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THE POLITICS OF HONDURAS WATER INSTITUTIONAL REFORM

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Report

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Preface and Acknowledgments

When Dr. Jan Erik Gustafsson proposed my participation in a research project, I could not think of a better research theme and exciting challenge. As an architect who combined the professional practice with urban and environmental planning, research was a personal challenge and the opportunity to be exposed academically to disciplines that I had been exposed to in professional practice.

I would like to express my profound gratitude to Dr. Jan Erik Gustafsson who shared his initiatives in this project as well as for his guidance. My gratitude to Sida-SAREC (SWE-2003-260) for making possible the study by funding it, first as a planning grant, and later by supporting the research application as PhD studies at KTH. The conceptual framework, the strategy and methodology for the field trip were designed while at the International Institute for Applied Systems Analysis (IIASA), I thank them for sharing their experiences in developing countries.

The field work in Honduras is the basis for this report and it represented a major input at the beginning of my research. I want to specially thank the people that collaborated and guided my first steps in Honduras: to Engineer Alfredo Stein, at the time working for Sida in Tegucigalpa, who in a brief meeting put me in contact with the key persons for the study. My sincere gratitude to Engineer Rodolfo Ochoa, Director of Sanaa-DIAT, who devoted time for explanations and discussions; Engineer Lino Murillo, President-Sanaa at the time. My thanks to: Engineer Humberto Puerto -RRAS-CA, who took the time to explain me the whereabouts of the water sector in our first meeting in 2003, to Engineer Oscar Almendarez -Sanaa-UEDB for offering their facilities and contacts with the communities. Thanks to Engineer Gladis Ochoa and Ms. Yarixa Andino and all the staff from Sanaa-DIAT who were always kind when I visited their office. And, indoubtely, this work could not be possible without the information kindly provided by the communities Villa Cristina, Villa Franca and La Nueva Jerusalén.

A very special gratitude to my hosts in Honduras, Yvonne Murillo Schwaderer, Mirko Cuculiza, Mrs. Rosa Horna y Daniel for their kindness and generosity of sharing with me their family life even before getting to know me:

Mi especial agradecimiento a Mirko por la gentileza y entera confianza al brindarme alojamiento durante aquel mes de noviembre del 2004. A Yvonne y a Daniel por su cálida amistad y mostrarme el devenir en Tegucigalpa. Muy especialmente a la Sra. Rosa Horna por compartir conmigo cada día y brindarme su cariño y confianza durante mi estadía.

Abstract

The water and sanitation sector has been in the eye of the storm when referring to institutional reforms in Latin America. Concepts and methodologies have been imported from western countries and these have required adjustments of existing policies and the creation of a regulatory framework. Have these adjustments resulted in delivering an efficient implementation? What is the degree of dependence to the top-down approach, when the implementation stage comes into place?

This study focuses first on understanding institutional and organisational structure in the Honduran water sector from 1990-2002. Second, the study analyses the changes generated by the institutional reform and evaluates the policy implementation of the institutional reform and their linkage with past performances and the traditional organisational structure from 2003-2006. Third, three exploratory case studies are presented as the outcomes of these institutional and organisational changes.

Finally, the controversies of the institutional change are presented as dilemmas. They exposed the strengths, weaknesses and potentiality of the Water Institutional Reform (WIR). The result of the analysis is presented in the conclusions and indicates the weaknesses carried out from the traditional institutional and organisational water sector system. It proves as well that it is not only the rules that constraint the WIR process but the lack of creativity and incentives that individuals in charge -new administrators-, and not only the administration, thrust into the process.

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Abbreviations and Acronyms

ASP	Aguas San Pedro- private company
CBO	Community-Based-Organisation
CEDE	Honduras Decentralization Commission
CNSSP	National Supervisory Commission
CONASA	National Board for Potable Water and Sanitation
DIMA	Municipal Division for Water – San Pedro Sula
ERSAPS	Regulatory Office for Potable Water and Sanitation Service
HNL	Honduras Lempira (currency)
FLWS	Framework Law for Potable Water and Sanitation
IADB	Inter-American Development Bank
MIF	Multilateral Investment Funds
NGO	Non-governmental organisation
PAH	Water Platform- Honduras
PAHO	Pan American Health Organisation
PRS	Poverty Reduction Strategy
PSRP	Public Sector Reform Program
RRAS-CA	Regional Red for Water and Sanitation- Central America
SANAA	National Company for Aqueducts and Sewage
SIDA	Swedish International Development Agency
UN	United Nations
UNDP	United Nations Development Program
WIR	Water Institutional Reform
WSP	Water and Sanitation Program – World Bank
WSS	Water and Sanitation Service
WB	World Bank

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1 DESCRIPTION OF THE STUDY

Introduction

"The next great war will be a water war". This saying is becoming popular when talking about water and the consequences of lack of water resources. Although it has mostly been applied in international affairs, the popular saying is also relevant for national and local environments.

In 1990s the Honduran government decided to proceed with State Modernisation as part of the Public Sector Reform Program (PSRP). One of the main criticisms for this modernisation was the inclusion and participation of the private sector. The modernisation in the water sector in Honduras brought to the heart of the debates two main issues. First, the extent of possible changes within the public sector a reform can modify. Second, the feasibility to improve water management with private participation and its accessibility to the poor.

Honduras is a key case in Latin America due to the occurrence of socio-economical circumstances that rank the country with high risks for macroeconomic, financial and political instability. The State Modernisation had brought new institutional systems, regimes and technological advances, and organisational alternatives to achieve the goal of supplying water and sanitation service (WSS) for all. This alternative was sought as a solution to accomplish an integrative approach to water management that includes physical and socio-economic dimensions. The approach convenes stakeholders to assign, monitor and decide upon rules and responsibilities in order to cover up for the socio-economic gap. Rogers and Hall (2002) argued that these processes are needed for achieving a solution within WSS and to achieve Water Governance, as they defined the term.

This research is an initial exploration to (1) understand the institutional and organisational arrangement for the water sector prior to the implementation of the new system, and (2) to investigate the impact of the decentralisation process in water and sanitation and governance approach generated by the State Modernisation.

For this purpose this report focuses on the water institutional reform (WIR) evolution from 1990s-2006. The analysis is divided in two periods: (i) 1990-2002: the gradual setting up of the institutional reform and (ii) 2003-2006: in which new institutional framework and organisational framework was implemented for the water sector. This report is based on data taken *in situ* from the field trip in 2003 and 2004, at times when the WIR was in the first stage of implementation. Updates from 2005 and 2006 through papers and web documents are also included in the references.

Study Context

The starting point of this study was to examine the circumstances under which water governance including the WIR was taking place in Honduras prior to the State Modernisation, as well as to discern on the performances for providing WSS in urban and peri-urban residential areas.

This study is part of my doctoral research project 'Restructuring Water Utilities-Cases in Latin America'. The geographical focus for this paper is Tegucigalpa-Honduras, and two other cases, San Pedro Sula and Puerto Cortes are exposed to denote the different water governance systems in the country.

Especially in the case of Honduras, it is important to integrate the problem of disaster risk management within the frame of water governance. Even though the study recognizes the relevance of risk planning and emergency planning for water infrastructure, this study focuses neither on this issue nor in its operational arrangements.

Aim and Research Questions

The overall aim is to identify the components of the water governance dynamics of the water institutional reform (WIR)¹. The analysis is performed by:

- Analysing the interaction among actors, and identifying their influence in the process of the WIR and its relation to water governance;
- Examining the improvement of water service and sanitation from the previous management;
- Capturing the formal and informal actors perceptions: public sector, private sector, and civil society groups; and
- Analysing the political and institutional conditions.

This report further aims to elucidate reasons of success or failure for the WSS in the Honduran urban context. The departure for the analysis is composed for the research questions that have guided the course of the report to achieve the aim:

Level of water governance before the implementation of WIR

- What were the constraints for water institutions?
- What were the operational organisations for delivering WSS?
- What were the institutional constraints in peri-urban and rural settlements dealing with the lack of accessibility to water?

Given the institutional changes in all sectors nation-wide:

- How the WIR link with other institutions?
- What are the components for an institution and organisation framework, and what are those in operation for the water sector?

Given the decentralisation process: the transition to municipalities,

- How is decentralisation allowing improvement in the WSS service?
- What are the constraints that the new institutional framework faces?
- Is decentralisation efficient? How does the decentralisation approach coping with the organisational transition to municipalities?

Regarding the Institutional and Organisational potentiality,

- What is the potential role of new institutions to improve water governance?
- How can public utilities improve their ability to deliver water efficiently?
- What type of institutions could be improved or created to cope effectively with the provision of water and sanitation in the city of Tegucigalpa?
- Has the decentralisation approach in Honduras the potentiality for sustainability?

The analysis is based on a Water Governance and Institutional Economics theoretical frameworks. These approaches have been used to cope with the subjectivity inherent in water service and sanitation (WSS) in order to provide an efficient service to urban and peri-urban areas. Based on these theories the result of this research should contribute to explain facts and behaviour adopted from stakeholders, and to understand circumstances leading to the water institutional reform nowadays. For the purpose, the research also gives the political, legal and socio-economical framework of Honduras.

¹ Douglas North (2002) defines institutions as the laws and rules; they could be formal and informal. A definition that is also taken in this report regards to organisations. North defines organizations as the players that behave under the rules (institutions), however they are 'designed to further the objectives of their creators'.

Key definitions

Provision of Water and Sanitation Services

The term is oriented to the provision of the service. According to Ostrom, Schroeder and Wynne (1993) 'provision' refers to decisions made through collective-choice mechanisms regarding the kind of the service, quality, regulation, production, financing, performance and monitoring.

Water Actors

Individuals, agencies and organisations (Kemper, 1996 cited in Hukka, 1998) direct consumers- direct users of the water system; indirect users- those without connection but who may be affected by the system (Lobato de Faria and Alegre, 1996 cited in Hukka, 1998). Water actors are also those competing for the resources with economic and political means such as decision-makers, politicians, funding agencies, and the society as a whole.

Decentralisation

Decentralisation or devolution² is usually referred to as the transfer of powers from central government to lower levels in a political-administrative and territorial hierarchy (Crook and Manor, 1998; Agrawal and Ribot, 1999; Larson, 2005).

Integrated Resources Planning

Integrated Resources Planning (IRP) emerged in opposition to the traditional planning. Among the differences between the traditional planning and the IRP are the decentralised resources control; open, flexible and externally oriented planning process; consensus building management, as opposed to the traditional centralised control, no consultation or participation (closed process), conventional dispute resolution management.

In the IRP the planning issues include the environmental quality as a planning objective; direct and indirect costs, including environmental and social externalities; pricing as an economic signal to guide consumption, and the risk to be analyzed and managed (Beecher, 1995). IRP is a planning process that supposed to create a flexible plan that allows uncertainty and permits adjustment in response to changed circumstances.

Institutions

In a colloquial language, the term institution also applies to organisations, in some cases formal organisations or governmental organisations.

According to North (1990: 3-4) institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction. They are the framework within which human interaction takes place. He compares them with the rules of the game in a competitive sport.

Institutions can be formal (laws, rules, regulations that human beings devise) or informal (conventions and codes of behaviour). Institutions can be created or evolve over time, as does the common law. Institutional constraints include both what individuals are prohibited from doing and, sometimes, under what conditions some individuals are permitted to undertake certain activities.

Organisations

North (1990: 4-5) also makes a crucial distinction between institutions and organisations. Organisations are groups of individuals bound by some common purpose to achieve objectives. Organisations include political bodies- such as political parties, city

² Devolution is also a term that denotes the transfer of rights and assets from the centre to local governments or communities, though in some cases devolution is only use in reference to direct community transfers (Larsson, 2004).

councils, regulatory agencies-; economic bodies –firms, trade unions, cooperatives-; social bodies –churches, clubs-; educational bodies –schools, universities.

Like institutions, organisations provide a structure to human interaction. As Oström et al (1993) argue a group of organisations constitutes the social infrastructure that with their patterns of behaviour transform inputs into outputs to achieve objectives.

Institutional Framework

The term has become well used and covers all organisations with very different origins, purposes and constitutions, such as governmental and other public bodies, commercial and charitable organisations or those representing private individuals' interests in associations, professional bodies, etc. Kemper (1996, cited in Hukka, 1998) includes in her definition of institutional framework the structural nature of institutions (institutional arrangements) and actors.

Methodology

The development of the methodological and theoretical framework was made in parallel with the empirical studies. Such a methodology made it possible to find themes and perspectives deemed essential to enrich the case study. The structure of the study is shown in figure I.

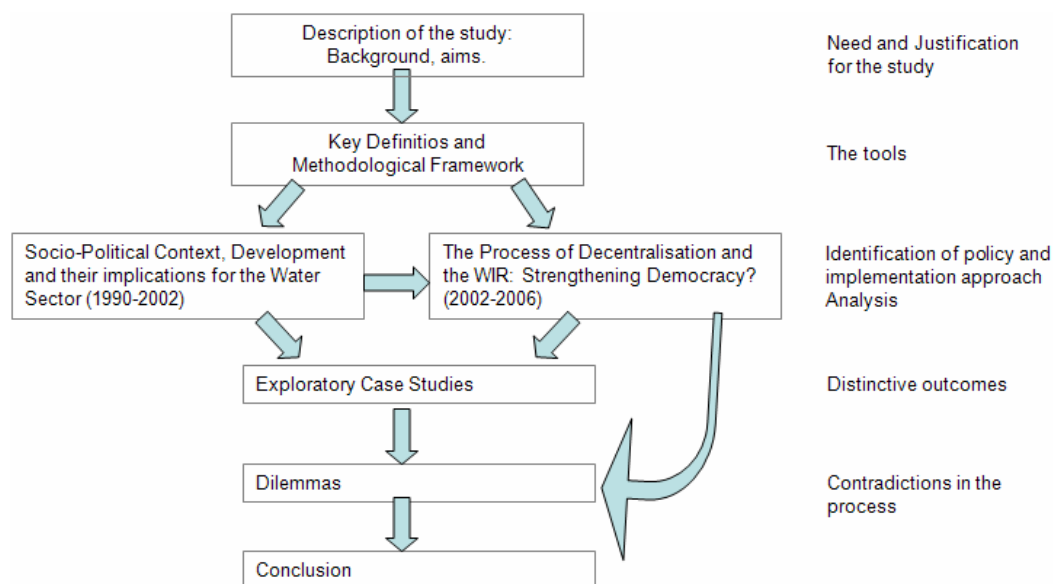


Figure I. Structure of the Study

The methodology for the case studies is a qualitative research based on existing literature and information from the field trip held in October-December 2004. A focal point in the research was centred particularly on the group of governmental –national and local- and international actors/stakeholders. These stakeholders held public conferences and forums at the time of the author's field trip October-December 2004, from which the author has gained various opinions and perspectives on what feasible actions to take regarding WSS management.

Field work in Honduras

A planning field trip of 10 days was conducted in 2003 in order to determine the case studies for the research. The following year a field trip was conducted during the months of October and December 2004 to Tegucigalpa. The data collection during the fieldwork

was organized in two mainstreams: i) revision of official documents such as policy documents, legal documents, governmental agencies documents and web sites, and international agencies documents and web sites; ii) distribution of full structure questionnaires in Tegucigalpa: though they do not correspond to a representative sampling in terms of percentage of population, they instead represent an overview of the water residential situation; iii) daily observations.

One of the initial ideas was at first to survey and evaluate the consumer perspective. This aim was not possible to achieve due to the difficulties to reach the outskirt settlements, and the lack of local assistants in the research project. Nevertheless, the 53 questionnaires collected for the initial survey have contributed to build an opinion on the situation and perspectives of consumers in Tegucigalpa.

Thus, the strategy was redesigned to organise focus group discussions in three settlements. It was very helpful to count with the help of Sanaa-Division for Marginal Areas (UEDB) to reach peri-urban areas in Tegucigalpa.

2 SOCIO-POLITICAL CONTEXT, DEVELOPMENT AND THEIR IMPLICATIONS IN THE WATER SECTOR (1990-2002)

Honduras is located in Central America, and its population according to the national census by 2001 was of 6'535,344 million inhabitants³, which by 2007 has incremented to 7'585, 155 inhabitants⁴. It is noteworthy to acknowledge that 47% of the population was urbanised⁵ and 53% were located in peri-urban and rural areas.

Up to the 1950s the public administration was set up through a vertical hierarchy from the president, ministers, political governors, and the municipal mayor. In a decentralised administration, the elected mayor was in charge of solving the most urgent problems of their communities. Thus, municipalities were in charge of issues such as protection to inhabitants and real estate, education, public health, etc, including the provision of water and sanitation service (WSS). At the time, national or regional plans or programs were non-existing. Solutions were proposed based on acknowledged merit and urgency of the problem (personal communication with governmental officials, 2003). In the 1950s, a major change in



Figure 1. Honduras

organisation and institutions transferred the responsibility for providing basic services including WSS to the central government; these services included education, health, and the promotion of economic and social development. Since then, economic centralization has increased to the degree that public expenses are decided at a level of 90% at the central level.

In 1992 the country began a considerable effort to modernize the public sector, State Modernisation, under the Public Sector Reform Program (PSRP). One of the purposes of the PSRP is to improve the efficiency of the public administration under a decentralization scheme⁶. After almost 50 years of centralised administration, the decentralisation strategy devolves to municipalities the responsibility of the provision of basic services.

Geo-political administration

In order to achieve a better understanding of the water institutional reform (WIR) and the decentralisation process, the next paragraphs illustrate the trends of development and political organisation in the country. The geopolitical organization in Honduras is based on 18 Departments⁷, and 298 Municipalities. Figure 2 shows the boundaries of Departments coloured according to population.

³ INE (Instituto Nacional de Estadística. Honduras) XVI Census of Population, and V Census of Housing. <http://www.ine-hn.org/censo2001/p19.pdf>. Accessed March 2005.

⁴ Ibid. Encuesta Permanente de Hogares de Propósitos Múltiples. http://www.ine-hn.org/EPHPM_XXXV/survey0/data/Cuadros/02.%20Poblacion.mht. Accessed January 2008.

⁵ UNICEF, 2006

⁶ The PSRP began in 1992 with the support of UNPD, the IDB and the International Community. The program includes eight chapters: Public Administration Reform, Decentralization and Municipal Strength, Strengthening Right of Estate and Civil Society, Corruption Control, Justice System, Political Modernization, Legislative System and Education Modernization (Cambio Empresarial, 2001)

⁷ Administrative divisions: 18 departments (departamentos); Atlantida, Choluteca, Colon, Comayagua, Copan, Cortes, El Paraiso, Francisco Morazan, Gracias a Dios, Intibuca, Islas de la Bahia, La Paz, Lempira, Ocotepeque, Olancho, Santa Barbara, Valle, Yoro.

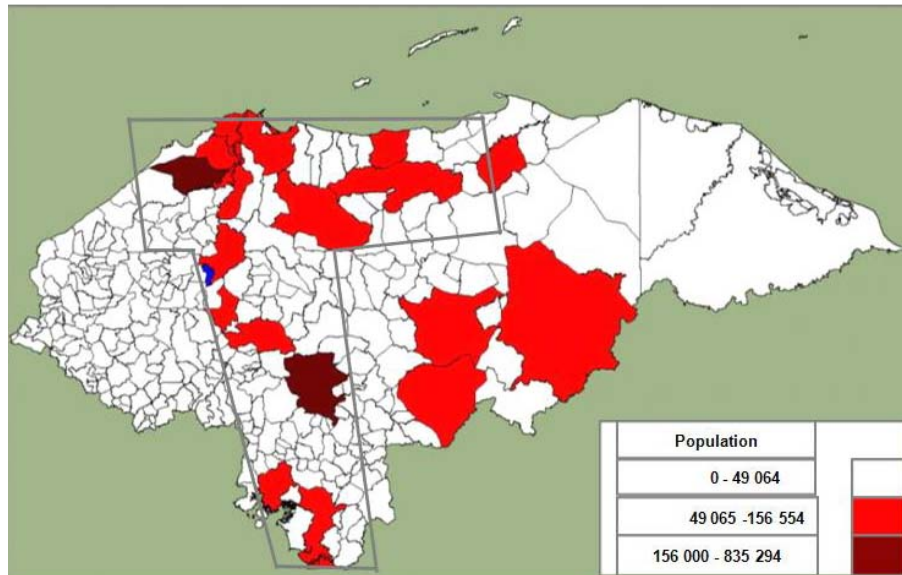


Figure 2. Departments of Honduras by population and the 'T of Development'.

