

**LGU- MANAGED WATER SUPPLY**

**THE MAGDALENA WAY**

## **II. SUMMARY**

Magdalena is a fourth-class municipality in the Province of Laguna, Philippines and is politically divided into twenty-four (24) barangays. It shares boundaries with the towns of Sta. Cruz in the northwest, Pagsanjan in the northeast, Liliw in the southwest, and Majayjay in the southeast. According to the 2015 census, it has population of 25,266.

It boasts of its rich history evidenced by post Spanish and Spanish era structures like the St. Magdalene Parish Church, the Emilio Jacinto Shrine, Rizal Park, and the Town Hall of Magdalena. It is also known as the little Hollywood of Laguna because the town had been a location where numerous movies and teleseryes have been shot. Although Magdalena is rich in history, it lacked one vital resource - clean and potable water. Wanting to provide its constituents with this resource, the local government mobilized itself and devised ways on how to gain access thereto.

As a matter of fact, Magdalena used to source its water requirements from the nearby municipality of Liliw. On July 27, 1953, the municipal governments of Liliw and Magdalena forged an agreement allowing the residents of Magdalena to use water from the Sungi Spring in Barangay Oples in Liliw. The said contract was supposed to end in 2003 (or after 50 years) but can be renewed upon agreement. According to the feasibility study prepared for the Magdalena water system project, the Sungi water supply system was unsatisfactory due to the deterioration of its facilities, which were constructed in 1926. With the municipal population expected to grow by 66% between 1995 and 2010, the old water system may not meet the increased demand

especially since the water supply from Sungi is inadequate and the water pressure is low.<sup>1</sup>

It should be noted that the old water system's coverage area is ten barangays and 1,097 household service connection.

In consideration of the foregoing, and to abate the inevitable shortage of water in the municipality should conditions remain the same, the local government unit of Magdalena decided to take action. As a consequence, Magdalena is one of the first municipalities that availed of a World Bank loan under the \$283-million LGU-UWSSP<sup>2</sup>. Thus, in 1998, the Municipal Government of Magdalena, through the Development Bank of the Philippines (DBP), applied for a World Bank loan under the LGU-UWSSP<sup>3</sup> to finance a water system project. The loan application, worth P24.2 million, was approved in March 1999. Construction started in September of the same year and was completed in June 18, 2001.

After the completion of the project, the Municipality of Magdalena found itself lost on how to successfully operate and maintain the Magdalena Municipal Water System amidst the existence of legal and political issues. Showing resolve and political will, it came up with a solution to address the problems it faced relative to the water system. The solution mentioned is the creation of the Municipal Water Board. The Municipal Water Board and its contributions to the successful operation and maintenance of the Magdalena Municipal Water System is the focal point of this paper.

### **III. PROJECT DESCRIPTION**

After bidding the project, LGU- Magdalena thru its then Mayor Pablo V. Agapay entered into a contract with RODMAN Construction and Development Corporation, which offered the lowest bid at P18.92 million, in August 1999. Construction started in September of the same year.

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<sup>1</sup> <http://www2.ohchr.org/english/issues/water/contributions/civilsociety/WaterforthePeopleNetworkAsia.pdf>

<sup>2</sup> *Local Government Unit Urban Water Supply and Sanitation Project*

<sup>3</sup> *Ibid.*

The project includes drilling of three (3) deep wells and the construction of pumping stations (the Pronove Pumping Station, the Salasad Pumping Stations, and the Booster Pump Station). It also involves the construction of a 150 cu. m. elevated reservoir (an elevated water storage tank built inside the Poblacion children's mini-park), the rehabilitation of existing pipeline and reservoir (the Cistern Tank in Burlongan), the construction of 15.62 kilometers of distribution pipelines, and the provision of disinfection facilities for wells.

The new waterworks system is expected to achieve 24-hour a day availability of water supply; the installation of 1,950 service connections by the civil works contractor, with service to 1,712 consumers. Furthermore, the system is also expected to achieve non-revenue water of 20%; employee per connection ratio of 1:130; collection efficiency of 97%; and **50% service coverage by 2004.**

There was an agreement between the Municipal Government of Magdalena and Bayan Water Services (a joint venture between Benpres Holdings and Montgomery Watson New Zealand Ltd.) that the former shall retain the ownership of the system while the latter shall handle the operation and maintenance. The 70-million, 15-year Lease Agreement was signed on August 4, 1999 with the objective that it would cater to the expected population growth of the Municipality in the turn of the century and beyond.

