

Lessons on public-private partnership disseminated from the pilot project

‘Building water service in small towns with PPP’

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Executive summary

GRET, a French development NGO, and the United Nations Human Settlements Programme (UN-HABITAT) signed a Cooperation Agreement (CA) within the framework of the Mekong Region Water and Sanitation Initiative (MEK-WATSAN) in December 2009. The MEK-WATSAN Initiative is a programme undertaken by UN-HABITAT along with the governments of the Greater Mekong Sub-region (GMS) – Cambodia, Lao PDR and Vietnam – in 2004 in order to support these governments attain their water-related Millenium Development Goal. By signing the CA, GRET and UN-HABITAT hereby agreed to collaborate in implementing the “Water Supply and Sanitation project under Public Private Partnership” (hereafter referred to as “Thabok project”) in Thapabath District, Bolikhamxay Province. This project is part of GRET’s MIREP programme (“Mini Réseaux d’Eau Potable”, meaning “Developing Mini Drinking Water Network”), which aims at improving access to safe water supply and sanitation (WSS) through local Public-Private Partnerships (PPPs) and appropriate financing mechanisms & technologies.

The main objective of the present report is to evaluate Thabok project from UN-HABITAT’s own point of view. Since the project has already been subjected to GRET’s final evaluation, the main goal pursued here is, rather than a reevaluation, an attempt to provide a complementary vision on the conduct and results of the project, so as to enrich the debate.

The evaluation was principally based on a desk review of the main outputs of the project (as listed in Annex B of the CA); of the various complementary documents provided by GRET; and of other sources found on the web. The methodology applied also included a field visit to Thabok with GRET (on October 27th 2012) and various interviews with relevant stakeholders (from GRET and from the Lao Department of Housing and Urban Planning – DHUP).

The present document is organized as followed: after a brief presentation of the background of the project (including presentations of MIREP and MEK-WATSAN programmes as well as of the Lao legal, institutional and financial context on PPPs in the WSS sector – part II), we will recall the main elements of the project itself (rationale; objectives; main activities implemented and main stakeholders – part III), and finally draw the main lessons and challenges (part IV) and recommendations (part V).

I. Background

2.1. MIREP programme

Founded in 1976, GRET is a French development NGO that supports sustainable development processes in urban and rural areas by building on social equity, economic promotion and respect for the environment. Active in more than thirty countries, GRET has thirteen permanent branch offices in Asia, Africa and Latin America. Believing that acting for development requires a comprehensive and multidisciplinary approach, GRET:

- Addresses challenges from local to global level and from implementation to policy level;
- Encompasses a diversity of professions (GRET designs and implements field projects, conducts studies, runs networks, defends ideas, and produces and distributes reference works); and
- Intervenes in 16 complementary fields¹.

Among the projects currently being implemented in Lao PDR, MIREP programme (“Mini Réseaux d’Eau Potable”, meaning “Developing Mini Drinking Water Network”) aims at improving access to safe water supply and sanitation through local PPPs and appropriate financing mechanisms & technologies. The MIREP approach is based on the following principles²:

- Strong involvement of local authorities (province and district) and participation of village authorities and communities;
- Partnership between local authorities and private entrepreneurs (PPP) for the funding, the construction and the operation of the systems;
- Empowerment and capacity building of stakeholders involved at all steps, including local technical and financial consultants;
- Special assistance to the most vulnerable with special care for the poorest, ethnic groups and children in schools;
- Cost-efficient and appropriate technologies;
- Improved access to finance for investment but also technical assistance services;
- Monitoring and evaluation of project investments and water supply services.

¹ Climate change, international trade and trade negotiations, agricultural development and food security, urban social development and housing, drinking water and sanitation, energy, agrifood commodity chains and consumption, land tenure, information management and ICTs, natural resource management, media, micro-insurance, micro-finance, nutrition, strengthening actors of social change, and business development services, training and professional insertion

² These principles are taken from output F3 (the final evaluation report completed by GRET), page 11.

The first two phases of the project, which were undertaken between 2004 and 2011, targeted 9 small towns of Vientiane and Bolikhamxay Provinces³, which amounts to more or less 30 000 direct beneficiaries. The main funders of the project were the French Agency for Development (AFD); the French Ministry of Foreign Affairs; the trade association for water of the region Ile-de-France (SEDIF); the City of Paris; UN-HABITAT; and local entrepreneurs. MIREP's main partners were the Department of Housing and Urban Planning (DHUP, which is under the aegis of the Ministry of Public Works and Transport – MPWT – in Lao PDR); the Water Supply Regulatory Office (WASRO); and GRET.

2.2. MEK-WATSAN Initiative

The United Nations Human Settlements Programme, UN-HABITAT, is the coordinating agency within the United Nations System for human settlements. It is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. In particular, it is the focal point for coordinated implementation of the MDG Goal 7 Target 11 – improving the lives of at least 100 million slum dwellers by the year 2020 – and of Target 10 which calls for the reduction by half of the proportion of people without access to improved water supply and sanitation (WSS) services by 2015.

In order to support Governments of the Greater Mekong Sub-region (GMS) – Cambodia, Lao PDR and Vietnam – attain the latter objective, UN-HABITAT has undertaken, in collaboration with them, the Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Specifically, the programme aims to:

- Expedite pro-poor water and sanitation investments in secondary towns;
- Mainstreaming of gender in planning, budgeting and project implementation
- Enhance institutional and human resource capacities at local and regional levels to sustain water and sanitation services;
- Operationalise upstream sector reforms at the local level;
- Enhance capacities of local private sector entities in service delivery;
- Reduce the adverse environmental impacts of urbanization on water resources;
- Support economic development in secondary towns through improved water and sanitation, and related income generating activities; and
- Facilitate increased investments in water and sanitation in the region.

The first phase of the programme, hereafter referred to as the “roll-out phase 1”, was initiated in December 2008 with the signature of a Contribution Agreement between UN-HABITAT and the Government of the Netherlands – the main funder of the project along

³ Vientiane Province encompasses the 6 villages of Tha Heua, Feuang #1, Feuang #2, Hin Heup, Namone, Senxoum, while Bolikhamxay province comprises Houay Khoun, Thabok and Nong-O villages.

with the Water and Sanitation Trust Fund of UN-HABITAT⁴ and the implementing partners of the three participating countries. It is currently being implemented in eighteen secondary towns along the economic corridors of the Mekong region (four in Cambodia, ten in Lao PDR and four in Vietnam). Initially planned to last until December 2011, the programme timeline has been extended to another twelve months as per the recommendation of the mid-term review. So far, 68,977 people have benefited from improved access to water and 211,513 of improved sanitation (according to the latest result-based narrative report of May 2012). The project has therefore exceeded the initial target of providing 190,365 people with access to adequate sanitation facilities. Regarding improved access to water supply, the stated target of 90,755 people has not been attained yet but it is on track to be achieved by the end of December 2012. Finally, the programme has been implemented in partnership with the government departments of the three participating countries (DHUP under the aegis of MPWT in Lao PDR; the Department of Potable Water Supply within the Ministry of Industry, Mines and Energy – MIME – in Cambodia; and the People’s Committee of Quang Tri Province in Vietnam) along with some key actors of the W&S sector active in the region (GRET, the Centre for Development– CFD).

1.3. Lao context

a) The private sector: Small and Medium Enterprises (SMEs) business environment and PPPs opportunities in Lao PDR

“The MIREP-like projects have characteristics not often found in development projects: they add the particularities of PPPs to the particularities of SMEs” (GRET 2009). That is why both SMEs and PPPs are detailed in the next part.

