sustainable use of water for various purposes such as water supply, irrigation, drainage, navigation, hydropower, environmental purposes and the protection against water related risks such as floods and droughts.

Interventions in water systems are necessary to meet the rights of people and the needs of society in the widest sense and in order to be able to face the challenges of all kinds of global changes (e.g. climate change, land use change, etc.).

Research at UNESCO-IHE deals with surface and groundwater systems; river basins, coastal and estuarine water systems and ports and waterways and includes the following main aspects:

- Analysis and understanding of hydrological, hydraulic, geotechnical and morphological processes and phenomena;

- Planning and design of engineering interventions at regional/trans-boundary and local scales;
- Management, operation and maintenance of water related infrastructure; and
- Environmental assessment and mitigation of impacts due to water use and interventions in water systems.

2. Mitigating Measures

While the national government agencies are squabbling over questions of who does what first in addressing climate change, municipalities and provincial governments must commit themselves to efforts to limit emissions of greenhouse gases. This may be distinguished by actions in at least three areas:

- The development and implementation of targets for limiting greenhouse emissions;
- The adoption of policies to promote clean energy — generally defined as energy efficiency and use of fuels with little adverse effect on climate and air quality; and
- The adoption of coordinated strategies for climate and air quality protection.

The national government and the DENR have successfully instituted reforms in this field such as the approval and passing into law of the Clean Air Act (RA 8749). What remains to be done is the faithful implementation of the provisions of this law.

Implementing Water Safety Plans

A Water Safety Plan (WSP) is a holistic, systematic, and integrated management approach used to identify and prioritize potential threats to water quality at each step in a specific system's water supply chain—from catchment to consumer—and implement best practices to mitigate those threats and ensure drinking water quality.

WSPs are a key component of the framework for safe drinking water described in the World Health Organization's Water Safety Plan Manual: Step-by-step risk management for drinking water suppliers

WSP Objectives and Benefits

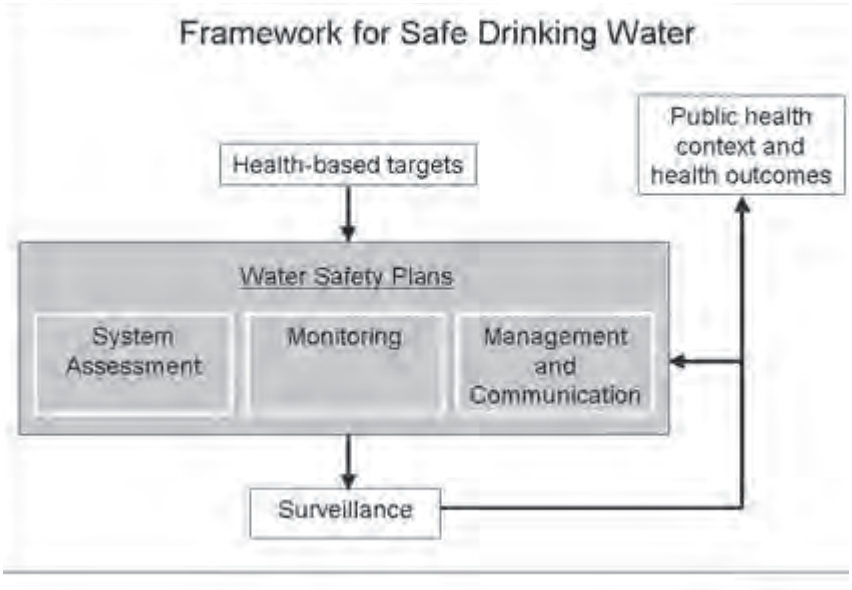
A WSP aims to help drinking water providers and other stakeholders improve water quality and consistently meet established health-based targets by:

- Controlling the contamination of source waters through managing activities in the watershed;
- Optimizing the removal or inactivation of contaminants during treatment; and
- Preventing recontamination during distribution, storage and handling.

The WSP approach to ensuring a safe water supply is flexible and serves to:

- Identify opportunities for low-cost improvements to operations and management practicea that can enhance water safety;
- Improve efficiency and reduce expenses;
- Improve stakeholders' understanding of the complete water supply chain and its vulnerabilities;

Figure 1.4.3: WSP Framework



- Improve communication and collaboration between key stakeholder groups, such as water providers, claimholders, regulatory authorities and commercial, environmental and health sectors; and

- Help substantiate and prioritize capital improvement needs and helping leverage financial support.

KNOW MORE

Related Links World Health Organization

- Water Safety Portal - How to develop and implement a Water Safety Plan
- Water Safety Plan Manual: Step-by-step risk management for drinking-water suppliers (Also available in Spanish)
- Guidelines to Drinking Water Quality (4th edition) – Chapter 4

Growing Worldwide Application of wsps

Communities in almost every region of the world have implemented WSPs, including Africa, the Americas, Southeast Asia, Europe, and the Western Pacific.

C. CASES ON IWRM IMPLEMENTATION IN THE PHILIPPINES

1. Case No. 1: Implementing IWRM in Bohol

The opportunity to implement IWRM in Bohol came as a unique experience because the impetus came no less than from the local chief executive of the provincial government of Bohol, Governor Erico Aumentado. Although the initial seed of the knowledge of IWRM through a training-workshop was planted among the small group of members of the TWG of the DILG-GTZ (German Technical Cooperation) Water in Bohol, it was Gov. Aumentado who was instrumental in making things happen.

On July 23, 2007, Gov. Aumentado signed Executive Order No. 10, Series of 2007 creating the Bohol IWRM Board. Engr. Maurito Lim, a media practitioner, was appointed as the Board's Co-Chairperson and Presiding Officer.

Through the technical assistance and logistical support from the DILG-GTZ Water, various stakeholders of the water and environmental sector of Bohol attended an IWRM strategic planning workshop. Forty participants from the IWRM Board and the TWGs representing the academe, local government agencies, provincial government of Bohol, and the private sector produced vision and mission statements and corresponding strategies for the IWRM Board as outlined in Executive Order No. 10.

"Water Vision 2020," the vision statement of Bohol IWRM strategic plan, is written as: "...safe and sustainable water responsibly managed for the welfare and benefit of the community, economy and environment of Bohol."

The participating stakeholders of the IWRM planning process in Bohol identified four strategic themes to realize their vision statement:

1. Protection, Enhancement and Restoration of Land and Water Resources through Effective Watershed Management.

2. Expanding Access and Ensuring Availability of Affordable and Responsive Water Supply and Sanitation Services.

3. Establishing Knowledge-based Information System on Surface and Groundwater Quantity and Quality for Effective Water Resource Planning, Allocation, and Protection.

4. Promoting Effective Water Governance and Supportive Policy and Regulatory Environment.

The Bohol IWRM Board, through its TWGs and with secretariat support from the Bohol Environment Management Office (BEMO), uses the IWRM plan as the main reference for its activities.

To this day, Bohol IWRM Board is one of the very few institutions in the country which is implementing IWRM.

2. Case No. 2: Implementing IWRM in Ilog-Hilabangan River Basin in Negros Island

Perhaps one of the biggest challenges for DILG-GTZ Water as a catalyst in implementing IWRM in Negros Island, composed of Negros Oriental and Negros Occidental, is the enormous task of bringing all the key stakeholders of both provinces to address the common problems they face in the Ilog-Hilabangan River Basin. This basin area is the eleventh largest in the country with an area of 362,000 hectares covering the municipalities of Kabankalan, Ilog, Cauayan, Candoni, and Himamaylan for Negros Occidental; and the municipalities of Bayawan, Tanjay, Bais City, Mabinay, Bindoy, Ayungon, Tayasan, and Jimalalud in Negros Oriental.

The Ilog-Hilabangan River Basin is also facing a host of environmental problems that include forest denudation, saltwater intrusion, river pollution, water scarcity, high prevalence of water-borne and environment-related diseases, fish kill occurrences, eutrophication of major rivers and lakes, water use conflict, and many other problems. Additionally, previous efforts to address these problems were done in an uncoordinated manner due to administrative limitations caused by the political juridical boundaries that divide Negros Island into two provinces. Things got underway slowly. Starting in the latter part of November 2007, a series of coordination meetings, inter-province cross-visits and training of TWGs from both provinces were facilitated and supported by the DILG-GTZ Water.

Finally, after eight months, the two governors and vice governors of Negros Island—Negros Oriental Gov. Macias II and Vice Gov. Jose Baldado, and Negros Occidental Gov. Isidro Zayco and Vice Gov. Emilio Yulo III—agreed to sign on June 26, 2008 in Bacolod City the Memorandum of Agreement (MOA) that created the Negros Island IWRM Council. The main objective of the MOA was for the stakeholders to protect, rehabilitate, and develop water, land and related resources that affect the Ilog-Hilabangan River Basin, and to establish enabling mechanisms and institutional support to realize such objectives.

With the concurrence of both Governors, the Negros Island IWRM Council elected Silliman University President Dr. Ben Malayang III as the Chairperson of the Council. The Council then tasked a TWG composed of 12 representatives of stakeholders from each province to draft an Island-wide IWRM strategic plan. This activity was facilitated and supported by the DILG-GTZ Water. The resulting vision statement was stated as: "Negros Island where the shared water, land and related resources are adequately protected, rehabilitated, and sustainably developed for the benefit and welfare of all Negrenses."

The plan outlined the following six strategic objectives to achieve its mission statement:

1. Watershed Management - To conserve, rehabilitate, protect, and develop land and water resources, ecosystems and biodiversity through sustainable watershed management.

2. Water Supply and Sanitation - To ensure availability of safe, sustainable, affordable, responsive and equitably distributed water supply and sanitation services and facilities.

3. Water Quality - To ensure that quality of surface and drinking water is safe and acceptable based on national regulatory standards to protect the ecosystem and human health.

4. Water Resource Policy and Governance, Regulation and Advocacy - To establish effective management instruments and enabling policy environment for effective water resource governance.

The Negros Island IWRM Council unanimously approved its strategic plan on December 16, 2009. Since the organization is relatively at its infant stage, it is worth the effort to study and identify lessons learned since it is one of the few cases where IWRM principles were applied and an institution was organized based on hydrogeological boundary, the Ilog-Hilabangan River Basin shared by two provinces of Negros Island.

3. Synthesis: Lessons Learned in Implementing IWRM in Bohol and Negros Island

After around four years of initiating and advocating IWRM in the provinces of Bohol and Negros Island, many valuable lessons have been gathered. They are enumerated here in the perspective of Capacity WORKS, a management model developed by the German Agency for Technical Cooperation (GTZ).

Strategy

Implementing IWRM involves coordination and engagement of many stakeholders in a river basin area. What is required in here is the institutional support that can provide technical and management advisory services in building a cohesive IWRM organization and facilitating the drafting of IWRM strategic plan. GTZ, in partnership with DILG, played this role when IWRM was implemented in the provinces of Bohol and Negros Island.If the DILG-GTZ intervention will be replicated in other bas areas in the country, similar elements may be employed. The content of IWRM strategic plan itself covers the usual vision and mission statements as well as strategic objectives and specific action plans. Depending on the priorities and peculiar characteristics of the river basin, strategic objectives of IWRM plan may cover aspects of (i) watershed or the “water tank” of water resources, (ii) water supply distribution, (iii) sanitation and wastewater treatment, (iv) drinking and surface water quality monitoring, (v) knowledge management on water resources, (vi) water resource governance and regulation, and special concern on (vii) climate change adaptation and mitigation measures.

Cooperation

One of the most effective ways to engage the cooperation of the key stakeholders is through management of an effective learning process and continuing dialogue. This approach should be tempered with periodic presentations of clear and present environmental problems that they face.

Workshops have been an effective means to let stakeholders define their own solution and action plan to

address such problems. This could be a crucial element to sustain the implementation of IWRM even when external support is already out of the picture. In this regard, the DILG-GTZ Water invested a lot on training, exposure trips, and learning sessions with the stakeholders.

Steering Structure

Implementing the IWRM needs local partners to help steer the building up of a cohesive IWRM organization and facilitating the drafting of IWRM strategic plan. In the case of Bohol, the DILG-GTZ Water engaged BEMO as its partner. In Negros Oriental, initially it was the Provincial Planning and Development Office (PPDO), then the Environment and Natural Resources Division (ENRD) of Negros Oriental. For Negros Occidental, it was the Provincial Environment Management Office (PEMO).

Implementing IWRM at the local level also needs local "champions." This person or persons will drive activities and set the momentum going. There is no question that the Governors and Vice Governors of these provinces played very significant roles in implementing IWRM in their provinces. It is also interesting to learn that some of these effective champions do not hold high official positions, but they are technical personnel whose dedication and energy influence and drive other people to get things done. They are the unsung heroes of this project. Some of these personnel are Ms Judith Alpuerto of Negros Oriental PPDO, Mr. Jun Monterola of Negros Occidental PEMO, and Ms Tata Ganub of BEMO.

The quality of leadership defines the character of any organization. So far, the most active, dynamic and sustainable IWRM organization that the DILG-GTZ Water had helped organize is the Bohol IWRM Board, presided by Engr. Lim as a private sector representative. Notably, Negros Oriental has the superior legal basis for its IWRM organization since it was founded on a local law or ordinance. The local law was crafted by some of the best legal and environmental minds of the province. If IWRM implementation were to be replicated at the provincial level, the Negros Oriental IWRM ordinance may be a good model with which to start.

Processes

During the preparation to draft the strategic plan of Negros Oriental, particularly in the preparation of the draft vision and mission statements, and strategic objectives, GTZ engaged only a small TWG in three different workshops. This made the work easier, less stressful, and more productive.