At present, the Magdalena Water System caters to twelve (12) barangays namely: Cigaras, Buenavista, Salasad, Maravilla, Ilaya at Ibabang Butnong, Malinao, Bucal, Tipunan, Munting Ambling and Malaking Ambling, and Poblacion with a total of **2,560 Households.**<sup>4</sup> The Magdalena Water System is run by the Municipal Government of Magdalena thru the Municipal Water Board.

#### **IV. IMPLEMENTATION PROCEDURE**

##### **OPERATION AND MAINTENANCE BY THE MUNICIPAL WATER BOARD**

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<sup>4</sup> Interview with Engr. Ariel Ungco, December 21, 2016

Upon the issuance of the Certificate of Project Completion (CPC) by the municipal government of Magdalena in favor of RODMAN (contractor), the project, more appropriately its operation and maintenance, was turned-over to Bayan Water Services, Inc.

However, on February 2002, Bayan Water Services, Inc. opted out on the contract citing violations on the part of the Municipality of Magdalena to some of the provisions of their contract. On April 24, 2002, Mayor Agapay and representatives from the World Bank, DBP, and DILG agreed to dissolve the contract with Bayan Water Services Inc. They also permitted the Municipal Government of Magdalena to rebid the operation of the project as soon as possible. However, no private entity expressed their interest to operate and maintain the New Water System. Such created a myriad of problems for the municipality. Such problems extend to the financial viability, administration, and technical operation of the project.

Without any private entity willing to assume the responsibility of the operation and maintenance of the new water system, and in view of the running of the period for the payment of the loan, the Municipality, exhibiting strong political will came-up with a solution that touched upon all the facets of the operation and maintenance by establishing a new Magdalena Water System.

Thus, on August 2004, the Municipal Water Board of Magdalena was created. The Municipal Water Board of Magdalena (MWB) serves as the recommending and policy-making body to the chief executive, and is in charge of the planning, administrative, institutional, financial, and technical aspects of the operation of the Magdalena Municipal Water System.

This board is composed of the following persons:

*Table 1. Composition of the Municipal Water Board*

<b>NAME</b>	<b>POSITON AND DESIGNATION</b>
David O. Aventurado, Jr.	Municipal Mayor - Chairman of the

	Board
Maximo B. Sotomayor	Member - Sangguniang Bayan Member
Laurito P. Ibanez	Member - Sangguniang Bayan Member
Ariel M. Ungco, Jr.	Member - Municipal Engineer
Antonio T. Cabantog	Member - Municipal Treasurer
Ma. Cleofe A. Pita	Member - Municipal Health Officer
Marvy V. Hermano	Member - Municipal Budget Officer
Hegina S. dela Cruz	Member - Municipal Accountant
Norman B. Licong	Member – MPDC
Olivia A. Evidente	Member - Municipal Administrator

## V. PROJECT RESULT/IMPACT

Thru the abovementioned board, the Magdalena Municipal Water System resolved the issues it is confronting in the following wise:

- The problem of lack of management skills and experience and also the mentality that there will be a private operator the operation , on the part of the persons (Municipal Employees) in charge of the operation and maintenance was remedied by directing the department heads concerned (Municipal Engineer and Municipal Planning and Development Coordinator) to attend various seminars related to water system operations; while owning the operations was the amendment on the Sub-loan Agreement with DBP for the LGU to temporarily run the system.

- The problem of high non-revenue water<sup>5</sup> pegged at 52% of the total water production was addressed thru a resolution<sup>6</sup> implementing minimum payment (0-5 cu.m.) and policies on the protection of the water meter assembly. The additional employees will provide technical expertise to man and maintain the facilities of the Magdalena Waterworks Supply System thereby minimizing if not eliminating non-revenue water caused by damaged pipes;

- The issue of low collection, which contributed to a higher subsidy from the Municipal Government of Magdalena, was remedied with the adoption of a resolution<sup>7</sup> by the Municipal Water Board directing the disconnection to the service those who has 2 months of unpaid bills and adoption of the provisions of Republic Act 8041 also known as National Water Crisis Act of 1995 particularly on pilferage. And later on it was upgraded to a Municipal Ordinance.