- **Lao’s promotion of the private sector participation**

“The Lao government began promoting gradual economic liberalization through the introduction of the New Market Mechanism in 1986” (P. Kyophilavong 2008). This market-oriented approach was launched with the aim of “strengthen[ing] the socio-economic growth of the country and releas[ing] it from least developed country status” (Southiseng 2010). Before 1986, most large enterprises were State-owned (SOEs). Since then though, the Government of Lao (GoL) has progressively transferred SOEs to private ownership and has initiated a process of “privatization of markets by allowing private enterprises (including foreign-owned enterprises) to operate more freely (Bird and Hill, 2010)” (Kyophilavong 2011). Overall, it may be affirmed that “the Government of Laos (GoL) has

⁴ UN-HABITAT launched the Water and Sanitation Trust Fund in October 2002 to create a hospitable environment for pro-poor investment in water and sanitation in urban areas of all sizes in the developing world and thus provide the means to improve significantly the volume and effectiveness of the Official Development Aid and local financial flows into the water and sanitation sector (cf. <http://www.unhabitat.org/content.asp?cid=8711&catid=647&typeid=24&subMenuId=0>).

enhanced private sector development to promote growth” (GoL, 2004) (Kyophilavong 2011).

- **The SMEs business environment**

- Introduction:

According to the Prime Minister’s Office (Decree on the Promotion and Development of Small and Medium Sized Enterprises No. 42/PM, 2004), Small end Medium Enterprises (SMEs) “are independent enterprises that are legally registered and operating according to the prevailing laws of the Laos and are classified into the following size categories: (i) Small enterprises are those having an annual average number of employees not exceeding 19 persons or total assets not exceeding two hundred and fifty million kip or an annual turnover not exceeding four hundred million kip; (ii) Medium sized enterprises are those having an annual average number of employees not exceeding 99 persons or total assets not exceeding one billion two hundred million kip or an annual turnover not exceeding one billion kip.” (SMEPDO 2008, P. Kyophilavong 2008, Southiseng 2010).

Southiseng et al. (2010) affirm that the Lao economy is mostly composed of micro (21%), small (58%) and medium enterprises (16%), the large enterprises only accounting for 5% of the economy. Yet, “although SMEs dominate the business landscape in terms of numbers (...), they contribute 52.8% of total employment” (Polsaram 2011). Another characteristic of Lao SMEs is that they are still at an early stage of development, since more than 60% of firms were established after 2000 (Kyophilavong 2011). Finally, the latest study on SMEs in Lao PDR in 2009⁵ showed that the main sectors in which SMEs are involved are whole sale& retail trade (41.6% of the sampled firms); manufacturing (17.6%); and accommodation/food service (16.6%) (Polsaram 2011).

- Legal framework:

In 2006, the GoL replaced the Business Law No. 03/94/NA introduced in 1994 to allow national enterprises to operate freely, with the Enterprises Law No. 11/NA in order to reduce administrative costs and barriers (Kyophilavong 2011, Polsaram 2011). More specifically, the new Enterprises Law brought substantial changes in: “the enterprise incorporation system, the requirements for minimum registered capital, the availability of business registration information to the public, and the creation of single access points for businesses” (LNCCI 2006).

⁵ Enterprise Survey 2009, Lao-German Programme on Human Resource Development for a Market Economy (HRDME), Vientiane, 2010 (quoted in Polsaram et al., 2011). The sample frame was selected from the tax register. The survey sampled 728 enterprises of all sizes from 5 provinces.

Another law governing the creation and operation of SMEs is the New Investment Law which was passed in July 2009. This law replaces the Law on the Promotion of Domestic Investment No. 10/NA, dated 22 October 2004 and the Law on the Promotion of Foreign Investment No. 11/NA, dated 22 October 2004, which used to govern domestic and foreign investments respectively. The law of 2009 aims at “merg[ing] these domestic and foreign investment laws; mov[ing] towards national treatment for domestic and foreign investors; eliminate[ing] barriers for obtaining investment licenses; and defin[ing] investment incentives better (Bird and Hill, 2010)” (Kyophilavong 2011).

But the most crucial legal text regarding SMEs in Lao PDR is the Prime Minister (PM)’s Decree on the Promotion and Development of Small and Medium Sized Enterprises No.42/PM. of 2004 (Kyophilavong 2011). This Decree is revealing of the GoL’s efforts towards SME promotion, namely to: “a) improve the regulatory environment; b) enhance the competitiveness of establishment; c) expand domestic and international market access; d) improve access to finance; e) encourage the development of business organization; f) enhance entrepreneurial attitudes and characteristics within the society” (P. Kyophilavong 2008, Polsaram 2011).

- Institutional framework:

The Decree of 2004 also established the National Small and Medium Sized Enterprise Office (SMEPDO), which main objective is “to promote the establishment and sustainable development of Lao SMEs” (SMEPDO 2008). More precisely, “it aims at expanding commercial goods production, trading and service to contribute to employment creation and raise living standards of Lao people, as well as laying the foundations for gradual industrialization and modernization of the national economy” (Southiseng 2010).

In addition to SMEPDO, the 2004 PM Decree also instituted the National Small and Medium Sized Promotion and Development Committee (SMEPDC) for which SMEPDO acts as the secretariat, as well as SMEPDC’s Standing Committee (SMEPDO 2008). Their responsibilities are respectively to provide the GoL with advice and proposals of strategies regarding promotion and development of SMEs and to assess SMEPDO’s progress against the proposed strategy outlined in the Decree No.42/PM (Polsaram 2011).

It is worth mentioning that other institutions are involved in the promotion and regulation of SMEs in Lao. The Lao National Chamber of Commerce and Industry (LNCCI) is an “institution that provides information about SME activities [...] and promotes trade and investment and SME development” (Ibid.). As for the Lao Trade Promotion Centre (LTPC), it “supports the growth of SMEs through assisting Lao manufacturers and exporters to fulfill production potential and marketing ability; doing

research related to export and trade promotion; exhibition and trade fairs” (Southiseng 2010). Finally, another 25 Official Professional Business Associations⁶ are important stakeholders in SME promotion and development (Southiseng 2010).

- Financial framework – main sources of finance for SMEs:

Another important aspect addressed by the 2004 PM Decree is the creation of a SME Promotion and Development Fund (SME PDF). The Fund, which is a government organization under the Ministry of Industry and Commerce (MIC) and managed by SMEPDO, was officially launched in August 2012 (National Portal of Lao PDR 2012). It works “towards fund generation and to contribute to SMEs' operations and growth” (Ibid.). Moreover, “SMEPDO has introduced an SME fund decree in 2010. The main objective of the decree is to introduce rules and regulations on mobilizing and using SME funds to support SMEs. However, there is still a lack of supporting decrees and regulatory framework required to implement it.” (Kyophilavong 2011).

These specific funds for the promotion of SMEs are indeed necessary since “very few formal financial institutions (FIs) have shown capacity to provide financial service to the small-scale entrepreneurs and rural operators” (Keovongvichith 2012). Indeed, the Lao banking system is relatively small compared to the size of the Lao economy (Kyophilavong 2011); still quite young (Keovongvichith 2012); and therefore “comparatively unsophisticated” (Ibid.). It is therefore unsurprisingly that the loans provided by commercial banks (CBs) are not very advantageous: ‘long-term’ loans are quite short in duration (3-6 years maximum) and the average interest rate applied is relatively high (currently of 20.3 % in Kip and 11.3% in USD) (GRET 2009). Still, it is important to note that the Lao Banking system has grown significantly and evolved towards more openness and competition since the banking sector reform initiated in the late 1980s (as part of the New Economic Mechanism) (Keovongvichith 2012).

“In summary, GoL has considered private sector development as an engine of growth. Therefore, GoL has introduced new laws, regulations and programs in order to support private sector development”. (Kyophilavong 2011)

- **PPP environment**

- Introduction:

The first PPP project to be implemented in Lao PDR was the 4M US\$ Tha Ngon Bridge project. The Build Operate and Transfer (BOT) contract was signed in 1993 between the Australian firm Transfield Holdings Company (the sole sponsor) and the Lao Government (Transfield s.d.).