Postscript

The initiation of IWRM in Negros Oriental and Bohol marked a groundbreaking chapter in localizing the Philippine IWRM Plan Framework. A number of observers thought that it would be very difficult to bring diverse stakeholders in the local water sector together considering that they have natural conflicting interests. And making them agree on a common path toward managing their common water resource in a sustainable manner would be even more difficult. But the collaborative and painstaking efforts of stakeholders themselves made all things possible. The DILG-GTZ Water partnership played a major role as catalyst in the change process—providing education, coaching support, funding, and even personal friendship and guidance to the stakeholders. Perhaps the only way to validate the efficacy of this role as catalyst in this whole exercise is when it finally detaches itself totally from the IWRM organizations that it helped organize and from the strategic IWRM plans that it helped to facilitate. But the contribution of the local leaders and technical personnel of these three provinces that helped build these organizations can never be overestimated. They were the ones who made these organizations run and their plans work.

Source: Bernardo R. Agawin, Jr. "DILG-GTZ as Catalyst: Water Resource Management in Bohol and Negros Island," Closer to the People: GTZ, the Local Government Code, and 18 years in Water and Sanitation. German Agency for Technical Cooperation, GTZ Water and Sanitation , Quezon City, Philippines 2010.

Section

Tools and Mechanisms for Enabling Access to Water Services through Human Rights Based Local WatSan Governance

CHAPTER 1 COLLABORATIVE PARTNERSHIPS

A. Principles and Concepts

The partnership between the local government unit (LGU), water service provider (WSP) and community in setting up and sustaining a water and sanitation system creates enduring public value, and is likewise essential for human rights principles (PANTHER) that promote good governance. Broadly defined, public value refers to the generation of widespread and lasting benefits at reasonable cost, tapping at the same time the people's deepest interest in, as well as desire for, a better community, society and country.

Partnerships established among entities from the public, for-profit and non-profit sectors have demonstrated that they can generate public value and lead to practical benefits that improve water and sanitation service delivery, decrease the costs for their services, increase citizen participation and utilization of current programs, engender citizen support and compliance with pertinent laws, and likewise lead to overall Claimholder satisfaction.

Benefits are ultimately realized when the roles of the partners are clarified, and their respective responsibilities regarding the ownership, management and administration of water resources are likewise understood and exercised. Among these responsibilities are inter-sector dialogue and collaboration, Claimholder participation and conflict resolution, water rights and permits, role of women in water management, water quantity and quality standards, need to address bureaucratic obstacles and corruption if necessary, price regulation and subsidies, including tax incentives and credits.

Partnerships among different sectors enable water and sanitation services to become increasingly accessible, available, adequate, acceptable and affordable to its users. In particular, partnerships that function effectively make it possible not only for the community as a whole to enjoy these services, but also for the most vulnerable groups in society like women, children, indigenous peoples, persons with disabilities, and internally displaced persons to be properly identified and served as well.

Through their collaboration, partners can likewise identify the priority areas where scarce resources can be deployed. These are usually in communities where there is no communal system that can provide adequate and safe supply of water; there is a high incidence of children affected by diseases brought about by deficient and contaminated water supply and unsanitary conditions; there are insufficient numbers of sanitary toilets and functional drainage systems in relation to households; there is no effective and safe system for collecting and disposing of garbage; there is no safe and adequate supply of water in schoolhouses, barangay health clinics, and no public or communal structures serving children and women; there is no access to sustainable water sources; and where there is not enough number of households that can maintain a water system as well as protect the water source in a cost-effective manner.

In the water and sanitation sector, partnerships are fast becoming the preferred form of governance

by many entities because they depart from the perceived failures and limitations of traditional forms of service delivery where the public sector does everything by itself, outsourcing where rigid contractual relationships that often curtail desired outcomes exist between government and particular service providers.

In a partnership, diverse entities come together to leverage their respective and unique resources and ideas to address common and compelling challenges and constraints that can redound to the benefit of all. Here, each entity realizes that it cannot act alone and must collaborate with others to find better ways to solve complex problems, disseminate information, improve service delivery, and even build local capacity.

By their very nature, partnerships are collaborative in nature and can be viewed as a set of multipartite arrangements for responding to public problems such as the absence or lack of affordable and safe water and sanitation. Collaboration means to "co-labor" in order to achieve common goals, share risks, often working across one's organizational boundaries in multi-sector and multi-actor settings on the bases of mutual trust, mutuality and reciprocity.

Collaboration that brings about meaningful partnerships goes beyond cooperation and even coordination. Cooperation is less formal, short term, has little risk, and merely involves the sharing of information. On the other hand, coordination refers to the orchestration of people toward a particular goal, implying at the same time more formal and longer-term interaction, as well as increased risk and prospect of mutual rewards. For its part, collaboration suggests working together or in close partnership through a new structure, shared resources, a set of clearly defined relationships and open lines of communication.

B. Realizing Collaborative Partnerships

For a partnership to succeed, however, it is necessary to manage and constantly assess five elements of collaboration, namely, the (1) initial conditions, (2) processes and mechanisms, (3) governance structure, (4) common constraints, (5) outcomes in making the partnership work.

1) Initial conditions - Partnerships will be formed faster if there are brokers and convenors present who share a general agreement on what the problem is at the outset, and such agreement is also validated and maintained throughout the entire partnership. Brokers and convenors facilitate collaboration by calling attention to an important public problem and according it legitimacy to a set of stakeholders.

The Mayor and leaders of different stakeholder groups, whether formal or informal, are the best examples of brokers and convenors that can call attention and compel action to address the right of people to water.

2) Processes and mechanisms - Partnerships must aspire to develop leadership, build legitimacy and trust, manage conflict, and learn to plan effectively.

Sponsors and champions in particular are required at many levels of the partnership to provide leadership in terms of formal and informal authority. Sponsors are individuals who lend their considerable authority, access to resources, prestige and influence to the partnership even if they are not closely involved in the day-to-day activities. Champions are directly involved in the partnership and must use "process skills" to attain its goals. Process skills involve communication and interpersonal skills, even the exercise of facilitative and integrative abilities, which enables dialogue, mutual understanding, and varying agreements among prospective and current partners to take place.

Sponsors include the Mayor, the leaders of the community and other national government agencies and funding organizations that provide the vision and resources, while champions are their respective members and representatives who attend regularly to the tasks and implementing details of the partnership.

In order to build the legitimacy of the partnership, the members of the partnership must be able to attract internal and external support and resources, should be recognizable to insiders and outsiders, and build trust among members to communicate freely.

Likewise, to build trust, the partnership should engage in trust building by sharing information, knowledge, demonstrating its competencies and good intentions, and follow-through on its avowed commitments and intentions.

6 Elements of Collaboration

1. Initial conditions
2. Processes and Mechanisms
3. Governance Structure
4. Constraints
5. Outcomes

Legitimacy and trust are gradually built and strengthened when there is a straightforward participatory process put in place for WatSan services.

6-Point Steps in Realizing Effective Partnerships

This process usually starts from:

⇨ **First** Communities rally for support in improving their water supply

⇨ **Second** Support agencies like the WSP and LGU take the lead in mobilizing and organizing the community to work with them in reviewing the situation in the sector

⇨ **Third** A participatory baseline survey is conducted during which a situation analysis is done with the communities to assess demand; consumption patterns and desired service level; a perception of benefits of an improved water supply system that includes factors like distance, comfort and health gains; culture, beliefs and habits of different user groups regarding water supply, sanitation and hygiene; housing distribution; income and willingness to pay;

potential technical options that match users' preferences, ability to pay, management capacity; capacity and willingness to pay for capital costs, contributions in kind and regular fees; and need to integrate sanitation, hygiene and wastewater management.

⇨ **Fourth** An assessment of operations support capacity is undertaken, during which an investigation is made among local, municipal and district public bodies, private bodies and individuals and NGOs in order to assess their current and potential role in supporting the management, operation and maintenance of water supply schemes. Here, the support agencies will subsequently need to define a division of responsibilities together with the main stakeholders involved, especially the LGU. Moreover, the involvement of the private sector will be promoted for design and construction purposes, as well as for maintenance, repairs, supply of spare parts, water quality monitoring, and so on.

⇨ **Fifth** An analysis of results with the communities happens during which the agency that implements the overall program makes a preliminary overview of the results of the participatory baseline survey. The results are then discussed with the communities and concerned LGUs with an emphasis on all implications and long-term commitments of various technical options. Communities need enough time to consider the various options and implications, and may soon have to be organized into a formal group; and

⇨ **Sixth** There is a formal agreement between the community, local authorities and support agency once the community has made an informed choice on the desired water supply system, location and sites; it has formally decided to contribute to the capital costs; and has also formed a group.

Conflict is inevitable and to manage it the partnership must also use its resources and apply tactics to equalize or spread power equally among its members.

Meanwhile, to plan effectively, the partnership must learn how to combine deliberate and emergent planning; make use of stakeholder analysis; emphasize responsiveness to stakeholders in its socio-economic, technical and financial assessments; and employ a process to build trust. Planning must therefore emphasize both processes and outcomes. It must include participation, accountability and local ownership by all participants of the development process.

3) Governance structure - The effectiveness of the partnership is likewise determined by the extent to which its governance structure is influenced by changes of membership and complexity of local environments. The type of governance structure is likewise important, including the presence of formal and informal governing mechanisms. A governance structure can actually be of three types: self-governing, lead organization, and network administrative organization.

4) Constraints- Constraints are common and to be expected in any partnership so much so that resources and tactics such as strategic planning and scenario development, for instance, must be built in to address power imbalances and similar shocks that happen when changes in the larger environment affect the members of the partnership but are not within their control. These may include the change in policies and depletion of funds.

5) Outcomes - (also called Purpose) change in institutional or individual behavior); what outputs expected Partnerships create public value but then the respective interests of the individuals and organizations must also be identified and even built on, while ways are found to compensate for each organization's weaknesses.

Outputs and outcomes must be determined beforehand and are quite necessary to measure the success of a partnership. Outputs refer to the number, reach and frequency of the partnership's different activities and interventions, while outcomes refer to the specific and desired results that are generated as a consequence of these activities.

B. CASES ON COLLABORATIVE PARTNERSHIPS

Case No. 1: Public - Public Partnerships in the Water Sector
By Violeta Corral

The concept of a public–public partnership (PuP) was developed in the context of the aggressive promotion of international financial institutions (IFIs) like the Asian Development Bank and World Bank of public–private partnerships (PPPs) in water service delivery. Public-Public Partnerships (PUPs) are new partnerships developed between public water operators, communities, trade unions and other key groups, without profit motive and on a basis of equality. In addition, PUPs are also being created when well-performing public utilities are matched or 'twinned' with those that are not-so-well performing to share expertise on a not-for-profit basis in order to improve the standard of the lesser performing utility. This kind of partnership is sometimes called 'Water Operators Partnership' (WOP). The partners may come from within the same country – 'local PUPs' - or from other countries - 'international PUPs'. PuPs are most effective when all partners have an understanding of each other's goals and are willing to work together to reach their shared goals. In all these partnerships, the aim is to address common causes of public service failure and secure affordable clean water for all.

For practical purposes, PuPs can be categorized according to:

- partnerships between two public authorities;
- partnerships between public authorities and communities;
- development partnerships;
- international associations - the partnership's objectives.

PuPs can be used to achieve the following objectives:

- They can lead to *improved services* because they are a way of restructuring the public sector, which helps to overcome some of the current limitations of the public sector.

- They may lead to greater efficiency, improved access to services or more equitable treatment
- PuPS can be used to *build capacity* in public agencies and the skills of a workforce. There is evidence that the process of capacity-building, which involves different groups or parts of the public sector, is often the most successful in drawing together groups to learn.

Possible activities under public-public partnerships include:

- Reforming (and democratizing) decision making and planning
- Institutional and human capacity building (including training of managers and workers to boost capacity and public sector ethos: including integrity, equity, clarity, accountability, transparency, openness, cooperation, and evaluation)
- Managerial consulting, training and capacity building
- Administrative support (including working conditions, salaries, benefits, and supervision of any outside contracting)
- Financial planning, social tariff setting (differential for domestic, industrial, commercial, institutional, and agricultural uses), billing, and customer service and collection & assistance in locating available finance
- Maintenance (including repair and replacement of equipment)
- Leakage control and other sustainability measures
- Advice and other assistance in operational infrastructure and/or project design assistance in service delivery
- Construction - Operation - Expansion of coverage
- Financial assistance in obtaining finance for investment/expansion needs.

The Philippine Case

A labor-management PUP is gradually being developed in the Philippines. The Alliance of Government Workers in the Water Sector (AGWWAS) and Philippine Association of Water Districts (PAWD) have recently agreed to collaborate in joint benchmarking and performance improvement planning activities. Initial technical assistance shall be provided by a not-for-profit multi-disciplinary team that includes PSIRU-Asia and a local state university. Of the more than 500 water districts all over the Philippines, less than 200 have been assessed for their utilities' performance. A necessary first step is to enhance the capacities of both utility managers and workers in benchmarking water utilities. Developing in-house capacities for performance improvement planning ensures that the utility workforce becomes a more effective actor in ensuring safe, affordable and efficient water for all.

NOTE: This document was prepared under the auspices of the Philippine Water Supply Sector Roadmap, jointly chaired by the National Economic and Development Authority and the National Water Resources Board and supported by GTZ. This document has been analysed by members of the Philippines Water Dialogues with their commentary incorporated.

Case No. 2
San Carlos City, Negros Occidental: Funds for the Future (San Carlos City's Water Levy)

An example of a case involving collaboration can be found in San Carlos City, Negros Occidental where a private landowner lent his unproductive land to the city government for its watershed management project in order to rehabilitate water sources through reforestation. Landowner Judito Salvador has been convincing other landowners to lend their lands for the project because they can get financial and technical assistance from experts who develop them into productive areas that can also provide more income to the farmers. Thus was born in April 2005 the San Carlos Watershed Management Project, a 15-year partnership of the city government with the San Carlos Development Board, a non-profit development foundation designated by the local government unit as project manager. The project is unique because it is totally funded from the water levy that is collected from water Claimholders. Proceeds of the water levy go to a watershed development and environmental protection fund.