The main two cities in the country are: the city capital, Tegucigalpa, and the industrial city San Pedro Sula (darker colour in fig 2). The corridor for development includes the cities of Tegucigalpa, San Pedro Sula, and La Ceiba (north east coast). These cities are the centre for national development so called the 'T of Development' (fig. 2). According to the development of the cities, the south of the country is not prioritised, which generates a dichotomy on the development of settlements along the Caribbean in comparison to the Pacific region (Falck, 2003).

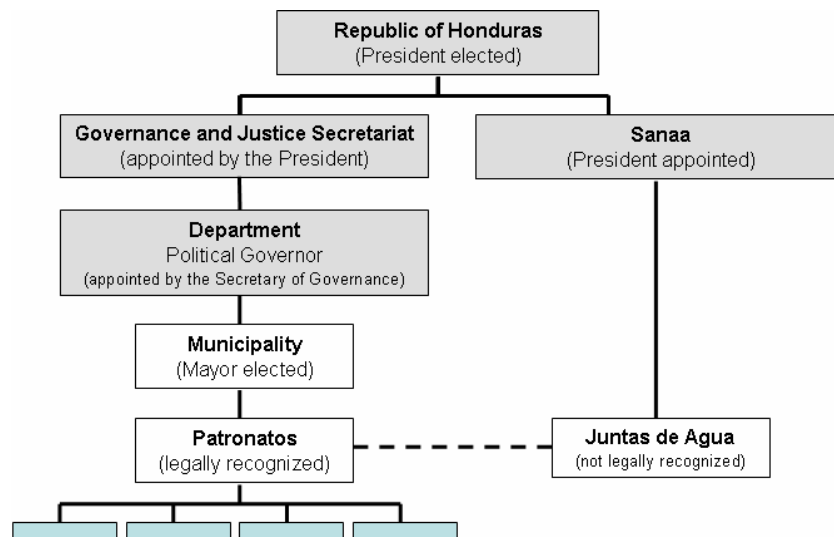


Figure 3. Political Organisation Levles and operational organisations for the water sector.

The public administration is managed by three government levels: national, departmental and municipality level (fig.3). Departments are extensions of the central government headed by presidentially appointed governors, the political governor, who in practice do not exercise political power nor have responsibilities of importance. Municipalities are headed by an elected mayor, and are the smallest government units

recognized in the Honduran law. In practice, two levels have active decision-making within the governmental administration: the national government and the local government.

The water sector was represented by Sanaa, which president was appointed by the President of Honduras. Thus, Sanaa at the high political level had coordination with other institutions at national level but not with local governments. Nevertheless, due to the earmarked donations to the water sector, Sanaa had close coordination with the Juntas de Agua, community-based organisations(CBO) that were managing local services. Most of Juntas de Agua were not legally recognized, and thus if they needed to coordinate with local governments the official liaison was the Patronatos.

Poverty and health linked to water management in Honduras

The argument that water governance is a key factor to contribute to the improvement of health and also to reduce poverty is widely recognised (Lawrence, et al., 2002; Soussan, 2004; UNDP, 2004; SEI and UNDP, 2006). In a more specific issue, water management not only can contribute to poverty reduction by linking to wider poverty reduction processes at national and local levels, but also can do so in ways that are affordable (SEI and UNDP, 2006) and sustainable. The Honduran Constitution, enacted in 1982, recognizes the right to health of the citizens, which enhance the duty to participate in the promotion and preservation of health for the individual and the community. The state will preserve the appropriate environment to protect people's health (cap.VII, art. 145). The government should promote integrated programs to improve the nutritional status of the Honduran population (cap.VII, art 150).

Honduras is a country with many social inequalities as it is reflected in the UN Human Development Index (HDI)⁸. In the 2000 HDI report Honduras ranked 116th out of 175 countries, with a medium HDI value of 0.667 and a GDP of 2 600 US\$⁹. In 2004, Honduras still lies on a medium HDI value of 0.683 under the 117th position, with a GDP per capita in a PPP¹⁰ of 2,876 US\$ (UNDP, 2006). Nevertheless, this figure was under the average of the 0.777 as the HDI value that counted for Latin America and the Caribbean. The Honduran National Institute of Statistics in Honduras have the following percentages in 2001 for poverty incidence which are shown in table 1.

Table 1. Poverty incidence in Honduras (% of households)

Classification	National	Urban	Rural
Total of households	1,258,299	630,735	627,564
In Poverty	64.5	56.3	73.8
Poor *	17.0	20.3	13.3
Very Poor **	47.4	36.1	60.5
No Poor	35.5	43.7	26.2

Source: National Institute of Statistics (INE-Instituto Nacional de Estadísticas) 2001.

* **Very Poor or in extreme poverty:** those which income is less to the cost of the basic needs for food. ** **Poor homes:** those which income allow them to cover the cost of the basic needs for food, but not the entire basic cost for basic needs in total.

⁸ The UN Human Development Index is a comparative measure of poverty, literacy, education, life expectancy, childbirth. HDI represents the average of three general indicators: Life Expectancy Index, Education Index and GDP index.

⁹ <http://hdrstats.undp.org/indicators/15.html>

¹⁰ PPP (Purchasing Power Parity) is the value (exchange rate) of all final goods and services produced with a nation in given year divided by the average population for the same year. PPP is the law of one price under the idea that in an efficient market identical goods must have only one price.

These percentages are continuously increasing as shown in subsequent census. In 2003, according to the national analysis of the water sector, 59% of urban households were in poverty. Though percentage changed downwards for rural areas to 65% in extreme poverty this might also reflect as well the diminishing of total population (R.H., 2003a).

An aggravating factor for poverty and thereby also the WWS situation is the increasing number of women as responsible households, meaning one person with income per resident unit. In 2004, there were 370,000 households with the economical support of one woman (INE, 2003). This rate is rapidly increasing, and will be reflected in the GDP for households. The situation gives us an alert for poverty incidences, since the salary for woman is less than the salary granted to a man for the same activity.

The relationship of education with water and sanitation also plays an important role in WSS. Although this relationship does not reflect precisely the willingness to pay; the more education, the more people are aware of the need for water connections within the house. In Honduras, one of five persons over 15 years old is illiterate, and the illiterate rate increases with the age. It reaches the peak at 60 years old where almost 50% of the population is illiterate (INE, 2001).

Demography and water and sanitation infrastructure in urban areas

The rapid urbanization in central urban areas over the last twenty years has set additional stress on WSS and the infrastructure coverage. As a tropical country the water and groundwater sources in Honduras are plentiful. However the abundance of water is relative to the access of potable water because the availability in populated areas depends on infrastructure and management.

In 1961, approximately 440,000 Hondurans lived in urban areas; by 2001 this number had risen to over three million according to the National Government Census (in Angel et al, 2004). In spite of the claimed macroeconomic performance, the government has difficulties to cope with the operation and management of public services including water infrastructure. Even more critical is the infrastructure coverage for peri-urban settlements most of them categorized under the poverty line. A slight progress in the increment of water and sanitation infrastructure coverage is shown in table 2 although far from alleviating the demand for WSS of the existing population.

Table 2. Residential characteristics in Honduras: Infrastructure supply.

Residential characteristics Percentage of households	1996 %	2001 %
1. Electric Energy	53.4	60.6
2. Radio	73.9	85.2
3. Television	44.0	53.4
4. WC / latrine	73.8	78.0
5. Domiciliary water connection	69.2	74.3
6. Floor of soil	40.6	32.1
7. Cooker with wood	62.1	55.9
8. Appropriate garbage points	69.0	74.8
9. Women as a household	-----	21.1

Source: Report of National Census of Epidemiology and Family Health. 1996-2001

Table 3 depicts the Pan American Health Organization (PAHO) survey of water supply and sanitation, which states that the access to improved WSS in 2000 for urban population in Honduras was as follows:

Table 3. Access to improved WSS. Honduras 2001

Water supply % of urban households (hh) with:			Sanitation % of urban households (hh) with:		
Hh connection	no hh connection but 'easy access'	No service	connection to sewers	no sewage connection but 'in situ' sanitation	Unserviced
89	5	6	55	39	6

Source: PAHO and WHO (2001), Water Supply and Sanitation: Current status and Prospects, Regional Report on the Evaluation 2000 in the Region of the Americas, Pan American Health Organization, Washington, DC.

Though 94% of the urban population may have access to WSS, the quality of the delivery is questionable. PAHO defines 'easy access' as the water in a public standpipe is 400 meters from the home, meanwhile UN-Habitat pointed out that this distance in urban settlements is considered rather long, especially taking into account that women are in charge for collecting the water.

On the other hand, the quality of drinking water depends to a great deal of the water quality at sources. In Honduras, rivers do not get a continuous quality monitoring unless the bad quality is pretty obvious. Prevention for using water with bad quality is not fostered, especially in marginal settlements. In urban areas such as Tegucigalpa the water comes easily contaminated because the infrastructure is obsolete. According to Sanaa (2002) records, only 11 of 55 major sewerage systems in the country have wastewater treatment facilities. UNDP estimated in the 1990s that 82% of the population was provided with excreta disposal systems consisting of a septic tank, or simple latrine containers. The progress in providing water and sanitation infrastructure is slow, and the latter even more delayed.

Legal framework for the water sector

The legal framework for the water sector must be understood in two levels: the water as a resource (macro level) and the water for consumption so called drinking water or potable water (micro level) (see fig. 4). Despite their appearance at a glance that they are independent of each other, they are closely interrelated: the water for consumption depends on the availability of the water resource physically and institutionally.

Arguments get easily confused regarding these two levels, as it happened during the General Water Law Consultation Forum.

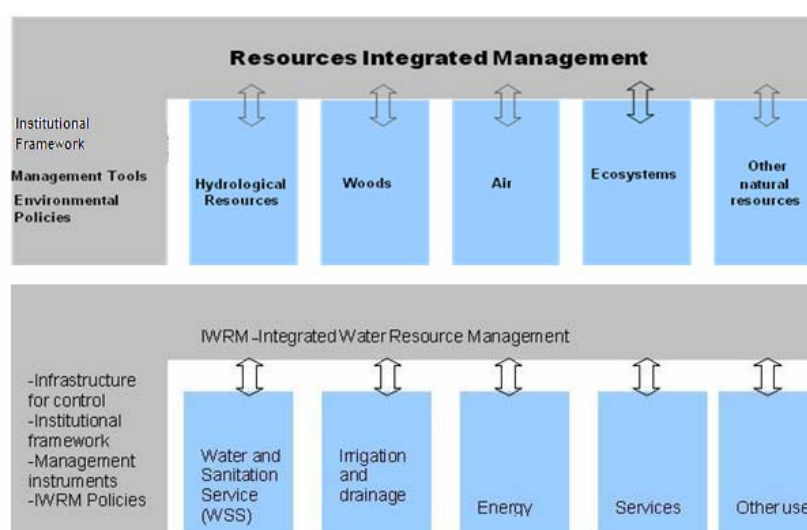


Figure 4. The two levels of the Water Sector.

In Honduras, the legal framework at the micro level is given by the Framework Law for Water and Sanitation (FLWS), enacted in October 2003. The institutional framework for water at a macro level will be given by the General Water Law (GWL), in elaboration since 2004. Among the issues in consideration are: the quality of water at the source, the amount of reserve water in case of draught, regulation for uses of water, competition with other services derived from the water resources.

The legal framework related with the WSS is dispersed in more than 25 legal documents, of which the most important are displayed in table 4.

Table 4. Laws related to the Water Sector.

Name	Original name	Enacted
Law of Usage of National Waters	Ley de Aprovechamiento de Aguas Nacionales	1927
cSANAA Constitution Law	Ley Constitutiva del SANAA	1961 (amendments in elaboration- 2005)
Municipal Law	Ley de Municipalidades	1990 Valid January 1991
Framework Law for Water and Sanitation (FLWS)	Ley Marco de Agua Potable y Saneamiento	October 2003
General Water Law (GWL)	Ley General de Aguas	In elaboration
Territorial Land Use Law	Ley de Ordenamiento Territorial	October 2003
Technical Normative for Water Quality	Norma Técnica Nacional para la calidad de agua potable	October 1995
Technical Normative for the discharge of waste water to water sources and sewage	Normas técnicas de las descargas de aguas residuales en cuerpos receptores y alcantarillado	December 1997
Environmental Law	Ley del Medio Ambiente	May 1993
Creation of National Corporation for Forest Development	Corporación Hondureña de Desarrollo Forestal	1974. Amendments 1983
Health Code	Código de Salud	May 1991
Reglamentation for Juntas de Agua	Reglamento de Juntas de Agua	June 2006

Table 4 denotes willingness for a institutional change in 2003. The FLWS and the Territorial Land Use Law are enacted the same year, foreseen merging and approaching new perspectives. Workshops with actors involved in the water sector participated actively in consultations. For example at local and regional level Integrated Water Resources Management workshops were organised with the Global Water Partnership. At the national level, the Water Platform together with the Congress organised consultation workshops with the presence of organisation nation wide.

Among these laws the Municipal Law (1990) and the Law for Promotion and Development of Public Works and National Infrastructure (1998) confer the premises for decentralisation.

The Municipal Law (RH., 1990) enacted in 1990 and valid from 1991, authorizes the Municipalities for the ‘construction of distribution network of potable water, sanitation for drainage and black waters, and their administration’ (art. 13). It also establishes the right for municipal entities to contract public or private entities for construction, maintenance or administration of these services. Municipalities are also entitled to established rates for the

direct or indirect services¹¹ (art. 84). The enactment of this legal framework promotes the political decentralization of water administration. The Municipal regulation (art.58) establishes that municipal public services could be provided and administered by: the municipality administration itself, a decentralized division/unit of the municipality, mixed firms conformed by public and private sector, concessions granted to private firms by contracts.

The Law for Promotion and Development of Public Works and National Infrastructure (RH, 1998), enacted in 1998, establishes the judicial framework for the provision and indirect management of public services. According to this law, the national government and municipalities can request the provision by indirect management through the concessions or licences, transfer of the ownership rights and contracts for subcontractors of the public service management, and their combination (art.4). The mechanisms for requesting the concession or transfer of ownership rights (privatisation) are contained in both laws.

In summary, water related laws and rules were established according to the historical and political momentum. The WIR in Honduras had some advantages as to the revision of laws that were obsolete by the time. However, the WIR also faced the situation in which laws and rules were enacted supporting certain political and economical interests. The risk of not envisioning a decentralisation approach as a whole by integrating a legal framework and an integrated resources planning was at stake.

Organisations for water management

The roles and duties for the water sector in this period, 1990-2002, were dispersed over several organizations (see fig. 5). The responsibilities were separated according to the nature of the issue – planning, financing, control, regulation, technical assistance, and

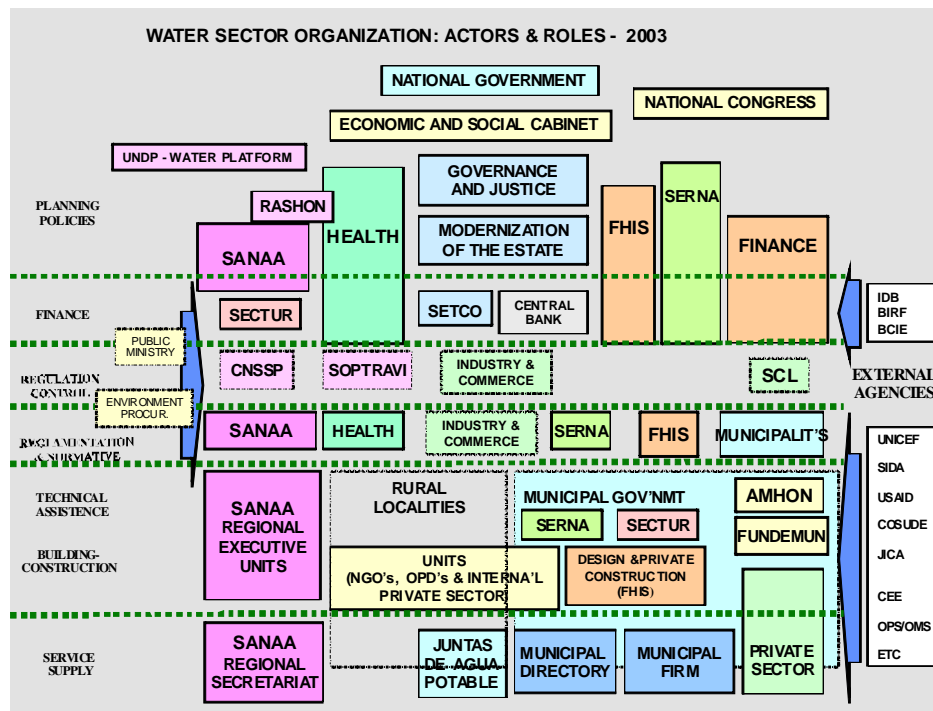


Figure 5. Organisation of the water sector. Honduras 2003.

Source: Phumphu & Gustafsson, 2005

¹¹ Direct services are provided by governmental entities (autonomous, decentralized), Municipalities, and Juntas de Agua. Indirect services are given by private entities (RH, 2003).

construction but not always coordinated.

The Health ministry had the planning role, which in most case was not necessarily was the water sector agenda, therefore water and sanitation projects were not prioritised.

Among all national organisations Sanaa had a relevant role in supplying water and sanitation in urban and rural areas. The function of Sanaa since the 1960s has been to construct, operate, maintain, administer water and sanitation systems, and promote development, designs, operation, maintenance and administration for WSS. However, it has been losing operational coverage; by 2004, Sanaa administered 31 municipalities countrywide, of the existing 298 municipalities (RH, 2003a). According to Angel, et al. (2004), Sanaa controlled Tegucigalpa's WSS policies and projects and maintains the piped water distribution network in the city capital. None water authority was in operation at the time.

The patronatos are the neighbourhood movements at the local level. The following excerpt describes the patronatos:

The patronatos are perhaps the most significant organized groups at the grass-roots level. Patronatos first appeared in the 1950s and took on their present character as neighborhood empowerment associations in the 1960s. They are founded as housewives' and women's associations and still seem to be dominated by these groups. (...) Patronatos have no governance function, but they do have legal status. They help hold officials accountable for their actions and work to obtain basic municipal services, such as water, sewage, and garbage collection, for their neighborhoods. Some patronatos have become militant and influential locally, often affiliating with political parties or local and congressional candidates at election time (Lippman and Pranke, 1998).

In the same manner, neighbourhoods are associated in groups in order to access and manage water. The *Juntas Administrativas de Agua* (Juntas de Agua) have played a self management role (UNDP, 2002:130). These community-based organisations are pioneers in providing water to most rural areas and peri-urban areas, in an attempt to improve the sustainability in the rural water service. They share responsibilities with Sanaa-technical support and depend administratively on the patronatos, since the latter possesses legal recognition, which the Juntas de Agua do not.

There are approximately 4,000 Juntas de Agua that involve 30,000 people (Union Europea, et al. 1998). Their operation in rural communities demonstrates that in practice the operation and management for water facilities in rural communities have been decentralized from local and national governments long ago.

Nevertheless, since the early 1990s, trade unions and peasant organizations experienced difficulties in expressing their voice these civil society organisations were not included in the consultations looking for new alternatives for implementing new institutions- laws and rules.

SANAA technical support to Juntas de Agua: Evolution for efficiency

Decentralization has been the solution for many towns and villages in Honduras since the 70s with the Juntas Administrativas de Sistemas de Agua (Administrative Committees of the Water Systems- Juntas de Agua) organized by SANAA and European Union funds. These committees were originally created as part of the *Patronatos* in rural areas with the purpose of encourage the community participation in the administration, operation and maintenance, especially of the aqueducts. The model has also been applied in peri-urban areas like in Tegucigalpa.

