and Studies

# **International Journal of Multidisciplinary Approach**

ISSN NO:: 2348 – 537X

# Safe Drinking Water a Realized Dream: A Case Study of Tanauan, Leyte

#### Generoso N. Mazo

Leyte Normal University, Tacloban City, Philippines

#### **ABSTRACT**

Access to safe drinking water is a perennial global concern. It has been identified as one of the Millennium Development Goals by giving more people around the world sustainable access to safe drinking water. The Philippines also share the same experience. The Province of Leyte is one of the poorest provinces in the Philippines. The Municipality of Tanauan is a 2<sup>nd</sup> class municipality in the province of Leyte. Tanauan has 54 barangays or villages. Only 25 barangays have access to Level III potable water supply. Twenty-nine (29) barangays are still dependent on deep-well or open-well sources for drinking water.

Using a descriptive method this study sought to elicit how the local chief executive was able to convince the Millennium Challenge Corporation, USA to redirect their Php 32 million fund resource to finance these projects and the perspectives of the implementers and the recipients. Interviews were done with the local chief executive, program implementers and selected residents in the recipient barangays.

The project is implemented through the Local Government Unit of Tanauan, Leyte, the Kapit-Bisig Laban sa Kahirapan - Comprehensive and Integrated Delivery of Social Services (Kalahi-CIDSS) of the Department of Social Welfare and Development (DSWD) and the Leyte Metropolitan Water District (LMWD). Around 17,212 individuals in 4,188 households in the 29 barangays will benefit from this project. The target date of completion is May 2016. The Local Government Unit is excited to complete this project as it would mean 100% of its households would have sustainable access to safe drinking water. The Social Work Department is thrilled to be a part of this noble undertaking. The local water district is enthusiastic as it would be able to deliver safe drinking water to more clients thus increasing their area coverage as it would now include the rural areas. Everyone was thankful that a generous donor shouldered the cost of the project and that their dream to experience sustainable access to safe drinking water in the comforts of their homes has now become a reality. Some recipients expressed mixed reactions. Some doubted whether it would be completed on-time, some feared they might not have the finances to pay the monthly bill for their water consumption, while others hoped that politics will not affect the projects implementation. Good governance obtains trust from decision-makers of fund sources. This would result in the convergence of resources for purposes of development and delivery of basic social services. This can become a pilot project on convergence for the delivery of sustainable access to safe drinking water that may be replicated in other areas.

**Key words:** sustainable access to safe drinking water, social services, good governance, Tanauan,



### **International Journal of Multidisciplinary Approach** and Studies

ISSN NO:: 2348 - 537X

INTRODUCTION

#### Water is the foundation of life. Safe drinking water is a basic necessity and access to it is a basic social service that must be provided by those in power. According to the facts and figures of the "unwater.org," even if water is not confined to political borders, still 783 million people do not have access to clean water. This is corroborated by

"thewaterproject.org/water scarcity," data that states: clean, safe drinking water is scarce where nearly 1 billion people in the developing world do not have access to it. Water scarcity simply means that there is lack of enough water (quantity) or lack of access to safe water (quality). The World Health Organization (WHO) estimates that 1.1 billion people have no access to any type of improved drinking source of water.

Geere (2016) asserted that in developing countries, women and girls spend an estimated 40 billion hours a year collecting water. Despite overwhelming evidence that providing safer, accessible and more reliable supplies of fresh water leads to healthier populations and economies, millions of people still struggle to access safe drinking water, and more than 840,000 people die each year from poor water, sanitation and hygiene. "Access" is defined as having a source of safe drinking water within 1 kilometer of the dwelling. Estimates have it that in 2015, 663 million people still lacked access to improved drinking water source. Water is not an easy substance to transport it is heavy, unstable and energy-intensive to move. The infrastructure that supports piping water into houses is expensive to install and maintain. Many cities reap the benefits of past investments in infrastructures and face huge costs of repairing and replacing old materials. Piped water services are simply unaffordable in many communities of low-income regions or countries, particularly in remote rural areas.

Philippine Senator Ralph Recto cited a joint report of the WHO and the United Nations (UN) entitled "Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment" which tracks access to drinking water and sanitation against the Millennium Development Goals (MDGs) which highlighted the fact that 8.4 million Filipinos have no access to clean drinking water. The report also showed that 2.3 million Filipinos use untreated "surface water" from rivers, dams and canals for drinking while 6.1 million source their drinking water from "unimproved drinking water sources" like unprotected dug wells and unprotected springs. These facts should prompt governments to increase investments on clean water and sanitation.