⁶ Among which Lao Handicraft Association Lao Consulting Company Association; Lao Hotel and Restaurant Association (LHRA) (Southiseng 2010).

Since then there has been a total of 16 PPP projects implemented in Lao according to the World Bank's database on private participation in infrastructure. The repartition by sector and by type of project is shown in figure 1 below (Group 2012). We can see that the sector in which PPPs are the most numerous is the energy sector, with 70% of the total number of projects. In fact all these projects are electricity generation projects and more specifically hydro-power ones⁷ (Ibid.). It is interesting to note that MIREP projects are not yet updated in the WB database since no project is reported within the WSS sector (as showed in figure 1a). Concerning the types of PPPs, Greenfield projects are by far the dominant type of partnerships implemented so far. A Greenfield project is a PPP in which "a private entity or a public-private joint venture builds and operates a new facility for the period specified in the project contract"⁸ (The WB Group 2012).

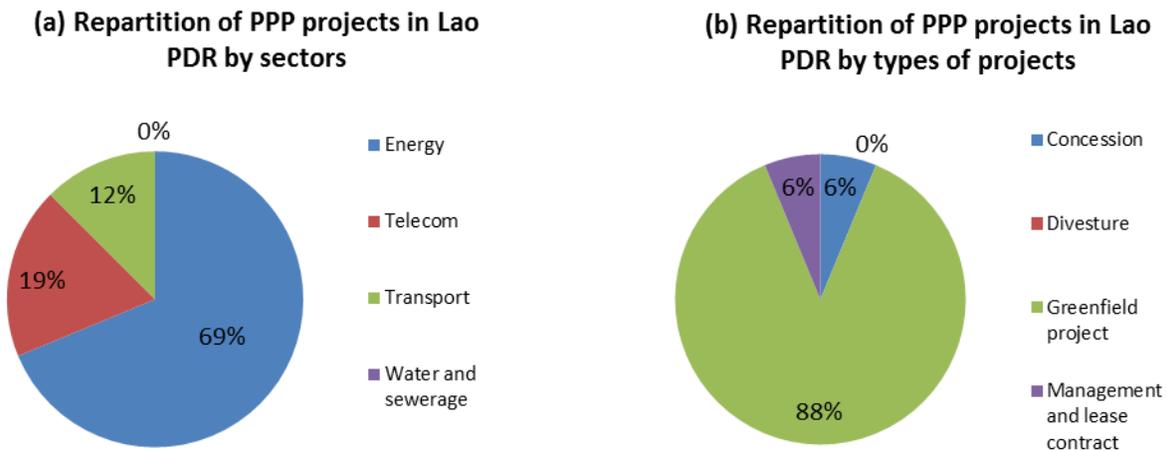


Figure 1: Repartition of PPP projects in Lao PDR (a) by sectors and (b) by types of projects.

o Legal framework :

In the absence of a legal framework specifically related to PPPs in Lao PDR, this is the 1990 Contract Law (PL No. 41/PO, passed July 27, 1990) which can be considered as the legal basis for the implementation of PPPs. According to a survey conducted by USAID in 2006, even though this law recognizes the principle of freedom of contract, it cannot be considered as a modern contract law and it still has some definitional problems (USAID 2006). Therefore, there is a strong need of a new Contract Law (Ibid.).

⁷ One of the most famous one is Nam Theun dam project.

⁸ It encompasses Build, lease, and transfer (BLT); Build, operate, and transfer (BOT); Build, own, and operate (BOO); Merchant; and Rental projects.

What is more, the same survey showed that the Contract law is rarely implemented and that written contracts remain relatively rare in the Lao economy. The main reasons which are quoted are: "(i) the weakness of courts and other supporting institutions (...); (ii) the stratified nature of the Lao economy (...); (iii) the predominance of family-owned and sole proprietorship businesses in the SME sector; (iv) A desire to leave a minimal paper trail, and/or to avoid government scrutiny" (USAID 2006).

- Regulatory and institutional framework

The regulations specifically related to PPPs in Lao PDR are still quasi inexistent. As far as the institutions are concerned, it is interesting to note that a PPP unit has been created under the Ministry of Public Works and Transports (MPWT) (Phadouandeth 2012). Nonetheless, no unit has been created yet under the Ministry of Planning and Investment which is the public authority responsible for coordinating the different sectors (Ibid.).

b) *The Water supply and Sanitation sector* (Avrillier 2010)⁹

Before 1999, there was no WS sector policy; "the urban water supply (WS) in Lao PDR was provided by a single national utility called Nam Papa Lao" (Avrillier 2010); the Government of Lao was the only body in charge of the regulation of the sector; and the legal framework was very weak (Water and Water Supply Resources Law – 1996) (Ibid.).

Since the Minister Decision 37PM of 1999 however, many changes have occurred regarding institutional, regulatory, legal and financial aspects of the sector, as showed in the following part.

- **Institutional aspects – Decentralization of the WS sector**

As mentioned above, Prime Minister Decision 37PM decentralized the urban WSS sector to the provincial level by splitting Nam Papa Lao into 18 decentralized provincial utilities called the NamPapa State Enterprises (NPSEs). The sector's target was to provide 24-hour access to safe drinking water for 80% of the urban population by 2020 (Mongphachan 2010, Avrillier 2010). Roles and responsibilities were decided as follows.

At the national level, "The responsibility of the urban water sector is born by the Ministry of Public Works and Transport (MPWT), whereas rural areas are under the scope of the Ministry of Public Health." (Mongphachan 2010). MPWT has "the general role of facilitator and coordinator, and also to activate the necessary resources to achieve the sector goals" (Avrillier 2010). Under the responsibility of MPWT, the Water Supply Division (WSD) of the Department of Housing and Urban Planning (DHUP) and the Water Supply Regulatory Committee (WaSRC and especially its secretariat: WasRO) act for sector policy and

⁹ All the information in this paragraph is extracted from this report unless another source is specified.

regulation respectively (GRET 2009). Finally, the Water Resources Coordination Committee (WRCC) is responsible for water resources protection (Avrillier 2010).

At the provincial level, “the Provincial Governor (and its Cabinet) is responsible for the implementation of the water supply policy of the government, assisted by the provincial Department of Public Works and Transport (DPWT)” (GRET 2009). Moreover, in each Province, a NPSE operates the WS systems of the main provincial towns “based on commercial principles in compliance with existing regulations” (Avrillier 2010). More specifically, “PNPs, as state-owned enterprises (SOEs), [are] responsible for (i) managing and operating all water supply and wastewater systems in urban and rural areas in their provinces; and (ii) ensuring sanitary facilities comply with sanitation regulations” (Mongphachan 2010).

Finally, at the district level, “the District authorities act locally with the different stakeholders” (Gret 2009).

A chart summarizing the organization of the WSS sector in Lao can be found in annex 1.

- **Regulatory aspects – from WASA to WASRO**

“Regulation can be defined as the necessary arbitrations required to ensure fairness towards the legitimate interests of all stakeholders within the constraints of the legal framework and national objectives” (Avrillier 2010).

The 1999 policy statement (Prime Minister Decision 37PM), on top of establishing the 18 NPSEs, created the WASA (Water Supply Authority) as the main regulatory body of the WSS sector. The decree states that “WASA assist[s] MPWT in developing detailed action plans to promote new projects in urban and rural areas. It also set[s] technical/economic specifications and standards, and direct[s] on behalf of MPWT the implementation of the WS sector policy” (Avrillier 2010).