By the 70s some rural communities had a SANAA appointed supervisor, and at the end of the decade SANAA supervised 78 rural communities through the juntas de agua. The supervisors went to the communities to supervise the compliance of assigned roles, bills, and helped with some administration errands. After some time, these activities were not enough to bring an efficient technical support, and then by 76' the *Fontanero Regional*- regional plumber- was created to solve the weakness of the local technical supervisor. By the beginning of the 80s it was not convenient to have two separate technicians and the two roles were merged in one person, who was called the *Technician for rural operation and maintenance*- TEOMAR. These technicians revised the administration as well as the technical problems, and gave recommendations to the local rural plumber -*fontanero rural*- to solve the small problems. For problems that surpassed the solving scale, SANAA sent an engineer for evaluation and analysis. However, when visiting the rural communities, technicians did not have the time to devote in construction of new water systems, communities were growing and expanding. When new technical competences were needed; there was an increasing demand for construction of aqueducts. It is then that again the Juntas de Agua were reinforced with the *Técnico en Agua y Saneamiento-TAS*, the *Water and Sewage Technician*, who was a SANAA te I. Structure of the Studyd pipe network installations. (Personal communication with Engineer Rodolfo Ochoa, Director of DIAT, SANAA).

Financing the water sector

As Honduras was in the list of Heavily Indebted Poor Countries, the subsequent condonation for debts were granted in July 2000 (IMF, 2000), which gave some financial alleviation. In 2002, Mac Cuish denoted that Honduras was stalled in its debt relief programme for not adequately complying with IMF conditions. A letter on 20 Sept 2001 from IMF had noted that 'further progress with privatisation is essential to achieve a sustainable fiscal position and to promote faster poverty reducing growth' (cited in World Development Movement, 2003; World Bank, 2000). Nevertheless, under the PSRP and with the Millennium Goals in mind, the government assigned financial resources for the WSS, especially oriented towards low-income population.

National funds and loans were the main sources of funding water infrastructure, but external donations were still quite a significant percentage, however, it is noticeable the considerable reduction of donations from the years that followed the Hurricane Mitch. Then, national programs were promoted to generate independency from donors (RH, 2003a). On the other hand, the policy towards an open economy to the world market from the 1990s has had a positive impact in the macroeconomic figures, according to the Honduras Central Bank, maintaining a fiscal discipline and a coherent monetary policy to achieve production growth (Nuñez Sandoval, 2004). However, these improvements are not seen at the economic micro level where local investment diminished.

The annual budget for the water sector was fixed and distributed to the Central Bank and the Finance Secretariat (SEFIN), and the financial aid was mostly directed to the Honduran Fund for Social Investment (FHIS). The distribution of external donations had three major receivers to finance WSS at the investing and operation level: Health Secretariat, FHIS for investment and operation, and to Sanaa for investment and operation to rural areas (see fig. 6). At the operational level, Sanaa had funds to offer capacity building to water associations, Juntas de Agua; and the Association of Municipalities (AMHON) trained future local governmental administrators. Nevertheless, national plans

were non-existing as a base to coordinate external aid and national funds, and to establish criteria for priorities.

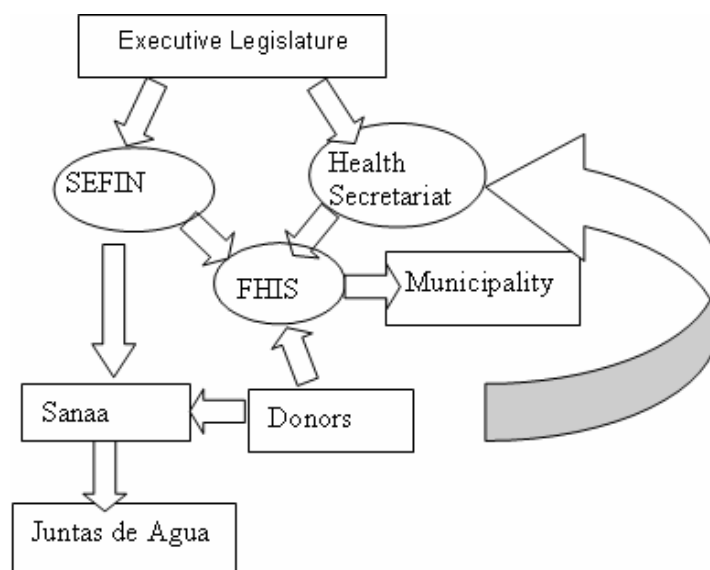


Figure 6. Financial structure of the water sector before the WIR

Natural hazards and effects in development and WSS investment

Natural hazards play a role in development in countries like Honduras located within the hurricane belt. Hurricanes, tropical storms, and seismic movements are common, while devastating earthquakes have been rare. From the past ten years water and electricity rationing has been intensified due to El Niño damages and seasonal droughts. Also, Honduras' dependence on hydroelectric power for more than two thirds of total national power generation make the provision of public services very vulnerable to natural hazards.

An exceptional event such as the Hurricane Mitch serves us as an example. Telford (2004) denotes that the country was vulnerable and unprepared in terms of policy, systems, and resources for rapid recovery. It hit Honduras at the end of 1998, and resulted in the largest natural disaster experienced in the country in recent memory. The resources pledged for post-Mitch programs are recognized as having been exceptionally high as compared to other countries suffering from major disasters. Table 5 shows that almost 35% of the donations during 1998–2003 were earmarked for water infrastructure and management or earmarked for aspects that could include water infrastructures (i.e. physical infrastructure). Still the results do not seem to achieve the minimum standards for WSS infrastructure.

Table 5. Donor earmarked support.

Donor 1998-2003	\$M	Priorities
Bilateral donation	1,078.4	(total amount)
Germany	72.4	Social and physical infrastructure
Italy	66.5	Community development, water/sanitation, import finance
Japan	62.0	Basic infrastructure, health (inc. water supply/sanitation), agriculture, housing
Sweden	99.0	Infrastructure: roads, rural water and municipal development
Other bilateral	74.5	Housing, forestry, municipal water and transparency

Source: World Bank Honduras Country Assistance Strategy, 2000

Annex F P. 2 of 3 (from the IDB Report on Stockholm CG, June 30, 1999 and other inputs).

The following table 6 shows the second priority for the water and sanitation reconstruction within the infrastructure assigned costs¹². The replacement cost meant the amount the reconstruction would have cost by 1998. The total reconstruction cost assigned for WSS was in the range of only the 30% of the cost needed for its replacement. The figures in table 6 denote the reconstruction funds assigned to achieve a minimum water and sanitation coverage. If we take in account that the infrastructure before the Hurricane Mitch was not covering the demands we can imply that the assigned costs were far from alleviation the problem.

Table 6. Damages and reconstruction costs. Honduras 1998 (US\$ million)

	Direct cost	Indirect cost	Total cost	Replacement cost
Total cost for reconstruction	2 117.4	1 461.1	3 638.5	4 987.0
Roads, bridges	314.1	140.04	454.1	571.4
Water/sanitation	24.2	7.2	31.3	118.6
Energy	9.3	17.0	26.3	23.2

Source: Telford (2004) from UNDP/ECLAC, A Preliminary Assessment of Damages Caused by Hurricane Mitch, 10 December 1998.

The policy for reconstruction was of “all aid is welcome”. The aid management resulted in a supply driven response, which was driven largely by what was offered. A demand driven process would have been preferable. Since no clear criteria existed to determine severity of damages and population affected, there were no guidelines for prioritizing the assistance. Deciding on giving interim versus permanent solutions was established randomly.

On the other hand, issues not directly related to a disaster may play a central role in determining the success of recovery efforts. Macroeconomic realities, especially the debt burden, and unfavourable international trade conditions, have overshadowed post-Mitch recovery efforts. Most concerns, even hopelessness, expressed by interviewees from widely diverse backgrounds reflect these negative economic realities (Telford, 2004). Among the contributing factors for successful reconstruction were: (i) people’s own skills, efforts, and resources (e.g., based on family remittances from abroad, family or individual labour and savings and/or new standard rate bank loans). (ii) The large influx of international funds brought programs that integrate physical reconstruction with other socio-economic and cultural facilities and infrastructure (jobs, child-care, schools, community, recreation and religious facilities, shops, transport and access routes, etc.). (iii) Appropriate consultation with an involvement of communities and families. (iv) Use of high quality resources, both human and material (e.g., engineers and construction materials such as steel) (RH, 2003a; Telford, 2004). According to Telford (2004), failure in reconstruction may be attributed also to the government not being able to generate and ensure adequate standards for recovery to be applied across projects and geographical areas.

An effective national, regional and municipal emergency planning and construction inspection capacity did not exist. Even governmental bodies differed widely in the criteria and standards they applied in the reconstruction of, for example (a) NGOs participation and responsibilities were unclear; housing projects implemented by NGOs has frequently been inadequate. Many NGOs reported that it was their first involvement in housing

¹² Direct Cost is the cost directly attributable to the manufacturing of the product. Meanwhile, the Indirect Costs are the expenses shared among programs, or among functions within the organization, i.e. management, accounting, legal affairs (Flood and Phelps, 2005).

reconstruction. Sub-standard work and an absence of socio-economic and environmental assessments frequently resulted in poor quality. (b) Self-help projects were often poorly managed, unsupervised, and ineffective. Families and communities were often left alone in their efforts to reconstruct their homes, with little or no technical or financial support from anyone – meaning government, civil society or international agencies. Alternatively, self-help in some cases amounted to no more than a token presence of beneficiaries.

In 2002, a legal framework draft was prepared for emergencies, spatial planning and a construction code were also included. However, vulnerability is also driven through existing environmental conditions. The Mitch effects were largely due to environmental degradation -deforestation, rapid population growth, inadequate infrastructure for flood management-, and massive disparities in the distribution of wealth, which has resulted in extremely vulnerable living conditions for the poorest.

As a reflection, reconstruction could have had been supported by social capital and from of a national reconstruction plan. Considering that reconstruction does not necessarily means to restore the damage as it was before but to have alternatives to replace it, and these could have been contemplated in plans. The structure of the governmental organisation plays an important role, and it needs to be built gradually long before the disaster comes.

Two concerns arises from the experience of reconstructing water infrastructure due to natural hazards: (i)Planning reconstruction –i.e. priorities set up in an Emergency Plan- and (ii)Financing the cost of reconstruction.

Another instrument that could be used as prevention is Land Zoning. In fact, causes for damages are due not only because of absence of planning, but more frequently due to the absence of effective enforcement (Angel, 2004). In case of disaster, according to some authors, the failure of the central government to decentralize funding, enforcement, and delivery mechanisms for services, particularly water, sanitation, and transportation, which are essentially local infrastructures in nature, has compounded the City's problems for an efficient performance in emergencies.

Summary

This section has exposed the facts and analysis of the socio-political context in which the WIR has developed. During the analysis we have considered the first set of issues from our research questions section, which we summarise as follows.

The WIR began in a global historic momentum with a decentralisation approach. Water institutions, laws and rules, were enacted and established clearly with three roles: planning, regulation and provision. The weaknes of the institutional set up is the fact that these roles were established under the framework for drinking water and sanitation service and not under the entire water sector framework. The constraints are extended to the rural and peri-urban areas were the illegality of water organisations, does not allow for direct and opportune negotiations.

Operational water organisations were Sanaa in urban areas and Juntas de Agua in rural areas. The finance for water infrastructure dependeded on external aid and loans, which was administered by FHIS and directed to municipalities. An integrated management to prioritize projects was lacking. Also, integrated resources planning was missing although there was an attempt to formulate an emergency planning and priorisation of projects.

3 THE PROCESS OF DECENTRALISATION AND THE WIR: STRENGTHENING DEMOCRACY? (2002-2006)

The WIR in Honduras is based on a decentralization scheme promoted by the PSRP. However, it was only after the Hurricane Mitch in 1998, when the country re-emphasised the decentralisation approach. The first stage of the decentralisation process was devoted to consolidate legitimacy for democracy¹³. However, there are opinions that contradict the purpose:

In Honduras, as the rest of Central American countries, the PSRP was the result of a diagnosis, which focused in the inefficiency and excessive public activity, which should be corrected through the reduction of the state;(...). However, the diagnosis concentrated on the defects of the public management rather than on the obstacles, potentialities and dreams (UNDP, 2002). (...) In essence, the origin of the process to modernize the state was not necessarily born linked to the effort for deepening democracy, neither to promote transparency, nor accountability, and not even for promoting civil society participation. The motive seemed to be the economical stabilization and the improvement of governmental management at the beginning of the 1990s (Cosenza, 1999).

The PSRP¹⁴ in Honduras was approved by the Inter-American Development Bank (IDB) in 1995 at total cost of \$226.8 million. The financial support from the IDB was \$160.0 million, \$64.7 million Honduras had to finance from other external sources and \$2.1 million was the contribution from the country (IDB, 1995). The technical cooperation program would support the PSRP and the state modernization activities through the preparation and implementation of the following components: (a) reform of public services; (b) institutional restructuring; (c) human resources management; (d) integrated financial management and investment programming; (e) procurement and contracting; (f) the Social Security Institute and social security system; (g) environmental strengthening; and (h) coordination and monitoring (IDB, 1995).

In practice, WIR actively began to take efforts for implementation with the Water Platform launched by the UNDP as the moderator and facilitator for the WIR process, and the arena created for discussion and debates. The Water Platform brought interests and agendas together with the participation of stakeholders from the government, international organizations, the local and international private sectors and some civil society organizations.

¹³ Among the conditions to legitimate democracy are the respect for human rights, participation, pluralism, and the governance attributes of transparency and fight against corruption (UNDP, 2002, p.69).

¹⁴ The PSRP program consists of a loan and a technical cooperation. The objectives of the loan are to modernize the public sector and eliminate structural problems that cause recurrent fiscal imbalances. Among the issues the government should rethink regarding its role in the economy is the transfer of the provision of public goods and services in part to the private sector, concentrating the government's activity on setting policies and standards, and regulation. The loan program has three components: (i) reform of public services, consisting of restructuring principal services through privatisation and concessions (of telecommunications, aviation, and electricity, as well as development of a strategy to introduce private participation in ports); (ii) administrative reform, including institutional reform in four sectors (education, health and social services, natural resources, and infrastructure and communications), rationalization of the central ministries (Economic Affairs, Finance and Planning), and rationalization of public employment and pay regimes; and (iii) public administration reform, including reform of financial management and investment planning.

What does decentralisation imply?

The WIR was at the core of the political debate in 2004. The reform took place within an existing deficient WSS and with the demand for new water sources. The debate focused on the decentralisation process and the accountability on water sources and socio-economic considerations of its usage.

Decentralisation or devolution¹⁵ is usually referred to as the transfer of powers from central government to lower levels in a political-administrative and territorial hierarchy (Crook and Manor, 1998; Agrawal and Ribot, 1999; Larson, 2005). This process involves in some cases the creation of new political entities and bodies at the lower tiers and in others to increase their content and power (Prud'homme, 1994 cited in Rodriguez-Pose and Gill, 2003:334). Looking for common denominators, Donohue (1997, cited by Rodriguez-Pose and Gill, 2003:334) characterizes the decentralisation concept in three separate factors: legitimacy, the decentralisation of resources and the decentralisation of authority.

The last two factors are parallel to the conceptualisation that Prud'homme (1994, cited in Rodriguez-Pose and Gill, 2003:334) offers by classifying decentralisation into spatial, market and administrative decentralisation. This study concentrates on the administrative decentralisation types: (i) the distribution of decision-making to lower government tiers (deconcentration); (ii) the closer involvement of semiautonomous organisations (delegation), (iii) the power transfer to lower governmental tiers (devolution). In fact, empirically these types depict the stages towards a complete decentralisation process in developing countries.

When decentralisation becomes difficult to achieve, the entire process concludes at the stage of deconcentration. In practice, the incomplete decentralization process confuses the conceptualisation of decentralisation and deconcentration, where deconcentration often becomes the description of decentralisation. Deconcentration, unlike decentralisation, does not mean fragmentation of roles and responsibilities, but it means the transfer of administration to appointed governmental entities. As Sayer et al (2005) describe it, deconcentration is the process by which the agents of central government control are relocated and geographically dispersed. Following this description, deconcentration is defined as the 'administrative decentralisation', where deconcentrated entities are administrative extensions of the central state, and their primary responsibility is accountable to the central government (Ribot 2002 cited in Larson, 2005).

Decentralisation and Democracy

Democracy has still the challenge to achieve social acceptance to improve its deficiency of legitimacy (UNDP, 2002). Honduran democracy has been vulnerable to persistent deficiencies in the political system such as clientelism practices in the political parties system, and the internal struggle of each political party. Corruption is also a major constraint for the economic development of the country (UNDP, 2003). The influence of non-political factors –such as the high social cost for economic reforms- contributes also to generate distrust of the Honduran citizens towards the political system and democratic institutions. The WIR does not escape to the trend for deficiencies in the transition process, despite of the inclusion of different stakeholders in the consultation and implementation stages.

Bredehoeft (2002) argues that the main problem for deficiency of democratic legitimacy does not seem to be the lack of flexibility of the government, but a deficit of regularity,

¹⁵ Devolution is also a term that denotes the transfer of rights and assets from the centre to local governments or communities, though in some cases devolution is only used in reference to direct community transfers (Larson, 2005).

trust and an appropriate control of processes. In 2002, UNDP conducted a study in Honduras that included a survey about institutional trust in four departments¹⁶. Figure 7 gives an idea of how trust is perceived for organisations.

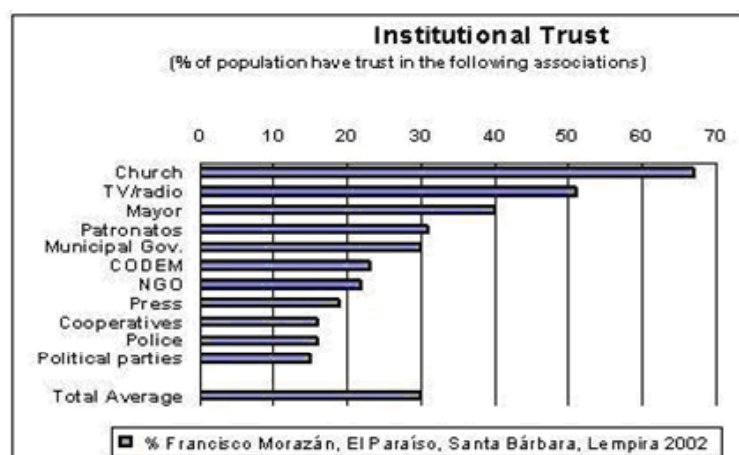


Figure 7 Institutional Trust
Source: UNDP, 2002. *Social Capital Survey 2002-2003*

Among the population surveyed, church associations are the most trustful institutions compared to the police and political parties. The 30% Patronatos got a low 30% trust value due to their increasingly association with political parties, according to the UNDP (2002). Noteworthy is the perception people have about the mayor. People trust in the person, but not to the same extent on the local government and the bureaucracy that surrounds the elected candidate. Thus, democracy is still a challenge for Hondurans. There is a general perception of institutional fatigue regarding the creation and reforming governmental institutions and organizations.

Democracy could be strengthening within the decentralization process by enhancing transparency. One of the alternatives to improve transparency is through active civil society participation; UNDP stresses the concept of social capital as the relationship of cooperation to achieve mutual benefits¹⁷. In a multicultural country, the recognition of pluralism through their active participation would bring more opportunities for transparency and accountability, and would gradually generate social acceptance towards the WIR. Legally recognized social capital and civil society movements could be strong administrative support for municipalities performing their new role. An integrated resources planning and a comprehensive planning where the municipality plans correspond with those proposed at the department level such as the Land Use Territorial Law is the necessary complement activities to achieve efficient WSS operation. Thus, decentralization means also a revival for planning organisations in Honduras.

¹⁶ Although the study regards to the relationship between social capital and the formal institutional environment, the analysis is still useful for this study.