Here are 10 lessons learned from the collaborative experience of the LGU, San Carlos Development Board, stakeholders and other participants that can be used by other existing as well as future partnerships in the water and sanitation sector:

- Having a strong political will and the LGU's openness to new ideas and team orientation.
- Availability of quality water services before asking the people for other fees (i.e. environmental fees).
- Sustainable source of funds to implement the project (not necessarily a water levy).
- An independent, competent, committed, and experienced multi-sector organization to implement the various phases of the program, and to work in partnership with the LGU.
- Don't decide from the top. Consult a wide range of people. Get their reactions on what you are inclined to do. Be firm with what's good, even unpopular, for the good of the majority and show results.
- Transparency in dealing with the communities that is necessary to gain their trust and cooperation.
- Good knowledge of the community to be organized for the project—its history, issues, demographics, geography, political leadership, orientation, attitude, and capacities related to the project.
- Cooperation of the different national government agencies by involving them in regular consultation meetings, and communicating the project to the decision-makers of these agencies.
- Having very few women involved in the project is a critical gap. Community projects/ grassroots projects should always have strong gender components.
- Involve the community in all phases of the project. Evaluate and learn lessons from the project. Keep a good documentation of project implementation, including processes.

(pp. 171-173 IN: Innovations in Local Governance: Stories in the Ten Galing Pook Awardees for 2007, Quezon City. Galing Pook Foundation (2009)

CHAPTER 2 COMMUNITY PARTICIPATION

A. PRINCIPLES, CONCEPTS AND PRACTICES

Participation is an essential component of successful and lasting development. It contributes to equity by involving persons living in poverty and other groups in planning and implementation. Participatory decision-making, together with the rule of law, democracy, and transparent and accountable governance and administration in all sectors of society is an important requirement for the effectiveness of development policies. –UN, Participatory Approach to Development.

1. What is Participation?

According to the FAO Informal Working Group on Participatory Approaches and Methods (IWG) participation in development is:

… a process of equitable and active involvement of all stakeholders in the formulation of development policies and strategies and in the analysis, planning and implementation, monitoring and evaluation of development activities. To allow for a more equitable development process, disadvantaged stakeholders need to be empowered to increase their level of knowledge, influence and control over their own livelihoods, including development initiatives affecting them (FAO, 2007).

Water is a right in which everyone is a Claimholder. Participation in this aspect is strengthened in the decision-making process in which all claimholders must be involved. Participation is also realized when democratically elected officials in the accountable agencies represent the different stakeholder groups.

A participatory approach is fundamental for achieving lasting consensus and agreement. Participation involves taking responsibility, recognizing the effect of sectoral actions on other water users and allows the sustainable development of the resource. Local governments are key to making participation possible. This involves the creation of mechanisms for stakeholder consultations. However, participatory approaches must be particularly focused among women and other marginalized social groups.

Participatory Approach to Development means realizing the potential of people by engaging and providing them capacities and capabilities necessary to address their issues. It implies the empowerment of people and enabling them to participate actively in their own development. In order to realize their potentials, people especially those who are disadvantaged and vulnerable must be given the opportunity to participate actively in establishing and maintaining independent organizations representing their interests.

HELPFUL HINTS

A simple definition of a community is that it is a group of people living in the same locality under the same government. However, the people residing in a community are not homogenous; instead they are distinguished by gender, class, age, ethnicity, and the like. In promoting Community Participation, it is vital to include the different opinions of each community member. It is the active community members who serve as the key to building an empowered community.

Participation is a critical factor to the success of any development intervention entering the lives of each community member. International funding agencies which promote empowerment program interventions illustrate that high rates of participation apply for and receive more funding than communities with less participation. In addition, communities with active members attain a greater sense of ownership of the project outcomes and impart greater citizen satisfaction with their community.

2. Typologies of Participation

While the ultimate goal in community participation is always full participation, many factors contribute and determine participation and it is a reality that the community can be anywhere between various levels of participation. A UNESCAP Report (Case Studies on Community Participation), defines various levels of participation in Table 2.1: Types of Participation and Its Components & Characteristics.

According to the same UNESCAP document, there are two arguments over the typologies of participation.

- Efficiency argument which envisages the use of participation instrumentally, to achieve better project outcomes or greater sustainability in rural development terms, for instance by mobilizing Claimholders' contributions through their involvement in implementation, or by increasing project acceptance, local ownership and sustainability.

- Equity and empowerment argument - regards participation as a process that empowers persons living in poverty and strengthens their capacity to take independent collective action in order to improve their own situation (and can, in some cases, even lead to changes in the distribution of power, as successful collective action and the associated increase in awareness and self-confidence lead persons living poverty to claim a larger share of power and resources in the rural community).

While the latter type is the "target" participation, the efficiency argument is valid and will still be useful in the different stages of local water governance. Some people argue that some claimholder involvement is usually better than none, and that instrumental forms of participation may, over time, lead to more comprehensive and more empowering participation.

Table 2.1.1: Types of Participation and its Components and Characteristics

Type of Participation	Some Components and Characteristics
1 Passive Participation	People are told what is going to happen or has already happened. Top down, information shared belongs only to external professionals.
2 Participation in information giving	People answer questions posed by extractive researchers, using surveys etc. People not able to influence the research.
3 Participation by consultation	People are consulted and external agents listen to their views. Usually externally defined problems and solutions. People not really involved in decision making. Participation as consultation.
4 Participation by material Incentives	Provision of resources, e.g. labor. Little incentive to participate after the incentives end, for example much farm research, some community forestry.
5 Functional Participation	Groups are formed to meet predetermined objectives. Usually done after major project decisions are made, therefore initially dependent on outsiders but may become self dependent and enabling.
6 Participation as organization	Interactive participation from joint analysis to joint actions. Possible use of new local institutions or strengthening existing ones. Enabling and empowering so people have a stake in maintaining structures or practices.
7 Self-Mobilization	Already empowered, take decisions independently of external institutions. May or may not challenge existing inequitable distributions of wealth and power. Participation as empowering.

Source: Pimbert and Pretty, 1994.

Scope and Applications of Participation

- Participation in projects - In the project cycle, the diagnosis of situations and problems, leading to project identification and formulation, is a field where the current trend is towards the use of various participatory approaches. Participatory approaches are applied in project planning and design. Other stages of the project cycle where participation is used include project planning and design decisions, project implementation, monitoring and evaluation.

- Participation at the macro level to influence policy - Participatory poverty assessments (PPAs) are designed to influence policy at the macro level, particularly in relation to development and poverty reduction strategies (Norton et al., 2001).

- Participation at the intermediate level - Between the micro and the macro level, a number of exercises in participation at an intermediate or meso level have also been carried out. These include participatory budgeting in local governments and various forms of territory-based rural development, among which the LEADER programs of the European Union are notable.

3. What Does an Active Community Look Like?

An active community shares several characteristics which include:

- People are involved in the activities of the community. (I.e. assemblies, celebrations, labor, and so on). The activities are not solely performed by the Sangguniang Bayan, Council of Elders, etc. but the duty is shared by everyone.

- There is decentralization of power and responsibility. There are many centers of activity promoting active community action participated by each member regardless of age, gender, ethnicity, and the like.

- Active communities have well-informed members about the community's work and the different opportunities for personal involvement in meaningful roles.

- Each member's idea and opinion is treated with respect and welcomed as potential value to the entire community. An active community promotes the well-being of the mass.

- An active community includes members who are impartial to the different groups and types of personalities who offer themselves to community involvement. They do not discriminate according to color, age, gender, ethnicity, religion, disability, and the like.

- Active communities do not passively wait for groups to present themselves with opportunities for development. They do not wait for someone to provide them with answers or solutions, it is they themselves who realize the problems and issues they need to settle and encourage all members for their participation in addressing the situation.

- Active communities are not controlled; they make decisions together by discussing issues together. The leadership is used to facilitate the discussion of diverse viewpoints rather than pushing their own agendas. Leaders are motivated by an open decision-making process.

In communities, the creation of valuable roles for each person to play and the creation of supporting opportunities build on active citizen participation. Strengthened community participation leads to higher rates of success for development interventions, better results for resource management, and higher levels of security in the community.

One similar element is the role people play in the community. Most especially in decision-making processes, it is vital that the Claimholders discuss the issues among themselves and come up with a consensus. For each member of the community is impacted differently from the other. Community decisions affect each member differently. The box below shows descriptions of four community members and their different views on their common problem. The four characters are listed as i) Women, ii) Youth, iii) Katutubo, and iv) Older persons. They describe their personal experiences on the lack of access to safe water and highlighted in red font below of each box is the affected area of their being.

Figure 2.1.1: Stories on Lack of Access to Safe Water and Sanitation

What To Consider:

- Residents, across socio economic groups;
- Persons with disabilities;
- Indigenous people (Aeta, Mangyan, Manobo, Maranao, etc.),
- Genders, especially women;
- People from the uplands, lowlands, coastal, swamps, grasslands; and
- Individuals whose houses are located at the head, middle, and tail end portion of the water system.

Taking into consideration how each member is affected is one aspect of strengthening community participation. In this way, the members see their importance in the community and they experience a sense of belongingness and they are therefore motivated into beings with ownership for their resources. Communities who have chosen to engage themselves are found to derive more satisfaction from their involvement; more so, interventions achieve more positive results rapidly, and provide greater benefit to the community as a whole.

4. Guidelines for Strengthening Community Participation

Following are ways on how to strengthen and encourage community participation:

- The community must conduct Open Meetings, Planning and Assemblies. The community must have a venue where they can update each on the status of their projects, issues encountered in the community, brainstorm on how to address the problems. Each sector and organization must be represented in the assemblies.

- Community Assemblies are advertised properly and meetings are scheduled during periods where women are most available to participate.

- Obtain public input, collective decision-making in matters that affect the community. Consultations are meant to gather the public's opinion and are not venues for dissemination of prearranged decisions or plans.

- The members of the community must be familiar with their Vision, Mission, and Goals (VMGs).

- Promote a community activity that can be participated in by everyone. For example, community feasts wherein everyone can bring their share of food, etc.

- Create a community map.

Transitioning into a community with active and involved members is not an easy transformation. It calls for leaders to be more inclusive rather than exclusive. It is not about personal gain or power rather it is a means to build a place where members are accountable for their own community.

B. HUMAN RIGHTS BASED COMMUNITY PARTICIPATION

Participation is a key human right principle that promotes good governance and under the Human Rights-Based Local WatSan Governance Framework, the goal is full community or Claimholder participation wherein the ladder of participation is classified as self mobilization - where people have achieved empowerment.

Realities will differ between areas or municipalities such that participation in one community could begin consultation until it progresses to full participation. The role of the LGU as Duty Bearer is to create an enabling environment until full participation of the community is achieved.

1. Enabling Community Participation under the HRB Local WatSan Governance Framework

In the process of operationalizing the Human Rights Based Local WatSan Governance Framework, it is anticipated that community participation will go through the following levels until full participation is achieved as shown in the table below. This is on the assumption that there are no organized community groups yet in the area/municipality and it is incumbent on the LGU to start the process of community organizing as was earlier discussed in Part 1, Chapter 2.

Table 2.1.2: Participation Under the HRB Local WatSan

1 Passive Participation	The community is informed by the LGU that there will be a baseline survey to be conducted to assess the situation of water and sanitation in the area/municipality.
2 Participation in information giving	The community participates as respondents in the baseline survey that will be conducted by the LGU.
3 Participation by consultation	FGDs, community meetings are conducted to inform them on the results of the survey and the status of the water and sanitation condition in the area. They are then consulted on proposed action
4 Participation by material Incentives	This happens when the community is engaged to participate in undertaking to provide equity in the project such as cash for work, and others..
5 Functional Participation	The LGU leads the creation of consumer groups or users' groups and/or requests representatives to sit in the WATSAN Council
6 Participation as organization	The established CSOs, users' groups work with the LGU as partners in the development of plans for the water sector.
7 Self-mobilization	The existing CSOs, users' groups are empowered and initiate actions without influence of the LGU.

Community participation is useful and necessary especially during the operation phase and in ensuring sustainability of water operations. When there is community participation and support for the activities of the water utility, there is a sense of ownership in the activities of the water utility.

There are tried and effective ways to enable full community participation in various stages of realizing the right to water. Many of the practices discussed below already embody human rights principles for good governance.

2) Forms of Participation - Participation shall be realized through the following:

a) Participation through water users' or consumers' group where the most vulnerable sectors of the community are represented. This is in addition to representatives who will sit in the WatSan Council. The users' or consumers' group shall be an active partner of the Duty Bearer (LGU) and the WSPs in the realization of the right to water. The LGU shall enable the setting up of these groups and their participation in the WatSan Council.

It is envisaged that the community group shall participate in the following:

- Development of local water and sanitation plan;
- Development and preparation of a localized customer service code;
- Providing timely feedback on the performance of the water utility;
- Development of the strategic plan for the water utility;
- Actively participating in and supporting the programs and projects of the water utility specifically those that are concerned with water conservation, protection of water sources and implementation of water safety plans; and
- Carrying out their responsibilities with regard to payment of water bills on time.

b) Participation of the community at large in planning and development activities as:

- Respondents in socio-economic surveys and other studies conducted under a feasibility study.
- Respondents in consumer satisfaction surveys that target improving a water service provision.