The Province of Leyte is located in Region VIII or the Eastern Visayas in the central Philippines. It is politically divided into 5 congressional districts, subdivided into 3 cities and 40 municipalities. It has 1,393 barangays. The province has a population of 1,567,984 as of the 2010 Census. Data from the Philippine Statistics Authority (PSA) show that in 2010 in the Health Sector, the Safe Water Supply was at 336,540 then in 2011 it was at 317,629. No further data updates were available in its website.

Tanauan, Leyte is a 2<sup>nd</sup> Class Municipality in the Province of Leyte. It is politically subdivided into 54 barangays or villages. Its population stands at 53,310 in 12,947 households. Out of the 54 barangays only 25 enjoy sustainable access to safe drinking water through the services of the Leyte Metropolitan Water District (LMWD). The remaining 29 barangays source their drinking water from shallow wells, unprotected dug wells while others have to fetch drinking water from communal faucets in nearby barangays or from the homes of relatives and transport them to their residences. Access to safe drinking water had always



# **International Journal of Multidisciplinary Approach and Studies**ISSN NO:: 2348 – 537X

been the dream of the residents of these 29 barangays. It had also been the dream of previous local chief executives but no one would commit the same, even as a campaign promise, knowing that said project would entail huge costs which the Local Government Unit cannot afford using its own resources.

The theories of transformational leadership and empowerment were the frameworks of this study. Potter (2004) quoted Jones and Moses (1999) that transformational leadership is centered on "the capacity to move resources for greater productivity" and according to Bower (1997) "it requires adaptability and flexibility. It is about leadership with values and meaning, and a purpose that transcends short-term goals and focuses on higher needs. In this study, the characteristics of transformational leadership were found to be evident in the manner of how the local chief executive convinced the funder to channel their savings to finance the project. (1995) quoted Swift & Levin (1987) that the theory of Perkins and Zimmerman empowerment include both process and outcomes, suggesting that actions, activities, or structures may be empowering, and that the outcome of such process result in a level of being empowered. Empowering processes at the community level might include collective action to access government and other community resources. Empowerment suggests that participation with others to achieve goals, efforts to gain access to resources, and some critical understandings of the sociopolitical environment. At the community level, empowerment refers to collective action to improve the quality of life in a community and to the connections among community organizations. In this study, empowerment of the community is evident on the excitement of the beneficiaries that they can now avail of safe drinking water similar to what is enjoyed by communities in the urban areas.

#### RELATED LITERATURE

Aguilar (2010) in his article "Access to Safe Drinking Water in Cambodia: Available Sources and Point-of-Use Water Treatment" said in spite of the high availability of drinking water sources in Cambodia, the lack of infrastructure development means the country faces serious challenges with respect to safe drinking water. Rural Cambodians do not have access to clean drinking water, unless they venture to filter it themselves. Aguilar's study was on the available water sources and the water treatment practices in Cambodia while this study focused on how the municipality of Tanauan, Leyte was able to secure funding for the basic infrastructure for its clean and potable water system for its rural areas.

Patunru (April 2015) claimed that in 1990, 30 per cent of Indonesian population had no access to improved drinking water source. Almost 65 per cent lacked access to improved sanitation—and almost 40 per cent defecate in the open. One of the Millennium Development Goals' objectives is to halve these numbers of disadvantaged by 2015. We explore the recent progress using World Health Organization/United Nations Children Fund report and the Indonesia's Socio Economic Survey. We conclude that the country still face a great challenge to meet the targets, especially on sanitation. We next illustrate the importance of these facilities by estimating their impact on diarrhoea incidence. We find that the relative importance of sanitation is higher than that of water. A household with 'unimproved' drinking water source is about 12 per cent more likely to have diarrhoea than that otherwise. Lack of improved sanitation, on the other hand, makes the household members about 23–27 per cent more likely to suffer from it. Patunru's study shed light on the connect between safe



### **International Journal of Multidisciplinary Approach** and Studies

ISSN NO:: 2348 - 537X

drinking water and sanitation in Cambodia while this study gives focus on the efforts to give access to safe drinking water to the 29 interior barangays in Tanauan, Leyte.

