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Water Crisis in Vietnam

Jordan M. Zaid

Background of Crisis

- Immediately after the Vietnam War ended in 1975, Vietnam experienced economic turmoil and famine as the roots of industrialization began to grip the nation.
- In 1986, the government declared a rapid transition from a planned to a market economy would take hold. The ensuing change caused further increased industrial development and a subsequent growth of the emerging market economy. ¹
- To this day, Vietnam's GDP is rising yearly at a rapid rate.
 - For this reason, much of Vietnam has been developed in a relatively short amount of time (since the end of the war) but much of it has lagged behind, including the infrastructure including water pipes and water sanitation plants. This lag has caused limited access to sanitized water in both rural and urban areas.
- Despite an overall adequate water access for Vietnamese citizens, the sanitation of supplied water has not improved as markedly as the country as a whole.
 - Sanitation has increased from 37% in 1990 to 75% in 2011 as defined by the JMP's sanitation standards. Here, sanitation is defined as the distance between a water supply and human excretion.²
 - Although Vietnam's water has been made safer over the past few decades, it is largely undrinkable.
- A 2009 study done by scientists at the Vietnam Institute of Biotechnology concluded that ammonia levels in Vietnam's waters range from an average of 6-18 times higher than an acceptable level. ³
 - Furthermore, arsenic levels range from 2-3 times higher than an acceptable level.

Conclusion

- Access to an abundance of sanitized water is crucial to a person's livelihood. Therefore, proper water resource management is a top priority for most nations. Adequate water sanitation for all citizens is a logistical challenge and for that reason is a luxury for many citizens in developing nations. Vietnamese citizens are no exception.
- Although water resources are property of the people, management of water resources is, above all else, a government's responsibility and should be treated as such. Vietnam, a rapidly developing nation, is lagging particularly in water resource management.
- Too few citizens receive drinkable tap water and instead must rely on bottled water which is costlier, relies on industry to produce, and creates waste that is not always recycled. It is clear that water resource management is a top priority for the Vietnamese government, however, several logistical issues are preventing an adequate percentage of Vietnamese people from receiving sanitized water.
- The government should first implement a comprehensive strategy and deadline for meeting its goals regarding water resource management.
 - Due to a lack of formalized data collection and integrated statistics, the Vietnamese government is left directionless and without a significant plan.
 - A strategy that covers the basics of providing clean water to citizens should be created and immediately followed with a final deadline of the year 2025. Such a strategy must provide a focus on protection of Vietnam's vast natural water sources which are being depleted or polluted by industrialization.
- Investments in long-term planning of tackling the water crisis would help Vietnam continue its rapid development with a specific aspect on socio-economic factors which play a key role in water distribution and sanitization.

Government Action and Criticisms

- The government's response to large areas of untreated water and unchecked industrial wastewater pollution has lagged behind the country's development but is catching up.
- Within the government, responsibility for water sanitation is divided between three Ministries.⁴
 - 1. The Ministry of Construction deals with urban water supply and sewerage.
 - 2. The Ministry of Agriculture deals with that of rural water supply.
 - 3. The Ministry of Health covers both urban and rural areas and deals with sanitation and hygiene.
- The government's goal for water sanitation is to provide 90% of the urban Vietnamese population safe drinking water and to collect and treat 100% of all urban wastewater by the year 2020.⁵
 - Furthermore, the government intends to make all water companies selfsustaining by 2025. Several of these goals' deadlines were set for 2010 but were missed.
- Vietnam's ambitious sanitation goals lack any sort of formal accountability.
 - The goals concerning access and sanitation are not defined in terms approved by the JMP, but by a narrower definition laid out by the Vietnamese government itself. There also lacks proper data collection as no formal governmental entity exists to collect data on water access and sanitation.⁶
- In rural populations, water access and sanitation are almost purely governmental and fall under one of six separate categories.⁷
 - 41% of rural water service is operated by the National Center for Rural Water Supply and Sanitation (CERWASS).
 - 24% is handled directly by local town-level governments with 23% regulated by community management.
 - 4% is dealt with by agricultural cooperatives, 3% by private water companies, and a final 1% by other state-owned enterprises including district water supply companies and/or environmental service companies.



https://www.euractiv.com/wp-content/uploads/sites/2/2015/06/children_in_cambodia.jpeg

International Cooperation

- The main external donors for Vietnamese water supply and sanitation are the Asian Development Bank (ADB) and World Bank, followed by Germany, Japan, Australia, Denmark, the UK, and the Netherlands.
 - In 2011, the ADB approved a USD \$1 billion facility for water sanitation in 7 cities including Vietnam's capital, Hanoi.⁸
- The World Bank had funded several projects between 1997 and 2013 which deal more with rural water supply and sanitation through similar river-city connections.9
- Germany is the largest national cooperator for Vietnamese water supply and wastewater management. Between 2005 and 2014, Germany set up several wastewater treatment facilities across 9 Vietnamese provinces.¹⁰
- Japan's role includes yearly low-interest loans of roughly USD \$170 million for sewer systems for urban populations. ¹¹
 - These loans have largely gone towards expanding distribution of water as opposed to sanitation.
 - For example, through cooperation with Japanese and Malaysian governments, drinking water treatment plants have been operating from the village of Binh An since 1994.

References

- 1. Bui Tat Thang, "After the War, 25 Years of Economic Development in Vietnam," NIRA Review (Spring 2000). http://www.nira.go.jp/publ/review/2000spring/06thang.pdf (accessed July 15, 2007).
- 2. WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. "Vietnam Data Search". Retrieved 19 January 2013.
- 3. "VIETNAM: Even bottled water unsafe". IRIN. 17 April 2009. Retrieved 30 May2013.
- 4. <u>"Viet Nam Water and Sanitation Sector Assessment Strategy and Roadmap"</u> (PDF). Asian Development Bank. June 2010. pp. 2–14. Retrieved 30 May 2013.
- 5. Ibid
- 6. <u>"Viet Nam Water and Sanitation Sector Assessment Strategy and Roadmap"</u> (PDF). Asian Development Bank. June 2010. pp. 2–14. Retrieved 30 May 2013.
- 7. <u>"Study of Rural Water Supply Service Delivery Models in Vietnam"</u> (PDF). World Bank. January 2010. pp. 35–36. Retrieved 19 January 2013.
- 8. Asian Development Bank (ADB):
 - Viet Nam, ADB Sign \$1.38 Billion Water, Environment, Transport Package, 5 May 2011
- 9. "Waste Water Management Programme". Retrieved19 January 2013.
- 10. JICA (30 March 2012).
- "Signing of Japanese ODA Loan with the Socialist Republic of Vietnam Assistance balanced between urban infrastructure for propelling growth and rural living improvements—".

 Retrieved 19 January 2013.
- 11. Ibid.
- 12. <u>"Viet Nam Water and Sanitation Sector Assessment Strategy and Roadmap"</u> (PDF). Asian Development Bank. June 2010. pp. 2–14. Retrieved 30 May 2013.