The Decree 191PM of July 2005 further specified the regulatory tasks of WASA and created the Water Supply Regulatory Committee (WSRC) to supervise the regulatory activities of WASA. “On the technical side, WASA [is now] responsible for validating the suppliers' licenses (mainly their service area) and for setting performance targets for service level and water quality [while] on the economic side, tariff calculation ha[s] to be based on the tariff policy released by MPWT in 2004 (in fact, drawn up by WASA), which mainly focuses on the long-term discounted cash flow method while also considering social fairness and affordability” (Avrillier 2010).

A last shift occurred in late 2008, with the Decision No.13265 by MPWT: WASA became WASRO, and WSRC was placed directly under the supervision of MPWT instead of the

DHUP (Avrillier 2010, Mongphachan 2010). "The aim of [the latter] move is to enable a more independent and effective regulatory system." (Mongphachan 2010). WASRO's main duties are the following :

- (i) "To draft regulations, techno-economical specifications and different guidelines as references for monitoring and control of business and customer services;
- (ii) To study the promotion on the participation of all economic sectors and the use of models and forms of the sustainable water supply operations economically, financially and environmentally;
- (iii) To monitor, control and evaluate the capacity in organizing the management of business, accounting, finance and customer services of the water supply operators to encourage the improvement;
- (iv) To promote innovation and introduction of technique advances and appropriate technology to the improvement and upgrading of the capacity in organizing management of various aspects of the water supply operators periodically;
- (v) To create a mechanism and favorable conditions for the water supply operators in the competition for operations and customer services;
- (vi) To collect and manage data and statistics on water supply operations along with the preparation and publication of the annual reports on performances of the operators." (Mongphachan 2010).

Another important task of WASO is its responsibility in setting water tariffs. "Since Decree 191PM of 2005, water suppliers must submit a tariff structure for each period [which is then] reviewed and commented on by WASRO and DPWT before being submitted for the provincial Governor's approval" (Avrillier 2010). The tariff structure must follow the requirements of the Water Supply Tariff Policy, a policy which was set by Decision 5336/MCTPC and approved by Decree No. 57, May 07, 2004. For instance, "the Tariff Policy advocates a business plan based on the discounted cash flow for Long Run Average Costs (LRAC), including asset depreciation and anticipated efficiency improvements. A positive return on capital (ROC) is supported, but the tariff should not be above the users' willingness to pay, estimated at 3% to 5% of household income. WASRO is responsible for reviewing the validity of the business plans" (Avrillier 2010).

Overall, "the role of WASA, and now WASRO, has evolved during the last 10 years. After being involved in policymaking, WASA progressively staked out its identity and independence as the sector regulator" (Avrillier 2010).

A chart presenting an overview of the regulatory powers in the WSS sector can be found in annex 2.

- **Legal aspects – the New Water Law (2009)**

Until 2009, the legal framework regarding W&S was very weak: “the legal framework for the Lao water and sanitation sector [was] contained in about 134 pieces of separate legislation for water supply and 45 pieces of legislation for sanitation, various guidelines and policy documents” (ADB 2008). What is more, the main law regulating the WS sector, namely the Water and Water Supply Law of 1996, only “contained general rules about water usage in the country” (Avrillier 2010).

In July 2009 however, a new Water Law was approved by the National Assembly and President of Lao PDR, aiming “to consolidate all WS existing policies in order to provide a clearer picture of the sector” (Avrillier 2010). “The GoL also intends to clarify the regulatory environment for water supply; enable greater private sector participation and stronger community management of water supply; clarify responsibilities and establish the right of access to basic water supply, sanitation and wastewater services; and ensure that future supporting legislation reflects customary tribal and ethnic law through extensive national field research. A significant part of the text is dealing with private investment and its classification as eligible for exemption or reduction of many taxes (land tax, profit tax, etc.)” (Mongphachan 2010).

- **Financial aspects – the Water Supply Tariff Policy (2004) and the Water Sector Investment Plan 2005-2020**

The first WSS sector investment plan, attached to the 1999 policy statement, “listed all urban center water supply systems in order of priority for rehabilitation, expansion, or development” (ADB 2008). It was updated in 2005 by MPWT which prepared a Water Sector Investment Plan (WSIP) for 2005 – 2020 as part of the Urban Sector Strategy and Investment Plan (USSIP) (DHUP 2008). According to Avrillier (2010) the latter plan reflects “the GoL’s growing emphasis on equitable development through improvement of service in small towns, particularly in the poorest districts”. In order to reach the goal of providing access to safe water and sanitation to 80% of the urban population by 2020 set in PM Decision No. 37 of 1999, “investment needs for 2005–2020 were estimated at \$267 million, including \$103 million for small towns” (Avrillier 2010). The WSIP was revised and updated in 2007 (DHUP 2008). Interesting to note is the fact that “capital investments in the urban water supply sector are funded primarily through external assistance, with Government allocations averaging about \$9.9 million annually from 2001 to 2004” (ADB 2008).

II. 'Water Supply and Sanitation project under Public Private Partnership': a project implemented in partnership by GRET and UN-HABITAT

3.1. Signature of a small-scale cooperation agreement between GRET and UN-HABITAT in 2009

In December 2009, GRET and UN-HABITAT signed a Cooperation Agreement within the framework of the MEK-WATSAN Initiative. They hereby agreed to collaborate in implementing the "Water Supply and Sanitation project under Public Private Partnership" – a project which is part of MIREP programme – in Thapabath District, Bolikhamxay Province.

3.2. Rationale for the project

a) Answer some important water supply needs

According to the Joint Monitoring Programme for Water Supply and Sanitation¹⁰ latest estimates, about 67% of the total Lao population (estimated to 6.3 millions¹¹) enjoys access to an improved source of drinking water. In rural areas, the proportion falls to 62%. Improving access to water remains a critical issue for Lao PDR if the country wants to meet its MDG target of 80% of national water supply coverage by 2015.

Even though Lao PDR is mostly a rural country, the recent past few years have witnessed some villages turning semi-urban during and some small towns appearing in several provinces (such as Bolikhamxay). In these settlements, most people use traditional access to water like shallow wells, sometimes equipped with electric pumps, and surface water from rivers. The quality of these water sources is often quite bad (turbid and contaminated) due to the concentration of population. Wealthy people usually buy big bottles of drinking water for drinking and cooking purposes, but this solution remains unaffordable for the poorest households.

In Thapabath District, most of the households rely on shallow wells. Yet, this type of water source does not seem to satisfy completely the population of the 3 villages targeted by the project¹², as illustrated by the high rate of users (60%) who complained during the

¹⁰ A joint programme between WHO and UNICEF; the figures come from the latest report on the 'Estimates for the use of Improved Drinking-Water Sources' (2012).

¹¹ Latest estimation of the World Bank (2011), available online: <http://data.worldbank.org/country/lao-pdr> .

¹² The project targeted a small town called 'Thabock', which gathers three semi-urban villages – namely Thabok, Palai and Oudomxay – and which is located within Thapabath District, in Bolikhamxay Province, about 90 km South of Vientiane capital city.

socio-economic field survey (undertaken at the very beginning of the project) about water shortage in the dry season. In addition, close to 34% of the targeted households reported some water-borne diseases¹³, which might be linked to stagnant water points during the rainy season (caused by the problems of rainwater drainage). All in all, it is not surprising that nearly all surveyed households (92%) answered that they were interested to connect the future piped water system.

b) Address the challenge of sanitation, hygiene and solid waste management

At the national level, the government stated that sanitation and hygiene should receive as much consideration as water supply so the population can benefit from healthy living conditions. Although some efforts have been made in that sense, proper domestic sanitation remains low. Most villagers defecate nearby their habitats and the current practices for discharging family's wastewater create unhealthy environment. The situation is even worse in areas surrounding local markets where the population density multiplies the risks of indirect contamination. In addition very few families consistently practice good hygiene behavior such as washing of hands with soap and water before food preparation.

