Repurposing Rights to Expand Public Access to Water: The case of the National Irrigation Administration

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Outline

- Rationale
- Water use and access in the Philippines
- Policy environment
- Prospects for water resources development after repurposing
- Policy Implications
  - Technical and Financial
  - Institutional
  - Informational

Rationale

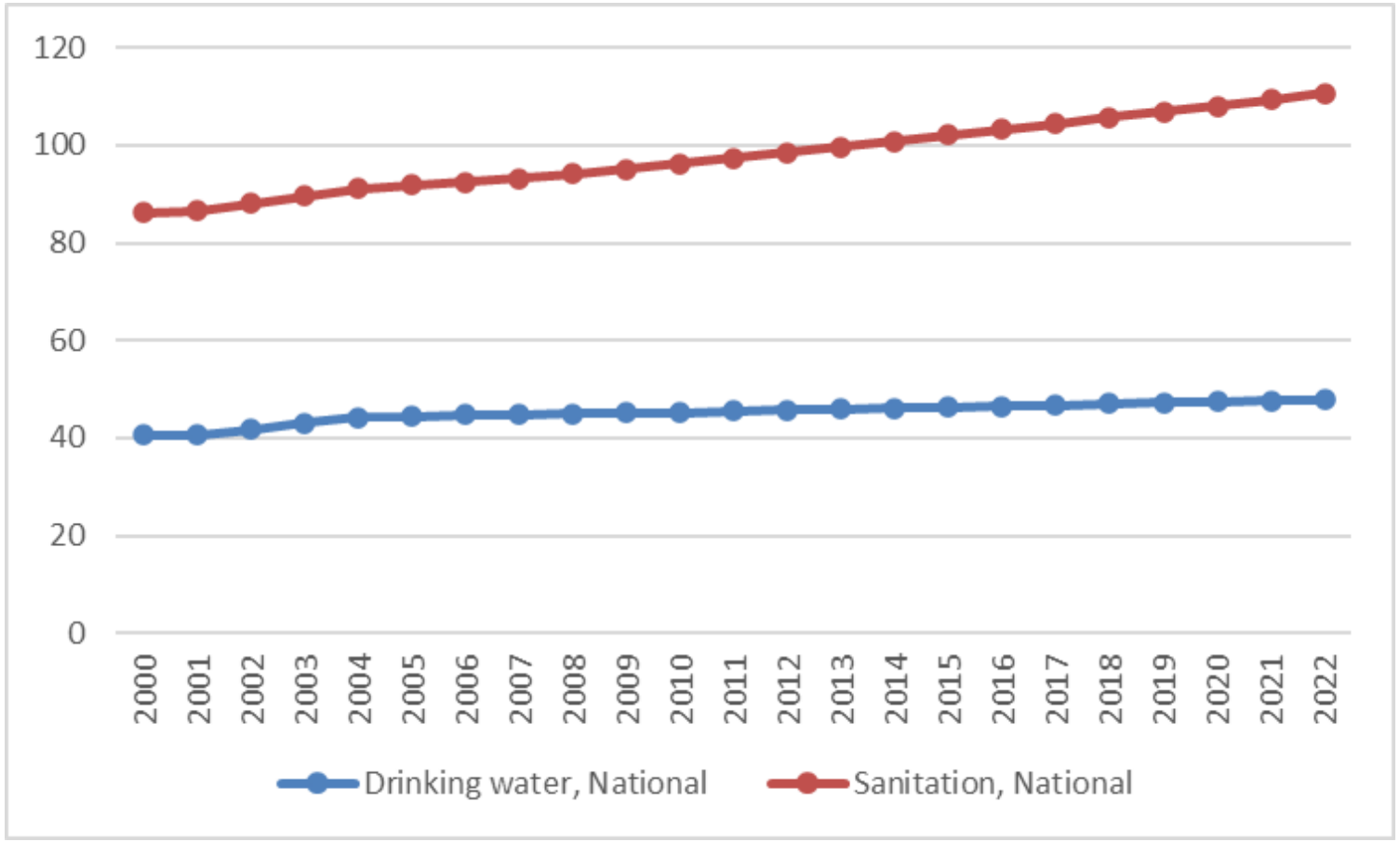
- Highly fragmented governance system for water resources.
  - Excluding the National Water Resources Board (NWRB), there are *21 agencies* performing *14 different water-related functions* (DEPDev, 2024).
  - National Irrigation Administration (NIA) is responsible for irrigation development and management of the national irrigation systems.
- Over time, extensive water rights allocated to NIA have fallen **below** the actual water uptake for irrigation and have not been transferred to other users.