Israel (2009) assessed the local service delivery (LSD) of potable water in Dumaguete City and selected areas of Agusan del Sur. It is based on a recent study conducted by the Philippine Institute for Development Studies (PIDS) and the United Nations Children's Fund (UNICEF). The results and findings of the study indicated, among others, that Dumaguete City had met national and Millennium Development Goals (MDG) related to potable water delivery while some of the covered municipalities of Agusan del Sur were far from achieving them. Findings also showed that LSD in the two sites faces numerous problems—many of which were institutional in nature—that need to be addressed if national and international goals are to be realized. Some recommendations, including those on the institutional and other related aspects, were put forward for the further development of the LSD of potable water in the two sites as well as in similarly situated areas in the country. The service delivery of Level I water in Dumaguete City is provided by both the private sector and LGUs while Level II water is supplied by the LGUs. Level III water is supplied by the Dumaguete City Water District (DCWD), a government corporation. Records show that in 2007, there were a total of 232 Level I water systems in Dumaguete City as against only two Level II and one Level III water systems. Level I water systems comprised about 99 % of the water systems in Dumaguete City. Providing Level I and Level II potable water systems, particularly for the poor in Dumaguete City, has been one of the major programs of the city government in coordination with the barangay governments. This assessment was on the delivery of potable water in the City of Dumaguete and selected areas of Agusan del Sur while this study highlights the efforts to deliver potable water supply to interior barangays in a 2<sup>nd</sup> class municipality in the Province of Leyte.

#### **METHODOLOGY**

Using a descriptive method this study sought first, to elicit how the local chief executive was able to convince the Millennium Challenge Corporation (MCC), an international nongovernment organization based in the USA to redirect their 2015 fund savings for their Philippine operations to finance this project in Tanauan, Leyte. Second, to know the sentiments of the program implementers and selected residents in the recipient barangays on the novel project. Lastly, to articulate the positive or pro-active results as effects of good Interviews were done with the local chief executive, program implementers, and selected residents in the recipient barangays.

#### **RESULTS AND DISCUSSIONS**

#### **Gravity Fed Water System – Level II**

Honorable Pelagio Rudas Tecson, Jr. is the Local Chief Executive or town Mayor of Tanauan, Leyte. He was elected into public office on May 2013 and assumed office on June 30, 2013. His administration was barely 4 months and 7 days when the Super Typhoon Haiyan (Yolanda) unleashed its fury on his hapless town. Due to the unprecedented recovery of Tanauan through his leadership, he was the only local chief executive invited to represent the Philippines in the United Nations – General Assembly, Community Driven Development



and Studies

## **International Journal of Multidisciplinary Approach**

ISSN NO:: 2348 – 537X

Event last September 2015. There he spoke about the recovery efforts and success stories of his beloved town. There he met Mr. Andy Moll, the Millennium Challenge Corporation (MCC) representative to the Philippines. During their discussions he learned that MCC had a savings of more than P32 million from their 2015 budget allocation for their Philippine operations. Wasting no time, Mayor Pel asked if they were willing to reconsider a proposal for the said fund. They agreed on principle as long as the provincial government and the local government will provide the necessary counterparts at 10% and 5%, respectively. Upon his return from the UN event, Mayor Pel made the proposal for the water system for the 29 barangays of Tanauan. He also secured the commitment of Governor Dominic Petilla for the 10% provincial counterpart and used part of the Municipal Development Fund for the 5% LGU counterpart. The proposal was then approved by the MCC upon the submission of the technical plans. On February 27, 2016, the agreement for the project was sealed through the signing of the Memorandum of Agreement (MOA). MCC imposed that the project be done through the KALAHI-CIDSS approach of the Department of Social Work and Development (DSWD).

The MCC was pressed for time as the funds for the project was already downloaded to the municipal account. However, due to the lack of material time in following the legitimate but tedious procurement process and the closing of their financial books, MCC had to withdraw from the project and recall their funds. Mayor Pel, immediately found another willing partner in Asian Development Bank (ADB) who responded to the call to bankroll the project in lieu of MCC. The counterparts of the Provincial Government and the LGU remained. The project continued.

Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services: Kapangyarihan at Kaunlaran sa Barangay (KALAHI-CIDSS) is a Community Driven Development (CDD) initiative of the Government of the Philippines' Department of Social Welfare and Development (DSWD). KALAHI-CIDSS seeks to reduce poverty and vulnerabilities to poverty by addressing a lack of capacity and resources at the local level and limited responsiveness of local governments to community priorities. KALAHI-CIDSS (KC) seeks to "empower communities in targeted poor municipalities to achieve improved access to sustainable basic public services and to participate in more inclusive Local Government Unit planning and budgeting." The acronym, LET-CIDSS, summarizes the basic principles that guide its implementation: localized decision making, empowerment, transparency, community priority setting, inclusiveness, demand-driven, simple, and sustainable. Engineer Luz Maderazo, Head of the Tanauan, Leyte KALAHI-CIDSS team said Tanauan, Leyte is a recipient of the Millennium Challenge Corporation (MCC) - Incentive Grant Fund for the construction of the Gravity Fed Water System in 29 barangays. The Total Project Cost is P44,058,983.28. The KC Grant stands at 37,534,174.08. The counterpart of the Provincial Government is P4,380,359.73 while the Municipality of Tanauan shelled-out P1,968.449.47 as counterpart. The public bidding for the project implementation will be done on April 12, 2016 and the project duration covers the period April 20-May 20, 2016. The KALAHI-CIDSS personnel have already finished the physical survey of the identified barangays.