Regarding Thapabath District, the socio-economic survey revealed high domestic sanitation coverage in the targeted villages: nearly all households have latrines (mainly pour-flush) and even septic tanks. However, the majority of these are not really "septic tank" since they are single-block equipped (83%). Besides, few households have invested in sinks, lavabos and showers; some report they wait for a permanent water supply system before spending for high quality sanitation devices. One third of the respondents indeed have a temporary bathroom. Consequently, sanitation is a real challenge to be addressed in the area.

As far as hygiene is concerned, it has been reported that 34% of households had health problems related to water in Thabok, a proportion which is quite high compared to other MIREP sites (cf. the socio-economic survey results, output A2). This is probably due to problems of rainwater drainage which cause stagnant water points (Ibid.). It also and above all denotes a lack of awareness on hygiene from part of the targeted population, further highlighted by the non-negligible percentage of the population unaware of the causes of water-borne diseases (Ibid.).

Closely related to the hygiene issue is the one of solid waste management. In Thabok, the socio-economic survey revealed that 91% of the population burns its garbage to get rid of it, while only 13% of the population disposes it in the collective disposal. This demonstrates a clear need for a new solid waste management system.

¹³ 13% of respondents have ever had dengue fever or malaria, 13% skin diseases, 12% diarrhea and 4% Thong Khee Hak (gastroenteritis) (output A2, report on socio-economic field survey, pp. 48).

c) Increase Efficiency: Identify, Train and Contract Local Entrepreneurs

In its policy for water supply, the Ministry of Public Works and Transport (MPWT) of Lao PDR gives the private sector a key role to play and encourages its participation in semi-urban areas. With the support of the World Bank, MPWT conducted a study about potential private sector participation in water infrastructures, and a workshop on the issue was organized in September 2003.

In addition, the private sector is known to be dynamic in Lao PDR and has demonstrated that it has a good capacity to respond efficiently to the demand for water service with the fast-track phase¹⁴ of MIREP's project. This is mainly explained by the fact that, since a bad functioning of the water service would have a negative impact on his personal profit, the entrepreneur has a direct incentive to undertake good maintenance, to address problems and disrepairs.

This is why a Public Private Partnership between a local private entrepreneur and the District authorities has been implemented: the two parties signed a concession contract stating that the local entrepreneur is responsible for financing and managing the piped water, while the District authorities remain the owner of the facilities.

d) Provide Institutional Support to National, Provincial and District Authorities

The provincial authorities are legally responsible for providing public services but they lack financial and operational capacity to implement local services such as water supply. This programme was thus meant to help provincial departments improve their competence about local planning process, financing and regulating water supply services.

Furthermore, while district departments are generally interested in bringing improvements in local water conditions, they have few staff capable of carrying out or implementing such works. District leaders therefore require additional knowledge and training to promote piped water supply development through the participation of the community and the local private sector. This aspect was addressed as well by the project, especially through the participation of the District representatives to the different steps of the project implementation.

¹⁴ The Fast-Track phase of the project refers to the project undertaken by Gret and UN-HABITAT between 2008 and 2011 in the small town of Houay Khoun in Bolikhan District in Bolikhamxay Province in Lao PDR. A Fast-Track initiative is a pilot project typically involving smaller scale operations and shorter timelines (twelve to eighteen months) than usual projects and meant to demonstrate innovative approaches, to build capacity of service providers and to build ownership amongst stakeholders.

3.3. Objectives of the project

The main objective of this project was to improve in a sustainable way the population's welfare in the semi-urban area of Thabok by increasing access to safe water and improved sanitation through decentralized public-private partnership approaches.

More specifically this project sought to:

- Improve access to water supply for 4,553 people (by 2011) living in Thabok through the setting up of an optimally sized water supply service using appropriate technologies;
- Improve access to appropriate sanitation facilities for 1,100 people (by 2011) living in Thabok;
- Propose incentives and credit mechanisms to support local private sector involvement in piped water system management and investment (PPP);
- Improve solid waste management through the establishment of a solid waste management community service;
- Enhance public hygiene awareness, especially by stimulating the demand for water supply and sanitation services and by motivating public participation using the HVWSHE approach;
- Strengthen local authorities' leadership and organizational capacities with regard to planning, partnering with the private sector (under BOT-concession model), and PPP regulation; and
- Support the scaling-up process of the present project so that the Lao Government may use these examples to initiate other contracts, either directly, or with the support of other donors.

3.4. Description of the action

The project targeted a small town called 'Thabock', which gathers three semi-urban villages – namely Thabok, Palai and Oudomxay – and which is located within Thapabath District, in Bolikhamxay Province, about 90 km South of Vientiane capital city.

The main activities implemented are synthesized in the logframe of the project which may be found in Annex 3. They included:

a) *Rapid situation assessment*

- **Planning at district level with district leaders and heads of villages (cf. output A1):**

On 12 March 2008, DPWT with the assistance from WASA (now WASRO) and GRET held a meeting at the district office to present in details the procedures, discuss about planning and review the action plan with the District Management Committee (established

especially to support the implementation of MIREP project activities in collaboration with provincial and national stakeholders and the heads of villages). The following day, detailed planning for the feasibility study was done with the same stakeholders.

- **Identification of poor households through socio-economic survey, technical field survey and financial analysis (cf. output A2):**

A feasibility study was conducted regarding the two following aspects: 1) a socio-economic survey to assess the population's water habits, the economic conditions, the capacity and willingness to pay for water service, and sanitation situation; and 2) a technical study to analyze the available water resources in the area, to provide the technical drawings of the piped water system that the private investor will have to build, and to estimate the investment cost that will help to calculate the subsidy amount and the water tariff.

b) Selection of Small-Scale Private Entrepreneur/Investor

- **Identification of small-scale entrepreneur including training on tendering process, preparation of tender documents and bidding process (cf. output B1):**

A Bidding Management Committee was set up in July 2009 in order to carry out the selection of the water supply service provider (future concessionaire). In addition, a set of tender documents, as well as the procedures for short-listing and scoring the candidates proposals, were prepared by WASA with the assistance from GRET. Finally, several meetings were held at the District office with the Bidding Management Committee to explain the whole bidding process and validate the above mentioned documents. Following this preparatory phase, the bidding process was undertaken and Phongsavath Engineering Company, managed by Mr. Xaykham Phongsavath, was selected as the future concessionaire of the water supply service of Thabok, Palai and Oudomxai villages.

c) Detailed physical work design preparation and PPP contract

- **Detailed design works for small scale water supply (cf. output C1):**

The detailed designs of the technical options were prepared by the Engineering Company (VV Survey- Design and supervision Consultants Company) selected by the water supply service provider with the assistance from GRET. The technical options, the sizing calculations and the drawing plans were prepared on the basis of the relevant technical specifications and the feasibility study report. The Engineering Company also prepared the project Bill Of Quantity (BOQ), i.e. the detailed list of materials and equipments used for the construction of the new facilities and the extension or the renewal of existing facilities.

The unit prices were included in the BOQ in order to calculate the required total investment cost. Lastly, the project was validated by the public authorities in December 2008 and it was then considered as the reference for the construction phase.

- **PPP contract negotiation and set-up of financing mechanisms (cf. output C2):**

Following the consultation meetings organized by Thaphabath District Authorities and DPWT with assistance from WASA and GRET to negotiate the final terms of the concession contract with the water supply service provider, both contracting parties came to an agreement on all the conditions of the service delegation contract. The contract signature ceremony took place on March 13, 2009 at Thaphabath District Office.