The aforementioned practices have, in turn, contributed to the increase in the income of the Magdalena Municipal Water Services as described in the table below:

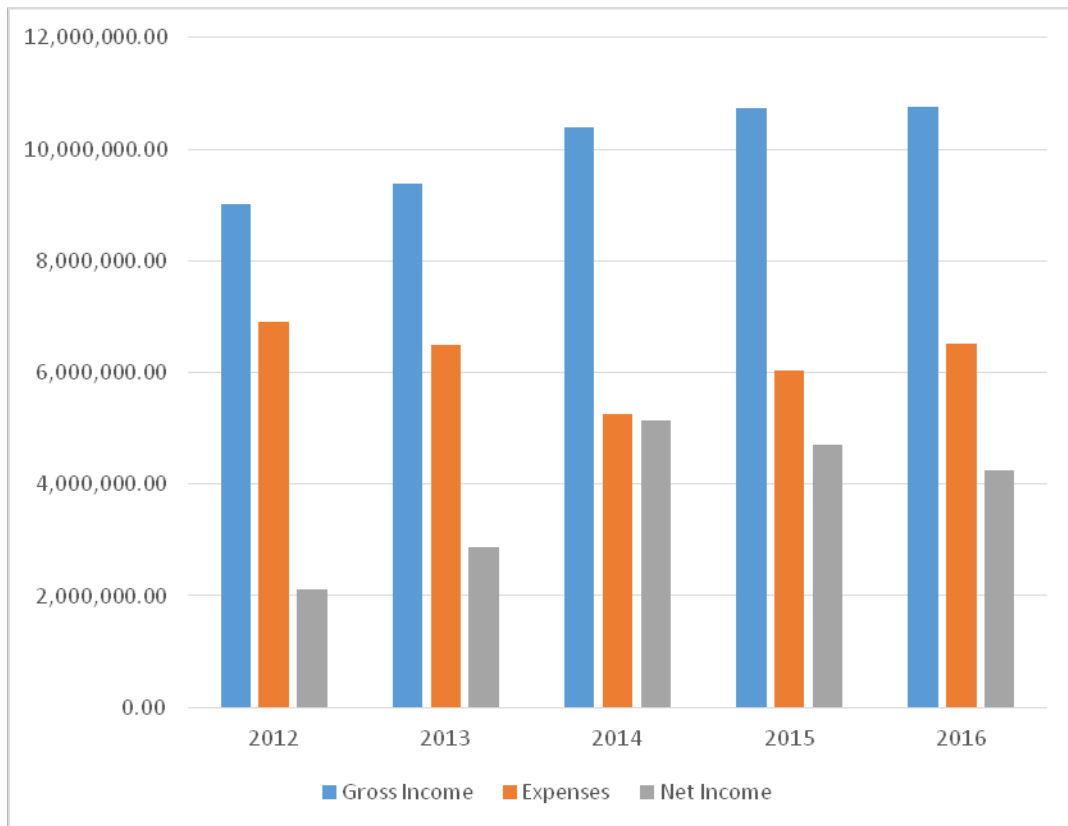
*Table 1. Comparative Table Illustrating the Gross Income, Expenses, and Net Income of Magdalena Municipal Water System for years 2012-2016*

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<sup>5</sup> Water lost before reaching the consumer

