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VERSION

VoR (Version of Record)

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REPOSITORY RECORD

Virabouth, Noupheuak, and Keith Burwell. 2019. "Regulation of the Urban Water Supply Sector in the Lao PDR". figshare. <https://hdl.handle.net/2134/28939>.

PEOPLE-CENTRED APPROACHES TO WATER AND ENVIRONMENTAL SANITATION

Regulation of the urban water supply sector in the Lao PDR

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Urban water supply in the Lao PDR was initially provided through a single national utility. This was decentralised in 1999 into 18 provincial utilities and the creation of the Water Supply Authority (WASA) as the sector regulator. Initially, the concepts of regulation were not fully understood and extensive consulting support was necessary, provided by Interconsult International (Norway), funded by the Norwegian Agency for Development (NORAD). Although slow to get started, WASA has developed into an effective regulatory institution employing comparative competition, especially the publication of the WASA Annual Water Sector Performance Reports, as its primary driver for improved performance. Tariff determinations, the single most important function of WASA, required the development of other regulatory tools such as a Tariff Policy, Regulatory Accounting Guidelines and Tariff Determination Methodologies. Although WASA is a regional leader in water supply regulation it will still continue to develop its expertise to ensure a sustainable and affordable water supply for all.

Background

In the Lao PDR water supply services fall into two main categories:

- Nam Papa State Owned Enterprises (NPSEs) – Urban water supply.
- Nam Saat – Rural water supply.

This paper focuses on the former, with the rural water schemes considered to be self-regulating activities with limited need for additional regulatory oversight.

Until 1999, Nam Papa Lao was operating as the sole state-owned enterprise responsible for the provision of urban water supply services throughout the Lao PDR (generally confined to the provincial capitals and some district capitals). In 1999, the government decentralised the urban water supply structure creating 18 provincial NPSEs.

Although the utilities were decentralised, the government retained direct control over capital investment in the sector and created the Water Supply Authority (WASA) as the principal investment channel for donor-funded projects. It was also recognised that decentralisation required effective regulation even though there was no clear understanding as to what form of regulation was most appropriate for the Lao PDR. The government therefore added regulation of the sector to the overall responsibilities of WASA, a decision that was later recognised as less than ideal.

The WASA Regulatory Board, comprised of representatives of various economic and social interest groups, lies between WASA and the government. Its role is to set overall regulatory policy with the WASA executive responsible for its interpretation and implementation.

In 2000, WASA embarked on an Asian Development

Bank (ADB) funded capital investment programme for the development of water supply services in several towns within the Lao PDR. This programme was supported by the Norwegian Agency for Development Cooperation (NORAD), and in September 2000 the consulting firm, Interconsult International, was appointed to provide technical assistance to both concerned NPSEs and WASA, including assistance towards the development of WASA as the sector regulator.

Regulation in the Lao PDR: 1999 - 2001

The fundamentals

The general understanding of regulation in the Lao PDR in the early days was limited. It was therefore necessary to start from first principles for which several workshops and training sessions were initiated by the consultant. These early activities focussed on the reasons for regulation and foundation concepts.

In a perfectly competitive market, price and quality are determined by the laws of supply and demand. Water sup-

Box 1. Water supply – an imperfect market

Operators are natural local monopolies with inherent inefficiencies

Water is a single quality product and the customer is not free to choose alternative products or services at different prices and qualities, and

Water supply, as a basic human need, is often subject to pressure from political interest groups, especially with respect to tariffs.

ply services, however, do not operate in a perfect market (see Box 1).

Regulation is required to redress these market imperfections by acting as a surrogate to competition utilising the most appropriate tools available, namely:

- Enforcement of statutory regulations that set out the legal obligations of the water supply businesses;
- The promotion of an environment that is attractive for investment;
- The promotion of continual improvement in service delivery through comparative competition;
- Price control through tariffs to ensure a fair price to the customers, yet at the same time protecting the operating units' financial positions from political interference.

Additional regulatory functions include guidance for government in: technical, legal, financial, social and economic areas in relation to water supply services.

It is important to note that regulation, as a surrogate for competition, does not involve managing the businesses but rather setting performance targets and objectives in order to improve overall operational performance and value.

Institutional conflict

Although the remit of WASA as a regulator was accepted in law WASA's capacity to regulate the sector in the early years was handicapped by WASA's primary role as a channel for capital investment. Regulation was, at that time, a secondary activity of limited importance. Furthermore, this dual function of WASA led to potential conflicts of interest, e.g. WASA, as a channel for investment, actively sought funding for its investment projects whereas WASA, the regulator, was expected to challenge these investment decisions. Fortunately, this conflict was substantially resolved in 2003 by the removal of the capital investment responsibilities, transferred to the Department of Housing and Urban Planning. WASA was then left to dedicate itself to regulation. As both institutions still fall within the same ministry, further separation is desirable but of relatively low priority at this stage.

The first steps

WASA's initial challenge in regulation was to gain not only an understanding of regulation but also an understanding of the sector, its problems, needs and aspirations. WASA's technical staff had a reasonable grasp of the technical problems, and the technical solutions available, mostly through increased capital investment and improved operational practices. There was, however, limited understanding as to the root causes of these problems, many of them non-technical but rather financial, social, and political; and certainly no clear understanding as to how they could be resolved.