¹⁷ Social capital has been incorporated to theories of development, since several studies have demonstrated that the presence of an active social capital have positive outcomes in public management, access to market, participation, and local development, further literature about the benefits in social capital can be found in Putnam 1993, UNDP 2002.

Organisation structure for water and sanitation and the WIR

An important development in the process has been the number of new organisations, which have been created, or evolved, to liaise between the central government and its national policies on the one hand, and the individual citizen on the other.

The decentralisation process for the water sector in Honduras actively began in 2003 with the enactment of the FLWS (RH, 2003b) and the active presence of the launched Water Platform¹⁸ as a facilitator. FLWS clearly defined and assigned the missing roles for WSS by creating new national organisations: the National Board for Potable Water and Sanitation (Conasa) and the Regulatory Office (Ersaps).

Conasa is responsible for: (i) design policy and (ii) develop strategies and water and sanitation national plans, (iii) define objectives, (iv) investment plans at urban and rural levels and coordination with the actors such as the municipalities, (v) coordinate activities of the public and private organisations related to technology, capacity building, improvement of the service and conservation of the water resources (vi) methodology for water valuation (FLWS- RH, 2003b). Thus, Conasa fulfils the planning gap that was lacking from the previous structure.

Another function that was tackled by FLWS is the regulatory function. Ersaps was the national entity created for the purpose with the director appointed by the president of the country. The objectives for the entity was to: (i) establish the conditions for regulation and technical control or the provision for water and sanitation; (ii) establish the normative for the tariffs and the rationalisation for the tariff system, (iii) Information system for the data presented by the providers, (iv) establish efficiency criteria and indicators, and evaluation models (v) application of sanctions (Ersaps website).

Three roles are assigned in the decentralisation-municipalisation process. The roles of: (1) planning –Conasa, (2) the regulatory –Ersaps, (3) the provision role (municipalities and providers). The latter is conferred by the Municipality Law and the Law for Promotion and Development of Public Works and National Infrastructure (see p.5). The structure of these organisations is drawn in figure 8.

The creation of new organisations did not mean the disassociation from old organisations, but on the contrary depended on them. The legal rules and formal structures of the new organisations had limitations in their implementation, where the political discourse was part of the complex process, as well as the interplay of ideas, interests and resources that determined the real output.

Sanaa was at the centre of the stake, because Conasa and Ersaps were initially built and set up with specialists from Sanaa. Ersaps had Sanaa professionals to set up the office, which was in line with the needs for a regulatory office, which ‘must be abreast of the technological sophistication of the regulated industry, and have working knowledge of its needs’ (Majone, 2006: 9). In time, this exclusiveness for technical staff has been broadening to other disciplines in order to add a socio-economic perspective in evaluating service and information from providers. Conasa had also, and still has, the core of Sanaa professionals from the Sanaa Planning Department. This department will be the centre office for Conasa, which at the moment is managed by Sanaa.

¹⁸ The first task of the Water Platform was to advocate improvements in water governance at national level, and its second task was to strengthen IWRM including grass root integration (<http://www.undp.un.hn/plataformadelagua>)

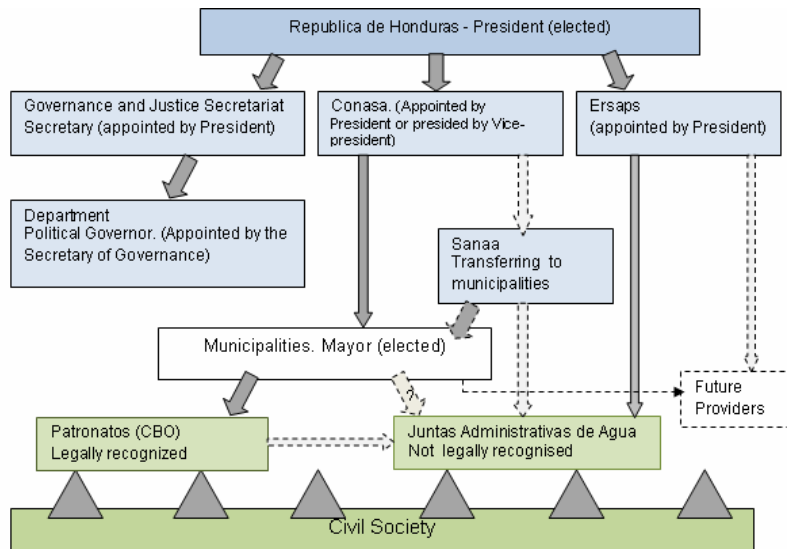


Figure 8. Organisation Structure of the Water Sector by 2007.

The operational organisation structure maintained the state at the center of the decentralisation process. The dependence for professional resources might have indicated the lack of technical capacity or rent-seeking within governmental organisations by political and bureaucratic elites.

The problems of building organisational and managerial autonomy reside on both the delegation of means and resources, and the regulatory agencies themselves. The latter indicates the capacity of the agency to self-evaluate in order to fulfil their mission.

At the local level, the decentralisation approach through the municipalisation of water and sanitation services represented different management alternatives according to the location of the municipality. In rural and peri-urban areas, small and medium cities, providers and municipalities cooperated for the integration of administrative and operational tasks. In most areas the operational task was organised by the Juntas de Agua; and municipalities needed to acknowledge the new tasks of administration, planning and management. In main cities as Tegucigalpa and San Pedro Sula the process has taken different paths. The former was in the process of transferring functions by the end of 2007; the latter decided for a concession of the WSS, when at the time there was no presence of a regulatory entity.

Municipalisation: The process of transfer

Officials at the Municipality expressed their concern for their capacity to acquire knowledge and expertise in a short-term period. The election year 2005 made it more difficult to prepare for transferring procedures. In 2006 the new elected Mayor took over in Tegucigalpa, and his main concern was the lack of manpower and expertise at the technical level, and the lack of financial means considering the poor economic performance for WSS in the capital. At the time of the interview in 2004-2005, the probability of transferring the WSS to the private sector was highly considered.

The transferring process could be schematically summarized in figure 9. Stage (1) depicts the establishment of the National Authority, Conasa. Stages (2) and (3) depicts the establishment of a network and coordination with regional government level. In cases like Tegucigalpa with an autonomous status and municipality this might not apply, however it should coordinate with the IWRM – and the Basin Network agreements. Strengthening of the municipality is the last stage in the transfer process.

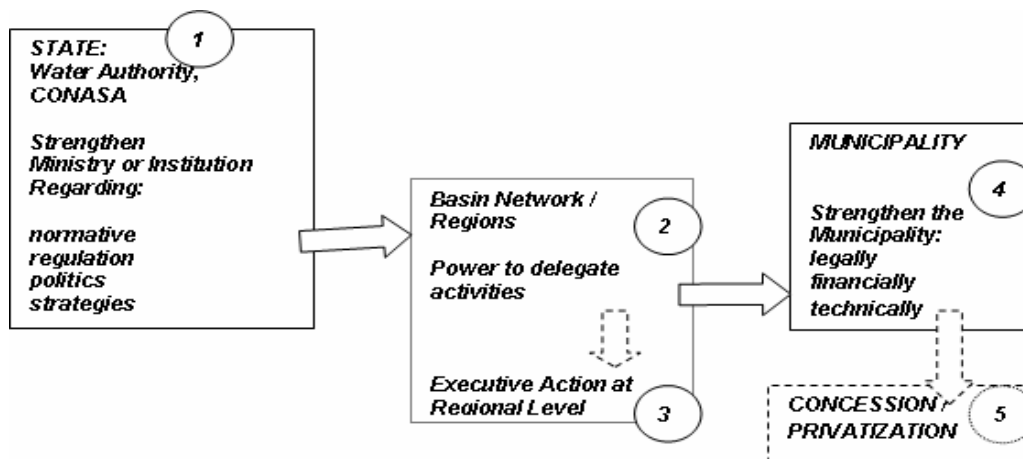


Figure 9. WSS Transfer Process to municipalities

Municipalisation can further lead to a change of the management model through a concession or to a privatisation (5), also known as a public-private-partnership (see figure 10). It is noteworthy to differentiate the concepts of concession and privatization, since they were used interchangeably in Honduras during the debate, Congress Forum and during the resident's survey¹⁹. Concession does not grant the ownership of assets. However, concession means a long-term contract for WSS management, operation and maintenance to a private company. Privatization, on the other hand, is the process of transferring the assets and its management from public ownership to private ownership (divestiture). The difference between these two notions is the property ownership of the service. However, long-term concessions could develop as privatization if the conditions established by the national government are not strong enough to determine the rules of the game, to thrust initiatives and priorities for the development and improvement of the water sector.

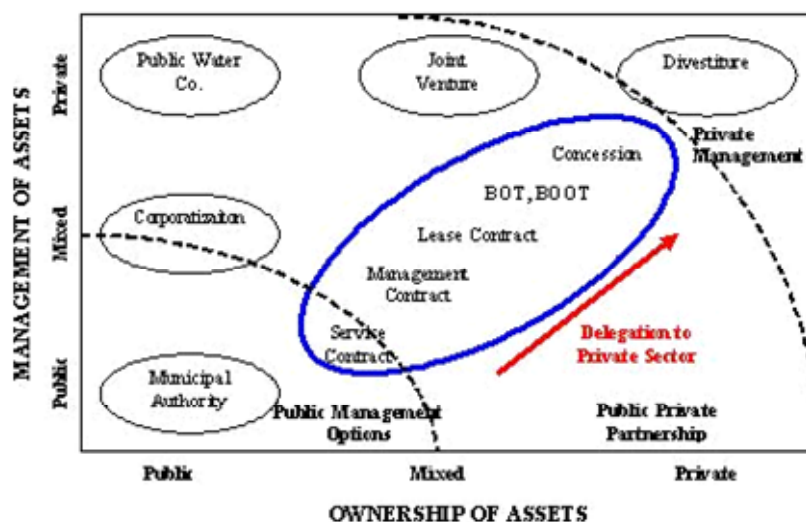


Figure 10. Public and Private Management

Source: Blokland et al, 1999.

¹⁹ During the Tegucigalpa survey of residents in the urban area, non-awareness was detected concerning the difference between concession and privatization. Most of the answers approved the privatization as a default answer against Sanaa which according to them did not offer any improvements of the WSS.

Who is who? Old and New actors

In the course of the decentralisation process, an important element in the analysis is the identification of dominant organisations in the water sector. Having the institutional framework for the water sector established by law, the question relied on the extent of which new organisations would function accordingly.

Any discussion of the policy process needs to be grounded in an extensive consideration of the nature of power of the state (Hill, 2005), especially for providing WSS as a public service. Since the state power in Honduras had been governed by centralised and hierarchical, presidential and military dominated regimes (Ruhl, 1996; Mahoney, 2001; Phumpiu and Gustafsson, 2008c), the decentralisation approach is not an easy task.

The roles were given, but the implementation of the organisational framework needed adjustments, the proposal was continuously evolving. Figure 11 shows one of the first proposals divided by tasks elaborated in 2002, and figure 12 is the Conasa's proposal from 2005. Figure 11 shows the dominance of entities steered by the state elite of the political hierarchy in the operation of the water sector, there is no linkage with lower tiers. The civil society is represented by NGO and CBO organisations, the municipality steered by an elected mayor, and future providers that could be private or local entrepreneurs such as the CBO-Juntas de Agua.

Figure 11 depicts the attempt to include one civil society organisation within the Conasa National Board such as the Association of Municipalities (AMHON), which is a support entity for local governments. The second scheme elaborated in 2005 (fig. 12) shows the more realistic presence of international actors (*Entidades Internacionales*) and the Water Sector Table (*Mesa Sectorial de Agua Potable*) as part of the active mechanisms to integrate all levels of governance.

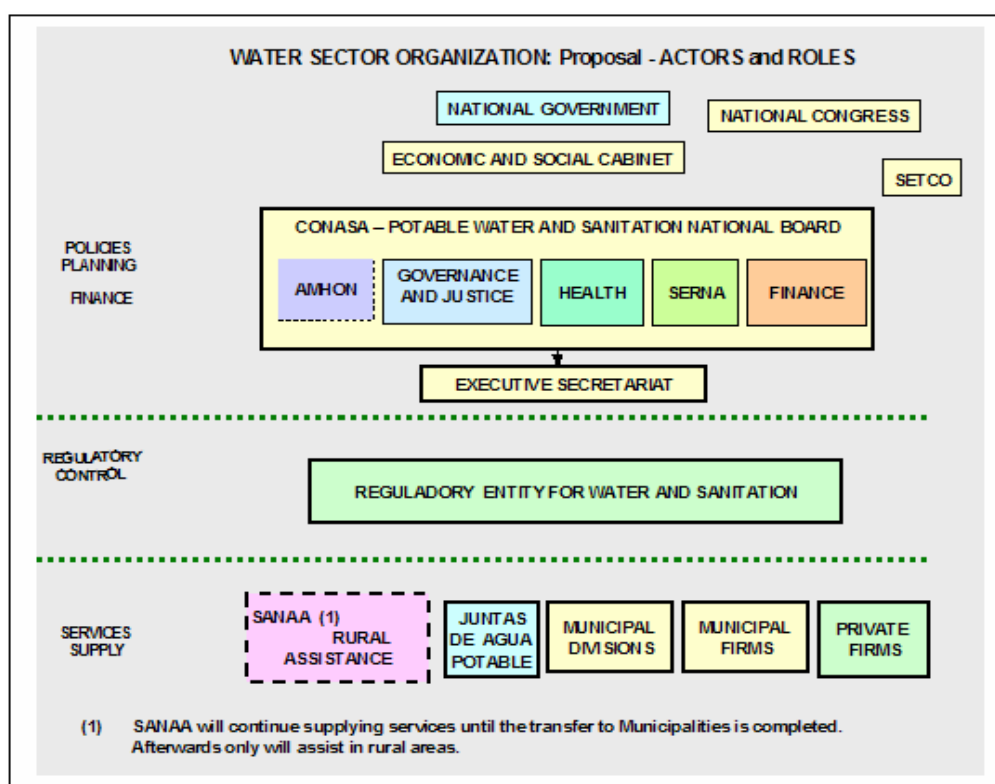


Figure 11. Proposal for the Water Sector Organisation.

Source: *Análisis del Sector Agua Potable y Saneamiento*, 2002. Republica de Honduras.

ORGANIGRAMA

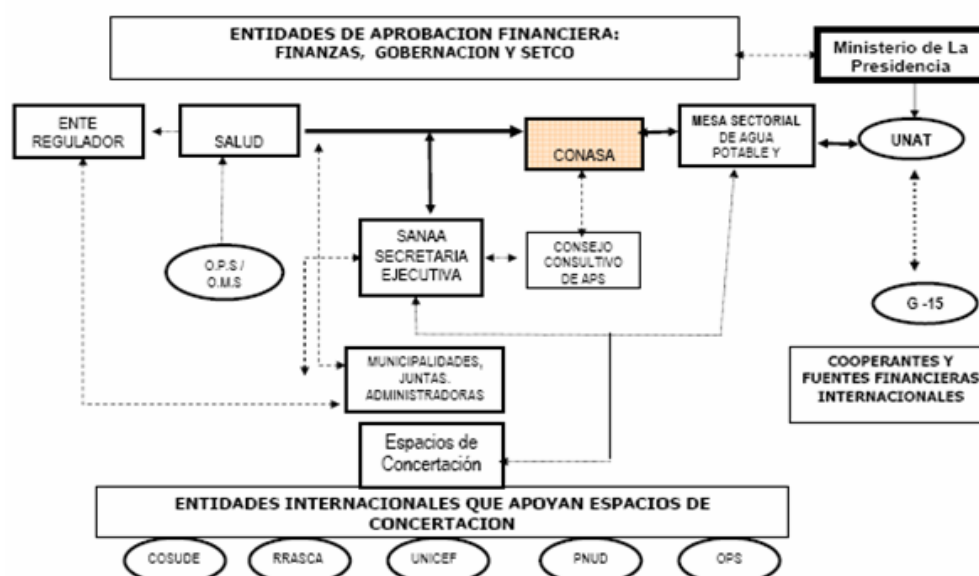


Figure 12. Organisation for the Water Sector, 2005.

Source: Conasa, 2005

The study of the policy process is essentially the study of the exercise of power in the making of policy (Hill, 2005: 26). The debate in Honduras was about to what extent making policy was solely the exercise of state power or a consensual agreement among the main actors. The controversy about the state and about power is closely related to the debate about democracy (Hill, 2005: 13). For the purpose this section analyses representative active actors in the municipalisation process: (i) Conasa and the Water Sector Table, (ii) Ersaps, (iii) Sanaa, (iv) FHIS, (v) International actors, (vi) Sanaa Trade Union, and last but not least (vii) Informal actors: Juntas de Agua, water vendors.

i. Conasa and the Water Sector Table

Conasa as national authority lacks real operational authority since it is operating under the Sanaa Planning Division. The task is broader than the Sanaa task. Conasa-Sanaa is attempting to cope with the national planning system and the local one. Water management in regions is one of the tasks that are adding to the Sanaa's duties. The creation of centralised policy and planning mechanisms is a logical and necessary step for comprehensive and coordinated management of unitary water resources (Ferragina, et al, 2002). As Ferragina also noted, in practice they are underfinanced as seem the case for Conasa.

The democratic debate in the decentralisation process brought the activation of the Water Sector Table (*Mesa Sectorial*) in 2002 as a mechanism to have the civil society needs represented in the decision-making process. The Sector Tables are the decision-making arena for 'Specific Issues' such as: transparency, environment and risk, decentralization, macro economy, human rights, and gender. The organization responsible for managing the Water Sector Table is Conasa²⁰. The main objective is to develop projects in the Poverty Reduction Strategy (PRS), with non-refundable finance, supporting the less attended areas.

²⁰ The Water Sector Table is supported by the fifteen international institutions (G-15) that cooperate with Honduras. The aim is to achieve 95 % of coverage for water and sanitation at national level for the year 2015. It includes the improvement for water quality at urban and rural level, and more importantly extend the coverage of sanitation from 23% to 63% and increase the wastewater treatment from 20% to 50% by the same year (Conasa, 2005).

The commission in the Water Sector Table comprises representatives from the national government, civil society groups, and international cooperation agencies.

ii. Ersaps

The political independency of Ersaps was at the debate since by law, the president was appointed by the ruling party. In addition, it operated with funding from the IDB to strengthen technical capacity of staff and external consultancies. Though the team leading Ersaps continued to be the personnel recruited from Sanaa, by 2005, it got their own facilities and organisation.

Contrary to Conasa, regulation for WSS needs independence from political approaches, the 'depoliticisation' of utility regulation (Wilks, 2001: 166). As regulation is defined as a process, it needs also flexibility for operation. Thus, Ersaps needs independence to evaluate proposed alternatives and to facilitate outcomes acknowledging whom they will affect and in what way. Therefore, different professional perspectives and public participation are required in some way in order to get agreements on action. Wilks (2001), talking about the British system, noted that there were not the prescriptive regulations and policies that lead the establishment of regulators, but the regulator himself, the individual administrator, which brought a different dynamic to the regulatory office. That might be the case also for Honduras, in which the institutional framework is established but not organised enough to coordinate with other sectors.

iii. Sanaa- National Service for Water Authority

Sanaa has been the traditional provider for WSS for 50 years. The administration of the main aqueducts for the main cities and the provision of WSS has been its major responsibility. In the main cities has been the main actor and in rural areas, which is half of the country, Sanaa has complemented the local management with technical support financed by cooperation agencies.

iv. FHIS

FHIS was managing the funds for the water sector at national and local level, working with funds from cooperation agencies. Cooperation agencies have had a relevant role dealing with the emergency of the Hurricane Mitch and after when the emergency projects were set upon a continuous basis. FHIS canalized funds through municipalities. But FHIS constituency is at risk if their mandate is to prioritize local governments with an elected mayor from the ruling party. Thus, capture of power has constantly been at risk, jeopardizing democracy attempts.

v. International actors

At the end of the 1990s though the IFIs had certain power over the Honduras government, the PSRP reform could not proceed due to lack of strong political alliances, which made it politically difficult (Strand, 1997: 2). Then, international development agencies organized initiatives to convene efforts in order to get coordination within the water sector.