Concerning financing mechanisms, a subsidy contract was signed the same day between the provincial authorities and the concessionaire in order to describe the modalities for delivering the MIREP Investment Subsidy to the concessionaire. It was agreed that it would be allocated to the concessionaire according to an Output Based Aid mechanism (OBA). In addition, the money shall be transferred to the Provincial Water Supply and Sanitation Investment Fund (PWSSIF), a fund established by the Provincial Authorities to mobilize financial resources for the development of small-scale water supply services under Public-Private Partnership in the Province of Bolikhamxay and for promoting development of sanitation.

- **Design works for solid-waste management system (cf. output C3):**

A consultant, Phounpaseuth Akhavongsa, was selected by GRET in March 2010 to conduct an accurate topographic survey of the study area – including soil tests – and to perform the detailed design of the sanitary landfill. The detailed design report and the design drawings were validated by the public authorities on 21th October 2010.

d) Construction and supervision of works

- **Construction works to benefit 4,553 people with access to safe water (cf. output D1):**

Before opening the works, WSD and DPWT with the assistance from GRET organized a short training session at district level about the roles of the local stakeholders during the construction process. They also prepared the different contract documents necessary for the works supervision.

A local consultant – Mr. Thongty, the same person as for the fast-track pilot project – was selected by GRET to supervise the construction process. However, the water supply service provider decided to perform the works by himself instead of sub-contracting a

construction company. The construction works took place November 2009 and October 2010, when the concessionaire started to connect households to the system.

- **Establishment of revolving funds for water connection fees (cf. output D2):**

“Revolving Fund” is a capital raised with a certain purpose which can be made available to the same users more than once. The basic principle is that households will be able to apply for an interest-free loan from a fund that has been set up by the donor, in order to pay for a water connection. There is a limited amount of initial capital in the fund so the next round of loans can only be granted once the previous loans have been paid in full. This encourages the households to make prompt repayments so their neighbors can also benefit from the Revolving Fund. The Revolving Fund is expected to become self-sufficient after an initial period.

This micro-financing tool has been utilized extensively by UN-HABITAT in the different W&S projects implemented by the agency in Lao PDR. This is, along with solid waste management, community-based management, social marketing, and the promotion of HVWSHE approach, one of the key inputs from UN-HABITAT, which contribute to making the specificity of Thabok project as compared to other MIREP sites.

Two meetings were held in Thabok, Thaphabath District, on 03 March 2011 and on 16 March 2011 respectively, to discuss about already-existing village funds and potential soft support for connection fees in Thabok, Palai and Oudomxay villages. According to the three village authorities there were different funds already existing in each village, such as the “Women’s Development Fund” in Thabok, the “Veterans’ Development Fund in Palai, and the “Agriculture’s fund” in Oudomxay. The revolving fund agreement was finally signed with Thabok and Palai village authorities on March 29, 2011¹⁵. It was decided in the agreement that a total amount of 6 million KIP per village (which corresponds to about 10 connections, the standard connection being evaluated at 600 000 KIP¹⁶) would be transferred directly from MIREP Programme to each existing Village Funds. The reimbursing period has been set to 6 months and the interest rate is fixed at 2% per month.

- **Establishment of revolving funds to support the construction of appropriate sanitation facilities to benefit 1,100 people with adequate sanitation facilities (cf. output D3):**

¹⁵ Oudomxai Revolving Fund contract was signed later.

¹⁶ As soon as one household has finished reimbursing its loan, a new one can benefit from the revolving fund.

The fund for latrine construction was established in a similar way as the fund for water supply connection. The agreements were signed with Thabok, Palai and Oudomxay village authorities on November 2, 2011.

Prior to the agreement, a sanitation situation assessment was undertaken including a preliminary assessment of the households without any latrine (meeting held in Thabok water supply office on 15th June 2011 to discuss about the “pre-lists” drew y the villages authorities); a school sanitation investigation (field trip in Thabok on 29th June 2011); a sanitation assessment meeting (held in Thabok water supply office on 10th August 2011); and an assessment of existing latrine materials local shops. Finally, a pour-flush latrine design was chosen as they can be easily built by the households themselves (GRET, Field visit to Thabok village 2012).

The 2 types of revolving funds have been assessed by GRET as being very effective micro-financing mechanisms (Vontobel 2012, Tongnengya 2012). The NGO is even thinking of implementing this kind of micro-financing mechanisms in some of the sites of MIREP Phase III as well as in the sites of MIREP phase II which are facing some management problems (Vontobel 2012). The latest site visit in October 2012 enabled to further assess the effectiveness of the 2 funds. It was reported that both the villages of Oudomxai and Palai have 100% of access to sanitation. Regarding water connections, the most striking improvement to report is in the management of the water connection fund in Palai village: while during the first round of connections the manager of the fund ¹⁷ did not manage to obtain a monthly refund from the households and had to extend the agreed period of reimbursement to enable most households to finish repay their loan, she is now able to collect monthly connection fees within the 6 months agreed period of reimbursement¹⁸. In Oudomxai however, the revolving fund for water connections has not been used yet since the water supply network has not been extended yet. It has been used by the village authorities to build toilets in the school of the village in the meantime, showing the interest of the village authorities in the fund.

- **Establishment of small-scale solid waste management service (including waste disposal facilities) (cf. output D4):**

After the detailed design for solid-waste management system was approved by all stakeholders in October 2010¹⁹, the service management contract and the construction contract were signed on 21 December 2010 by the District authorities and PEC Company – the private entrepreneur who is also the manager of the water supply service.

¹⁷ Mrs Boissi, interviewed during the field trip

¹⁸ At the date of the present report, the third round of connections is being implemented.

¹⁹ Cf. part “Detailed physical work design preparation and PPP contract” above

The construction of the sanitary landfill was undertaken in January 2011 and validated in March 2011 by the District Management Committee.

As for the operational start of the service, the preparation phase included a meeting on 3 March 2011 to discuss future service plans and regulations of solid waste management in Thabok and site visit on 29 June 2011. The solid waste management service consists of a door-to-door collection of waste once per week (except for Thabok market for which there is a daily collection). Two types of tariffs – which are function of the volume of waste collected – are applied: one for domestic users and the other for guesthouses, hotels and restaurants, non-domestic users and markets. The payment of the tariff is due when waste is collected ('trash and cash' principle).

A very interesting outcome has occurred following the first few months of management of the solid-waste service: given the malfunctioning of the service (the manager of the water supply service deliberately focused on water rather than on solid waste due to an overload of work as well as a lack of resources generated by the solid-waste service), Mr. SOMDAVI, who works for the Lao Ministry of Natural Resources and Environment, decided to take over the service. During the field visit of October 2012, he asked GRET to help him with: (1) the termination of the current concession contract and the establishment of 2 new contracts, one for WSS and the other for solid waste management with his name on it; (2) fund raising so as to improve the current stage of the landfill (replace the fence which has been stolen; improve the access road; etc.) (GRET 2012). Two lessons can be drawn from this episode so far: (1) GRET is still needed as a "facilitator"²⁰ between small private entrepreneurs and public authorities, especially regarding the establishment of contracts; (2) at the same time, the initiative of Mr SOMDAVI, as a spontaneous one, may reveal an interesting potential for the up-scaling of MIREP²¹.

e) Capacity building, awareness campaign and users' rights promotion

• Operations and Maintenance (O&M) support (cf. output E1):

GRET assisted the operator of the Water supply service regarding the following aspects of O&M support: start of the service; network operation and maintenance (pipe networks, valves, water meters, etc.); water quality (controls and disinfection procedures); management on site, including procedures and tools (both financial – water bills, incomes and expenses – and technical – meter reading, new connections, etc.) and the design of the users' service contract; IT-billing (a software developed by MIREP) training sessions

²⁰ See the last point of part 4.4.c for a more detailed analysis of GRET facilitator's role.

²¹ By "up-scaling", we mean that meaning that if GRET were to leave Lao PDR now, it is very unlikely that new PPPs would emerge spontaneously.