<sup>6</sup> SB Resolution No. 21-2005

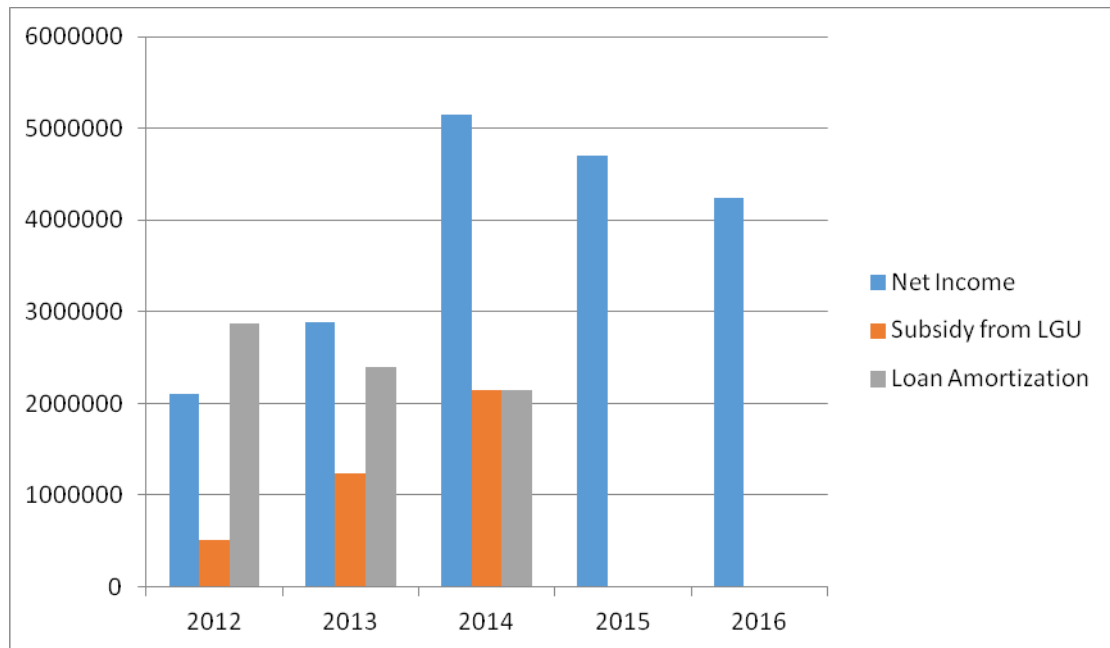
<sup>7</sup> Municipal Water Board Resolution No. 4-13



From a net income of Php 2, 108,511.30 from 2012, it doubled in 2016 amounting to Php 4, 243,638.39. Thus, it can be concluded that the measures adopted by the MWB has significant impact particularly on the increased revenue that can be used for future investment and expansion of the water system. Further, the said economic enterprise can be readily seen in the graph as self-sustaining with an

Table 2. *Payment of Loan Amortization*





Complementary to Table 1, the abovementioned table shows the rise in subsidy from the LGU only to fully-pay the loan from DBP ahead of the latter's maturity (DBP took-out Magdalena's loan from the World Bank and offers lower interest). As of 2015, the New Magdalena Water System achieved self-sufficient status and has since generated a three-year average net income of Php 4, 697,375.57.

## VI. ANALYSIS/LESSONS LEARNED

In spite of its rough start, the Magdalena Municipal Water System is now stable thanks to political will and resolve by the Municipal Government of Magdalena thru its Municipal Water Board. Not only did Magdalena Municipal Water System pay its obligations thru its earnings, it is profiting thereby giving the Municipality of Magdalena an added source of income, which, in view of the latter's income class, is very welcome.

The strengths of the Municipal Water Board as evidenced by the way it handled the operation and maintenance of the Magdalena Municipal Water System lie in its organizational set-up. The set-up is a combination of the

executive and legislative departments of the local government, with the municipal mayor as chairman<sup>8</sup>. This set-up enables check and balance thereby minimizing if not eliminating the probability of using the local water utility as a cash cow to further financial interests. Moreover, the other members of the Municipal Water Board are department heads in the local government unit which have years of experience and the necessary expertise in handling the financial, administrative and technical aspects of the water utility.

As compared to a local water district constituted under PD 198, otherwise known as Provincial Water Utilities Act of 1973, which has a separate and distinct personality<sup>9</sup>, the local water utility is connected with the Municipal Government of Magdalena and is composed of appointive and elected local officials therein. With regard to elected officials, appointment as chairman and members of the board, as the case may be, serves as avenue by which the constituents of the municipality can gauge their performance. Put differently, a well-operated and well-maintained water system may make or break an elected official's political career. It is also worthy of note that since the MWB is composed of department heads with permanent status, it is a continuing body.

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<sup>8</sup> See table 1

<sup>9</sup> Feliciano vs. Gizon, GR No. 165641

# Elevated Steel Water Tank

Capacity: 150 CU.M.



# Salasad Pumping Station

Capacity : 32 lps, 50 HP Submersible Pump



# Pronove Pumping Station

Capacity: 15 lps, 25HP Submersible Pump





# Booster Pumping Station

Capacity: 15 lps Booster Pump, 15Hp



# Stand-by Generator Set

165 KVA 3 Phase, 440V



# Service Connection

(Meter Blocking)