The *Water and Sanitation Programme (PAS)* from the World Bank, did facilitate the negotiations among cooperation agencies, government and civil society in times were there were no transversal coordination across levels and among actors. PAS attempted to fulfil the communication gap between different levels of administration.

At the macro level, the *Global Water Partnership (GWP)* was working in partnership with stakeholders for an integrated water management in order to achieve sustainable water resources management. The crucial task was the capacity building and facilitating the coordination among them actors around the water resource.

Red Regional de Agua y Saneamiento-Central America (RRAS-CA) through the Grupo Colaborativo was the organisation that took the initiative to coordinate governmental actors and cooperation agencies to have a diagnosis of the water sector.

Red de Agua y Saneamiento-Honduras (RAS-Hon) was the representative for the civil society in the Water Sector Table by 2002. A disassociation among them left civil society in the debate to choose their representative in time for setting up and prioritise the water sector agenda.

Cooperation Agencies have been the motor for implementing infrastructure in the rural and peri-urban areas. They conform a block towards development with their own agenda and projects that are presented usually to FHIS as a means for governmental approval.

vi. Sanaa Trade Union

The major work force for the water sector was placed at Sanaa. The Sanaa Trade Union did not take part in the WIR consultations. The decentralization process has neglected their voice (Phumpiu and Gustafsson, 2008b).

Sanaa workers union, Sitrasanaa, has foreseen the disappearance of Sanaa in the following years and has therefore included within its membership charter not only Sanaa but also similar institutions for the near future- now called **Sitrasanaays**.

Sitrasanaays defends the rights of their associates and tries to solve conflicts between Sanaa and their associates through an Agreement – that is reflected in the Collective Contract, which is the base contract for all members of the Union with Sanaa. Specific features of the contract with each employee are signed up as Individual Contracts.

There are advantages and disadvantages for the Collective Agreement (2002, 2004, 2006). The advantages are the security for the workers through the elaboration of positions and wages (art. 12, 15, 18), regulating promotion (art. 13, 14, 16) and insurance for the workers (art. 23, 58), in case of health (art. 51, 52, 53, 54). Women are also represented in this contract, maybe fulfilling a gap in the Labour Law, in case of pregnancy (art. 38). The Collective Contract also encourages workers to acquire education at secondary (art. 24), and university and at training level to its workers (art. 22, 79) and for their children (art. 78). The disadvantages are the lack of social security for the workers, for which the trade union attempts to compensate in the negotiations for the annual collective agreement.

The implementation of the decentralisation requires minimum consensus among the actors and the major expertise in the country for the water sector. The lesson is for both the government and Sitrasanaays, as the awareness of their opportunities acting together. A change of attitudes towards a positive position and a win-win situation could bring the rescue of the valuable labour force for the benefit of the water sector (Phumpiu and Gustafsson, 2008b).

Sitrasanaays with other civil social organisations, is part of the network against privatisation and free trade. The network has held a series of popular mobilisations and demonstrations to resist the privatisation of water services and to protest against free trade negotiations (PSI, 2005).

vii. The informal sector

The well known **Juntas de Agua** have been a pivotal organisation to gain access to water in previously inaccessible areas. Their opportunities to get direct funding are restricted due to their illegal status. Nevertheless, willingness to overcome these problems, they are economically recognized since the regulatory office already validated the rules that they were using prior to WIR.

A debatable informal actor is the water vendor. Water vendors can buy water from Sanaa and sell it. However, their status is illegal, and the water they sell do not have a fixed

price nor a water quality test (Phumpiu and Gustafsson, 2008a). A non-established partnership Sanaa-water vendor (s) needs to be also regulated in order to secure quality and possibly delivered quantity.

Networking

The interconnection among actors is quite linear. Three lines can be distinguished: operational, policy coordination, and financial aid. Coordination activities at a national level have a networking with Conasa, Donors, and at certain level civil society-representatives (fig. 13). The latter through the Water Sector Table, which is the entity that set up the agenda for the water sector to Conasa. The Financial link is given directly by the donors, FHIS and from the latter to the municipalities. Financial aid into water infrastructure or capacity building is given through Sanaa mainly to the Juntas de Agua. The Juntas de Agua are also regulated by Ersaps. However, the link among the coordination and operation is still not clear since the transfer of functions to municipalities is still in progress.

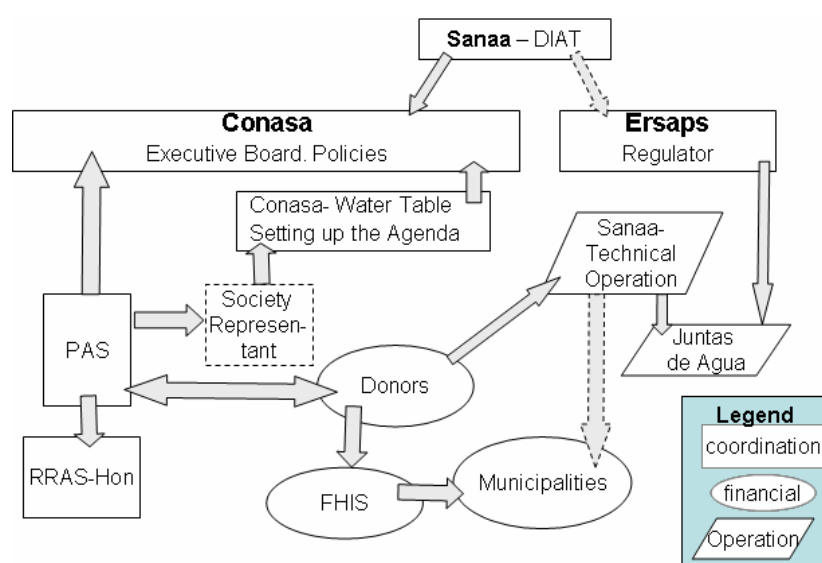


Figure 13. Networking of main actors.

Delegation and Discretion for the Decentralisation Approach

Honduras' WIR process debates between a Weberian state and a postmodern state. The first depicts a concentrated, centralised and elitist controlled state that has been the trend in governmental regimes in Honduras (Phumpiu and Gustafsson, 2008c). The second describes the concept of governance: a pluralist, decentralised, hollowed state however still with a state central steering that is represented by the decentralisation approach and the State Modernization.

Good regulation does not consist only in having well-drafted legislation in place, but also in having it respected and enforced in an effective but sympathetic and flexible way (Courtney, 2001: 160). Thus, the transition from the centralised to the decentralised regime depended on the political willingness and the political cycle. Willingness is reflected in the transfer of necessary means to operate accordingly. The intentions for Sanaa-Conasa were confused since Conasa is heavily dependent on Sanaa, then the task for national planning was at stake since Sanaa had other priorities at hand.

The discretion for the regulator, Ersaps, was at the risk of being dependent on governmental mandates since he was appointed by the ruling party. Again, Wilks (2001)

and Courtney(2001) denoted the performance of the regulatory office should be dependent on the administrator skills and not on prescriptive policies. The alternative still gives room for Honduran regulator to be creative and innovative in their strategies.

The political cycle tends to jeopardize political momentum. Institutional memory is not the strength in Honduras history. If a process could not be completed during a certain political cycle, the pace for continuing the process would slow down as the next political cycle began. Thus, the priorities might be according to the new regulator.

Independence of organisations necessitates power, which in the case of the main authorities for the water sector, seemed to be still dependent from the state. The delegation of policy making is given to Conasa, but it is not operating as such; for the purpose, financial means need to be allocated in order to delegate functions appropriately.

Municipalities have also their obstacles in the process. By law, Municipalities were granted 5% of government revenues to be transferred to municipal governments. However, in December 2004 municipalities received only 1.9%. According to the Association of Municipalities (AMHON), this amount was claimed insufficient for capacity building of technical and administrative personnel. In addition, many municipalities in towns and villages faced difficulties to cover expenses for infrastructure services with the budget assigned (from personal communications at AMHON).

Summary

In this section we have analysed the implementation process of the decentralisation to municipalities. Therefore, we examined the set of questions from the research questions regarding institutional change and decentralisation process. The WIR had a political momentum that was not shared with all water actors. One of the main concerns is the non-integration of the WIR with other related institutions such as forest, land use, etc. For a successful outcome of the WIR process laws and rules should be part of or assimilated by the relevant organisation. Otherwise, the whole process will be confusing and fragmented.

The improvement of WSS is still to come, the Juntas de Agua are still the main provider and water manager in rural areas and Sanaa still have control of main aqueducts at the time of this manuscript (2008). The main constraints for the decentralisation process to municipalities and the WIR is the effective delegation of resources and delegation of authority.

4 EXPLORATORY CASE STUDIES IN HONDURAS

As a basic tool to guide the national policy for decentralisation, the Governance and Justice Secretariat with the support of the UNDP carried out the Decentralisation and Local Development Programme (Proddel). Five municipalities initially took part in the project: San Pedro Sula, Santa Rosa de Copán, Tegucigalpa, Puerto Cortés and La Paz. Later on, other municipalities have joined the project, especially the 17 municipalities from the metropolitan area of San Pedro Sula.

Three cities from Proddel program have been chosen to be the exploratory cases for the field trip: Tegucigalpa, San Pedro Sula and Puerto Cortés. All three have gone through a WIR, in which each one represents a different alternative for water management, each one reveals different attitudes of civil society and local authorities towards water management.



Figure 14. Location of case studies.

Tegucigalpa and San Pedro Sula (cities numbers 1 and 2 from fig. 9) have similar population figures; however, they differ in density and distribution. The first has a higher population density because the surrounding mountains constraints the surface area of the city. On the contrary, San Pedro Sula can physically expand in all directions without geographical restrictions (Angel et al, 2004). The last case is the city of Puerto Cortez (city number 12) which is planned as the port entrance to the country.

Selection of case studies

The unit of analysis for all three case studies is the WSS management model, though in practice it is only applicable to water and not to sanitation. The collection of data was more feasible to access in Tegucigalpa due to contact persons. Despite the complexity of the case study, it was possible to gather information and get more feedback from authorities and stakeholders in the capital city due to the conferences and forums held at the time of the field trip. The other two case studies are based on key interviews and literature revision; their descriptions illustrate their different water source availability and socio-economic profiles from the capital city, as well as the different chosen management options.

Table 7. Characteristics of selected case studies.

City	Water utility management	Population aprox.	City profile
Tegucigalpa	National Government	1 250 000 ²¹	Capital city, administrative
San Pedro Sula	Private	1 250 000	Industrial city, main economy
Puerto Cortés	Municipal	81 000 ²²	Town, projected as the entrance harbor to Central America

Interviews and focus group

Interviewees were selected based on their experience and knowledge of the subject matter -see Annex 3 for the list of contacted organisations. During the interviews, questions were asked giving space for more in-depth responses. Interviews were conducted face to face, and responses were documented in notes and audio-taped when allowed.

Table 8. Aspects emphasized in the interviews.

	Topic emphasized from the questionnaire
Governmental Officials	Role, Performance: efficiencies and deficiencies
Municipal Officials	Transferring of the Water Services and Sanitation
International Officials	Role in water governance politics
Private Sector	Coverage and performance
Juntas de Agua- community association directives	Organization and relationship with municipality
Patronatos – community association directives	Role as a link of municipalities and Juntas de Agua

In addition, a focus group discussion was conducted to evaluate WSS at human settlements located in the outskirts of Tegucigalpa. The focus chosen for the discussion was oriented to understand the interaction among the stakeholders if any, and to weight their influence in the WIR process. The focus group was conducted with the communities of Villa Cristina, Villa Franca, La Nueva Jerusalén. The discussions concentrated on topics such as the administration system to access water, the effectiveness or ineffectiveness of national, local, international agencies, or NGOs working for water accessibility, the willingness to access and the willingness to pay for piped water, the impact in living conditions after having access to water, and the national socio-economic reality. A detailed version of the methodology process is presented in Annex 1.

Case study: Puerto Cortés

The Municipality of Puerto Cortés took over Sanaa WSS administration in 1995, in times when there was a high percentage of non-payment from the customers, more than 50% of informal connections to the water network, a destroyed dam by the Hurricane Gert, and an obsolete pipe network for the water supply and sanitation. All these facts contribute to the dissatisfaction of consumers with the WSS management (Paz, 2002).

²¹ <http://www.infoplease.com/ipa/A0855603.html>

²² By 2003. http://en.wikipedia.org/wiki/Puerto_Cortes

The taking over of the WSS administration by the Municipality was the first stage to privatise WSS management, and thus an attempt to improve the service by dissociating water management with political linkages through frozen tariffs and deteriorated service (personal communication with Paz, 2004).

The first stage of the transfer process began with the creation of the Division of Municipal Water of Cortés (DAMCO) as a decentralised municipal organization with a simple management structure. The second stage took place in 1999 when DAMCO was transferred into a municipal company, Empresa de Agua de Puerto Cortés S.A., which is regulated by the Commercial Law. The Municipality holds 95% of the shares, and the private sector 5%. The private sector is represented by the Commerce Board, the Cooperative of Savings from the National Enterprise for Harbour Employees, Cooperative of the Women of the Harbour, Cooperative Harbour Ltd, and the Association of Vendors of the Central Market.

The Municipality is the absolute owner of the drinking water system assets, which are rented to the Empresa de Agua and regulated through the Renting Contract. A local regulator, Ente Regulador Local, checks that the conditions of the contract are followed. This regulator is also a consultant for the municipality, the water company and the users.

The process for the transfer of the drinking water system was unique in Honduras at the time of its implementation. The transfer process was planned in three stages, i) the previous activities, ii) temporal transfer, iii) the transfer to the private sector.

In order to ensure the successfulness of the transfer, 'previous activities' started in February 1994 with a diagnosis and analysis. According to the initial programming and agreement, decisions were based on experiences and a previous analysis, and they were flexible according to new circumstances appearing in the transferring process. The staff was composed of a general coordinator, technical coordinator and a technical team. Both, the Municipality and Sanaa paid for the staff, including the consultancy to coordinate the transfer.

An important municipal administration activity was crucial for setting up the transfer process and schedule. One of the previous initial activities was to elaborate a cadastral map and a database of customers. The purpose was the identification of customers and the organization of the billing in a short time period and locally.

During the temporary transfer stage, an agreement between the Municipality and Sanaa was established in order to transfer the administration, operation and maintenance of the aqueduct of the city. The agreement objective was to establish the norms and conditions for the transfer within 16 months. A Commission for Evaluation revised the conditions in August 1996, and then proceeded with the definitive transfer of the assets. Sanaa absorbed the liabilities.

Lessons learned from the Puerto Cortés case are:

- The need for constant information of the decentralization process to the community.
- The need for implementing the aqueduct infrastructure in coordination with basin protection projects.
- The need for permanence of an organisation in charged of water with autonomy and independent of the municipal ruling party administration.
- The need for municipal political support to change the water management system.
- The need for leadership, trust and political support of the mayor.
- The need of agreement on water tariffs, in order to openly communicate with transparent detail of the benefits, the service increment and how to comply.

At the time of the process there was no GWL, then the transfer was based legally only on the Municipal Law. However, the facts to achieve success for this water management

alternative was administrative creativity, local skills and the strong desire for a better drinking water system.

Case study: San Pedro Sula

In 2000 an Italian lead company, Aguas San Pedro (ASP), was awarded a 30-year concession by the Municipality of San Pedro Sula²³. The creation of the private company was supported with an Inter-American Development Bank (IDB) grant that included the preparation of the concession document. The concession has the possibility for extension for 10 more years if parties agree. ASP has the responsibilities to operate, expand and upgrade the drinking water and sewerage system in San Pedro Sula.

ASP was conformed by the Municipal Division for Water (DIMA), the Municipality and the private operator. ASP is a consortium led by the Italian company ACEA S.p.A (31% of shares) and comprising four other Italian companies (65% shares in total), and one local engineering firm (4%).

According to IDB (2004), several lessons have been learned from this case:

- The need to create a regulatory entity to supervise the actions of the private company and to play the role of conciliator for conflicts and establish the water tariffs.
- As in the previous case, the need to inform the community in every stage of the process and to comply with promises and plans to generate trust within the community.
- The need to resolve land use issues in a reasonable period.
- The need for flexibility in negotiations.
- The need to use mechanisms for incentive and not punishments.

One of the advantages for ASP was the opportunity to hire the personnel that Sanaa has already trained. Along previous years to the concession Sanaa had brought capacity building and added to the accumulated experience along the years, the staff was already highly prepared (personal communication with DIMA officials during the field trip, 2004). However, capacity building is not all. Workers at ASP commented the motivation that ASP injected to them, encouragement that they could barely experience when working for Sanaa (personal communication with workers at ASP, 2004). The employees felt more considered and more trustable due to their new responsibilities, and felt themselves part of the process.

By 2002, IDB approved a loan of \$13.7 million to ASP as a support to the strategy for state modernisation, encourage private sector investment and expand urban services²⁴. This loan is in line with previous IDB support of \$36 millions in loans for San Pedro Sula's municipal development program. At the same time, IDB provided the long-term financing required for water infrastructure projects to meet large, up-front capital expenditure that must be recovered gradually over a protracted period. The loan entailed the replacement of existing pipelines and collectors and expanding the system in underserved areas, improving service standards, meeting future demand and installing new fire hydrants. ASP also aimed to raise and maintain drinking water quality.

Not all agree with the effectiveness of these types of loans like Food and Water Watch (2006), who claimed that the contract protects ASP from inflation and devaluation with extraordinary adjustments to protect profits. They also claimed that the contract authorized

²³ <http://www.iadb.org/news/articledetail.cfm?language=English&artid=1316&artType=PR>

²⁴ Ibid.

ASP to increase water rates by 20% in the third year of operation, starting from 1 February, 2001. Food and Water Watch claims that by February 2004 ASP had not extended the coverage of the drinking water and sanitation distribution network to areas that should had been covered.

Case study: Tegucigalpa, the unknown answer for WSS

Extensive attention has been devoted to the water supply in Tegucigalpa, due to the link between potable water and health, and because current inadequacies have had a disproportionately negative impact on the urban poor. Due to rapid urbanization, the water supply in Tegucigalpa has never satisfied the demands. Water and sewage systems are costly and difficult to provide because most of the drinking water is transported from outside the city. The water distribution system is too limited to supply the entire population, and it is estimated that 40% of water pumped in the network is wasted due to leakage.

One of the major problems in Tegucigalpa is supplying water to peri-urban low-income urban settlements, the 'barrios', which population was estimated in 400,000 by 1998. The settlements have developed on steep hills around the city, making them very vulnerable to natural disasters (i.e. landslides and hurricanes). Their location at the hills surrounding the city have difficulties to access piped drinking water, and surface water is non-existent, and groundwater is often too deep and polluted (Angel, 2004). Health statistics show that the residents of the barrios are suffering from a number of water related diseases that could easily be avoided with provision of a reliable, clean water supply (DTU, accessed 2005).

Water Sources for Tegucigalpa

Greater Tegucigalpa is expected to double in population before 2029 (Angel, 2004). With a population of around 850,000 inhabitants, it is of relevance as more than half of them live in 225 peri-urban communities (UN, 2004). Sanaa has established a minimum consumption per household of 20 cubic meters. An amount that needs to be revised due to the difficulties obtaining water resources with enough water and to lower operation costs. In Tegucigalpa, surface water is almost non-existent, and groundwater is often too deep or polluted. Tegucigalpa is served by two major sources of water: the reservoirs of Los Laureles and La Concepción (see table 9).

Table 9. Capacity of major sources of water for Tegucigalpa.

	Total capacity m³	Approx. supplied population	Yearly average stored	Operates at
Los Laureles	10.5 million m ³	250 000	8 million	30 % (2005)
La Concepción	33 million m ³	350 000	15 million	43% (2006)
Total	43.5 million m ³	650 000	23 million	

- i) The reservoir of **Los Laureles** drains its water from the Guacerique watershed located west of the city. The watershed is composed of 20 962 Ha. of forests and farmland. According to Sanaa (2004), it provides drinking water to 30% of the population, approximately of 210,000 inhabitants. Nowadays it provides water to 20% of the population (CIP, 2005). Due to low precipitation and ecological damages the dam is reported to supply only 25% of its normal water capacity. It is believed that the lack of vegetation caused by deforestation in the Los Laureles watershed leads to the loss of 20 centimeters of water level in the peak dry season (Honduran Economic Highlight, April 2001-part II).