(3 sessions in June 2011); reporting, monitoring and evaluation (provision of a M&E form inter alia).

- **Training to heads of villages and users' representatives on user's rights promotion using HVWSHE approach (cf. output E2):**

"HVWSHE is a programme to raise awareness on water, sanitation and hygiene-related issues, but also much more than that. It is a learning process by which people can gain awareness of their living environment, and acquire knowledge, skills, experiences and values that will enable them to act individually and collectively to solve present and future water, sanitation and related hygiene problems. HVWSHE seeks to inspire and motivate learners to change their behavior with a view of promoting and adapting wise and sustainable use of water, sanitation and hygiene²²".

The HVWSHE approach was especially used during a training session about solid waste management and hygiene, held in June 2011. The specific objectives of the session were: to inform and discuss on sanitation situation; to inform villagers regarding solid waste management service; to provide information on basic knowledge of solid waste management to villagers; to improve people behaviors on solid waste management. The five key topics addressed during the session were: (1) Introduction of solid waste "Solid waste management system"; (2) General health and environmental effects (health effects, environment effects, socio-economic impacts); (3) General sanitation situation in two villages; (4) Solid waste management service in targeted villages (solid waste management service, the type of service, the type of recipients, service fee); (5) Basic knowledge of solid waste management (definition of solid waste, types of solid waste, simple way for solid waste management (3 Rs), Dos and Don'ts, the beneficial effects). The methods and tools that were used included IEC (Information, Education and Communication) material such as posters, flip charts, and laminate pictures; a movie ('3R movie'); a game playing for solid waste management system and separation of solid waste; a quiz to review the training. In addition, special training sessions were provided to Osobos (Village Health Volunteers) and to local authorities (Vontobel 2012).

Three more training sessions were organized during the project period:

- (i) A population training session about what is a piped water system (March 2009) during which different topics have been addressed using different approaches (games, quizzes, questions and answers, poster presentations, etc.): What is a piped water system and how does it work? Which benefits does it bring for health? What are the rights and obligations of users? How will the construction works be implemented? etc.

²² Text copy pasted from: UN-HABITAT, 'Human Values-based Water, sanitation and Hygiene' brochure

- (ii) A population training session about the new water supply service (March 2011) in order to: encourage villagers to connect the piped water system; inform them about the new service, the persons to contact from the piped water system company, and the village fund; and discuss about users' rights and obligations;
- (iii) And a training session for users' representatives on the promotion of rights and obligations of users (March 2011), which objectives were: to make all stakeholders know about their roles and responsibilities in the piped water service; to set up Village Health Committee; to discuss on the design of the book of complaints; to discuss about how and where to set up the poster about the "Roles of Stakeholders"; to make water quality tests and get them ready for population training; to give the initial capital to the village fund for household water supply connections and to disseminate the policy of village revolving fund to stakeholders.

Overall, these methods have been judged useful by the village authorities of Thabok (more specifically by Mrs Boissi, in charge of managing the revolving fund of Palai village and interviewed by the author during Thabok field visit of October 27th).

- **Film on PPP-project in Lao PDR – a joint UN-HABITAT and GRET initiative (cf. output E3):**

A movie on MIREP was produced between August and November 2011. The main goals this film are: (1) to promote MIREP program approach and achievements to development partners (donors, public authorities, etc.) to trigger potential support; (2) to improve public understanding of development projects, refining the vision of development actors and actions by the general public. The two key messages that the movie aimed to disseminate are: (1) MIREP program helps improve the lives of people through access to water supply and sanitation services; (2) MIREP program implements innovative and appropriate partnerships and financing mechanisms; it participates in the formulation and implementation of the national water supply policy, ensuring its sustainability.

f) Project Monitoring and Evaluation (M&E)

- **Preparation of yearly progress report (cf. output F1):**

A yearly progress report presenting the activities implemented during the year 2010 in Thaphabath District was prepared by GRET and completed in November 2010.

- **National project/Policy dissemination workshop (cf. output F2):**

This event aiming to raise awareness and bring discussion about regulation in the water supply sector in Lao PDR was organized on June 2, 2010 and hosted by the MPWT. It gathered various stakeholders: public authorities from national to local levels, decision-

makers or technical bodies, private entrepreneurs in water supply, representative of donors, representatives of regulatory bodies, etc. The objective of the workshop was twofold:

- (i) Review the regulation approaches implemented in MIREP pilot projects and raise the regulation issue among the stakeholders of the water supply sector in Lao PDR; i.e. analyze the existing regulation framework(s); identify the main strengths and weaknesses; and draft some recommendations in the prospects of a potential up-scaling of PPP.
- (ii) Initiate a process of knowledge sharing, under a learning-by-doing approach, amongst the water and sanitation sector in Lao PDR, especially for better mutual understanding between public and private stakeholders.

• **Preparation of final project evaluation report (cf. output F3):**

A final evaluation of the project was undertaken by GRET between August and October 2011. The main lessons of the project are the following:

- (i) Cooperation framework must be consistent
- (ii) The strategy must be comprehensive and regularly put into discussion
- (iii) Stakeholders at different levels should be involved with proper responsibilities and tools
- (iv) Good cooperation between public and private stakeholders requires mutual understanding
- (v) The project team must keep an eye outside the project environment

Moreover, both the criteria of relevance and effectiveness were evaluated as “very good” while consistency and efficiency were rated as “good”.

The detailed set of activities implemented, as well as the timeframe and the outputs produced can be found in annex 1.

3.5. Main stakeholders

The main stakeholders involved in the project implementation can be classified as follows (2 diagrams presenting in a synthetic way the main stakeholders of MIREP programme and Thabok project may be found in annexes 4 and 5 respectively):

a) Stakeholders at Central Level

- **Department of Housing and Urban Planning (DHUP):** On behalf of the Ministry of Public Works and Transport, DHUP was responsible for general monitoring and is in charge of implementing the project in compliance with the national policies and regulations.

- **Water Supply Division (WSD):** DHUP delegated the co-ordination of this project to its Water Supply Division (WSD). WSD also provided technical assistance to the provincial authorities and to the targeted districts.
- **Water Supply Authority (WASA):** WASA was in charge of regulating and coordinating this particular Public-Private Partnerships (PPP). In accordance with its mandate, WASA provided institutional assistance to the provincial authorities and to the targeted districts in order to prepare the contracts for water service management and to regulate the service delegation contracts.

b) Stakeholders at Provincial Level

- **Cabinet Office of the Governor:** The Cabinet Office of the Governor coordinated the activities conducted by the provincial departments involved in the implementation of the piped water systems financed by this PPP project. Moreover, the Cabinet Office of the Governor controlled the compliance of the actions with the laws; particularly the Cabinet Office validates the service delegation contracts.
- **Department of Public Works and Transport (DPWT):** DPWT contributed to monitoring the technical and institutional aspects of the project's water supply systems. DHUP provided assistance to the water supply systems' owners in order to prepare and enforce the service delegation contracts. In addition, DPWT managed the Mini-Réseaux d'Eau Potable (MIREP) Investment Fund.

c) Stakeholders at Local Level

- **District Authorities:** In this project town, the District Authority is the owner of the water supply system. In this regard, the District Authority signed the contract for the provision of the water service and was responsible for monitoring the water service quality during the contract period.
- **District Management Committee:** A District Committee was established at the beginning of the project to support the implementation of MIREP project activities in collaboration with provincial and national stakeholders. The members (14 maximum) were appointed by the District Governor from different district offices (such as the Office of Governor Cabinet, the Office of Public Works and Transport, the Financial Office, etc.) and villages' organizations (Heads of village or Mass organizations).
- **Heads of Villages:** The Heads of Villages represented the water service users. They informed the households on their rights and obligations regarding service delivery and reported users' requests to the Private Service Supplier and to the District Authorities.