Rationale

- To address this, a *Memorandum of Agreement (MOA)* between the Water Resources Management Office (WRMO) under the DENR, NWRB, and NIA was signed on October 4, 2023.
- The MOA provides for the multipurpose use of the allocation to NIA including:
  - Domestic/municipal water
  - Hydropower
  - Floating solar use
  - Aquaculture
  - Industrial applications
  - Recreation/tourism

Water use and access in the Philippines

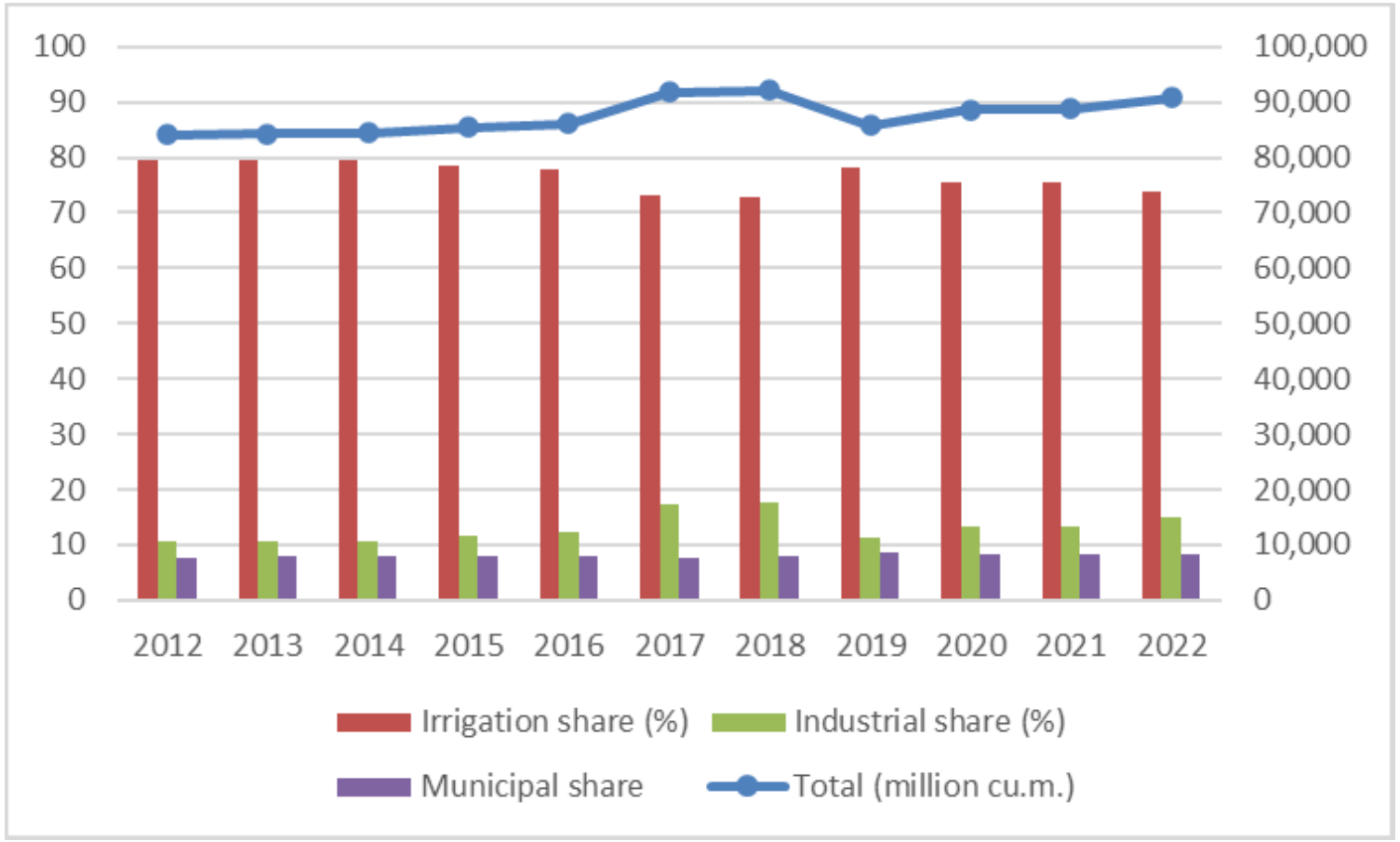
Figure 1. Proportion of households with safely managed water by use, Philippines, 2000-2022 (%).



Source: WHO and UNICEF (2024)

Water use and access in the Philippines

Figure 2. Volume of water permits, selected consumptive uses, Philippines, 2012-2022.