WASA's capacity to regulate depended entirely upon its understanding of the sector resulting in a concerted drive to get to grips with the non-technical issues such as financial management, institutional and legal structures, social factors

and political considerations. Resource constraints limited this exercise to the analysis of the 12 NPSEs that were directly affected by the ADB investment programme through the sub-project feasibility studies. Although not a comprehensive review of all 18 NPSEs, the work was considered sufficient for broad conclusions to be drawn as being representative of the sector nationally.

The principal conclusions of these early analyses were:

1. The financial structures were invariably weak; at best the accounts were maintained in accordance with the government accounting regulations.
2. The tariffs were set by local political authorities with limited regard for financial requirements.
3. The operational efficiencies of the NPSEs were well below what could be expected of a reasonably well functioning utility.
4. The financial integrities of the NPSEs were threatened by poor cash collection (largely as a result of non-payment by government agencies).
5. A high degree of customer dissatisfaction with the services they receive.

At this early stage of the regulatory development process it was considered appropriate for the results of such analyses to be kept out of the public domain without first giving the NPSEs the opportunity to respond and improve their performance. In future years WASA intended to undertake more comprehensive analyses and for the results to be placed in the public domain.

In late 2001, a significant event took place that raised WASA's regulatory profile (see Box 2).

Box 2. Nam Papa Vientiane Prefecture Tariff Review

In late 2001, the Government had been approached by Nam Papa Vientiane Capital City (NPNC), by far the largest of the 18 NPSEs, for a substantial tariff increase. Rather than undertake its own review of the increase, as had been the case in the past, the Government passed the application on to WASA for their comments and recommendations.

Absent of any firm tariff policy at that time of the regulatory development process, WASA was only able to undertake the tariff analysis on a simple 'cost of service' basis—a less than perfect method. However, the analysis did give WASA the opportunity to impart several key messages to the Government and NPV about the weaknesses in the current financial management systems that are not appropriate for effective and fair pricing. It also brought the Government's attention to several factors not previously considered in tariff adjustments, notably concepts such as return on capital, capital maintenance, regulatory asset values and the like.

The conclusions reached at that time suggested that there was a good case for an upwards adjustment, although not necessarily for the reasons cited in the original application.

This exercise did, however, raise WASA's profile in the eyes of Government and the management of the largest water provider in the country.

Legal and institutional development

During the early years of WASA it became apparent that the legal instruments setting out WASA's remit and powers were inadequate. There was no guidance in law as to the principal objectives of WASA as a regulator, very few regulations existed and (of those that did) there was no reference to WASA as the principal enforcement agency.

The Terms of Reference of the technical assistance project recognised these weaknesses and called for assistance to WASA to develop a 'charter', although no-one really knew what this 'charter' was supposed to cover and under what legal basis it would take. A prolonged period of discussion resulted in the agreement that the 'charter' should be a legal instrument, preferably a Prime Ministerial Decision, that clearly sets out the objectives and powers of WASA as well as the rights and obligations of the principal stakeholders in the sector, notably the NPSEs and their customers. Towards the end of 2001, the development of the 'WASA Charter' (as it came to be known), commenced, although it would take a few more years for it to become law.

Water quality regulation

In the Lao PDR water quality does not demand as high a level of importance as it does in many other countries, primarily due to the widespread accepted practice of bottled water being used for drinking, with the piped water supply generally used for washing and sanitation.

However, this does not absolve the NPSEs of their responsibilities to provide clean potable water and it is up to WASA to ensure that this obligation is met. In reality, WASA does not have, nor is likely to have in the near future, the technical and financial resources necessary to provide the inspection services to effectively regulate water quality. The approach adopted by WASA is therefore based upon self-regulation with WASA acting as an auditor.

In practice only Nam Papa Vientiane Capital City has the facilities to comprehensively test water quality. Elsewhere water quality monitoring is limited to residual chlorine testing at best. Consequently, any obligatory water quality standards are meaningless until such time that testing facilities are in place. WASA's first step was the preparation of draft water quality legislation setting out specific timetables for the establishment of appropriate testing facilities, either in-house, or shared with a neighbouring NPSE or even employing the services of an outside testing agency. Once these facilities are in place water quality compliance is required soon thereafter.

Regulation in the Lao PDR: 2002 – 2004

Vision and mission statements

WASA's corporate identity and direction is set out in its vision and mission statements (announced in 2003):

Our vision

"A first class water supply infrastructure that delivers the highest service possible that represents best value to custom-

ers now and in the future"

Our mission

"To regulate in a way that provides a potable, sustainable and affordable water supply for all by 2015."

Regulation through comparative competition

The pace of development of regulation in the water supply sector accelerated in 2002. Without any legal powers of enforcement for most of the time it has been operating, WASA has had to rely on other mechanisms principally comparative competition. This involves the publication of the performances, both technical and financial, of the operators providing an incentive for the management of the NPSEs to improve, either to rise to the levels of the best or at least not to be amongst the worst. The results of these reviews were, in the first instance, kept within government and not placed in the public domain.