- ii) The second water source for Tegucigalpa is **La Concepción** reservoir also located south west of the city in the Rio Grande Basin. The dam was built 1993 to meet the increasing demand of water that could not be supplied by Los Laureles reservoir. This new reservoir meets around 50% of Tegucigalpa's demand, approximately 350,000 inhabitants.

Other sources supplement the water demand in Tegucigalpa such as Jiniguare, which can provide water for 100,000 inhabitants in the dry season, and the Superficial Fountains of El Picacho Hill taken from La Tigra National Park, a cloud forest reserve located northeast of the city (figure 15). The Superficial Fountains were built to collect and provide water to some sectors located to centre east of Tegucigalpa. The Superficial Fountains El Picacho-La Tigra cover the supply for 20% of the population in the winter season, approximately 140,000 inhabitants. Deforestation was one of the park problems and it will consequently reduce the amount of the water resource²⁵.

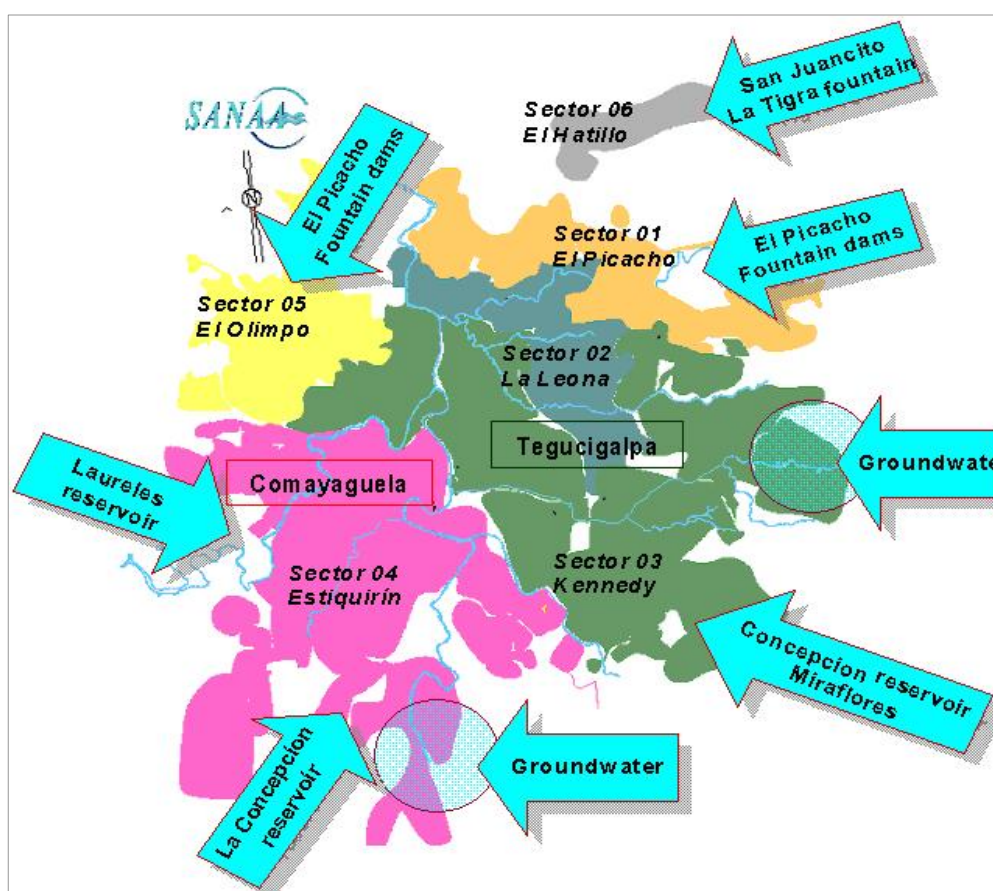


Figure 15. Water Sources in Tegucigalpa, 2004
Source: SANA-DIAT

WSS: coping with the demand in Tegucigalpa

Table 10 reveals the development of water consumption average incremental on the category of household with piped connections.

²⁵ Strand (1998), page 3 - 4.

Table 10. Tegucigalpa Water Demand.

	Number of users		Consumption million m ³		Average hh/m ³ consumption		Price HNL/ m ³	
	1995	2005	1995	2005 * ₂	1995	2005 * ₂	1995	2005 * ₂
hh with conection	75 000	94 216 * ₄ 22 826 * ₅	28.9	26.5	35	26.4	1.47	3.23
Gov & commerce	4 350	5 581	8.8	7.5	16	142.9	4.06	13.56
hh other service-wells, etc	25- 30 000	3 733 * ₁	1.0 (official)	no info	12	no info	6.12	
Hh with no service	20- 25 000	17 800 * ₁			45		26	30-60

*₁ according to Census 2001; *₂ from bills; *₃ without sewerage (20% water receipt); *₄ from receipts; *₅ Indirect (with water meter)

Source: Strand (1977) and Engineer R. Ochoa A., Sanaa-DIAT (communication 2006).

Technical studies to cope with the demand has evaluated alternatives to carry water from other sources as shown in figure 16 given by Sanaa-Diat.

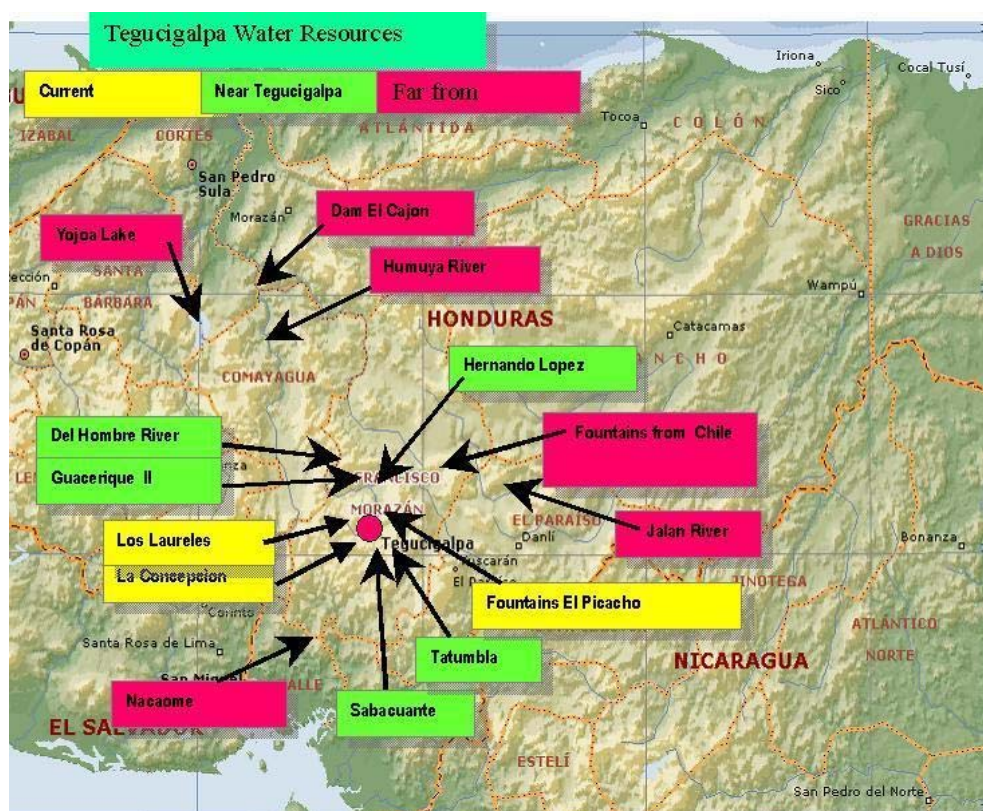


Figure 16. Alternatives for Tegucigalpa Water Resources.

Source: Sanaa-DIAT, 2004

One of the alternative solutions to cope with the water scarcity in Tegucigalpa has been the rationing of the service during part of the day, or only at certain days during the week. Often households that are connected to the water pipeline do not have water in 3 days. In addition to the water scarcity problem the low water pressure aggravates the situation. It is estimated that 32% from the one million inhabitants living in the city receive water from

sources other than house connections and public taps. In 2002 a study from the World Bank suggested that the current average supply deficit runs approximately 18% in the wet season, and rises to 45% during the dry season (World Bank, 2002:6). As Angel et al's (2004) study about the urbanization of the city reveals there is a need to double the amount of water supply of 2m³/s to 4 m³/s by 2029.

Surveys of neighbourhoods in Tegucigalpa by Angel et al (2004) showed that the poorest 20% of the population considered lack of access to WSS as the most serious problem, surpassing concerns of violence, bad roads, transportation, sanitation and solid waste collection. The 62% coverage figure even includes households served by pipes from holding tanks filled by trucks from Sanaa- UEDB that only receive four hours of water per week. For comparison, only 2% of the wealthiest households lack access to the piped water network. According to Walker (cited in Strand, 1997), from surveys in 1996 most households of all groups are willing to pay for water service improvements. An addition to this problem is the lack of maintenance of the water network system. According to PAHO, Sanaa suffers from relatively high rates of water losses, lack of up-to-date-records of users, and lack of water meters.

Box 2

UEDB Program- The Unit for the marginal 'barrios'

The Unidad Ejecutiva de Desarrollo de Barrios (UEDB), is the water service provided to barrios located in marginal areas, which are not provided with public services. The unit is a branch of SANAA and is committed only to the *barrios*. Cistern trucks are the main means for transporting and delivering water to barrels located outside the houses several times per week. Water trucks may be owned and operated by SANAA or private individuals. According to Angel (2004), the price to fill a 9 cubic meter-truck with water at SANAA's treatment facility is 450 Lempiras(Lp). Thus official SANAA water trucks deliver at the price of 50Lp/m³ and the illegal truck delivers at 150Lp/m³ (based on UN-Habitat 2003 report, p.34). Three times the price per household. Even more, the illegal price is 34 times higher than the official government rate for the piped system, where better-off families live.

As public service of water infrastructure is linked to the land use ownership, the main requirement to receive a UEDB project is the legalization of the community. Not the least, but the next step is for the community to raise a portion of the capital cost upfront plus commit itself to monthly payments and form a self-governing water board. Depending on the geography and other constraints, the distribution projects may take the form of home connections to the piped network, public taps, wells, or truck service sold by block. By 2003, 140 communities are beneficiaries of the UEDB program.

Thus, an underlying issue in discussions of water distribution in Tegucigalpa is the question of cost equity between residents with access to the piped network and those without. First, households receiving water by truck pay an order of magnitude more for water service than those on the network. According to a 2001 World Bank study, the average payment for piped water in the city was 72 Lp/month (WB, 2001- p55). In comparison, the cost per household for water delivered by truck was calculated to be roughly 780 Lp per month in 2002 (Angel, 'Housing Policy in Honduras: Diagnosis and Guidelines for Action, June 2002, p38).

People in these marginal neighbourhoods bear a large percentage of UEDB project infrastructure costs (in addition to operating costs) associated with establishing new water service. On the contrary, those who live in the heart of the city and receive piped water do not pay the full operating cost needed for the piped water system, let alone any infrastructure costs. UEDB projects in peripheral, marginal barrios require communities to pay 20% of infrastructure costs upfront, with another 60% of the total project price repaid in monthly instalments. This enables UEDB financing to be self-sustaining over time. In contrast, on-network water prices average 1.8 lempira/m³, but only a price increase to 6 Lempira/m³ would enable the network system to cover its costs in a self-sustaining manner. A recent attempt to increase water prices in the city was met with public outcry, and the tariff increase was subsequently scaled back by 50% (Angel et al, 2004).

Tegucigalpa Sewerage Service

Since the Tegucigalpa sewerage network construction in 1933, no relevant improvements have taken place. The 90km extension of the network (Sanaa, 2002) is only available to communities connected to the piped water network. Sanaa claims that at the very most 87% of the central urban residents have access to the sewerage system. Community-based sewerage treatment in the peri-urban areas is the main sanitation service, if existing. Many of these facilities are found close to community service spots, and are in most places composed of latrines and medium-sized septic tanks.

WSS pricing in Tegucigalpa

One of the main sources for funding water system is the user charges, but also water or sanitation taxes maybe used. Sanaa argued that low prices have a number of adverse allocation and distributional consequences (Sanaa 2000, Strand 1997). Thus, for several years Sanaa demanded to increase the water prices to the National Supervisory Commission (CNSSP), previously in charge of the water tariffs. The adopted CNSSP policy to keep the water prices low in relation to the economic inflation did not generate enough financial resources to manage the WSS properly and to ensure an efficient service and sustainability of the resources. Since 2004 water pricing is on the hands of Ersaps.

Strand (1997) organizes users according to the following main groups: i) domestic households connected to Sanaa piped water system, ii) governmental and commercial users, iii) domestic households with other domestic service, such as wells, tanks, iv) domestic households with no access to piped water. From these categories the most affordable price is the one offered to domestic households already linked to a pipe connection.

Table 11. Piped Water prices in Tegucigalpa (m³/hh/month/US\$)

	20 m³ or less	at-30 m³	at-40 m³	at-50 m³	at-60 m³	61 m³ +
1995	1.50	1.00	1.20	1.70	1.85	3.95
2004	1.20	2.70	5.20		12.90	

Source: Sanaa-Diat.

The differences in price between 1995 and 2004 were the increment of more than 10 times. Water vendors sold 9m³ for 450 Lempiras which was 6.70 US\$ (see Box 2), and piped water cost 81 Lempiras for 20 m³ which was 1.20 US\$, (table 11). No water quality test was performed for the water vendors. UN-Habitat estimated the total cost to all households in the 'barrios' in the range of US\$ 11-13 million a year. If even a fraction of the total annual cost of water paid by people in the peripheral areas could be allocated to an urban system, the same level of service could be provided at a fraction of the cost²⁶ (UN-Habitat, 2003). In addition, poor performance in water pricing is quite often linked to inefficiencies in the system and to corruption. First, not all households in urban areas have water meters installed, and often middle and upper income households are most favoured since water consumption increases with higher income and better comfort. Interviews during the field trip revealed the users attitude to pricing as a mere revenue collection mechanism instead of as a resource allocation mechanism. This attitude is partly a consequence of lack of trust and transparency in the governmental agencies.

²⁶ Cited in UN-Habitat (2003). Choguill, C L (1994). Implementing urban development projects: a search for criteria for success, Third World Planning Review, Vol 16, No. 1.

5 DILEMMAS

This section is devoted to the controversies that decentralisation has brought during its establishment and during its process for implementation. The issues presented in this section are:

- i. The Water Sector Reform and decentralisation
- ii. The choice for concession and privatisation
- iii. Multidisciplinary and multilevel participatory approach
- iv. Sanitation
- v. Actors and their networks
- vi. WSS in main urban settlements
- vii. Legitimacy, transparency, capture and corruption

i. The Water Sector Reform and Decentralisation

Decentralisation in Honduras is an incomplete process. The redistribution of decision-making, deconcentration, of the WSS administration has been conferred to the municipalities. However, decentralisation of resources as of financial means and manpower are absent, which diminish the degree of decentralisation accomplishment. As Minogue and Cariño (2006) described, the situation in developing countries, ‘often, privatisation and regulatory reforms will proceed piecemeal, without proper sequencing or coordination’.

In addition, deconcentration also needs to be strengthened in order to build institutionality and to strengthen the organisation.

Figure 17 depicts the incomplete process for decentralisation that turns into deconcentration due to lack of resources, and in which deconcentration is not the mean to foster municipalisation. The missing stage is also leaving deconcentration as a piecemeal development.

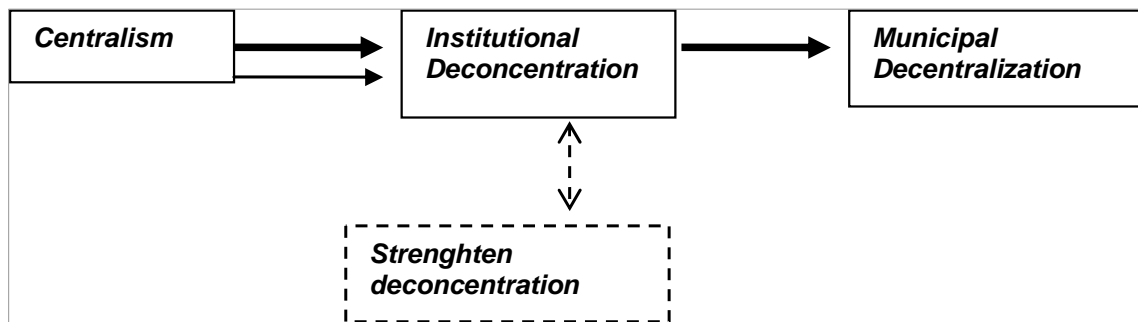


Figure 17. Strengthening deconcentration: the missing stage.

Besides, the assignment of minimum resources requirements, this process is dependent on the recurrent change of the political cycle; which output brings different political frameworks and styles. As a consequence of the political cycle, the instability of leadership and technical professional expertise could not establish a line of operation. This happened with national and local mandates ruling from 2006 when new local governments and new ruling party in the national government in 2007 came into power. Continuous reorganizations and new styles of governing added to the non-trust perceptions towards unsuccessful WIR implementation.

A special case is the Tegucigalpa Central District, which is an autonomous Municipality. This District did not have an interest in managing WSS, not at least the local government in place by November 2004²⁷. The transfer of WSS is supposed to be completed in five years after the ratification of the law. By Jan 2005 one year had passed, and no action was taken. The municipality claims it does not have the resources for the purpose, and definitely not the expertise. The administration was expecting to set up a Water Division with the initial task to elaborate a Water Plan in coordination with the Land use and Zoning Metropolitan Plans. Since the financial means were not available to cover these expenses, the approach were thought to be implemented only with the IDB loans, 2.5 US\$ million, which will come only after the transfer has started the legal process. The transfer at this stage was very controversial, since there was not much coordination from either Sanaa or the Municipality to establish an adequate management unit or monitoring.

The transfer of the labour force from Sanaa to Municipalities has been neglected from the beginning of the WIR process. Sanaa Trade Union, Sitrasanaays, has not been included in the corresponding consultation (Phumpiu and Gustafsson, 2008c).

The core of the debate centres on the allocation of cost, and mechanisms to spread the financial burden efficiently and fairly. The complication arose when there was consensus on efficiency means that conflict with fairness or equity definition interpretations.

Honduras has experience in other public services as electricity and WSS in other municipalities (San Pedro Sula, Puerto Cortes, Choluteca). Their experience is very valuable and should be taken into consideration, when contemplating the possibility for concession and privatisation; especially when the WIR is not mature enough to carry on with the responsibility of monitoring the process and performance.

Caveats for the WSS decentralisation

Decentralization of WSS to municipalities encounters several constraints such as: the lack of an adequate definition of responsibilities for elaborating policies, financing, planning, and regulations for stakeholders and operators. The following constraints were the most important at the moment of the field trip (2004-2005):

- Delegation of responsibilities. Duties are clearly stated in the law but their delegation is still in the hands of the national government.
- Financial support. Decentralisation is not complete without financial support or any of the mechanisms for its provision. As the primary example, the transfer of financial means to the municipalities has not been the amount estipulated by law.
- Water as a multidisciplinary theme. Accordingly, a professional multidisciplinary team should be assigned for the designation of responsibilities, esp. Conasa and Ersaps. There is still the tendency to tackle the technical problems without planning, without integrating with social issues and legal support.
- Timing. One of the main constraints for an appropriate decentralization planning is the time assigned for task completion. Unresolved issues, like the agreements between the union and SANAA, should be resolved before the implementation of municipalization. Otherwise, there is a constant risk for delaying the process, not contemplated in the time-planning.
- Implementation with local realities. Decentralization of water and sanitation services must respond to local demands. One of the most representative examples is role of the

²⁷ Interview with an official at the municipality.