The Leyte Metropolitan Water District (LMWD) is an autonomous and a quasi-public corporation. It has a total water service connections of 29,346 in the municipalities of Dagami, Tolosa, Tanauan, Palo, Tabon-tabon, Sta. Fe, Pastrana, and the City of Tacloban. However, none of these municipalities are 100% connected to the rural areas. Approximately



### **International Journal of Multidisciplinary Approach** and Studies

ISSN NO:: 2348 - 537X

30,000 cubic meter of potable water is delivered to the LMWD service areas every day with the main bulk of supply coming from Rapid Filtration Plant located within the boundary of Tingib, Pastrana, Leyte and Brgy. Hibunawon, Jaro, Leyte. The state-of-the-art treatment plant is first in Leyte which came to existence in the form of an aid from the Japanese government. An interview with the LMWD General Manager revealed that they are providing technical assistance and work supervision to the project. The Gravity Fed Water System Project – Level II will be connected to the LMWD pipeline for its water source. Level II connections means communal water faucets in the identified beneficiary barangays.

In the implementation of the Gravity Fed Water System Project – Level II the 29 barangays were grouped into 8 clusters. Cluster 1 include barangays Malaguicay, Sta. Elena, Guindagan; Cluster 2 include barangays San Isidro, Cabarasan Guti, Cabalagnan, Balud; Cluster 3 include barangays Bantagan, Maghulod, Hilagpad; Cluster 4, Barangays Kiling, Pasil, Binolo; Cluster 5, San Victor, Cabunga-an, Ada, Canbalisara, Picas; Cluster 6, Sacme, Limbuhan Guti, Limbuhan Dako, Catmon, Arado; Cluster 7, Lapay, Tugop, Amanluran, Linao, Cogon; Cluster 8, Salvador, Bangon, Calsadahay. This project will benefit a total population of 17, 212 or 32.28% in 4,188 or 32.35% of its households in the said barangays.

#### Common themes were identified based from the narratives of the interviewees, these are:

#### **Theme 1: Sense of Fulfilment among Implementers**

"To have delivered safe drinking water to all (100%) of our barangays had been the dream of all previous Local Chief Executives. I am glad, it happened during my tenure."

Mayor Pelagio Tecson, Jr.

"To implement this sustainable project that will benefit a marginalized group in our town gives our team a sense of ownership and fulfillment."

Engr. Luz Maderazo, KALAHI-CIDSS Team Leader

"To provide the technical expertise for this noble project and to deliver safe drinking water to these rural areas makes us proud as water service providers."

Pastor Homeres, LMWD Manager

#### **Theme 2: Mixed Reactions Among Barangay Leaders**

#### **Excitement**

"I am excited to be connected to the LMWD as our brgy is just about 1 kilometer from its main pipeline. This has been a long dream of our people....(Leader 1)"

"Water from LMWD – we can now drink chlorinated or treated water. We can now be free from worries about diarrhea and other ailments from unsafe water.....(Leader 2)"

"Water with chlorine is safe to drink direct from the faucet. To have it in our barangay will be a dream come true for all of us...(Leader 7)"

"My people are thrilled to have access to water from LMWD. We don't have to go far to fetch safe drinking water...(Leader 19)"

### **International Journal of Multidisciplinary Approach**

ISSN NO:: 2348 – 537X

#### **Pessimism**

"The project is good but I suspect that it will be used for political purposes....(Leader 5)"

"Water from LMWD is good but I am skeptical if it will be completed we have been dreaming about this for a very long time, even when my father was still the barangay chairman...(Leader 8)"

"Water from LMWD is fine but I don't think the water pressure would be enough. When it reach our barangay it will only be droplets of water...(Leader 11)"

"I don't believe that this will push through. This is just for political purposes. The government does not have the money for this kind of project...(Leader 22)"

#### **Mixed Reactions Among Barangay Residents**

and Studies

#### Thrill and Hope

"I am thrilled to be connected to the LMWD, we are very near to the LMWD main pipe but they always tell us they don't have money to connect us, I will immediately upgrade to Level III connection..... (Respondent 3)"

"Yes, we can have safe water right in our barangay. It will save us a lot since we buy our drinking water from refilling stations in the town proper.....(Respondent 18)"

