Faecal Sludge Management Services in Rural Laos: Critical Gaps and Important Ways Forward

A. Opel*, P. Cheuasongkham**

*Senior Advisor-WASH, SNV- Netherlands Development Organisation, PO Box 9781, Vientiane Capital, Lao PDR. Email: aopel@snvworld.org

**WASH Advisor, SNV Netherlands Development Organisation, PO Box 9781,Vientiane Capital, Lao PDR, Email: pcheuasongkham@snvworld.org

Theme: The enabling environment for FSM

Keywords: Faecal Sludge Management, Private Sector, Private-Public Partnership, Regulatory Framework

Introduction

Sanitation coverage has been steadily increasing in Laos although there is a big difference between the urban and rural areas in the prevalence of open defecation, only 4% in urban areas as opposed to 42% in rural areas. However, the national average suggests that nearly 70% people use some form of toilets throughout the country [1]. All of these toilets are on site sanitation (OSS), constructed by the households which require periodic pit emptying and proper transfer and management of the removed sludge so that faecal matter does not re-enter the domestic environment and pose a risk to harm public health. This paper presents the findings of a rapid assessment which investigated existing faecal sludge management (FSM) services, examined service gaps and assessed the roles of private and public sectors. It identifies some of the important next steps for programme and policy to develop efficient and sustainable FSM in rural Laos.

Data and Methodology

Primary information for this rapid assessment was collected in July 2014 in three districts of Savannakhet province. Household level data was collected from two villages in each districts through spot visits and informal interviews with household heads, village elders and customary heads of the villages. In addition, provincial and district level officials and private service providers were interviewed to understand the nature and extent of the available pit emptying services, roles and responsibilities of different stakeholders, regulatory framework for FSM and future FSM plans at provincial and district level. Spot checks were also made to assess the environmental risks at the sludge disposal sites identified by FS emptiers. A literature review of existing regulations, government strategies and plans was the basis of secondary information.

Key findings

Need for demand creation of FSM services

With increasing sanitation coverage, the need for pit emptying services has risen in the studied districts. However, no households knew any manual emptying service providers and therefore, despite relatively high costs, mechanical emptying services are reported to be their only option. Our discussion with households indicates that there is no or extremely low level of awareness about immediate health consequences of unsafe disposal of emptied sludge apart from general disgust and not wanting disposal near their homes.

Policies, strategies and understanding of public sector for FSM

Like many other developing countries in the region and beyond, there has been widespread lack of awareness among the public sector stakeholders about the importance of FSM services in the country. The Centre for Environmental Health and Water Supply (Nam Saat) is the key responsible agency for rural water supply and sanitation at the national, provincial and local levels. In the local levels, Provincial Rural Development and Poverty Reduction Office (PRDO) and District Rural Development and Poverty Reduction Office (DRDO) play a coordination role for multi-stakeholder bodies, also with provincial and district Nam Saat. However, there has not been any understanding or awareness about the need and importance of FSM services at any

levels. The country recently finalised and approved the National Plan of Action (2) with clear investment plans over the next years. However, main emphasis of the plan is to attain the increased WASH coverage and reduce regional and inter-class disparities. The issue of FSM has been missing in the plan. The other existing regulations (ie, building code) do not provide any importance of the management of FS from the OSS. However, during the rapid assessment discussions public sector stakeholder recognised that the failure to address FSM would undermine the health and economic benefits resulting from decreased open defecation.

Private Sector: emerging player in FS emptying

As a result of increasing demand and lack of public sector services, the private sector has already become an important FSM player in Savannakhet, where four pit emptying companies already cover all 15 districts in the province. These companies have developed effective marketing strategies. They are registered with the government as an SME and pay a fixed tax per vacuum truck, which are suitable for use in rural Savannakhet. However, there is no regulation to guide their activities or set emptying charges. The rapid assessment did not collect detailed financial information but the growth trends of the companies suggest that they make high profit from the business. Two companies started with one small truck each but both now operate four trucks and the expansion was financed through their profit from this business. They are planning further expansion to cover other neighbouring provinces.

FSM treatment and disposal

There is no sludge treatment plant available in the province. However, there is an official dumping site in the provincial centre but it is too expensive for the emptying companies to transport sludge from the rural areas to this disposal site. As a result, they dispose raw sludge in the roadside ditches, cannels, open water bodies. Our discussions with the companies suggest that they are quite aware about the negative environmental consequences of the existing disposal practice and there is interest among them to treat sludge before disposal. However, they never faced any obstacle to do so from the government or from the public and they lack technical knowhow to treat sludge before disposal. As a result, the existing practice continues.

Conclusion and ways forward

It is very positive that, without any initiative or incentive from the government, entrepreneurs have already developed for FSM emptying businesses in Laos. This is very much in line with the government's national plan for the private sector to play a complementary role. However, it is extremely important for the government to define its own role, create institutional responsibility, introduce a regulatory mechanism for the FSM sector and ensure enforcement.

The practice of disposing raw sludge in the environment is another form of open defecation. Thus, the failure to address FSM will negate the health and economic gains achieved from increased sanitation coverage. This rapid assessment found that the cost of emptying a single pit in Savannakhet is sometimes more than the cost of constructing a new toilet. If this situation persists it is highly likely that households will return back to open defecation once their pit is full. It is therefore critical to identify and develop socially and culturally acceptable resource recovery options to create revenue, which can be used to reduce the direct cost to households of pit emptying.

There is interest and willingness in the private sector to enter into the FS treatment business. However, treatment is often expensive and there is no easy solution available for FS treatment and reuse (3). Public sector may play an enabling role and public-private partnership could be experimented to find viable option in the Lao context.

References

1. WHO/UNICEF JMP (2014) Estimates on the use of water sources and sanitation facilities of Lao PDR (updated, April 2014). Joint Monitoring Programme for Water Supply and Sanitation.

2. Government of Lao PDR (2012) National Plan of Action for Rural Water Supply and Sanitation. Ministry of Health.

3. Dienera, S. A Value Proposition: Resource Recovery from Faecal Sludge: Can It Be the Driver for Improved Sanitation? *Resources, Conservation and Recycling*, July 2014.