Juntas de Agua in the community; their expertise is not recognized as they do not have legal recognition to act and administer their drinking water and sanitation, and with municipalities taking over their tasks without any transition period of adjustment.

- Political instability and institutional memory. The provision of the service is to be lead by the municipality ruled by an elected mayor, who could belong to a different association from the ruling party. In time, the set up could generate a conflict in the WSS management since municipalities may not have the state political support in financial means or organisational support from other related agencies.

ii. The choice for Concession and Privatisation

The initiative for the private solution of WSS in San Pedro Sula seemed lacking a clear vision of the tasks that the process implies such as monitoring and supervision of the responsibilities delegated. The City did not account with a proper database of supply and demand of WSS, monitoring and supervision. The alternative to rely solely on the national government administration seemed a partial approach. Complementary alternatives demand a combined social and political participation (UNDP, 2002). Rules and controlling mechanisms are necessary for contracting a new provider.

The lack of know-how and expertise and lack of financial means in Tegucigalpa Municipality were generating considerations to concession management alternatives to give an immediate and medium term solution. Previous experiences in San Pedro Sula taught the importance of having expertise to monitor and supervise delegated responsibilities, and the need to combine technical opinion with social and economical issues. In turn, Tegucigalpa Municipality might consider that Conasa and Ersaps are not yet structured as national water leading organizations. Both organisations were still under the influence of Sanaa, as a technical support. The concession process needs a strong water governmental agency to take the lead in the negotiations and procurement process, and to continuously controlling the contract conditions.

iii. Multidisciplinary and multilevel participatory approach

Several national and international organizations have enabled spaces for debate and discussion to integrate all efforts that were a positive thrust in the WIR process –such as the Water Platform, Mesa Sectorial, PAS. The Water Platform dialogue space at the national level was enhanced with its IWRM Division, which worked with GWP at all levels country wise. Thus the Water Platform has the possibility to bring all stakeholders at a multilevel discussion. In addition, PAS was the facilitator between the government-donors-civil society.

Participation in the WIR, while elaborating the GWL, was very restricted to the public and not widely reported by the media. Several consultation meetings concerning the Law were organized during 2004, which was a step forward in the progress for transparency. Nevertheless, the design for consultation meetings demand a more organized process for workshops, and more time devoted for amendments, even though it was organized as a multidisciplinary consultation with participation from a representative number of institutions related. Maybe a permanent commission could have better coordinated multi-organisation efforts.

Although consultations are a positive action, they are not to be equal participation. The opinions from consultations were not openly shown in subsequent consultations, thus participation was faded. Due to political time constraints, the time allowed for consultation did not develop in a participatory process.

By the time of the election year 2005, the WIR was at risk facing non political support for the next political cycle.

A special call for multidisciplinary teams in the Water Sector was required. Technical expertise predominated in the area, and the renewal or extension of the expertise to personnel committed to social, economic and financial areas were needed in the WSS agenda. If the aim was to build Water Governance and have an effective WIR, it should have been imperative to develop decentralisation and to avoid a vicious power circle that dominated the sector.

iv. Sanitation

All the efforts seem to be devoted to water, but sanitation is also part of the budget located for a better WSS. For consumers connected to the piped network the water bill includes 25% of the value for water consumed to account for sanitation and thus to cover partially the expenses in sanitation (SANAA, 2003-doc 323). Due to the heavy investment, upfront sanitation priorities were far behind the water supply priorities. This perspective was shared with the consumers²⁸, since they struggled so much for the access to water and their economies could not take both expenses. Some interviewees expressed their attitude towards the need for sanitation: 'the rest (sanitation) comes along, if it comes'. The strong relation between water and sanitation concerning health was neglected among authorities and society.

Unlike water supply, it was not popular for sanitation to be supported by international firms, or having the firms invested in wastewater delivery system. Local, private sector engineering and management firms have been involved in wastewater management in developing countries. The 'Unbundling' of sanitation from the water system approach was believed to bring up an alternative for solving socio-economic sanitation problems. Opposing opinions to the 'unbundling' approach, such as the one from CNES (2003), states that unbundling allows private sector interests to manage and collect profits from water delivery, while leaving the government to address the less potentially profitable wastewater and sewage management. The concept and context of 'management at the lowest appropriate level' requires careful interpretation; the 'unbundling' of responsibilities can lead to a piecemeal, uncoordinated approaches (<http://www.lboro.ac.uk>).

v. Actors and their networks

This section exposes the performance dilemmas of the actors, the causes or consequences of their activities, and in some cases recommendations are drawn. Part of this analysis also assess their networking or interaction with other actors. The actors analysed are: (a) Conasa and the Water Sector Table, (b) Regional Government, (c) Ersaps, (d) International cooperation agencies, (e) The neglected labour force, (f) Research and high education organisations, (g) Formal and Informal organisations, and (h) Municipalities.

a. Conasa and the Water Sector Table

The setting up process for the Water Sector Table brought positive expectations for democracy, an active dialogue and participation in decision-making. However, unrepresented society groups needed to be included, such as the rural areas, and peri-urban areas. The Water Sector Table deals with macro and microeconomic problems. Accordingly, Juntas de Agua should have a representation since it acknowledges the technical and administrative problems at the grassroots level, where the possibility of poverty reduction exists. In main cities, Juntas de Agua represent two critical areas: the peri-urban and the rural areas, different realities and different contexts.

²⁸ From the resident's survey in 2004.

b. Regional government level

The regional government is represented by the Political Governor in charge of a Department, according to the political division of Honduras. In practice, this level of government is not operative, relying only on two levels: national and local government. This government is of importance for the decentralisation process in order to achieve an integrative and cohesive plan. Moreover, to make possible implementation and coordination rather than focus only at the local level that can result in a fragmented piecemeal strategy.

c. Ersaps

The political independency of Ersaps has been at the debate since the president is appointed by the ruling party and working with personnel recruited from Sanaa. In addition, by 2005 Ersaps operated with funding from the IDB to strengthen technical capacity of staff and external consultancies.

Contrary to the practice of Conasa, regulation for WSS needs independence from political approaches, the 'depolitisation' of utility regulation (Wilks, 2001:166)

The regulatory office is very slowly evolving into an entity out of Sanaa guidelines. The new regulation for Juntas de Agua confirms the extension of coverage for regulating all providers. Still Ersaps needs to solve the issue of the water truck vendors, to regulate their prices and moreover to supervise the water quality.

A good-working database is of importance and Ersaps needs close collaboration with the municipality and at the moment Sanaa for the inventory information of the existing infrastructure as the basis for a better management and regulation. Social indicators are missing in Ersaps agenda.

d. International Cooperation Agencies

Honduras received a significant amount of aid, which heavily supported local communities right after the Mitch. This pattern generated the behaviour of 'losing arms' creating dependency and paternalism. This attitude was soon abandoned when no more full funding was granted. As a survival strategy, local communities have learnt to organize themselves and fight for the right to get access to water.

On the other hand, the state still depends to a great extent on international lending or funding. The donors strategy has been to supply technical and financial expertise to thrust the process. The partnership government-international agency provoked reliance of each other, and generated the vicious dependency circle that is often an impediment to achieve WSS sustainability.

It should be in the interest of an independent Honduras Government to monitor the progress of the reforms. Nevertheless, when international agencies proposed a project, the reaction from the state was minimal, non adjustment, nor intervention, nor response. As a consequence, projects were assigned as proposed.

In 2002 Pan American Health Organization (PAHO) and COSUDE, the Swiss Development Agency, took the initiative to convene a team to analyse the performance of the water sector at national level. Donors and PAS had a positive stance as they attempted to fulfil the water sector needs by playing the roles of facilitators and moderators to achieve a national consensus on the policies and strategies. By doing so, it could also be questioned the indirect influence they have on the political arena as they are the mediators and links between the national and local actors in Honduras.

The international dialogue created raised the question of fairness in participation: Is it a space where nationals and internationals can fairly debate? Will national politicians have a dominant position in the Platform? Or on the contrary, influenced by international organizations, would the Water Platform manipulate national politicians? In fact, the

outcome depended on the strengths and weakness of the national government. Do the key national professionals have a role to play in the debates? Are they well represented? Those are questions that the national government should be able to answer when appointing officials for the ongoing WIR.

e. The neglected labour force

One critical issue within the WSS process was the employment management at the Municipality and Sanaa. Sanaa headquarters are located in the capital, as such the major labour force was debating on losing their employment. The Sanaa Trade Union, Sitrasanaays, had a strong lobbying position in Honduras, and had acquired technical training and expertise along the years. The perspective is not at all promising if both parties are not willing to approach negotiation with a win-win attitude.

In practice, it was quite challenging to work with no financial budget and with the pressure of the economic instability of the country.

On the other hand, some union members have not entirely complied with their duties and seemed unwilling to change their attitudes to improve themselves professionally such as finishing high school education.

Despite existing education clauses, workers disregard the advantages of training. At some point, the Union went further by offering education to complete basic education after working hours since most associates had not completed their studies at the secondary school. According to members of the Union 'the benefits are not clear for them since it seems that the situation will not get better within the institution or even to look for another job'. An employee that changed his position to the private sector defined this passiveness as a consequence of a lack of incentives and positive attitudes from their seniors- 'In the (private) company I feel considered and was given specific responsibilities within the firm. We are treated differently. As a civil servant we are only part of the whole'.

The disadvantage for Sitrasanaays is the overprotection of their members in order to secure employment, since their workers do not have social security. For example, in case of a vacant position Sanaa employees have priority to compete for the position. The criteria to upgrade the employment position prioritise the length of employment in Sanaa over discipline and performance. Another disadvantage for the employer is the relocation of an employee (Collective Agreement, 2006: art. 16), in which in case of reorganization or technical change, an employee has the right to be relocated to other positions, regardless the needs.

A Technical System to evaluate the performance of the staff should be implemented as regulated in the Collective Contract in article 105. However, till date this mechanism is difficult to implement, due to the low economic incentives that the institution is able to offer to their employees.

Sanaa workers do not have a pension system. Therefore, Sitrasanaays strategy is to compensate by requesting bonus salaries, receiving 14 months salary per year. Similarly, a worker's disability is compensated by hiring a close relative of the disabled worker, where the capacity and skills of the worker's relative could be of little use in any division of Sanaa.

Overall Sitrasanaays demands were reflecting a compensation for government deficiencies in the social welfare system. Contradictorily, in the attempt to improve the conditions for their members, the Union generates inefficiency among the workers.

f. Research and high education organisations

Most of the individuals participating in the discussion of the water institutional reform were engineers. Nevertheless, there was rarely the presence of researchers to bring up new socio-technical alternatives as a way to generate awareness at the politician level. For example, cooperation with local, national and international educational institutions could

take place on a more frequent basis and can lead to a permanent presence of new investigations capacity and a constant awareness-building process. Participation in discussions and debates can bring all expertise from the field to reform the bureaucratic process. Thus, research and higher education could create awareness of social-technical nature and can also contribute to an awareness program at all levels of society.

g. Informal and formal organizations

Informal organizations mainly exist at local level and most times they are the engine that keeps grassroots organized and encourage them to mobilize. These organizations are usually not requested to participate in the decision-making process. The role of Juntas de Agua in peri-urban areas in Tegucigalpa differ from the rural areas in their need to secure land ownership with the Municipality. Juntas de Agua are not recognized by municipalities, therefore they need to contact associations like Patronatos and work hand in hand in order to secure land ownership and be able to continue the process with Sanaa-UEDB. The Juntas de Agua in Tegucigalpa operate in squatters areas where water supply need to be pumped from the reservoirs located down the hill, unlike the rural areas where is mostly groundwater. Administratively these organizations are very effective since they are responsible for their tasks and duties.

The peri-urban UEDB is the most successful organisation. However, Sanaa supports for the unit depends entirely on international financial aid, which makes it dependable and not sustainable for carry out the WSS.

The ‘forgotten’ informal sector is composed by the water vendors. They can obtain water from Sanaa and sell it to marginal neighbourhoods with prohibitive prices. No control is performed. A partnership with a entity as suggested by Phumpiu and Gustafsson (2008a) could be an alternative solution to monitor water quality and service frequency.

g. Municipalities

Municipal governments argue that the powers they have over WSS are not the ones they are able to cope with, especially small municipalities. Rather, in practice they have been given the burdens of certain management responsibilities without either the manpower and financial resources to take those burdens or other benefits that would arise from having real decision-making power.

vi. WSS in main Urban Settlements

The government find difficulties to satisfy drinking water demands within urban cores and surrounding peri-urban areas. This is also the case for Tegucigalpa. The following sections are based on issues brought up from the surveys, interviews with officials and users as well as on the focus group discussions at the peri-urban barrios in Tegucigalpa.

a. Geographical location and legal obstacles

Geographically, Honduras is a very diverse country. Urban settlements located like Tegucigalpa at the top of a hill range constitute a major constraint to deliver water. Frequently, squatters and low-income population are living over these hillsides that are extremely difficult to be reached by a water network. They require a different equipment to extend the current network. More commonly, water is delivered by trucks at extremely high prices.

b. Land ownership

Squatters very often reside in illegal settlements. By law, neither formal nor informal organizations can begin any water project without having the land tenure granted. Although the owners sometimes charge the squatters for the occupied land, it does not imply that squatters are entitled to build infrastructures. At the hills of Tegucigalpa the owners of the land sometimes had agreed with the Patronatos and Municipality to obtain

the license for initiating a water project. Most of the owners that ‘rent out’ are not willing to ‘sell’ their land.

Nevertheless, the illegality of land tenure in case of squatters is an issue that need to be faced by municipalities, since squatter settlements go back several decades.

c. Water management

A sustained technical and managerial effort is necessary to offer an efficient WSS. In Tegucigalpa, management of WSS is not sufficient, and expertise acquainted with the local context is needed in order to improve the implementation solutions given until nowadays. It is imperative to create a support from the political and civil society groups.

d. Access to water as an instrument for development

Access to water improves quality of life. What is more relevant is that access to water is to consider it as an instrument for development. Parallel to the need of water, Tegucigalpa needs to develop the individual, and the community awareness. But development does not come for granted with the solely presence of water. Tegucigalpa already has some mechanisms for development through the UEDB, through the education in water and environment programs they conduct. These programs could also be extended to all the population of Tegucigalpa and country wise in order to generate collective conscience that would induce to responsible community participation and the acceptability for appropriate solutions.

e. Equity and Fairness

The allocation of cost is at the core of the debates among residents and water providers. Who pays for the water facilities and wastewater service? Who is supposed to pay the new water network to reach either formal or informal residential areas? Households already connected to the water piped network are currently reluctant to accept price increases or a reform. Even though the service is rationalized, with only some hours of water delivery during the day, consumers do not think that increasing the water price will accordingly improve the service. On the other hand, according to the focus group discussions, those with great stakes in reform, such as the barrios, ‘wouldn’t mind to pay a slightly a higher price if they will get water in their homes’. It is a relevant issue that the barrios often are unable to express themselves collectively. Water is a political issue as low prices are subject to gain voters and Barrios often have low voting preferences, since the large majority of potential voters in Tegucigalpa have access to piped water.

f. Trust and transparency

The percentage of questionnaires delivered was not significant for the amount of population in Tegucigalpa. However it reveals some opinions. The opinions expressed in this section refer to the residents who are not connected to piped network but have water from Sanaa sources and do not live in the ‘barrios’. These residents have the idea that the private sector will do perform a much better water management than the current governmental organization. Their opinion coincides with the disliking on the Sanaa’s service and not trusting the governmental agency, since they do not see any efficiency and transparency in the process.

Residents expressed their desire to be exposed to clear transparency of the privatisation matters. Media has not been enough active to disclose information regarding the water needs, importance, problems, programs and management of WSS, i.e. to get access to water does not depend only on paying bills, but in looking for alternatives for water sources. Other sources and programs need to be developed to create awareness among all residents without excluding any sector of the population.

g. Migration

Migration from rural to urban settlements is a growing trend in Honduras. The explosion of urban population needs to be at the perspective of the national and regional plans. Prices for public services, especially in areas with no infrastructure have proven extremely high in urban areas, but they did not act as a detriment for migration, especially in low-income areas.

h. Globalisation

Urbanisation and migration are main problems that affect WSS and it is characteristic of globalisation, defined as the process of integrating and opening markets across national borders (Gleick, et al., 2000). These combined forces are placing additional burdens and responsibilities onto the cities and national governments. Surprisingly enough for the author, this topic was highlighted in one of the focus group discussions in the peri-urban areas. When elaborating on failure to pay water by the community, one of the residents expressed his concern related to employment situation from his own experience. He had a shoe repair kiosk and gradually he was making and selling shoes together with partners. The small joint venture vanished, when they could not compete in pricing with shoes imported from other countries. They were very aware of the term and economic consequences for national production and international trade.

When development plans have as target only economic improvement and they focus primarily on the global market to attract private investments, they disregard the social and environmental needs (Giggacher, 2001).

Deficiency of the water service is partly related to economic instability created by globalisation. The quality of life derived from disregarding water quality standards is much more acute in peri-urban areas such as those in Tegucigalpa squatter areas than in other areas of the country.

i. Politization

It is also true that if people is being segregated the process results in further marginalization of the impoverished masses. Segregation of people is used for the purpose of political means.

It is also uncertain, if giving more power to communities these will become politicised and obstruct even more the top-down water development process, i.e. communities are aware of the politization process, or influenced by other parties attempting to take advantage of political means for themselves or for personal ambitions.

j. Institutionalality and bureaucracy

When introducing the WIR, the first problems appeared with the lack of detachment from power organisations. These inflexible and bureaucratic institutions and organisations create difficulties for decentralization by for example, clarifying the definition of responsibilities in order to achieve efficiency. The result of 'no action' has been already experienced, when the implementation stage was delayed and finally became outdated.

vii. Legitimacy, transparency, capture and corruption: a breakable chain?

Legitimacy is defined by Donahue as the incorporation of 'popular support' and 'citizen cooperation'. 'The most important asset that government can command... is not legal authority, or fiscal resources, or even talented personnel, but legitimacy' (Donahue, 1997 cited in Rodriguez-Pose and Gill 2003:334).

In Honduras legitimacy has not been granted by law but as a default of no attention to the rural country; thus citizens has to fight for their own needs (Phumpiu and Gustafsson, 2008c). In the second period of our study (2002-2006), legitimacy was attempt to be part of

the decision-making when AMHON was incorporated to the Water Sector Table. However, AMHON was not a representative entity of the civil society. Ras-Hon was also elected representative of the citizens but it is recognized in these disagreements that the rural citizens are not incorporated into this debate. The constitution of a civil society is well organised at the bottom level, the operational level with the Juntas de Agua, but not a medium or higher levels of decision-making.

A crucial issue was missing from the WIR process: the role of the informal sector. Consequently informal institutions are also forgotten. Informal institutions are those related to different informal aspects such culture, religion, and ethnicity. Their pattern of behaviour is traditional and ancient and need to be respected and legitimise within the decentralisation process.

Transparency in the fragmented Honduran WSS is a difficult task to achieve among the independent organizations. The request for transparency is linked to the notion of trust among entities. Information and reliable data lacking from organizations are difficult to collect. However, it is necessary to bring all national information together in order to build a realistic analysis of weaknesses and strengths of the WSS system. In addition, consultation of procedures helped to build not only transparency and trust but also awareness and setting up agendas with all vested interests.

Capture is also dependent on transparency, in which ‘representation and consultation with different interests forestalls capture by any single one’ (Minogue and Cariño, 2006:10). Regulatory capture is a theory developed by George Stigler. It says that an industry can benefit from regulation, if it can capture the regulatory agency involved. This can happen if the industry’s political influence and technical knowledge makes the regulatory agency dependent on it. Political appointees from the industry, along with the agency’s need for informal cooperation from the industry, help create a situation in which the agency is captured²⁹. Regulatory capture is at risk in Honduras since the regulatory entity is quite new and their capacity is threatened by political cycles.