CHAPTER 3
COMMUNICATION/SOCIAL MARKETING

Water and sanitation service users and providers can apply communication as well as behavior change principles in establishing and sustaining a water and sanitation system in order to promote the right to water and sanitation. These principles can be used to increase the awareness, participation and involvement of the community as Claimholders, and enable at the same time resource providers like the Local Government Unit (LGU) and Water Service Providers (WSP) to create more consensual and consultative decision-making processes to promote transparency and accountability.

A. PRINCIPLES AND CONCEPTS

What is Communication?

Communication is the process of exchanging ideas and sharing meanings through dialogue. It is the process of creating commonness between persons, where the greater the area of common understanding, the more effective the communication is.

As a process, communication has no beginning and no ending. It has elements that are continually changing, dynamic, and interactive. These elements include the participants themselves who are engaged in the dialogue and their response, the message or the content of the dialogue and the means through which the messages are exchanged. Communication between participants goes on and on until mutual understanding of the message or the needed action happens.

Four Principles in Communication

There are at least four principles that are important in understanding the role of communication, and of eventually acquiring the skills to formulate, execute and evaluate communication strategies and plans to attain development goals related to affordable and safe water and sanitation.
The principles are:

1. **Identifying your participants.** In communicating, it is necessary at the outset to understand and discover the value of establishing and maintaining excellent working relationships

A SIDE STORY

Barangay San Vicente says, "Let's keep on talking!"

"Water is a natural resource. Everyone has the right to water," Manong Junior said. Discussion was starting to heat up one Sunday morning during a small gathering at the Barangay San Vicente hall . Two days ago, they started to find out among users the best way to collect water consumption fee.

"Yes, I agree with you, Pareng Junior. We all have the right to water. But you know…," Manang Ely said, her voice trailing off as Manang Isabel cut in.

"Kaya nga, Ely, that is why water should be free," Manang Isabel said.

"If water is free, can we make sure we can take responsibility if something goes wrong? For example, if our water source dries up; or if we get sick from the water we drink; or the pipes break down," Kagawad Johnny asked.

"What can we do?" others asked. Reactions were varied but all wanted to know what could be done. The entire barangay had waited a long time for a water system to get to the area while suffering from frequent diarrhea outbreaks and other diseases.

"What will happen if we pay for the water we consume? What do we get in return?" Manong Junior wanted to know.

"Siguro, we can discuss this with our families and relatives. Let us keep the discussion going and note down the

benefits and disadvantages," Manang Isabel proposed.

After one month of discussion and dialogue, water service users came to a unanimous decision: Let's pay for the water we use.

"It is really simple," explained Manong Junior who echoed the sentiments of all those who were against the payment of water fees. "By paying a fee, we feel we own the water service. We have a new right – the right to watch over it and make sure we sustain the service with the fee we pay."

"Pero, there are still a few pasaway," Manang Isabel sighed.
"Okey lang, as long as we continue to talk about it," Manang Ely said.

"As long as we talk, we can solve our problems!" Manang Isabel said. It has become the barangay's unofficial motto.

And thus Barangay San Vicente continues to talk, argue, explain, agree, and talk some more, be it on water services, children's education or health. Indeed, communication is a process. And it never ends.

with a wide variety of stakeholders inside as well as outside government, particularly the private sector and civil society organizations. To this end, it is also quite necessary to identify and target a particular group of participants that you need to communicate with in order to meet your current set of objectives. Participant/s refer to an individual, group, organization or even a sector. In the course of time, it is important to get to know and understand your target participants very well, especially their aspirations, needs and preferences, priorities and mindsets, resources and capacity to use those resources, including their limitations and constraints.

2. **Crafting key messages.** It is likewise necessary to develop the skills to craft messages for your target participants as well as for different participants, following the maxim that messages must always have to be clear, consistent and compelling. From experience, it is not always enough for target participants to simply know what the message is about. It is just as important too that they believe in it, and even act to support it. To this end, messages must also come across as meaningful, believable and distinctive.

3. **Choosing a media platform to communicate.** A media platform is the specific mix of media vehicles as well as types that will be used in order for the sender to communicate the message to the target participants. Media vehicles are generic and can refer to print, radio, television, Internet, and so on. On the other hand, media types are quite specific and refer to the actual newspapers, radio stations, and television channels and programs through which the intended message will be communicated.

As a rule, most Filipinos still prefer communication to be conducted face-to-face, or in a personal manner. However, there are now as many as six media vehicles that Filipinos generally patronize and derive their news and information from. These are television, radio, Internet, interpersonal communication, mobile telephone, and print.

4. **Determining your sender.** It is necessary at this point to determine the sender of the message or who the source of the information will be now that the participants have been targeted, messages have already been crafted, and a media platform has likewise been chosen. Sources of information, however, must learn to be accessible, dependable and credible to the general public.

C. WHAT IS COMMUNICATION DEVELOPMENT?

1. Framework for Communication Planning: Communication for Development

Communication for Development or C4D is a process of communication where the community and project participants dialogue with implementers on the best way to implement and conduct development initiatives. C4D moves beyond the traditional approach of looking into people's awareness, knowledge, and attitude. Instead, it focuses on practice, examines people's behavior, and finds ways towards change because problems are always rooted in or associated with what people do and what they fail to do.

C4D uses a participatory approach with children, families, communities, and networks in identifying and addressing problems. It involves the conscious and active participation of the people at every stage of the development process, thus leading to change in attitudes and behavior.

Three key strategies in C4D:

1. **Behavior Change Communication (BCC)** - Uses social marketing (selling of ideas to influence social behaviors) and participatory communication, to help inform, influence and support households, community groups and opinion leaders for the adoption and sustained practice of desired behaviors.

2. **Social Mobilization** - Engages and motivates civic society (NGOs, community and faith-based organizations/networks, etc.) around a common cause, to facilitate learning and provide support to communities and families.

3. **Advocacy -** Helps develop mechanisms to ensure that the perspectives, concerns and voices of children, women and men from marginalized groups are reflected in upstream policy dialogue and decision making.

2. The Behavior Change Framework

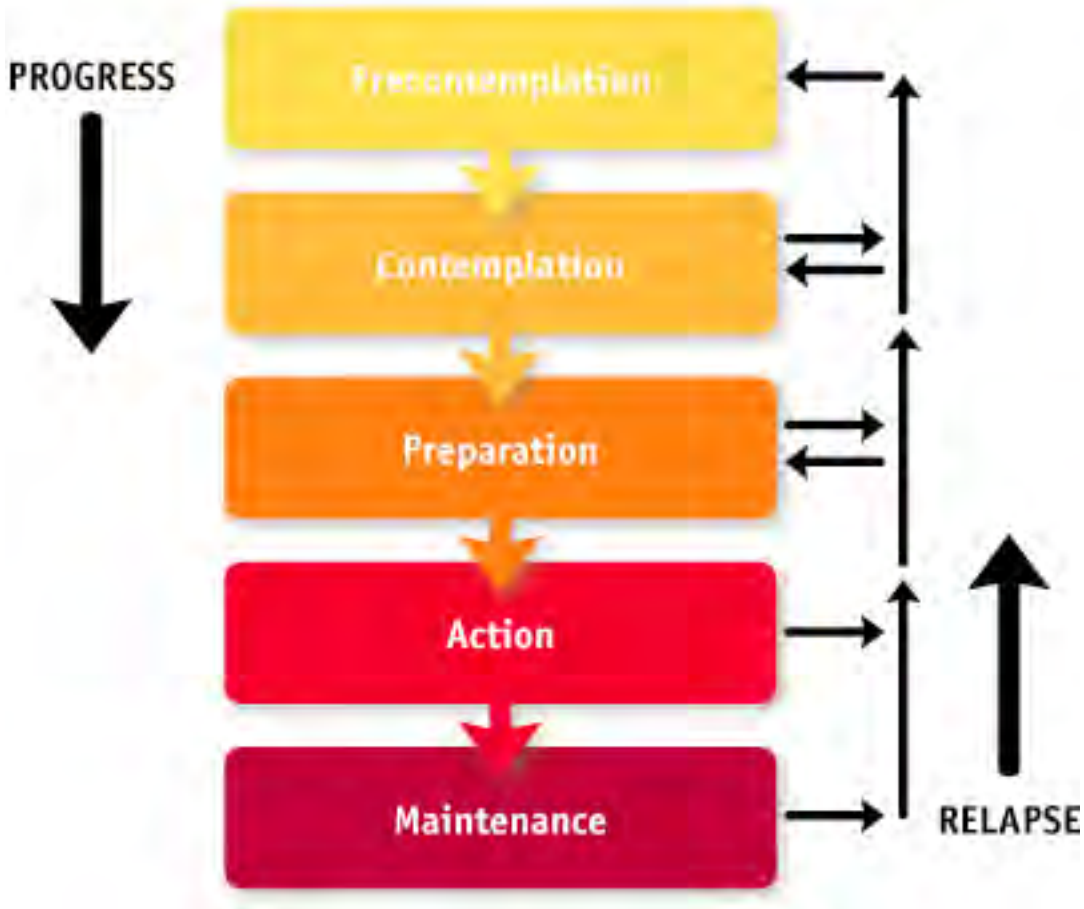
Why do people behave as they do and don't? The answer to this question relates to how strategies for change are selected. The key is to look for the problem issue or behavior that has to be addressed, monitored and evaluated.

The Stages of Change Theory presents a behavior change continuum that locates a person or group in the stages or process of change. The theory describes the process of change one goes through in practicing a recommended behavior.
A person might skip one or two stages or might need reinforcement of information or a more active dialogue to move up to the next stage or to continually and consistently maintain a behavior. People progress through these stages at varying rates, can move back and forth along the continuum a number of times before attaining the goal of maintenance.

This model has been useful in determining the communication information needs or requirements of a person at each stage. With the C4D concept, the model has been useful in designing communication strategies at each stage that will engage the participation of a person or groups. Also, C4D allows attention to issues that might influence an individual, family or community to practice a particular behavior.

Figure 4.6 presents the stages of behavior change model.

Figure 2.1.2: Stages of Behavior Change Model



Source: Adapted from DiClemente and Prochaska, 1998

C4D at Work

Three men and five women huddled in a corner near the tap stand in what seemed like a morning gathering to share the news of the day. But voices were kept low although the men appeared irritated.

"Good morning! What's the latest news?" Punong Barangay (Kap) Felipe asked from behind.
"May problema, Kap!" Francisco muttered.
"Huh?" Kap said in surprise.

"For the past seven days, Pareng Edgar noticed that a hose is attached to the tap stand and goes all the way to the house of Gusting," Mona declared.

"Ay, naku! That is not right! We should have a meeting on this," Kap said.

In an hour, almost all water service users in Barangay Sto. Nino gathered at the barangay hall. Punong Barangay Felipe presented the problem. Reactions were negative, others were angry.

"This should not happen. We all agreed and put it in our rules and regulations that there should be no connection from the tap stand to a household," Lolo Ignacio said. Everyone talked at the same time, each one expressing his/her opinion.

"Silence, please. Let us talk about this. Each one will be given the opportunity to talk and react to the idea of others. Now, what do you want to do to address this problem? How do you want to address the problem?" Punong Barangay Felipe asked. The group of men and women agreed that Kap Felipe should guide the dialogue.

3. The ACADA Planning and Implementation Process

This model stresses the process of using systematically-gathered data in informing the development of a communication strategy.

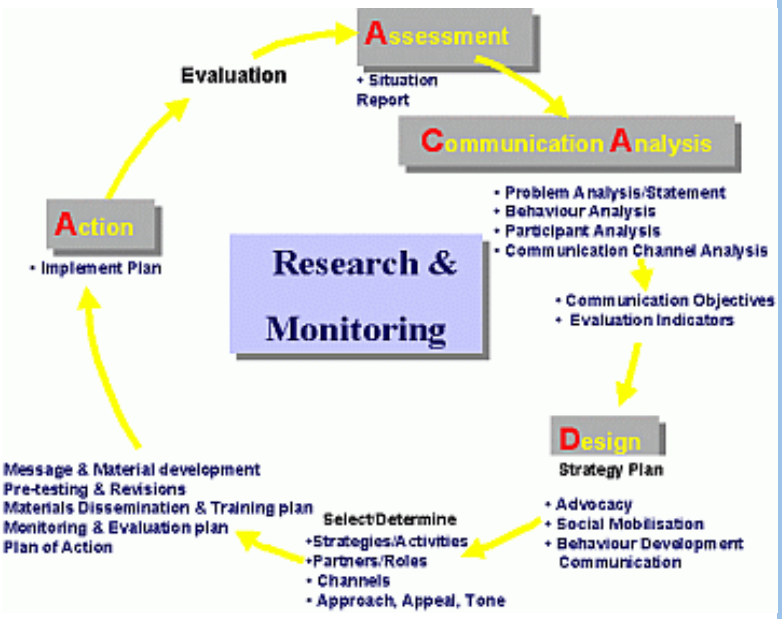
A – Assessment of the program issues. A detailed report is to be made and analyzed, containing the detailed analysis of the situation and viable plans of action.

CA – Communication Analysis. This looks at the behaviors or practices affecting the program, the identification of participants who can bring about and maintain the practice of desired behaviors, and the characteristics of available channels of communication.

D – Design of the strategy plan.

- This involves the three key strategies of advocacy, social mobilization and behavior development communication.
- The activities, roles and responsibilities of partners are defined together with matching channels with identified participants.
- Information materials are developed defining the approach, appeal and tone appropri ate to the participants. Materials pretesting are an important element of this process.
- Capability development is vital to the use of these materials as well as the conduct of selected activities.
- A monitoring and evaluation plan is a vital element of the design of the strategy.

Figure 2.1.3: ACADA Plan Matrix



A – Action. A well planned strategy complemented by clear implementing details will flow into action.

Evaluation is the final stage in the planning process. This will inform the extent to which the communication objectives are achieved and in turn help determine the role of communication in achieving program impact.

All the stages require various forms of research and constant monitoring of progress to ensure that objectives are attained.