At the end of 2002 WASA embarked on a significantly more revolutionary approach. Performance data from all 18 NPSEs for 2002 was analysed and compiled into a single and public Annual Water Sector Performance Report. This document included summary comparisons of NPSE performance allowing their customers to see how their supplier is performing in relation to others in the Lao PDR. This report illustrates performance graphically allowing easy to read comparisons to be made (refer Figure 1)

Aside from being a motivator for improved performance it also helps to boost the confidence of investors, donor agencies and other stakeholders

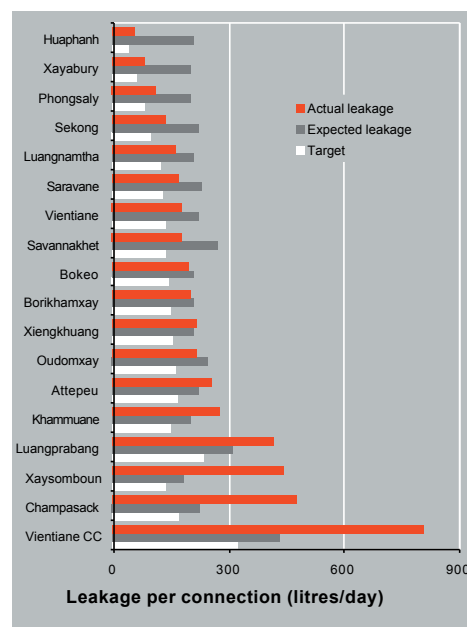


Figure 1. Water loss performance

Source: WASA Annual Water Sector Performance Report 2002

The WASA charter

The preparation of draft legislation for the WASA charter gathered pace in 2002 and was very much complete by mid-2003. This included a broad consultation process. However, such an important legal instrument requires detailed scrutiny by higher political and legal authorities including the Ministry of Justice and the Prime Minister's Office. At the time of the preparation of this paper this charter had not been officially approved but final approval and enactment was expected by the end of the second quarter of 2004.

This Charter effectively transfers much of the regulatory responsibility from the local political bodies, generally the Provincial Governors' (PG) offices, to WASA.

It also sets out the responsibilities of the Regulatory Board in setting overall policy with interpretation and implementation left to the WASA executive. Unfortunately, this Regulatory Board has not developed as intended with WASA still largely responsible for both policy and implementation. It is hoped that the Board will become more actively involved as WASA develops.

Until now WASA has been operating on the basis that this Charter will be approved.

Water Tariff Policy of the Lao PDR

The WASA Charter requires the development of a Tariff Policy based upon:

- Consumer interest and affordability
- Supplier costs of service provision
- The environment
- National economic policy

By mid-2003 WASA had developed a Tariff Policy that brought together all the above considerations into a single cohesive strategy. The principal foci of this tariff policy are social fairness, affordability and cost recovery. This Tariff Policy was presented to several communities for their consideration and received general acceptance, although there were occasional understandable objections based upon the self interests of particular individuals or groups. Finally, the Minister for MCTPC officially established the Water Tariff Policy on 26 April 2004 and was later approved by the Prime Minister on 7 May 2004.

Regulatory accounting guidelines and tariff determination methodology

The NPSEs are obliged to maintain their accounts in strict accordance with the Lao PDR government accounting system. Although effective in monitoring public expenditure it is not appropriate for pricing; accounts include commercial activities such as bottled water plants and depreciation and asset valuations are based upon historic cost accounting and do not reflect real charges and values. In early 2004, WASA developed its 'Regulatory Accounting Guidelines' that redresses the shortcomings of the government accounting system by specifying certain adjustments to the accounts (for

regulatory purposes only). These factors include separation of core activities from consolidated accounts (ring fencing), recalculation of depreciation on a current cost basis and a similar adjustment to asset valuations.

Following on from the regulatory accounts WASA has developed a detailed 'Tariff Determination Methodology' employing longer run discounted cash flow techniques and other pricing tools.

The Tariff Policy, Regulatory Accounting Guidelines and the Tariff Determination Methodology are currently being employed to determine the tariffs of the NPSEs with effect from January 2005.

Regulation in the Lao PDR - the future

The immediate future of WASA is economic regulation through tariff determinations. WASA intends to set the tariffs for the period 2005 to 2007 inclusive (subject to inflation linked adjustments) based upon the application of the Tariff Policy and other regulatory tools.

Future tariff determination exercises will include more complex determination methods that pass on efficiency gains to the customers yet still maintaining the financial integrity of the NPSEs.

The introduction of private sector investment in the sector will undoubtedly present further challenges to the tariff determination process incorporating market-related returns on capital, investment and efficiency incentives and the like. Regulation, like market competition, is a never-ending process that will continue to improve the value of services. The achievements of WASA to date have been exceptional despite the limited resources and powers at WASA's disposal. With the increased resources and powers that are expected as a result of the WASA Charter and further development of the institution, it is believed that WASA can continue to be a major force for good in the urban water supply sector.

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