Source: Philippine Statistics Authority (2024)

Policy Environment

- *1976 Water Code of the Philippines*, promulgated by Presidential Decree (PD) 1067
  - Allocates access to water resources through "administrative concession" in the form of water permits.
  - **Beneficial use** (Article 20) – "*utilization of water in the right amount during the period that the water is needed for producing the benefits for which the water is appropriated*"

Policy Environment

- Options for expanded water use
  - *Municipal water assigned to public water districts (PD 198)*
    - The utilization of water for supplying the water requirements of a community, whether by piped or bulk distribution for domestic use, direct consumption, the drawer or abstractor of which being the national government, its subsidiary agencies, local government units, private persons, cooperatives or corporations. (PSA, 2020)
    - However, a World Bank (2023) Survey found that among 47 LGU-run utilities, 68% were operating at a loss.

Policy Environment

- Options for expanded water use
  - *Partnering with the private sector*
    - According to the 2021 Philippine Water Supply and Sanitation Masterplan, about half of the investments needed to achieve universal access will need to come from **private sector involvement.**
    - Private-Public Partnership (PPP) Code of 2023 (RA 11966)
    - Several considerations in the PPP project design including feasibility, affordability, and value for money.

Prospects for water resources development after repurposing

Table 1. NIA water rights, converted and permanently nonrestorable service area

	NIA rights, in LPS	Converted area (1), in ha	Permanently non-restorable area (2), in ha	Total area (1)+(2), in ha
CAR	65,080	965	3,347	4,311
1	129,019	2,011	11,911	13,922
2	132,035	902	4,349	5,251
3	317,630	20,394	16,899	37,293
4A	27,786	10,534	4,804	15,338
4B	99,030	2,279	7,753	10,032
5	51,506	194	24,810	25,004
6	117,286	5,834	5,639	11,473
7	585	3,435	2,512	5,947
8	43,338	390	798	1,188
9	17,525	3,189	3,857	7,046
10	65,993	5,934	4,926	10,861
11	60,123	2,747	992	3,739
12	106,300	3,634	9,400	13,033
13	43,448	1,627	4,555	6,182
Total	1,276,683	64,068	106,552	170,620

Source: Philippine Statistics Authority (2024)

Prospects for water resources development after repurposing

- MOAs have been signed with 10 LGUs encompassing water districts or group of water districts.
- The provincial government of Cavite has signed a MOA for bulk water supply that includes the entire province of Cavite..
- Under the Maynilad Water concession, cities of Bacoor and Imus, and municipalities of Kawit, Noveleta, and Rosario has begun to source water from 4 out of 22 NIA dams located in the province (Lagare, 2024).

Challenges to bulk water supply

- Minimum of 50,000 cubic meters per day is required to service about 50,000 households (300,000 to 350,000 individuals).

Supply side: availability of surface water and the cost of upgrading NIA facilities to meet domestic and municipal standards

- Will require a hydrology assessment and engineering evaluation.

Challenges to bulk water supply

Demand side: ability of water district to accept water supplied by the investor at the appropriate tariff

- Bulk water supply projects undergo simultaneous negotiation with water districts while coordinating with a provincial LGU.

Ideal test case for PPP using repurposed NIA water rights: The province of Cavite

- MOA signed between provincial government of Cavite and NIA
- To repurpose 13 dams across the province as bulk water supply.
- According to the Cavite Provincial Bids and Awards Committee (PBAC):
  - MOA cannot be activated as NIA has not informed about the excess water available beyond the irrigation requirements.
  - Dams are no longer used for irrigation, and most are in dire need of rehabilitation and maintenance.
  - Preliminary estimate for the cost of rehabilitation and upgrading is PHP 70 billion.
- Plans of conducting a feasibility study for the bulk water supply project will be funded from the Project Development and Monitoring Facility (PDMF) of PPP

Policy Implications (Technical and Financial)

- NIA and NWRB should undertake a hydrologic assessment of the surface water resources covered by NIA water permits, both now and for the long term.
  - This assessment must consider future precipitation trends, future agricultural and non-agricultural land use patterns in terms of watershed integrity and the expansion of built-up areas.

Policy Implications (Institutional)

- The government should adopt a system of nationally regulated tariff setting and service delivery.
  - The national regulatory board as been identified as a key institutional reform under DEPDev's Philippine Water Supply and Sanitation Master Plan (PWSSMP).
  - Tariff setting should be based on fundamental pricing principles applied consistently nationwide.

Policy Implications (Institutional)

- The government should undertake a programmed approach for implementing water supply projects, where national and local government spending follows a prioritization scheme under the options outlines in the PPP Code, including *blended financing*.
  - Blended finance is an important option recognized under the PPP code, encompassing the sourcing of finance from the private sector, government through budgetary appropriations, and donor agencies, with clear and fair allocations of project risk.

Policy Implications (Informational)

- With the support and leadership of the PPP Center, concerned stakeholders (NIA, NWRB, and LGUs) should continue conducting roadshows to orient potential water suppliers and users
  - PPP is currently sponsoring these forums, which will require active participations from stakeholders, including government officials, private water companies, and other private entities that will eventually use repurposed NIA water.

Thank you for listening!