Figure 3.2 illustrates the different stages in the ACADA communication planning process.

Each water service user expressed his/her ideas. Ideas were either supported or explained. Main points, issues, and proposals were written on the blackboard.

"Do you think we can now summarize all issues, main points, and agreements?" the Punong Barangay asked.

Punong Barangay Felipe proceeded to present that the water service users of Barangay Sto. Nino agreed to make it a policy to: 1) increase the penalty for violators from P200 to P400, and 2) a Ronda Team composed of three barangay officers and three household representatives will make the rounds of the barangay from 9 pm to 4 am to ensure no connection from the tap stand to a household will happen.

While Kap Felipe called the meeting and acted as referee during the discussion/dialogue, the water service users themselves identified the problem and how the problem should be addressed, and made a majority decision on rules and regulations to be adopted to address the problem.

B. PARTICIPATORY COMMUNICATION PLAN

What is a Participatory Communication Plan?

A Communication Plan is a document that guides organizations and project workers in managing and implementing communication efforts to reach desired goals. It is like a road map that provides a common direction for people working on a project so that limited resources are maximized and communication interventions are managed well.

It is a written document that describes:

- What needs to be accomplished (goals and objectives);
- Who needs to be influenced (participants);
- What they need to know (message);
- How the goals and objectives can be accomplished (strategies, channels, tools); and
- How progress and the results of communication efforts will be measured (monitoring and evaluation).

Importance of a Communication Plan:

Communication is a basic function of a development manager or worker. The key to raising awareness, changing people's attitude, getting them involved, making them participate, and changing their behavior towards accepting an idea or adopting a practice lies in effective communication.

A Communication Plan

- Provides a clear direction for the implementing team on where to go and how to get there;
- Considers the best options and strategies before implementing a project;
- Ensures that communication efforts like activities do not overlap, thus, avoiding a waste of resources;
- Creates a schedule of activities strategically, keeping the implementer organized and gives a sense of order and control;
- Anticipates and prepares solutions to possible problems;
- Allocates resources more effectively and strategically by setting priorities and identifying opportunities; and
- Serves as justification for fund/budget allocation request.

KNOW MORE

For the detailed steps in the planning process, please refer to the Guide on Communication Planning for Community Based Development, prepared by the Asian Institute of Journalism and Communication for MDGF 1919, March 2012

Table 2.1.3: Sample Outline for a Communication Plan

Component	Description
I. Introduction	Gives a short background about the communication plan, its importance and purpose.
II. Situation Analysis	Presents the Program / Project Situation and Communication Situation.
III. Communication Plan Framework	Presents the guiding principles that the communication plan is anchored on.
IV. Participants	Identifies the participants or the individuals, groups, sectors involved in the success of the program / project; describes each participant group in terms of their characteristics and behavior.
V. Communication Goals and Objectives	Presents the overall communication goal as well as specific objectives based on communication gaps identified.
VI. Messages	Presents the messages designed for specific participant groups in order to achieve desired behavior.
VII. Strategies, Approaches and Activities	Identifies the various approaches and channels to be used based on the strategies defined under C4D a. Advocacy b. Social mobilization c. Behavior change communication
VIII. Monitoring and Evaluation	Identifies indicators to measure whether planned activities and expected results are met.
IX. Budget	Provides a cost estimate of expense items that will be incurred in the execution of strategies and implementation of activities.
X. Operational Matrix	Shows at a glance the summary of objectives, participants, messages, strategies and measures for monitoring implementation and success of the communication initiatives as well as budgetary requirements (See Table 1).
XI. Organization and Management	Presents suggested mechanisms on how to put the plan into action to be led by an implementing unit; presents recommendations on how to sustain communication initiatives even after the project life ends.

Who will manage and implement the communication plan?

D. Organization and Management

Preparing a Communication Plan (or C4D Plan) can be a challenging task. But making sure that our strategies and activities are put into action to pursue our objectives can be more daunting. Many plans fail because we do not identify who is responsible and accountable for specific activities and for the entire plan.

The designation of a focal point to initiate, coordinate and orchestrate the proposed C4D strategies and activities will ensure effectiveness and efficiency in the eventual planning, managing, and monitoring and evaluation of the proposed Plan.

We must highlight the "coordination" function because in many cases, communication activities require different individuals and groups working on related projects or activities either simultaneously or at different time frame. Orchestration leads to harmony and greater impact.

An Empowered WatSan Team as C4D Focal Group

In the case of the MDGF 1919 Program and the Salintubig Program, a strengthened WatSan Council/ WatSan Team is most ideal to remain as the focal point or lead for C4D activities. This means WatSan-members are provided opportunities to upgrade their skills and competencies in doing communication work and adequate resources (e.g., financial, equipment and facilities) to do their job.

The role of the local information officer in theWatSan Council or Team is crucial because of his/her training and/or experience in communication work. The information officer, therefore, is expected to anchor the team in the management of communication activities.

The C4D Group for Community-Based Development Programs

All community-based development programs and projects must designate their respective focal person/group.

The advantages of a distinct Communication/C4D Group are:

- It institutionalizes C4D initiatives and therefore ensures sustainability of communication programs, projects and activities.
- Center of accountability and responsibility is well-defined.
- Resources (funds, equipment and facilities, etc.) can be mobilized and generated and used in sustained and expanded C4D programs and projects.

- Lessons and experiences (best practices) gained can be replicated in other development initiatives.

The ideal composition of a local communication group is:

- Municipal Planning and Development Coordinator
- Local Public Information Officer
- Community Leader
- Program/project representative(s)

The program/project representative may refer to a specialist such as public health worker in the case of a health project, school head or teacher for an education project, and social welfare officer for social development programs, among others.

What are some of the primary functions of the local communication group?

- Prepare (update) communication/C4D Plan;
- Develop (or conceptualize) communication materials using various formats;
- Conduct regular dialogue/consultations with program or project stakeholders;
- Conduct communication training for local stakeholders;
- Oversee implementation of major communication activities;
- Establish good media relations to ensure sustained (positive) media coverage;
- Establish partnership or networking with relevant agencies/organizations;
- Mobilize resources for communication projects and activities;
- Monitor and evaluate communication projects and activities; and
- Prepare and submit accomplishment reports.

Working Together With Diverse Organizations

Some development programs or projects are implemented by various organizations or agencies. In this setup, a coordinating body or network for communication or C4D work is advisable.

The following are some of the advantages of networking:

- Ensure complementarity and reinforcement of messages and avoid or remove conflicting messages;
- Maximize information exchange necessary in message development,;
- Identify “territory” in project sites to avoid unnecessary duplication;
- Promote spirit of teamwork and lessen inter- and intra-agency competition;
- Promote resource-sharing and exchange (resources can include experts, funds, equipment and facilities, among others);
- Maximize reach through complementary programs/projects; and
- Strengthen advocacy, negotiation and bargaining power.

CHAPTER 4 REGULATION

Introduction

Under a human rights based approach to local WatSan governance, the LGU has the "obligation to protect" which, as per General Comment No. 15 states:

> ***General Comment No. 15 (2002), The Right to Water (Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)***
>
> *23. The obligation to protect requires State parties to prevent third parties from interfering in any way with the enjoyment of the right to water. Third parties include individuals, groups, corporations and other entities as well as agents acting under their authority. The obligation includes, inter alia, adopting the necessary and effective legislative and other measures to restrain, for example, third parties from denying equal access to adequate water; and polluting and inequitably extracting from water resources, including natural sources, wells and other water distribution systems.*
>
> *24. Where water services (such as piped water networks, water tankers, access to rivers and wells) are operated or controlled by third parties, State parties must prevent them from compromising equal, affordable, and physical access to sufficient, safe and acceptable water. To prevent such abuses an effective regulatory system must be established, in conformity with the Covenant and this General Comment, which includes independent monitoring, genuine public participation and imposition of penalties for non-compliance.*

In order to comply with the obligation to protect, the government as Duty Bearer has to ensure that there is a strong regulatory system in place. Regulation enables the monitoring and evaluation of whether the right to water is fully realized, and particularly as indicated under paragraphs 23 and 24 of General Comment No. 15 the enjoyment of the right to water is protected from the interference of third parties.

Currently, there is no clear law that defines the regulatory framework in the local WatSan sector covering LGU-managed water utilities. There is the National Water Resources Board (NWRB), but regulation of LGU-run water utilities is on a voluntary basis. It is incumbent upon the LGU as Duty Bearer to work for the development and passage of appropriate legislation that defines the setting up of a regulatory framework and the appointment of a regulator to cover LGU-run water utilities. If and when established, the regulatory framework shall define a regulatory system and guidelines and cause the appointment of an independent regulator that monitors the performance of the WSPs. Iy shall also assess whether the Duty Bearer is able to comply with its obligation to protect and the other actors (WSPs) are observing human right principles that promote good governance.

A. DEFINITION, PRINCIPLES AND CONCEPTS OF REGULATION

1. What is Regulation and why is there a need to regulate?

Regulation is a set of rules that is applied to control or restrict behavior that may produce undesired consequences or enable desirable behaviors. For public services such as water supply, regulation establishes mechanisms for overseeing, monitoring and evaluating the activities of service providers (whether public or private) if they conform with agreed levels of service.

It is a common reality in the water sector, (both national and global) that there are gaps between the desired water service provision as against what Claimholders receive in terms of the following:

According to Goals vs. Actual Conditions in the Provision of Water Service

Goals	Actual Conditions
Safe and adequate water and sanitation for all inhabitants in the area	Many people rely on water vendors and methods of on-site disposal of waste that may be unsafe, expensive, and inconvenient. Those who do have a piped connection often get water only a few hours a week, and it may not be safe to drink.
Sufficient investment in infrastructure to meet new demands and increase access	A utility that is constantly on the verge of bankruptcy faces frequent crises and cannot expand its service as demand grows, so more and more people go without water and economic activity suffers.
Good management that keeps costs of service low	Poor management, waste, corrupt practices, inadequate maintenance, leakage, and low labor productivity often mean that costs are higher than they should be.
Tariffs that cover costs (but no more), with a social safety net to ensure that everyone can get at least basic services	Tariffs usually cover operating costs at most, because the government wants to keep water affordable. The government carries some of the utility's costs, for example, writing off debt when the utility cannot pay. However, subsidies and low tariffs benefit only those connected to the network, who tend to be better off, while the unconnected get no subsidy and suffer, because low tariffs means the utility cannot expand to serve.

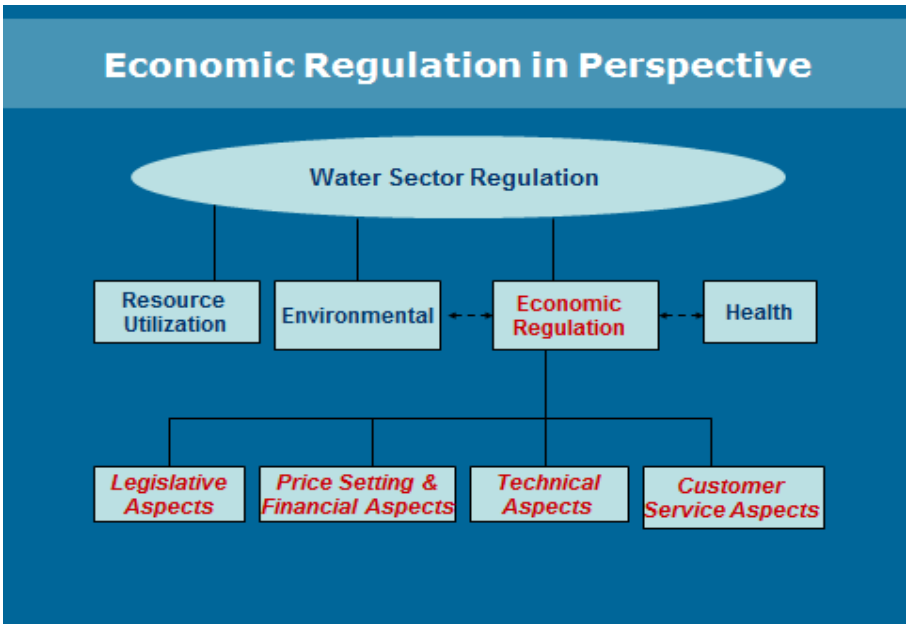
Regulation is a mechanism available to governments that enable them to bridge the gap between desired and actual service delivery. It comprises two elements: economic and resource regulation. This chapter deals more with economic regulation.

Economic regulation, in particular, seeks to (i) balance the interests of the community (Claimholders) and other actors (WSPs), (ii) ensure that water service providers deliver the agreed levels of service and (iii) ensure fair pricing.

2. Aspects of Economic Regulation

Economic regulation encompasses four areas as shown in the figure below.

Figure 2.1.4: Economic Regulation in Perspective



a)Tariff setting and financial aspects

The regulator is tasked with reviewing and approving proposals for tariff increases or adjustments. In addition to the responsibility of reviewing tariff increases, the regulator also studies, develops and recommends appropriate policies on tariff setting and cost recovery. It is important that a regulator is able to determine the appropriate levels of tariff in a fair and transparent manner that is not biased in favor of any party and takes into consideration short-term (affordability of Claimholders) and long-term requirements (investments to meet the demand of future customers).

The regulator shall also monitor the financial viability of the water utilities and their performance, and as necessary undertake financial auditing. The monitoring of financial performance is to support in many instances the review of tariff proposals, and monitor how well the utility is attaining the targets set in the business plan.

b) Technical and customer services

A key role of the regulator is to monitor and evaluate whether the agreed levels of service have been met by the WSP. The levels of service are always tied to the tariff levels that the review of the technical aspects is done alongside a review of a tariff proposal. The regulator can also schedule periodic technical reviews to monitor the technical performance covering water availability, reliability and quality.