In San Pedro Sula, the concession to a private firm took place without the regulatory office established. Once in place, Ersaps was quite new and without the expertise needed to accomplish its responsibilities. Ersaps was also steered by a state appointed leader that previously worked for Sanaa. This approach is at risk of leading to agency capture for political interests and not necessarily in favour of the citizens.

Corruption is one of the critical issues in Honduras and a central challenge towards sustainable development.

Just as it is impossible not to taste the honey (or the poison) that finds itself at the tip of the tongue, so it is impossible for a government servant not to eat up, at least, a bit of the king’s revenue. Just as fish moving under water cannot possibly be found out either as drinking or not drinking water, so government work cannot be found out (while) taking money (for themselves). (R.P. Kangle 1972: 91, cited in Bardham, 1997).

UNDP (2002) and the Honduran study on Social Capital Survey prove the lack of trust due to previous corruption cases in the governmental system. Corruption is seen at two levels: political and local service-performance. For the political corruption, the ambiguity of duties at local level prompted to the ill-traditional corruption. Although it is not good to over-rule the sector, it could be convenient to specify responsibilities and delivering items

²⁹ <http://www.yourdictionary.com/capture-theory-of-regulation>

for each organisation. On the other hand, not any commission is today responsible for searching for mechanisms towards transparency and cancelling corruption issues.

At the service and operative level, in order to reduce corruption and increase transparency, WSS needs clearly to reorient the accountability networks by adding new actors in the assessment for performance. Sitrasanaays, has fought for their workers labour rights; but the traditional management tools such as promotion or dismissals might be improved by adding public assessment and staff meetings. Also the assessment of the workers performance has been rather soft. Then, there is a need to merge public and worker opinions with the resources available for the task. The latter is quite relevant in the assessment considering that Sanaa had declared severe constraints in its annual budget.

The Juntas de Agua as managed by their communities are generally transparent to its members. The new input is then the municipalities that are taking the new role to administrate the service.

6 CONCLUSIONS

The water sector reform in Honduras began under severe conditions for the accessibility of water and sanitation country-wide, more specifically in urban settlements. Operational formal organisations such as Sanaa was the only entity dealing with the development of national plans and operative management in the sector. Due to the severe financial constraints, no monitoring and assessment for performance had been performed. In these conditions the Water Institutional Reform (WIR) starts in the 1990s in Honduras.

The policy of National Decentralization implying Municipalisation began strongly with the enactment of laws establishing three clear lines of responsibilities: planning, regulation and service. However, the implementation of the institutional framework still needs to accomplish integration concerning the delegation of the decision-making process to municipalities.

The WIR must strengthen the newly set up national entities as the Ersaps, the Regulatory Office, and Conasa, which is the Water National Board. These dependent entities of the national ruling party, such as Sanaa must be independent in order to promote full transparency and legitimacy.

The legitimacy and transparency condition is of extreme importance to be able to supervise water providers, formal or informal ones, the municipalisation process and any concession process, if any in the future. Strengthening the process of decentralisation and not only to end up with deconcentration is to facilitate the solutions for conflicts and to build trust during the reform process.

By strengthening new created organisations such as Conasa, WIR acquires an entity responsible for the planning and development of the water sector. In addition, any organisation needs the delegation of resources as a condition for a decentralisation process.

Still sanitation is the looser so far, and projects that need to be prioritized cannot be implemented for lack of political, social and financial support. These projects need a strong impulse in education to generate awareness of the importance to have not only water but also sanitation infrastructure.

One of the strength for Honduras is the community-based Juntas de Agua, especially in the outskirts or urban settlements and rural areas. These informal institutions need to be legalized in order to simplify bureaucracy and create transparency. Still the land tenure is a critical urban problem that is strongly attached to water accessibility.

Financing is still the big question mark that needs to be decided under the lines that access to water is a common good. Water is the means for development, and that development is not only a common and economical good, but also a social and individual issue.

Along with rapid urbanization, economic liberalization, and other transitions, informal institutions should be increasingly emphasized as a part of within the integrated resources planning. This integration should always go hand in hand with the national planning network and a comprehensive planning in order to achieve goals. Planning and goals are not properly integrated in the Honduran water agendas and there is a lack of a common vision. Policies based on promotion of public awareness, grassroot activities, participatory approach, and so on are often targeted at least partly to include the informal sector. In fact, successful WSS projects in peri-urban areas lean largely on informal institutions, which are well known locally, accepted and grows rapidly³⁰. The decentralisation process can

³⁰ Cases studies are reported in the UNDP, 2002 and Kuusisto et al, 2005 documents.

definitely improve the WSS, but also evidently needs the political will as has been notoriously reminded in most academic and empirical literature. The process can be built bottom-up, as it has been built empirically. But as experience has demonstrated this approach can also be forestalled by top-down interests, which could be far from the concept of integrated resources planning and development. Besides, these interests conflict with the common grounds for improving the water sector in Honduras.

Potential assets in the Honduran system and the WIR are the existing FLWS and the clearness of the roles. They need also to be stated under the whole water sector and not only for drinking water and sanitation. Existing water actors, formal and informal, are the potential and immediate resources for WSS. They should be considered and work in partnerships to join efforts. On the other hand, in practice, public organisations can define their role so to allow better information, communication, transparency and building trust. An integrated resources management and comprehensive planning could lead the development of the water sector and thus WSS to sustainability, and not only to search for economic growth.

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ANNEX 1. METHODS

The focus of attention is on one unit of analysis urban and peri-urban WSS, in three case studies with emphasis in Tegucigalpa, the capital city. Protocol and questionnaires were presented in order to establish main issues for collecting data during the field trip. The intrinsic nature of water governance in Honduras is considered an example of the water sector complexity in Latin America.

The development of the methodological and theoretical framework was made in parallel with the empirical studies. Such strategy made it possible to find themes and perspectives deemed essential to enriching the case study. Desk top Study consisted of an in-depth review of available literature in published formats and internet sources, with the field trip database.

A focal point was centred particularly to the group of governmental and international actors/stakeholders. These stakeholders held public conferences and forums at the time of my field trip October-November 2004. This group of professionals and politicians traditionally holds the know-how and expert knowledge on WSS, the research surveyed their opinions and what feasible actions to take. In addition, a focus group discussion was conducted to evaluate WSS at human settlements located in the outskirts of Tegucigalpa.

Field work in Honduras

A planning field trip of 10 days was conducted in 2003 in order to determine the cases studies for the research. Later on, the following year a field trip was conducted during the months of October and November 2004 to Tegucigalpa. The fieldwork was organized in the following manner:

Data Collection through revision of official documents

- Policy documents
- Legal documents
- Governmental Agencies documents and web sites
- International agencies documents and web sites

Data Collection through questionnaires in Tegucigalpa

- Questionnaires were designed and tested for interpretation. They were fully structured; the questions were formulated based on their ability to ascertain information about living conditions without being intrusive.
- Questionnaires were administered in two ways; by distribution and by direct face to face, which was used where respondents were willing to have a conversational interaction instead of writing themselves the questionnaire. Respondents were not reimbursed for their participation.
- The sampling pattern was quite dependent on accessibility to residential areas and residents. It was possible to distribute the questionnaire to middle-upper income residents, and not to low income communities. The number of questionnaires answered gives an overview of the water residential situation more than a representative sampling in terms of percentage of the population. The results are inserted in the narrative text of this report.

Direct observation

- Observations were noted since the very beginning of the field trip in neighbourhoods of different social and economic strata.
- The author was granted a couple of tours by the personnel of SANAA-Unit for Barrios Marginales (UEDB). The tours consisted in visiting different communities without water piped service and to communities that needed supervision for the ongoing water infrastructure work. We also visited schools where the UEDB have educational projects.

The accessibility to the Barrios up in the hill is quite difficult since there is no mass transportation reaching those communities. Safety was one of the main constraints on the way to the communities up the hill in Tegucigalpa. During the tours formal interviews were conducted with the water association local representants, and some brief informal interviews with local residents.

- A guidance of the program and activities of the UEDB was presented in the headquarters and *in situ*.

Data collection through use of a Focus Group Discussion

- The Focus Groups took place after general meetings in the community. The participants were not strictly selected, and the attendance depended on the willingness to participate. However it was requested for the participants to live in the community, and at least one of the following: a leader of the water association, representation of both gender, and an employed person.
- Three focus groups were conducted in the three marginal Barrios in the peri-urban area of Tegucigalpa.
- The proceeding was a semi-structure meeting in which participants were allowed to voice opinions and thoughts even if they deviate to some degree from the main question or topic at hand. In the three focus groups the meeting last from 45minutes to an hour. The use of a tape recorder was not considered appropriate since participants feel constraint if used.

The topics addressed were:

- General demographic information of residents (family size, number of families per house, number of households, etc)
- Willingness to access to piped water
- Impact in living conditions
- Opinion about the administration system to access to water
- Perceptions of effective or ineffectiveness of national, local, international agencies working for water accessibility
- Any additional information from experiences in the community

Interviews

Interviewees were selected based on their experience and knowledge of the subject matter. All interviews were questioned using the prepared questionnaire. The questions were asked giving space for more in-depth responses. Interviews were conducted face to face. Responses were documented in notes and, they were audio-taped when allowed. The Research Division Director of SANAA (the governmental water agency) was interviewed once and in addition we had two informal and quite resourceful meetings. Interviews were up to an hour.

Table. Aspects emphasized in the interviews according to interviewee.

	<i>Topic emphasized from the questionnaire</i>
Governmental Officials	Role, Performance: efficiencies and deficiencies
Municipal Officials	Transferring of the Water Services and Sanitation
International Officials	Role in water governance politics
Private Sector	Coverage and performance
Juntas de Agua- community association directives	Organization and relationship with municipality
Patronatos – community association directives	Links with municipality and Juntas de Agua

Dealing with the field work

The initial plan was to survey and evaluate the consumer's perspective. This aim was not possible to achieve because of the difficulties to get access to the outskirts settlements, and the lack of an assistant working in the research project. Thus, the strategy was redesigned to organize focus group discussions in three settlements. It was very helpful to count with the help of SANAA Division for Marginal Areas (UEDB) to reach the peri-urban areas in Tegucigalpa.

ANNEX 2. ACTORS IN THE HONDURAN WATER SECTOR (2003)

Acronym	Institution/Organization	Responsibilities/Duties
Governmental		
CONASA Nacional de Agua Potable y Saneamiento	National Board for Drinking Water and Sanitation	Concertation, apply policies and sector plans at national level.
CONAPA Comisión Nacional de Agua Potable y Alcantarillado	National Drinking Water and Sewerage Commission	Decentralized technical agency from Min. of Health. Operational and financial independence. Regulates and control. Decentralization process: transfer of SANAA to municipalities.
ERSAPS	Regulatory Institution for Drinking Water and Sanitation	
SANAA		
FHIS Fondo Hondureño de Inversión Social	Honduran Funds for Social Investment	In rural areas, they manage the service without short or medium term plans.
	Finance Secretariat	
SLC Superintendencia de Licencias y Concesiones	Superintendencia de Licenses and Concessions	
Health Secretariat	Ministry of Health	Include the water sector.
CNSSP Comision Nacional Supervisora de Servicios Publicos	National Supervisor Commission of Public Services	
SETCO Secretaria Tecnica para Cooperacion Internacional	Technical Secretariat for International Cooperation	
SERNA Secretaria de Recursos Naturales	Natural Resources Secretariat	Natural Resources and Environment Secretariat
CPME		Presidential Committee for the ME, Industry and Commerce Secretariat
Presidential Secretariat		
National Congress		
Governance and Justice Secretariat		
Industry and Commerce Secretariat		
Public Ministry		
Procuraduría del Ambiente y de Recursos Naturales		
Local actors		
Municipalities		
FUNDEMUN	Foundation for the Municipal Development	
Civil society		
Juntas de Agua	Juntas Administrativas de Agua Potable y Saneamiento	
AMHON	Association for Honduras Municipalities	
NGOs and OPDs		Operating mainly in rural areas
International		
UNDP- Water Platform		
World Bank- PAS	Honduran Water Program	
Cooperation Agencies		Financial Aid. Organisational agenda-local level.
NGOs		

ANNEX 3. CONTACTED ORGANISATIONS

Organisation	Division
National and local government	
CONASA Consejo Nacional de Saneamiento	President Executive Assistant
ERSAPS Ente Regulador de Agua Potable y Saneamiento	President
SANAA Servicio Autónomo Nacional de Acueductos y Alcantarillados	President DIAT - Planificación – Dpto. de Investigación y Asistencia Técnica http://www.sanaa.hn UEDB- Unidad Ejecutiva de Desarrollo de Barrios
FHIS Fondo Hondureño de Interés Social	Fondo Hondureño de Integración Social http://www.fhis.hn
SERNA Alcaldía del Distrito Central – Tegucigalpa	Secretaría de Recursos Naturales y Ambiente Secretaría Ejecutiva - Asesor Técnico Asesoría Internacional
Multinational	
World Bank - PAS	Programa de Agua y Saneamiento
IDB (interview 2003)	Alfredo Di Palma
PNUD Programa de las Naciones Unidas para el Desarrollo	PAH - Plataforma del Agua de Honduras http://www.plataformadelagua.un.hn PAH – Riesgos
RRASCA (interview 2003)	Humberto Puerto (Grupo Colaborativo de Agua)
RASHON	Red de Agua y Saneamiento de Honduras
International donors	
Praccagua	European Union –Division
JICA	Japan International Cooperation Agency-Honduras Office Desarrollo Municipal-Metas del Milenio
SIDA	Swedish International Development Agency
USAID	US Aid for International Development
COSUDE	Corporación Suiza de Desarrollo
CARE	
Civil Society	
SYTRA	Sindicato de Trabajadores de SANAA
AMHON	Asociación Municipalidades de Honduras
Patronatos	Villa Cristina, Villa Franca, La Nueva Jerusalén.
Juntas de Agua	Juntas Administrativas de Agua y Saneamiento
Foro	Foro Permanente de Organizaciones de Sociedad Civil
UNAH - Universidad Nacional Autónoma de Honduras	Engineering Faculty Dean Engineering Department staff
NGO	
AHJASA	Asociación Juntas Administrativas de Sistemas de Agua
APP	Agua para el pueblo

Annex 4. Questionnaires

Cuestionario para beneficiarios del agua – cuentan con red de agua

SECCION 1: Información General

Información	Respuestas	
Nombre de la Colonia		
Sexo	Masculino	Femenino
Occupación		
Número de personas en casa		
Número de personas que trabajan		

SECCION 2

Preguntas		Respuestas	
1. En Tegucigalpa, el agua es distribuida por	Privado	No sabe	
	Público	Mixta	
2. En su casa, ¿quién distribuye el agua?	Privado	No sabe	
	Público	Mixta	
3. ¿Cuánto paga por agua al mes?	Lps.		
4. ¿ha aumentado el precio del agua los últimos 5 años?	Si	No	
¿Es aceptable el aumento de precio?	Si	No	
5. ¿Cuántas veces llega el agua a la semana?			
¿Cuántas horas viene el agua al día?	Menos de 4 horas	13-16 horas	
	5-8 horas	17-20 horas	
	9-12 horas	21-24 horas	
6. ¿Necesita comprar agua extra?	Si	No	
7. ¿tiene problemas con la calidad del agua?	Si	No	
¿Qué tipo de problemas?	Turbia	Color	
	Olor	Impurezas	
¿Cuenta con filtros, ozonizador o cualquier otro purificador?	Si	No	
¿Compra otra agua para beber?	Si	No	
8. ¿Cuenta con otro recurso para recolectar agua?	Si	No	
¿Cuáles?	Camion cisterna	Agua de pozo	
	Agua embotellada	Tanque cisterna	
9. ¿Mejoró la provisión de agua en los últimos 5 años?	Si	No	No sabe
¿En qué mejoró el servicio? ¿Cómo mejoró?	Calidad del agua		
	Cantidad de agua		
	Servicio de connexion		
	Respuesta a quejas		
	Más horas de distribución de agua		
	Servicio regular, horario confiable		
10. ¿Está satisfecho con el servicio de provisión de agua?	Si	No	
11. ¿Sabía que el precio por el agua no es el precio real?	Si	No	
¿Qué el gobierno paga una parte de la tarifa?			
12. Está dispuesto a pagar más por el agua?	Si		No
En quién confía más para proveer aqua	Estado	Municipal	Privado

Cuestionario para beneficiarios del agua – servicio de camión cisterna

SECCION 1: Información General

Información	Respuesta	
Nombre de la Colonia		
Sexo	Masculino	Femenino
Occupación		
Número de personas en casa		
Número de personas que trabajan		

SECCION 3: Preguntas

Preguntas	Respuestas		
13. En Tegucigalpa, el agua es distribuida por	Privado	No sabe	
	Público	Mixto	
14. En su casa, ¿quién distribuye el agua?	Privado	No sabe	
	Público	Mixta	
15. ¿Cuánto paga por agua por barril?	Lps.		
16. ¿Cuánto paga por agua total al mes?	Lps.		
17. ¿Aumentó el precio del agua los últimos 5 años?	Si	No	
¿Es aceptable el aumento de precio?	Si	No	
18. ¿Cuántas veces al día viene el camion cisterna?			
19. ¿Cuántas veces a la semana viene el camion cisterna?			
20. ¿tiene problemas con la calidad del agua?	Si	No	
qué tipo de problema?	Turbia	Color	
	Olor	Impurezas	
¿Compra otra agua para beber?	Si	No	
21. Si necesita más agua ¿de qué otra manera consigue agua?	Camión cisterna	Agua de pozo	
	Agua embotellada	Bomba de agua	
22. ¿Mejoró el servicio en los últimos 5 años?	Si	No	
¿En qué?	Calidad del agua		
	Cantidad de agua		
	Servicio de connexion		
	Respuesta a quejas		
	Más horas de distribución de agua		
	Servicio regular, horario confiable		
23. ¿Está satisfecho con el servicio?	Si	No	
24. ¿Cómo mejoraría el servicio?			
25. ¿Pagaría más por el servicio?	Si	No	
En quién confía más para proveer agua	Estado	Municipal	Privado

**Cuestionario para beneficiarios del agua
antes con llave pública ahora cuentan con red de agua**

**SECCION 1:
Información
General**

Información	Respuestas	
Nombre de la Colonia	Villa Cristina	
Sexo	Masculino	Femenino
Occupación		
Número de personas en casa		
Número de personas que trabajan		

SECCION 2

Preguntas	Respuestas				
13. En Tegucigalpa, el agua es distribuida por	Privado	No sabe			
	Público	Mixta			
14. En su casa, ¿quién distribuye el agua?	Privado	No sabe			
	Público	Mixta			
15. ¿Cuánto paga de agua por metro cúbico?	Lps.				
16. ¿Cuánto paga por agua al mes?	Lps.				
17. ¿ha aumentado el precio del agua los últimos 5 años?	Si	No			
¿Es aceptable el aumento de precio?	Si	No			
18. ¿Cuántas veces llega el agua a la semana?					
¿Cuántas horas viene el agua al día?	Menos de 4 horas	13-16 horas			
	5-8 horas	17-20 horas			
	9-12 horas	21-24 horas			
19. ¿Necesita comprar agua extra?	Si	No			
20. ¿tiene problemas con la calidad del agua?	Si	No			
¿Qué tipo de problemas?	Turbia	Color			
	Olor	Impurezas			
¿Compra otra agua para beber?	Si	No			
21. ¿Cuenta con otro recurso para recolectar agua?	Si	No			
¿Cuáles?	Camion cisterna	Agua de pozo			
	Agua embotellada	Tanque cisterna			
22. ¿Mejoró la provisión de agua en el último año?	Si	No	No sabe		
¿En qué mejoró el servicio? ¿Cómo mejoró?	Calidad del agua				
	Cantidad de agua				
	Servicio de connexion				
	Respuesta a quejas				
	Más horas de distribución de agua				
	Servicio regular, horario confiable				
35..¿Está satisfecho con el servicio de provisión de agua?	Si	No			
36.Está dispuesto a pagar más por el agua?	Si	No			
37.. Hubiera pagado más desde un principio para obtener este servicio?	Si	No			
En quién confía más para proveer agua?	Estado	Municipal	Privado		