"This will mean lesser incidence of sickness from unsafe drinking water. Our source of drinking water are open wells and shallow-tube wells. I hope this will be finished soon...(Respondent 24)"

"I am happy for my children, at least they will experience to be connected to the LMWD water source. This was also the dream of my late parents but it never happened. I hope this will be completed, this is a big help to us...(Respondent 28)"

#### **Doubt**

"I doubt if they will be able to complete this project... (Respondent 1)"

"This project will not be finished, it will drag on for years. It will be used for political purposes...(Respondent 6)"

"Only those barangays that are politically aligned to the incumbent mayor will be finished...(Respondent 17)"

"LMWD cannot afford to supply all the barangays with safe drinking water...(Respondent 25)"

#### **CONCLUSION**

The characteristics of transformational leadership were evident in the actions of the local chief executive in securing the funds for the project as it focused on the higher needs of his constituents transcending short-term political goals. It highlighted a brand of leadership with values and meaning.



## **International Journal of Multidisciplinary Approach**

ISSN NO:: 2348 – 537X

Good governance obtains trust from decision-makers of fund sources. This would result in the convergence of resources for purposes of development and delivery of basic social services.

Upon completion of the project, Tanauan, Leyte will be the first municipality in the Province of Leyte to have 100% of its barangays connected to a sustainable access to safe drinking water through Level II or communal water faucet connections.

This can become a pilot project on convergence for the delivery of sustainable access to safe drinking water that may be replicated in other areas.

#### **ACKNOWLEDGEMENT**

and Studies

This paper was made possible through the help of the Honorable Pelagio R. Tecson, Jr., Mayor of Tanauan, Leyte and his wife Penelope. Engr. Luz Maderazo, Head, KALAHI-CIDSS, Tanauan Team, Mr. Pastor Homeres, LMWD General Manager. My colleagues at the Leyte Normal University, Tacloban City particularly Dr. Jude A. Duarte, University President and Dr. Ibarra M.V. Villarino. Special Thanks to my wife, my inspiration, my all, Rafaelita Cumpio-Mazo. Gratitude also goes to my "in-house" editor, my mother, Dr. Leatriz Nielo-Mazo and my late father Dr. Jose V. Mazo, Sr. (+).

#### **REFERENCES**

- i. Aguilar, M.F. (May 2010) Access to Safe Drinking Water in Cambodia: Available Sources and Point-of-Use Water Treatment. BAMA, UA.EDU/ JOSHUA Vol. 7. Downloaded from: www.bama.ua.edu/-joshua/archive/may10/aguilar.pdf
- ii. Geere, J. (2016). Access to Safe Drinking Water: Challenges and Opportunities for Improving Global Health Fair Observer, March 12, 2016.
- iii. Israel, D.C. (2009) An Assessment of the Local Service Delivery of Potable Water in Dumaguete City and Selected Areas of Agusan del Sur Province, Philippine Journal of Development Number 67, Second Semester 2009 Volume XXXVI, No. 2. Downloaded from: http://dirp4.pids.gov.ph/ris/pjd/pidspjd09-2water.pdf
- iv. Patunru, A.A. (April 2015) Access to Safe Drinking Water and Sanitation in Indonesia, Asia & the Pacific Policy Studies, vol. 2, no. 2, pp. 234–244 doi: 10.1002/app5.81 Downloaded from: http://onlinelibrary.wiley.com/doi/10.1002/app5.81/pdf
- v. Perkins, D.D. and Zimmerman M.A. (1995). Empowerment Theory, Research, and Application. American Journal of Community Psychology: Oct. 1995, Vol. 23, No. 5. p: 569-579.
- vi. Homeres, P. (personal communication April 1, 2016)
- vii. http://newsinfo.inquirer.net/702546/millions-in-ph-dont-have-access-to-clean-water-toilets-report
- viii. http://www.who.int/water\_sanitation\_health/mdg1/en/downloaded: 1-4-16; 11:15 a.m.



# **International Journal of Multidisciplinary Approach**

ISSN NO:: 2348 – 537X

- ix. http://www.unwater.org/water-cooperation-2013/water-cooperation/facts-and-figures/en/downloaded: 2-24-16; 2:10 p.m.
- x. http://nap.psa.gov.ph/countryside/showperregion.asp
- xi. http://www.thewaterproject.org/water\_scarcity downloaded: 2-24-16; 1:30 p.m.

and Studies

xii. http://www.adb.org/sites/default/files/publication/29878/kalahi-cidss-project-philippines.pdf

Tecson, P. Jr. (personal communication March 10, 2016)