The other activities of the technical and customer regulator generally include the following:

- Monitor the service provider's operational performance to ensure that the service provider is operating efficiently and providing the services to the customers' as cost effectively as possible;
- Requiring technical operational audits to verify the reliability and accuracy of information supplied by the service provider and to confirm that the working procedures adopted by the service provider are appropriate and are being followed;
- Carrying out enforcement actions where necessary, including the imposition of appropriate penalties or use of appropriate incentive mechanisms;
- Reporting to the stakeholders on the performance of service providers in relation to levels of service, operational performance and other matters; and
- Monitoring asset condition and performance to ensure that the condition and performance of the assets (particularly the underground assets) is adequately maintained in the short and long-term.)

3. Regulatory Framework Requirements

Regardless of the service levels, Levels II/III systems are water utilities, hence their cost of services as well as the quality of their product (water) are subject to regulations.

A regulatory framework has three interrelated components: the legal framework, the institutional framework and the set of regulatory practices that are to be used in applying the regulation.

- The legal framework is a set of regulatory rules or the body of laws, regulations, licenses and

contracts that define expectations and acceptable contracts. This framework defines what is to be regulated, who should be regulated and who will regulate. Current regulatory laws do not exempt Level II systems from regulation. Failure to comply may subject the operators/ owners to legal suits.

- The institutional framework comprises the regulatory bodies tasked with administering the regulatory laws. At present, the national economic regulatory agency is the National Water Resources Board (NWRB).

- *legal framework*
- *institutional framework*
- *regulatory practices*

- The regulatory practices are the rules, guidelines, licenses or permits required, and monitoring and enforcement practices and enforcement utilized by the regulatory bodies to carry out their responsibilities and protect the interest or security of the consuming public.

All these requirements exist not only for the benefit of the Claimholders but for the utility itself. Without compliance, the WSP will be deemed operating illegally. It is necessary to ensure that the WSPs must be operating within the ambit of the law to protect the investments made and ensure continuity of their operations.

4. Attributes of a Good Regulatory System

According to Ehrhardt, Groom, Halpern, and O'Connor, (Economic Regulation of Urban Water and Sanitation Services: Paper No. 9, World Bank/PPIAF), following are the attributes that a good regulatory system should embody:

- **Coherence**. Tariffs and service standards are inter-related: higher service standards, or greater coverage, mean that higher costs will be incurred. These costs need to be covered either by the government or consumers. A regulatory system should be able to ensure both that providers recover their costs and that people receive the services they are willing to pay for.

- **Predictability and credibility**. If service standards and rules for cost recovery through tariffs are clear and unlikely to change unpredictably, and regulation provides credible provider protection, it will be easier to procure competent new providers, and existing providers will face less risk in investing to improve and expand water system infrastructure. Predictable and credible regulation requires not only well-designed regulatory arrangements, but also sound policy and governance frameworks for the sector.

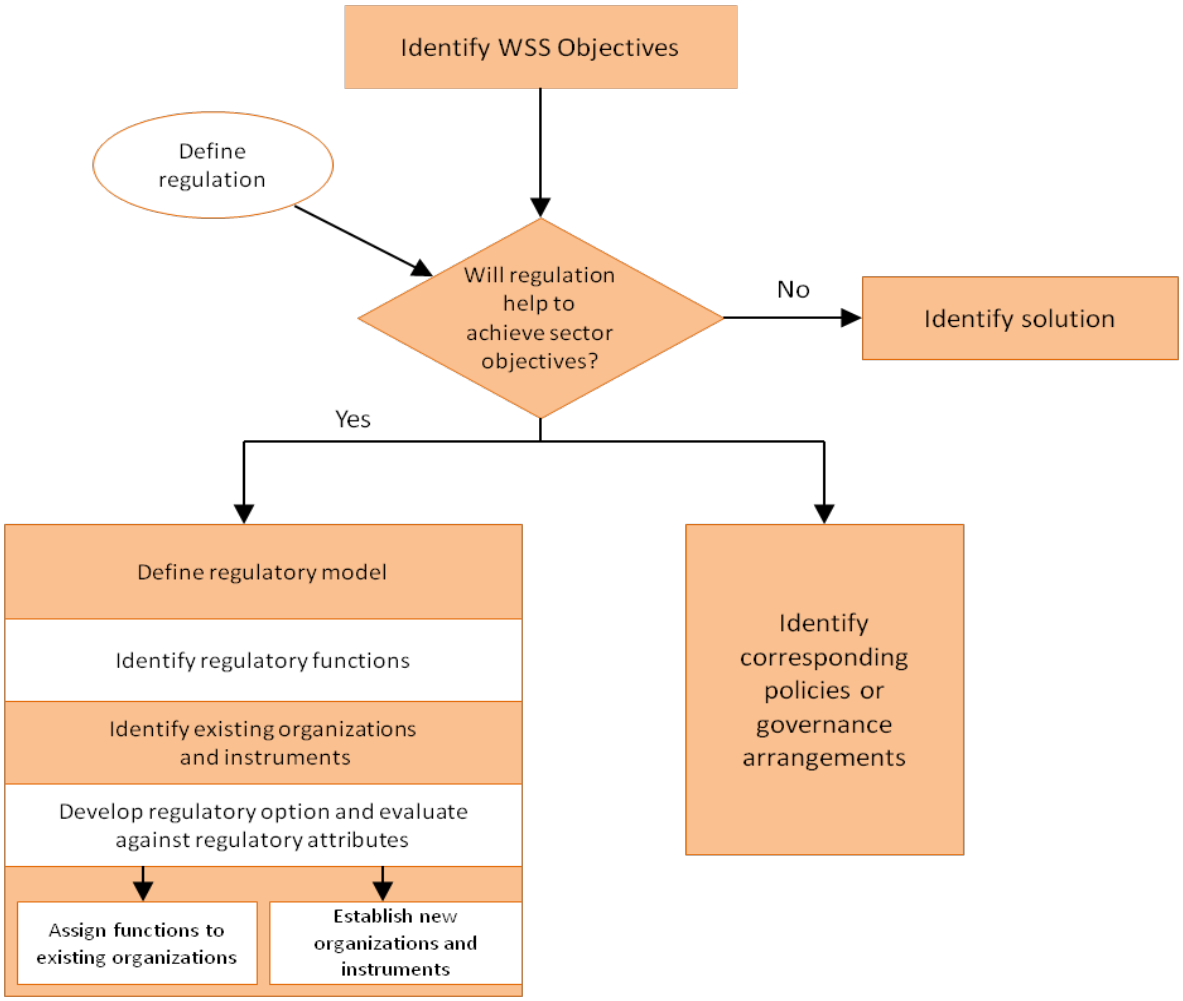
- **Legitimacy and accountability**. Regulatory processes and outcomes need to be understood and generally accepted by consumers who bear the ultimate impact of tariff and service standard decisions.

6. Setting up a Regulatory System

The following is a diagram taken from (World Bank/PPIAF), Paper No. 9, Economic Regulation of Urban Water and Sanitation Services: Ehrhardt, Groom, Halpern, and O'Connor). It provides a guide on how to establish a regulatory system when it is considered as an appropriate option in addressing water supply and sanitation concerns.

Figure 2.1.5: Regulatory System Diagram

The diagram will be useful to the LGU when it establishes a regulatory framework within the authority or limits set under the Local Government Code.



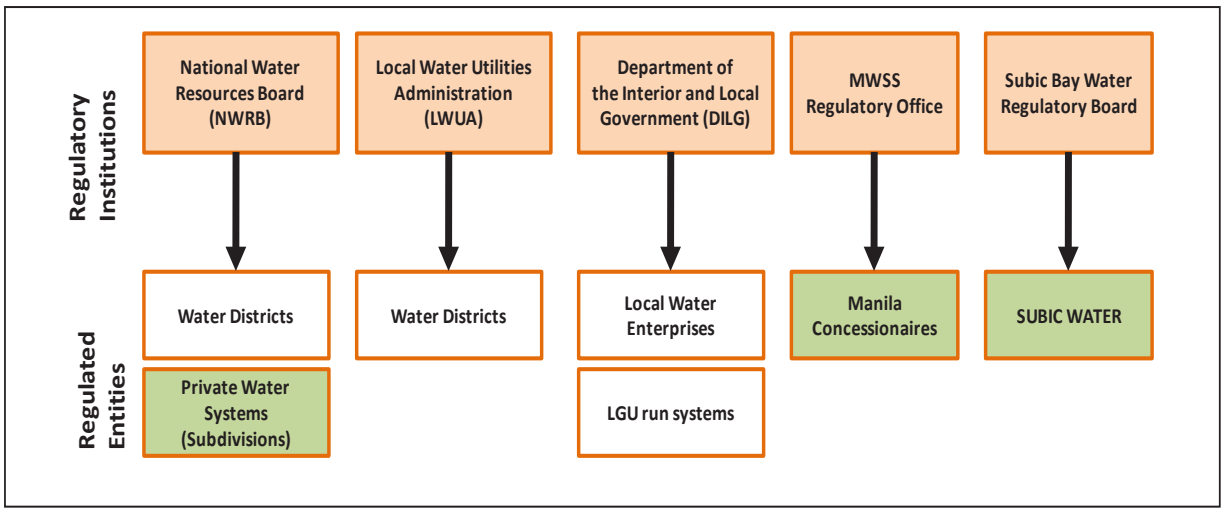
B. EXISTING REGULATORY FRAMEWORK AND ARRANGEMENTS IN THE PHILIPPINES'

Regulation of the water supply sector in the Philippines is characterized by multiple regulators and varying types of regulatory models. This is partly due to the fragmented water sector itself where there are many types of WSPs at the national and local levels. It is still evolving as water services are provided under a number of different arrangements.

Metro Manila's water supply is provided by the two concessionaires of MWSS as well as about 350 piped small scale water providers. Outside of Metro Manila, most water services are provided by 468 water districts (WDs) and 350 LGU run utilities. There are some privately-run utilities including about 200 cooperatives, 150 RWSAs and 103 private companies operating piped water systems in the provinces. Refer to Figure 1 for the existing economic regulatory structures.

Following is regulatory framework according to the Philippine Water Supply Sector Roadmap, Regulatory Reforms in the Water Supply Sector: An Inception Report, Antonio de Vera, August 2008.

Figure 2.1.5: Regulatory Framework in the Philippines



Source: Introduction to Economic Regulation of Water Supply and Wastewater Utilities, ADB, Sept. 2003

1. Primary Economic Regulatory Agencies. The three primary economic regulatory agencies are the NWRB, LWUA and the LGUs. Overlaps in responsibilities are common.

a) National Water Resources Board. The private systems currently regulated by NWRB are systems operated by cooperatives, subdivision developers, homeowner associations, rural water associations, condominiums, private companies as well as non-piped water providers. EO 123 transferred the WD tariff approval authority to NWRB which to date still lacks the capacity and resources to exercise it.

The Board and the NWRB Secretariat have been provided with a clear mandate for resource management. It has the power to issue water permits for water abstraction outside of domestic use, impose fees thereof, and penalties for violation. The NWRB has the authority to set rules on maximum return on investments for WSPs. It should be noted that it is the current policy of the national government that tariffs should be approved on the basis of cost recovery. WSPs that are regulated by the

The following documents are required for an initial application for a CPC and approval of tariff.

- SEC (or LWUA, CDA) Registration
- Articles of Incorporation and By-laws
- Water Permits if the utility has its own source
- Plan of the water distribution system
- Plan, elevation and cross sectional views of reservoir and pump house
- Certificate of Plan for five years
- Service levels agreed with claimholders commensurate with proposed rates

NWRB are allowed to have a maximum of 12 percent return on assets.
Part of the regulatory requirement of NWRB is the submission of the Annual Report. The Annual Report is a compilation of data pertaining to a water utility operator who has been issued a Certificate of Public Convenience. It depicts the financial condition and other information that will be used in the regular performance monitoring of the utility. As such, the Annual report must be audited by an external auditor and its accuracy and completeness sworn to by the operator before a notary public.

b) Local Water Utilities Administration. Although not established primarily as an economic regulator, LWUA had assumed a de-facto regulatory role given its functions and mandate expressly provided in PD 198 such as issuing standards for materials and operations, reviewing and approving water rates, and monitoring and evaluating performances of water districts. Even if EO 123 transferred the functions of tariff approval to NWRB, LWUA still provides some form of technical and institutional regulation. While EO 124 (1987) transferred the regulation of RWSAs to LWUA, the latter is not yet functioning as such. Consequently, most RWSAs are being regulated by NWRB.

- **DILG/LGUs**. LGUs have the authority to regulate all forms of economic activities within their domain; hence their requirements for business permits, building design approval, health inspections, etc and legislative resolutions. Tariffs of LGU-run systems are approved by the LGU's legislative bodies. However specifying levels of service and formulation of technical and operating standards are seldom, if ever, done by LGUs. Some LGUs have even submitted their tariff proposals to NWRB for approval.

The DILG to a limited extent exercises regulation over LGU-managed water utilities who are benefi-

ciaries of water projects that it implements. It also provides capacity building as part of the project assistance.

Some industrial zones in the country, like the Subic Bay Metropolitan Authority (SBMA), have their own charters which give them the authority to regulate activities within their jurisdiction. The SBMA established the Subic Bay Water Regulatory Board (SBWRB) while the Clark Development Corporation has an executive management committee.

2. Contract-Based Regulation

The MWSS tariffs are not subject to review by the NWRB. For this reason, when the MWSS operations were contracted out to two concessionaires, the concession contracts provided for the establishment of an MWSS Regulatory Office to regulate the 2 concessionaires.

