

# **Highlights of Research**

The Philippines is said to be rich in water

- resources: (Ref. The integrated Water Resources Manageme - 421 principal river basins, of which
  - 20 are major river basins
    - Giver basin the entire geographical area drained by a river and its tributaries; an area characterized by all runoff being conveyed to the same outlet.)
       Each wth at least 990 square kilometers basin area

nt Plan Framework 2006)

- - Coverage total area = 111,269 square kilometers to 37.1% of the total Philippine land area

- Average annual rainfall is about 2,400 mm, of which
  - -1,000 mm to 2,000 mm are collected as run-off by a natural topography of river basins, natural lakes, and numerous small streams
- 16 major lakes each covering 400 hectares and above

- In addition to surface water, the Philippines also draw from groundwater sources, which.
  - Contribute 14% of total water resources of the Philippines
  - Region I (Ilocos Region) and Region VII (Central Visayas — Cebu, Bohol, Negros Oriental) are the highest potential source of groundwater.
  - About 86% of piped-water supply systems use groundwater as a source.

- Importance of natural environment statistics for policy formulation and decision to support the integration of socio-economic and environmental plans, programs and policies.
  - Data of the country's natural environment (flora, fauna, forests, atmosphere, water, land and soil, mineral and energy resources, and human settlements) are being compiled and included in the Philippine National Accounts as Physical Accounts only, without valuation which is planned as an enhancement to the system
  - Physical Accounts of surface water and ground were compiled from 1988 to 2001 with donor fina support

- The Physical Accounts for water, for example includes opening stock of water (surface and groundwater separately), recharge and withdrawals, and closing stock in million cubic meters;
- However, despite the requirement by Executive Order No. 406, series 1997 institutionalizing the system (known as the Philippine Economic-Environmental and Natural Resources Accounting System (PEENRA), this system is in danger of being terminated due to lack of funds depending on receipt of grants from foreign donors - WHY CAN'T THE SYSTEM GET APPROPRIATIC
  - FROM THE GAA?

- (Back to the main subject). Yet despite seeming water abundance, Philippines is confronted with difficulties in meeting its water needs, expansion of capacity of WSPs, and connecting poor households to water supply systems.
  - To be sure, rapid population growth, economic development, urbanization and industrialization have impacted the country's water services and resource base

# - Focus of research

- Water Districts in regions outside the National Capital Region
- Operate in cities and urban areas
- Provide individual household piped water connections
- Compared with LGUs, WDs performed much better, for the present
- Considering, however, that although PD 198 legally created the WDs and LWUA in 1973, still a very large proportion of the population (65%) under the jurisdiction of WDs are still without WD servi

#### • Available data

- -Latest (2007) official published population (rounded-off)
  - » 89 million total Philippine population
  - » 77 million (87%) live in regions outside NCR

  - » 42 million (54%) of regions' population are under the jurisdiction of WDs (PAWD Directory 2008-2009) for their water supply
  - » 15 million (35%) of population under WD jurisdiction are served (equivalent to 19% of regions' population)
  - Regions' population not served by WDs get their w supply from alternative formal and non-formal WSF (water systems in private subdivisions, LGUs, RWSA, BWSA, BW and individual water vendors; self-provided systems).

### • Performance Benchmarking of Small Town Water Supply

(Ref: Development Alternatives, Inc. citing survey (2004) of 45 W SPs by Water and Sanitation Program project of the World Bank)

- Some of survey indicators
  - Service coverage (%)
  - Availability (hours)
  - Consumption (liters/per capita/day)
    - Non-revenue water (%)
    - Staff/1000 service connections

# • Urgent need, among others, to review the charters of WDs, particularly the so-called "population under WD jurisdiction" and institute appropriate action to reduce/eliminate the disproportionate gap between the served and not served population

- Alternative WSPs provide mainly Level I and Level II services, characterized by:
  - Absence of water treatment (Level I)
  - Sometimes water treatment (Level II) water services
  - Transmission from source to household: none for
  - Level I; available for Level II
  - Distribution: none for Level I and communal for

### Biggest concern is large proportion of Philippine population without access to clean and safe drinking. Government is well aware of the problem:

- "Recent" initiatives:
  - Preparation from 2007 and publication in 2009 of the Philippine Water Supply Sector Roadmap (PWSSR); and the Philippine Sustainable Sanitation S Roadmap (PSSSR) in 2010.

- PWSSR identified and discussed the following issues and challenges in the water sector:
  - Institutional fragmentation
  - Inadequate support to rural water supply sector
  - Low performance of water utilities
     Weak and fragmented regulatory framework
  - Low sector investment and financing
  - Lack of sector information.
- Although sanitation is an equally important sector, this is not included in our study. However, here are some interesting (and cause for alarm) aspects mentioned by the PSSSR.

- About ¼ of the population is still not served with individual sanitary types of sanitation facilities
- Open defecation is still practiced by 14% of the rural population and 5% of the urban population
- This means that every single day probably 10 million Philippine citizens defecate in the open, with serious consequences to the health. dignity and human development

### WHAT HAVE BEEN DONE?

- (Good opportunity to seek enlightenment from distinguished guests)
- Filing of at least two bills in the House of
- Representatives and one bill in the Senate to address the issues raised by the PWSSR.
- None on Sanitation as far as we know.
- Meanwhile, the PWSSR seems to have been overtaken by events, viz., promulgation of Executive Order No. 62, series of 2011:
  - Transfer of LWUA from DOH to DPWH
  - Transfer of LWOA from Don to Drwn
     Creation of an Inter-Agency Committee on the Water Sector "tasked to design and recommend to the President a water sector master plan which will effectively address all the issues and concerns of the water sector." THIS LOOKS LIKE A DUPLICATION OF THE PWSSR?

## **Other Comments**

- DOH budget includes Appropriations for Potable Water Supply of P1.5 billion each year from 2009 to 2011 (so far) for waterless municipalities to be implemented by LGUs by administration only (explain) based on MOA between DOH and concerned LGU.
  - DOH supposed to post on its official website at least on a quarterly basis:

- List of identified waterless municipalities with the corresponding
- budgetary allocation
- Utilization of amounts
- Status of implementation, and
- Program evaluation and/or assessment reports.
- WE HAVE FOUND NO SUCH REPORT BY DOH IN IS OFFICIAL WEBSITE. MAY WE KNOW PRESENT STATUS, IF YOU KNOW?
- RA No. 10149. GOCC Governance Act of 2011
   Created the Governance Commission for GOCCs as a central advisory, monitoring and oversight body with authority to formulate and coordinate policies governing GOCCs....
  - Initial tentative listing includes 158 GOCCs

 Noteworthy that LWUA is included in the list
 SUGGEST THAT WATER DISTRICTS WHICH ARE ALSO GOCCs BE INCLUDED IN THE LIST OF GOCCs for review.

# Comment on Expansion of Water Districts

- In a study of the data for over 420 water districts all over the Philippines, we found
  - that on the average, the water districts may
    - have economies of scale
      Increasing the inputs (e.g., labor, capital) in the water districts could lead to a more than proportionate increase in output
  - Increase in output
     Increasing output could lower the average cost of producing water service connections
     that labor productivity could be a crucial factor in efficiency differences among water districts

