

Domestic Water Supply Development and Need in Lao PDR: Case Study of Pakse City, Champasack Province, Lao PDR

Souphasay Komany

Head of Water Policy and Legislation

Department of Water Resources

Water Resources and Environment Administration

Prime Minister's Office, Lao PDR

Lao PDR is rich in water resources. Total average annual available surface water resources in Lao PDR are 272 km³, which is equivalent to more than 55,000 m³ on an annual per capita basis of which the number of population is just over 6 million. In comparison to other Asian countries, Lao PDR has the highest per capita water supply. However, little of the available water resource has so far been developed. Among other significant sectors for achieving medium and long term socio-economic development goals of the country, domestic water supply and sanitation are important areas in contributing for improvement of living standards and public health and protection of water quality and environmental benefits are also important.

The objectives of this paper is to: (i) review domestic water supply policy and strategy in medium and long term; (ii) assess progresses made by sector, comparing to the set strategic targets; and (iii) study a case as a reference for better understanding of the situation of domestic water supply sector of the country.

According to the "National Strategy for Rural Water Supply and Environmental Health Sector" (June 2004), the Government's goal in the water supply sector is to achieve 90% access to improved water supply in both rural and urban areas while the target set in the Millennium Development Goal in 2015 is to ensure that "80% of the total population and 70% of the urban population have sustainable access to an improved water source". To achieving these goals, the urban water supply sector, represented by the Water Supply Regulatory Office (WSRO), Ministry of Public Work and Construction (MPWC), has set up their development plan in 2005, which aims to install 139 pipe water supply schemes in district urban areas and additional 10 schemes in district non-urban areas throughout the country. Up to July 2006, in district urban areas, 51 projects (37%) were completed, 11 projects (8%) were agreed to finalized, and 77 projects (55%) were left over for further seeking of financial support / allocation and development. The urban water supply schemes are mostly owned by the government through its Water Supply State Enterprises (Nam Papa State Enterprises - NPSEs) and implemented under the jurisdiction of



repective provincial MPWC branches, supported by international financial institutions / donors through grant and soft-loan. A small proportion of private sector investment in this sector is existed. This initiative is critically promoted by the MPWC, in relying to the Government policy on privatization and investment promotion.

Along with their considerable progresses, the existing pipe water supply systems have been facing with low cost-recovery, which disqualifies their system operation and maintenance and customer services. The State-owned enterprises are largely subsidized and relatively inefficient service to that of a more commercial, efficient and financially sustainable business opportunity that can deliver improved value to the customers. However, it is viewed that these activities as a threat to the NPSEs, but rather a competitive challenge that they must rise to, whereby the performance at levels of efficiency that are comparable to their private sector counterparts. In competing with high population growth rate of 2.3%, the urban water supply sector has strategically been struggling and playing its effort to achieve its medium and long term targets.

The case study is sited to a, so called, Pakse Water Supply Development Project, at Champasack Province, the most Southern Part of the Lao PDR. The Capital City of Province, Pakse, situated along the bank of the Mekong River and Xedone River.

There is only one urban water supply system in Champasak Province, located at Pakse District, while some other districts use community water supply systems with smaller scale and more localized driven. Pakse has population of about 82 thousand inhabitants (2005), accounted for 13.5% of total population of Champasack Province. The Pakse Water Supply System has storage capacity of 15,000 m³ and the supply capacity of 3,750,012 m³ per year. The system is composed of two storage tanks with the respective capacity of 250 m³ and 500 m³ and a distribution tank sized 1,000 m³. This scheme served for only some part of Pakse City, covering around 85.5% of town people in 2005. This composed of 45 villages, 9,048 households and 54,787 people, comparing to total population of about 82 thousand (2005), accounted for 13.5% of total Champasack provincial population. Moreover, due to insufficient of water production and pipeline expansion, many people in northward and southward of the town have suffered form a town wide water shortage. According to the Census in 1995, population of Champasack province has been steadily growing at a rate of 2.6% in the past, which is a high ratio compared to the 2.3% population growth rate of the whole county. The continuing population growth in the city causes low pressure in the water supply system is also a prevalent problem in the existing facilities in Pakse. These result to water shortage in the city, especially at the north, north-west, south and south-west of the city.

To deal with these problems, the government of Lao PDR as of Champasack Provincial Public Work and Transportation Division is playing its significant step to keep water supply to people by 2001/capita/day, expansion of treatment plant and extension of distribution main pipeline are definitely required. Up to July 2006, 6 pipe water supply projects had financial agreements and 2 projects were under consideration. As water tariff in Pakse already reached quite high level, it is quite difficult to materialize those expansion works by credit, which needs reimbursement.