3. Existing Regulatory Instruments

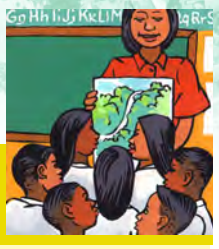
The following is a list of laws and executive promulgations including their salient features which played a major impact on the roles of the three major government agencies with economic regulatory functions:

Agency	Relevant Laws and Executive Promulgations
NWRB	• Commonwealth Act No. 146 (1935): Also known as the Public Service Act, created the Public Service Commission to regulate private utilities and prescribed the Return on Asset methodology with 12% as the maximum return. • PD 1 (1971): Abolished the Public Service Commission and transferred its powers and functions to the Board of Power and Waterworks. • PD 424 (1974): Created the National Water Resources Council (NWRC), attached NWRC to the DPWH with the task of coordinating and integrating all activities related to water resource development and management. • PD 744 (1976): Directed the NWRC to eliminate all unnecessary regulatory measures and fees especially on privately owned and dug wells. • PD 1067 (1976): Promulgation of the "Water Code". Updates and consolidates into one piece of legislation basic laws and administrative systems governing ownership, appropriation, utilization, exploitation, development, conservation and protection of the country's water resources. The IRR of the Water Code was implemented in 1979. • PD 1206 (1977): Gave mandate for the regulation of private water supply systems from the defunct Board of Power and Waterworks of the Department of Energy to NWRC. Also made the NWRC an appeals body on tariff disputes arising between LWUA and the WDs.

Agency	Relevant Laws and Executive Promulgations
	• EO 124-A (1987): Renamed the NWRC as the National Water Resources Board and reorganizes its Board to include heads of user agencies (MWSS, LWUA, NPC and NIA). • EO 123 (2002): Reorganized the Board membership; attached NWRB to the DENR and transferred the review and approval of WD tariffs to NWRB from LWUA.
LWUA	• PD198 (1973): This law authorized the formation of Water districts in the provinces on a local option basis and created the LWUA as a specialized lending institution with authority to review WD tariffs. Rates must be adequate to provide for the following: i) cost of services and meters; ii) annual operating expenses; iii) maintenance and repair of waterworks; iv) a reasonable surplus; v) debt service; and vi) sinking fund. • LOI 700 (1978): Directed LWUA to approve warranted tariff increases up to a maximum of 60% of existing tariffs. Directed the WDs to conduct public hearings prior to any tariff adjustment. • LOI 744 (1978): Directed LWUA to adopt ways and means to reduce WD tariffs. • EO 124 (1987): Abolished the RWDC and transferred to LWUA the supervision and development of the RWSAs. • EO 123 (2002): Transferred LWUA's authority to review WD tariffs to the NWRB. • EO 279 (2004): Rationalized LWUA's organizational structure in support of new sector financing policies. LWUA to finance only WDs below creditworthy status. While the guidelines for WD tariff review may have been sufficient, there is a lack of emphasis on setting coverage levels. LWUA does not set or enforce WD coverage levels. While the law mandates LWUA to set and enforce operating standards,

4. Other Regulatory Functions

a) Water permits - Any system needs to have a water right if they are extracting water directly from its source (groundwater or surface). If the source is from a main utility, then the water right will be the obligation of the main utility. To secure this right, the data requirements of NWRB are usually the place of abstraction, method of abstraction, volume to be abstracted and purpose. For more information, one can log on to the NWRB website at www.nwrb.gov.ph. This water right is important to establish the legal right of the abstractor and prevent any water rights or legal conflicts that may arise in the future.



MUST KNOW

Certificate of Public Convenience is a permit allowing the permittee to operate a water system for a certain period in a given area.

b) Water Quality Regulation - Any system needs to be able to prove that the quality of water being sold meets certain minimum health requirements or standards set by the country's health authorities. Our country has the Philippine National Standards for Drinking Water (PNS-DW) wherein chemical and physical tests are required once a year and the micro-biological test requirements are either on a monthly or quarterly basis with the number of test samples dependent on the served population. The monitoring protocol is usually for test results to be furnished the regulatory office as required and the test results posted in conspicuous places within the system's office.

These test results are necessary for the protection of both the claimholders and the system itself and to inform the claimholders and the regulatory agency of its conformance to health or water quality standards. The water lab test results must be posted in an area visible to the public within the water utility office.

C. HUMAN RIGHTS BASED ECONOMIC REGULATION

1. Features of HR Based Economic Regulation

General Comment No. 15 explicitly states under the Obligations to Protect that "Where water services (such as piped water networks, water tankers, access to rivers and wells) are operated or controlled by third parties, States parties must prevent them from compromising equal, affordable, and physical access to sufficient, safe and acceptable water.

To prevent such abuses an effective regulatory system must be established, in conformity with the Covenant and this General Comment, which includes independent monitoring, genuine public participation and imposition of penalties for non-compliance."

- Regulation provides an independent check on the performance of the other actors (WSPs), the LGU as policy maker and Duty Bearer if the human rights principles that promote good governance such as transparency, accountability, integrity and others are being practiced in the provision of water supply services.

- Regulation shall be carried out in a participatory manner. The Claimholder shall be involved in the development of performance indicators and shall provide feedback on performance results.

- The regulator should be an independent and strong body to be able to balance both the interests of the Duty Bearer and the Claimholder. The balancing act of the regulator shall ensure that no interest is sacrificed, as any imbalance will have an adverse effect on the claimholder.

2. Objectives of Human Rights Based Economic Regulation

Under a human rights based local WatSan governance framework, economic regulation will take more than monitoring compliance to the agreed levels of service. Regulation shall review and assess the following:

a) whether water and sanitation provision is carried out following the PANTHER principles and how the critical issues/ challenges are being addressed in water governance; and

b) whether the normative content (affordability, accessibility, availability, and quality) of the right to water are being met.

MUST KNOW

Economic Regulation does not only review tariffs for conformance to certain guidelines but also prescribes operating standards, looks after customer service efficiency and the necessary legislative reforms that is needed within the framework.

For instance, if the regulator favors the interest of the WSPs which is always assumed to be "profit oriented", there is the risk that it may arbitrarily approve proposals for tariff adjustments. When this happens, the approved tariff may not be affordable especially for persons living in poverty. Conversely, if the regulator will not consider any justified proposal a tariff increase, this will leave the WSP with insufficient funds to operate the water utility and in the long term will compromise the sustainability of water utility operations.

3. Scope and Coverage of HR Based Economic Regulation

Human rights based economic regulation shall apply to the entire (LGU - municipality or city) and is not limited to regulation of individual WSs. It is much more comprehensive in scope and shall cover all the WSPs operating in the area.

Human rights based economic regulation shall be carried out by the LGU (as part of its obligations as Duty Bearer) and shall cover:

a) *The development and adoption of appropriate regulatory laws and regulations that will enable enhanced access by the most vulnerable sectors of the community.* The LGU as regulator and/or policy maker shall undertake approaches and measures that are specifically directed at enhancing access to water of persons living in poverty; persons with disabilities and other vulnerable groups. These measures could include policies or institutional changes that seek to provide persons living in poverty with reasonable access to water sanitationservices at an affordable price and of adequate quality, no matter where they are or who serves them.

In the "*ADB book on ATTAINING ACCESS FOR ALL Pro-Poor Policy and Regulation for Water and Energy Services*," these initiatives could be in the form of establishing policy frameworks to:

- Remove the disincentives for utility providers to expand the network to the unconnected house holds in poverty by facilitating connections to illegal settlements, and assisting in the prevention of pilferage and illegal connections through good governance and integrity programs;

- Empower persons living in poverty to access formal legal identity documents that are required to obtain connections;

- Establish the financial incentives for water service providers to connect the unconnected; and

- Provide financial measures to persons living in poverty to facilitate payments for their access.

b) Monitoring and evaluation of the WSPs compliance with the HR local water governance framework. Unlike the current regulatory framework in local water supply that provides for direct regulation of individual WSPs, the HR based regulation shall cover the review of performance of all WSPs operating in the area/municipality.

c) Self assessment on whether the LGU as Duty Bearer is able to carry out its obligations.

Existing regulatory guidelines may need to be adjusted to conform with the requirements for HR based local water governance. Such revisions may require legislation at the local and even national levels so that the intent and spirit of human rights-based local water governance is achieved.

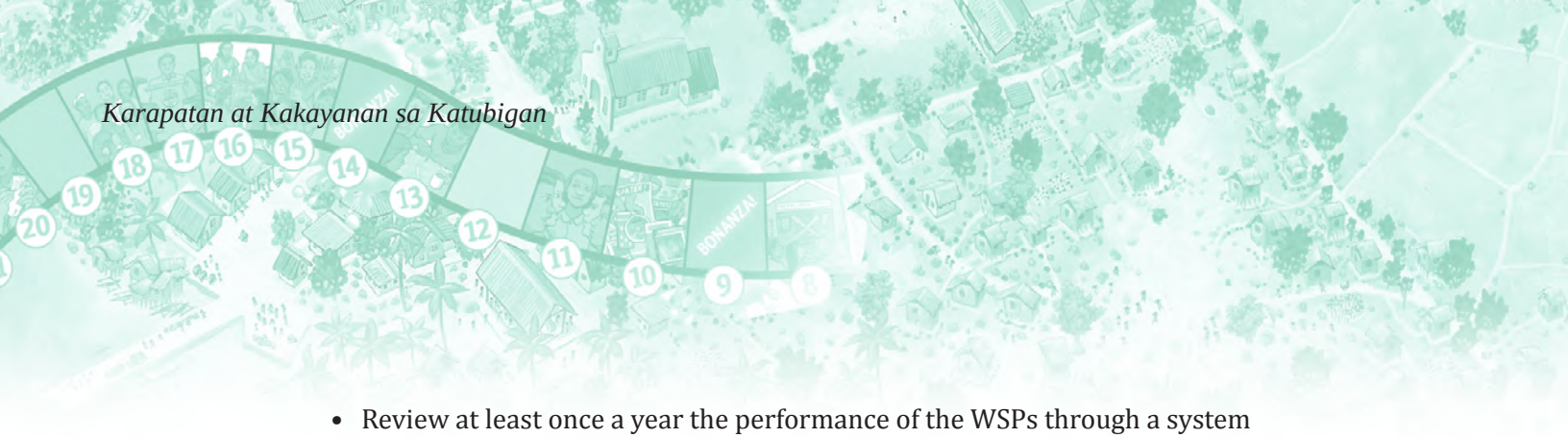
Two levels of regulation under human rights based regulation:

a) Human rights-based economic regulation of individual WSPs - this involves direct regulation of individual WSPs following human rights-based economic regulatory guidelines to be undertaken:

- If the WSP is LGU-managed, an independent body created by the Sanguniang Bayan shall carry out the regulation; and

- If the WSP is other than LGU-run regulation shall be by the appropriate regulator as discussed under the regulatory arrangements (NWRB and LWUA for the local water sector) and special regulatory bodies (MWSS-RO, Subic Water Regulatory Board, Clark Development Corporation) for WSPs that are under private sector participation (PSP).

b) LGU wide human rights regulation - the LGU through the Sangguniang Bayan shall develop and pass legislation that will allow for the monitoring and assessment of the performance of the WSPs and other activities that will allow it to evaluate whether it is complying with obligations to respect, protect and fulfill the right to water. This level of regulation shall be undertaken by the WatSan Council as follows:



- Review at least once a year the performance of the WSPs through a system of benchmarking. The WatSan Council shall establish and institutionalize a benchmarking system for all WSPs existing in the LGU/area. (Some KPIs are applicable to monitor compliance with normative content of the right to water. However, a lot more has to be developed to enable the monitoring of compliance of the LGU with the obligations.) The results shall be compiled, summarized and reported to the public (Claimholder, other actors);

- Undertake/commission a third party evaluation of the LGU performance as Duty Bearer; and

- Work for the incorporation of human rights-based principles in the regu

Under the Local Government Code, the SB has powers to enable regulation relating to water supply provision as implicitly stated in the following provision:

SECTION. 447. - Powers, Duties, Functions and Compensation. -

(a) The Sangguniang Bayan, as the legislative body of the municipality, shall enact ordinances, approve resolutions and appropriate funds for the general welfare of the municipality and its inhabitants pursuant to section 16 of this Code and in the proper exercise of the corporate powers of the municipality as provided for under section 22 of this Code, and shall:

(5) Approve ordinances which shall ensure the efficient and effective delivery of the basic services and facilities as provided for under Section 17 of this Code, and in addition to said services and facilities, shall:

(vii) *Subject to existing laws, provide for the establishment, operation, maintenance, and repair of an efficient waterworks system to supply water for the inhabitants; regulate the construction, maintenance, repair and use of hydrants, pumps, cisterns and reservoirs; protect the purity and quantity of the water supply of the municipality and, for this purpose, extend the coverage of appropriate ordinances over all territory within the drainage area of said water supply and within one hundred (100) meters of the reservoir, conduit, canal, aqueduct, pumping station, or watershed used in connection with the water service; and regulate the consumption, use or wastage of water.*

4. Critical Areas to be Monitored

Under human rights based economic regulation, the Duty Bearer shall ensure that HR based regulatory policies and guidelines are adopted and:

- Determine whether there is progressive realization of the right to water and the right to water of the most vulnerable is being addressed and/or considered in future expansion programs.
- Using the baseline survey that was carried out in Part 1: the LGU (WatSan Council) shall review coverage of most vulnerable sectors - assess percentage connected to the system and if there is an increasing trend in coverage based on expansion plans.
- Assess whether the most vulnerable sectors of the area/municipality are not being discriminated with the tariffs that are being charged to Claimholders; existing policies incorporate ways to ensure tariff affordability.
- Review tariff policies that enable tariff affordability and evaluate existing tariff if they comply with the rule on five percent.
- Evaluate if the design of the water system and actual water supply provision is carried out in the most humane way with special considerations for the needs of the most vulnerable - women, children, older persons, persons with disabilities.
- Determine if there is full participation of the Claimholder in the development, operation and management of the water utility to the extent possible.
- Assess the extent to which human rights principles for good governance are incorporated in the local water and sanitation plan and in the WSP's utility rules and regulations.

BIBLIOGRAPHY

Abano, S. P. (n.d.). *Integrated Water Resources Management*.

Adam Davidson-Harden A., Naidoo, A., & Harden, A. (2007). *The geopolitics of the water justice movement: Peace Conflict & Development,* Issue 11, 1-34.

Antonina M. Manochon. (2010). Indigenous Management of Water Resources in Bontoc, Mountain Province, Philippines*. 4th Asian Rural Sociology Association (ARSA) International Conference, 118-132*

Asian Development Bank (2008). *Managing Asian Cities. Sustainable and inclusive urban solutions*. Mandaluyong City, Philippines.

Asian Development Bank (2010). *Attaining Access for All: Pro-Poor Policy and Regulation for Water and Energy Services*. Mandaluyong City: Asian Development Bank.

Asian Development Bank (2010). *Community-Based Water Supply and Sanitation Sector Project, Case Study: Nepal*. Mandaluyong City: Asian Development Bank.

Asian Institute of Journalism and Communication (2012). *A Guide on Communication Planning for Community-Based Development*. (2012). Asian Institute of Journalism and Communication for the MDGF 1919 Programme.

Baietti, A., Curiel P. (2005). *Financing Water Supply and Sanitation Investments: Estimating Revenue Requirements and Financial Sustainability*, Note No. 7, World Bank.

Bucknall, J., Damania, R., & Rao, H. (2006). Good Governance for Good Water Management. *Environment Matters 2006,* 20-23.

Camdessus, J. (2003). *Report of the World Panel on Financing Water Infrastructure: Financing Water for All.*

Cardone R., & Foncesa C. (2006). *UN-Habitat Report on the Water and Sanitation in Secondary Urban Centres: Paper 1 Innovative Financing: Experiences with Secondary Urban Centres Water Supply and Sanitation Service Delivery*. Nairobi: United Nations Human Settlements Programme.

Cariño, Jojie (2000). Water and Indigenous Peoples: Indigenous Peoples and Large Scale Water Development Programmes. Paper presented during the World Water Forum 17-22 March 2000, The Hague, The Netherlands.

Case of Bohol, the Philippines, Municipality of Guindulman, Candijay, Duero: *Replication for 7* Barangays.

Castro, V., Msuya, N., & Makoye, C. (2009). *Sustainable Community Management of Urban Water and Sanitation Schemes* (Paschal, D., Trans.), Nairobi: World Bank

CEDARE (2006). *Water Conflicts & Conflict Management Mechanisms in the Middle East & North Africa Region*, Centre for Environment and Development for the Arab Region and Europe (CEDARE).

Chikozho, C. & Latham J,. (2005). Shona customary practices in the context of water sector reforms in Zimbabwe. *International workshop on 'African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa', 26-28 January 2005*. Johannesburg, South Africa, 7-1 to 7-13.

Dargantes, B. B., & Batistel C. C. (n.d.) *State of Water Resources Management in the Philippines*. Visayas State University, City of Baybay, Leyte: Institute for Strategic Research and Development Studies.

De Vera, A. (2008). *Regulatory Reforms in the Water Supply Sector: An Inception Report*. Philippine Water Supply Sector Roadmap, The Water Dialogues.

Department of Interior and Local Government and German Technical Cooperation (2007). *DILG Water Supply and Sanitation: Capacity Development Program for LGUs, Training Brochure*. Quezon City: Water Supply and Sanitation Program Management Office.

Department of Interior and Local Government. *The Provincial Water Supply, Sewerage and Sanitation Master Plans*.

Deutsch, W. G., Orprecio, J.L., & Bago-Labis, J. (n.d). *Chapter 9: Comunity-based Water Quality Monitoring: The Tigbantay Wahig Experience*. 194-196

Dictaan-Bang-oa, E. P. (2005). *Traditional Water Management Practices of the Kankanaey CSQ Issue: Water Rights and Indigenous Peoples Traditional religious beliefs and customary laws have enabled the Kankanaey of Besao in Northern Philippines to sustain their land's natural resources despite current challenges.*

Dictaan-Bang-oa, Eleanor P. *Traditional Water Management Practices of the Kankanaey*.

Diokno, Maria Socorro I. *The Human Rights Based Approach to Local Water Governance*.

Diokno, Maria Socorro I. *Working Framework: Human Rights in Water Governance*.

Dole, D., & Balucan, E. (2006). *Setting User Charges for Urban Water Supply: A case study of the Metropolitan Cebu Water District in the Philippines. EDR technical Note No. 17*. Mandaluyong City: Asian Development Bank.

Downer, A., (2000). *Good Governance: Guiding principles for implementation*. Canberra: Australian Agency for International Development (AusAID).

Duhaylungsod, Noel (2010). Scoping Report. MDGF 1919 Program: "Enhancing Access to and Provision of Water Services with Active Participation of the Poor", Capacity Assessment on Local Water Governance.

Duhaylungsod, Noel. *Capacity Assessment of Local Water Governance*, DILG-UNDP.

Ehrhardt, D., Groom, E., Halpern, J., & O'Connor, S. (2007). Economic Regulation of Urban Water and Sanitation Services: Some Practical Lessons. *Paper No. 9, Water Sector Board Discussion Paper Series*. Washington, DC: The World Bank.

Favre, C., & Münger, F. (2008) *A Human Rights-based Approach to Water and Sanitation*. Switzerland: Swiss Agency for Development and Cooperation SDC.

Furlong, K., Cook, C. LL. B., Bakker, K. (2008). *Good Governance for Water Conservation: A Primer*. Canada: UBC Program on Water Governance.

Galing Pook Foundation (2009). San Carlos City, Negros Occidental: Funds for the Future (San Carlos City's Water Levy), *Innovations in Local Governance: Stories in the Ten Galing Pook,* pp. 171-173.

Gleick, P. H., Wolff, G., Chalecki, E. L., & Reyes, R. (2002). *The New Economy of Water: The Risks and Benefits of Globalization and Privatization of Fresh Water*. Oakland CA: Pacific Institute for Studies in Development, Environment and Security.

Hafner J., Schlarb M. & Pinili L. *Community-based natural resource conflict management: the case of watershed planning in Metro Cebu, the Philippines.* New York: Cornell International Institute for Food, Agriculture and Development (CIIFAD) and the Cornell Center for the Environment Cornell University.

Hoffmann, T. (1999). The meanings of competency, J*ournal of European Industrial Training*, Volume 23, Issue 6, Page 275-286.

Horca, V.A. *Gender-Responsive Governance at Work: LGU Experiences in Using the GAD Budget.*

Illo, J. I., Encinas-Franco, J., Villasenor, J. R., Leyesa, M. L., (2010). *Accounting for Gender Results: A Review of the Philippine Gad Budget Policy*. Quezon City: Miriam College - Women and Gender Institute.

Kabonesa, C. & Happy, M. (2003). *The Gender Gap in Water Resource Management In the Nile Basin Countries: The Case for Rural Women in Uganda*.

Kho, J. & Agsaoay-Sañoi E. (n.d). *Country Study on Customary Water Laws and Practices Philippines*.

Kho, James and Agsaoay-Sano, Eunice. *Customary Water Laws and Practices in the Philippines.*

Kochuran, Mathew, Suma, Zachariah, and Roy Joseph. *Preventing Corruption, Encouraging Transparency and Accountability in the Water and Sanitation Sector: A Case Study from Kerala, India.* Socio-Economic Unit Foundation, WATERAID.

List of Philippine provincial name etymologies. Retrieved from *Wikipedia* http://en.wikipedia.org/wiki/List_of_Philippine_provincial_name_etymologies

Local Conflict and Water: Addressing Conflicts in Water Projects, Swedish Water House, 2005

Lontoc. J.F.B. (2010). "Water, Water, Everywhere? Ensuring the Country's Water Security", *The UP Forum Vol. 11:3 May-June 2010*.

Lopes, Carlos and Thomas Theisohn (2003). *Ownership, Leadership and Transformation. Can we do better for capacity development?* United Nations Development Programme. One United Nations Plaza. New York.

MDGF 1919 Programme Document

Monje, M. C. (n.d.). *Water District Features: Davao Water District's Success Story.*

Mwebaza, R. (2010). *Sustaining good governance in water and sanitation in Uganda*. Monograph 168.

NWRB and DENR (2009). Water Sector Climate Change Adaptation Strategy.

NWRB. 1998. Master Plan Study on Water Resource Management.

Orprecio, J., Rola, A., Deutsch, W., Coxhead, I., & Sumbalan, A. (2002). Using Community-Generated Data for Water Management Policy. *Philippine Institute for Development Studies*, 1-8.

OxFam. *Rising to the Call: Good Practices in Disaster Risk Reduction and Climate Change Adaptation in the Philippines*. Oxfam and the Australian Aid Program.

Pascual, C. (n.d.). *Towards a Sustainable Systems Approach in Governing Water Environment in the Philippines*. Mariano Marcos State University.

Pascual, C. M. (n.d.) *Towards a Sustainable Systems Approach in Governing Water Environment in the Philippines*. Mariano Marcos State University.

Peace and Equity Foundation (2007). *The ABCs of Potable Water Projects*.

Philippine Constitution (1987). Article XII, Sections 2,6,10, 11, 17, 18 and 19.

Piñon, C., D. Catacutan, B. Leimona, E. Abasolo, et al (n.d.). *Conflict Cooperation, and Collective Action: Land Use, Water Rights, and Water Scarcity in Manupali Watershed, Southern Philippines. CAPRI Working Paper No. 104*. Washington, D.C: International Food Policy Research Institute.

Plummer, J. (2008). Water and corruption: a destructive partnership. *Global Corruption Report 2008*, 3-17.

Ramazzotti, M. (2008). *Customary Water Rights and Contemporary Water Legislation Mapping Out the Interface.*

Republic of the Philippines (2008) . *Philippine Water Supply Sector Roadmap*.

Republic of the Philippines. *Magna Carta of Women.*

Republic of the Philippines. Republic Act No 8371: *The Indigenous Peoples Rights Act of 1997.*

Reyes, L. S. (2010). When water becomes source of conflict. *Philippine Daily Inquirer* [Mindanao] Retrieved 20 Mar. 2010 from http://newsinfo.inquirer.net/42765/in-cordillera-water-becomes-source-of-feuds.

Rola A. C., Francisco H. A., & Liguton J. P. T. (2004). *Winning the Water War: Watersheds, Water Policies and Water Institutions*. Philippine Institute for Development Studies, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.

Sardar, Z. (2008). *The Language of Equality: A discussion Paper*. Manchester: The Equality and Human Rights Commission.

Small Water Utilities Improvement and Financing Project: Experiences of Small Water Utilities in Loan Financing 2008.

Strategy for Eco-Efficient Water Infrastructure Development in the Philippines (Draft). (n.d.)

Teodosio V.A. (n.d.). *Community Participation through Cooperatives in Addressing Basic Services: The Philippine Experience.*

UN Committee on Economic, Social and Cultural Rights. (2002). *A Human Rights-Based Approach to the Water and Sanitation Sector: Drawing Water in Yemen,* General Comment No. 15.

UN Committee on Economic, Social and Cultural Rights. (2002). *Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment No. 15, The right to Water (Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)*. Geneva: Economic and Social Council.

UN Water – Report. (2008). *Status Report on Integrated Water Resources Management and Water Efficiency Plans, Prepared for the 16th session of the Commission on Sustainable Development.* UN-Water from DFID.

UN Water. (2006). *Gender, Water and Sanitation: A Policy Brief*. Water for Life 2005-2015.

UNDP (2012). *Draft Inventory of Laws, Policies, and Regulations*, Enhancement of Local Water Governance (LWG) Toolbox.

UNDP Water Governance Facility

United Nations – ESCAP. (2011). *Development of Eco-Efficient Water Infrastructure for Socio-Economic Development in Asia and the Pacific Region: Strategy for Eco-Efficient Water Infrastructure Development in the Philippines*.

United Nations (1948). Universal Declaration of Human Rights.

United Nations Development Fund for Women. (n.d.). *Unifem at a Glance: Woman and Water*. New York: UNIFEM Headquarters.

United Nations Development Programme (2008). *Conflict Resolution and Negotiation Skills for Integrated Water Resources Management Training Manual*. Cap-Net UNDP, 2008.

United Nations ESCAP. (2009). *Regional trends, issues and practices in rural poverty reduction: Case Studies on Community Participation*. United Nations.

United Nations. (2010). *The UN "Protect, Respect and Remedy" Framework for Business and Human Rights.*

United Nations. (2011). *General Assembly, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles for the Implementation of the United Nations 'Protect, Respect and Remedy' Framework*.

USAID ASIA. (n.d.) Enabling Water Services Delivery for the Urban Poor in Asia, *Best Practices Review and Workshop*. Bangkok: USAID's Regional Environmental Cooperation Asia (ECO-Asia) Program.

Water Facts: Sustainable Water Management. Retrieved 2012 from www.dainet.org/water/whatisswm.htm.

Whyte, A., (1986). *The International Drinking Water Supply and Sanitation Decade: Guidelines for planning community participation activities in water supply and sanitation projects*. Switzerland: World Health Organization.

Women and water management: an integrated approach. 60-83

World Bank (2003); *ASEAN (2005). Country Data Tables, in State of Water Resources Management in the ASEAN*.

World Bank (2005). *Philippines: Meeting Infrastructure Challenges. East Asia and Pacific Region,* The World Bank, Infrastructure Sector Department.

World Consumer Rights Day. (2004). *WaterWorks: A consumer advocacy guide to water*. Arts. #1-8.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