In addition, they ensured mediation in case of conflicts or other local problems related to the piped water service.

d) Others Stakeholders

- **Bidding Management Committee:** A Bidding Management Committee was set up in July 2009 in order to carry out the selection of the water supply service provider (future concessionaire). It was composed of representatives from Bolikamxay Provincial Governor Cabinet Office, Water Supply Authority (DHUP), Water Supply Division (DHUP), Provincial Department of Public Works and Transport, Provincial Department of Planning and Investment, Thaphabath District Authorities and the GRET.
- **Private Service Supplier (Concessionaire):** A local private investor, Phongsavath Engineering Company CO.LTD, represented by Mr. Xaykham Phongsavath was awarded through public decision as the future concessionaire of the system. Mr. Xaykham Phongsavath was responsible for investing, building and managing the new piped water system. This also included the responsibility to design the system.
- **Local Engineering Companies (LEC):** A LEC, VV Survey-Design and supervision Consultants Company, was contracted by the Concessionaire with assistance from GRET for the preparation of the detailed technical design of the water supply facilities. The LEC also prepared the project Bill Of Quantity (BOQ), which consists in the detailed list of materials and equipments used for the construction of the new facilities and the extension or the renewal of existing facilities.
- **Consultant for the design works for solid-waste management system:** A consultant, Phounpaseuth Akhavongsa, was selected by GRET in March 2010 to conduct an accurate topographic survey of the study area – including soil tests – and to perform the detailed design of the sanitary landfill.
- **Construction Manager:** A local consultant – Mr. Thongty, the same consultant as for the fast-track pilot project – was selected by GRET to supervise the construction process.
- **Research and Technical Exchanges Group (GRET):** GRET was in charge of managing this project. In this regard, GRET facilitated the implementation of the project activities and ensured mediation roles between the different stakeholders. GRET also provided technical and institutional assistance to the piped water system owners and to the Private Service Suppliers.

- **UN-HABITAT:** UN-HABITAT was in charge of ensuring that poor were not left out in the implementation of PPP and that community was involved in the process. Also UN-HABITAT assisted in bringing in the sanitation element, particularly for the poor, which had not earlier figured in the two PPP projects undertaken by GRET in Lao PDR.

A diagram of the main stakeholders of the project can be found in annex 2.

III. Main lessons learned

4.1. Lessons from GRET's final evaluation of the project

- Cooperation framework must be consistent
 - Important to define roles of the "pilots" (Gret, DHUP and Wasro)
 - Steering committees are important platforms for learning
- The strategy must be comprehensive and regularly put into discussion
 - Spend time to clarify, explain and review the procedures
 - Allocate time for policy dialogue and debates
 - Importance of M&E system of the project
- Stakeholders at different levels should be involved with proper responsibilities and tools
 - At national level to ensure the project fits with policy orientations
 - At provincial level to mobilize local stakeholders
 - At local level because the service is locally-based
- Good cooperation between public and private stakeholders requires mutual understanding
 - Multiply meeting opportunities
 - Emphasize exchanges between local stakeholders
- The project team must keep an eye outside the project environment
 - Important to analyze how the project interacts with other programs
 - Important to promote the project outside the country

4.2. Lessons from UN-HABITAT's own review of the project²³

- Micro-financing mechanisms (Revolving funds) are an effective way to boost the rate of connections to the water supply network as well as the number of latrines constructed.
- An integrated approach (solid waste, sanitation and water supply) enabled to increase public authorities' awareness of the potential of the private sector (which is not just responsible for water but also for sanitation and solid waste), and of contract procedures mechanisms (two contracts signed – one for water and one for sanitation)²⁴.
- Innovating approaches regarding community participation (social marketing and HVWSHE) are an important triggering factor in the behavioral change of the local population.
- Strengthening the public sector, especially the regulatory authorities, from the local to the central level is as essential for the success of the project as training and supporting the private operator.
- The concession model is adapted to the Lao context since small private entrepreneurs have sufficient resources to invest in water supply systems while the public sector lacks resources.

4.3. Challenges from GRET's final evaluation of the project²⁵

- How to better respond to capacity building needs of the public stakeholders?
 - DHUP: strategic planning; financing issues (credit schemes; subsidy schemes; etc.); pro-poor approaches; etc.
 - WASRO: contracting issues (licensing; PPP models; etc.); conflict resolution; contract monitoring and evaluation; etc.
 - DPWT: investment project management; facilitation aspects; local strategic planning; funding management;
 - District: conflict resolution; facilitation; etc.
- How to better respond to capacity building needs of the private stakeholders?
 - Continue training support on longer term for sustainable impact;
 - Meet mentoring needs;

²³ Extracted from interview with GRET on September 20th 2012

²⁴ Lesson drawn from the interview with A. Vontobel (September 2012)

²⁵ Other challenges have been identified by the 3 mid-term reviews of MIREP programme in Lao conducted by GRET: Mid-term evaluation of MIREP's Financing Policy, as well as MIREP's financing mechanism; Mid-term evaluation of MIREP's Pro-poor policy; Mid-term evaluation of MIREP's Regulatory policy, as well as MIREP's regulatory structure. We chose not to list them explicitly as they concern MIREP programme in general and not Thabok project specifically.

- Increase exposure to other sites, other technologies, by increasing exchanges within Lao PDR and even abroad (Example: Cambodia has similar issue);
- Develop also some capacity building activities for some public staff.
- How to improve the standards of the service while maintaining low-cost initial investments?
 - Put more emphasis effort and analysis on technical specification for designing and construction processes;
 - Need to gain knowledge on engineering tools (GIS, etc.).
- How to accelerate network connection rate?
 - Review the social marketing strategy. Need to gain expertise on this topic.

4.4. Main challenges identified from UN-HABITAT's review of the project

a) *Commercial, financial and economic issues*

- **Motives of investors in the WSS sector: a logic of Return On Investment?**

It can be affirmed that financial rationality is not the only reason why small private entrepreneurs invest in the water sector in Lao PDR (F. Naulet 2012). The main reason is that the water sector is not the most profitable sector in Lao PDR: figures show that forestry, hydro-power, trade, and civil engineering are more profitable (F. Naulet 2012). Indeed, "given the low consumption features and the economy of scale, return on investment is quite long in arriving, around 7 to 10 years. The mobilization of funding is difficult and costly interest rates are high, on the order of 20% per year, and institutional risks are not negligible." (Mahe 2006). Therefore, if MIREP is not an interesting investment, concessionaires must have other incentives to invest (GRET 2009).

Among other reasons is the logic of social entrepreneurship. This refers to the fact that entrepreneurs who have succeeded and managed to earn quite a good amount of money are expected, culturally speaking, to invest back in their home village (F. Naulet 2012). A second reason which also matters in the decision of small entrepreneurs to invest in the WSS sector is the security of the business. Indeed, the monthly cash-flows incomes generated by the operation of the water supply service generate a lot of liquid assets, which facilitate the management of the entrepreneur's family budget. Small entrepreneurs also consider it a good activity to consider for their retirement (Ibid.). Overall, it can be said that "The certainty of a constant and increasing income, the creation of work opportunities for the whole family, and the assurance of a retirement income are the motivating factors for these private entrepreneurs." (Mahe 2006).

Nonetheless it is important to bear in mind that these entrepreneurs are not acting as mere 'patrons' (Naulet 2012). In reality, their investment also obeys to a long-term strategic vision: investing in the provision of a social good enables them to improve their social status and to earn public authorities' trust, which in turn may allow them to have an easier access to more profitable activities in the future²⁶ (Naulet 2011). For instance, one of the concessionaires of MIREP managed to open a guesthouse thanks to the fact that the public authorities of the Province had made land access easier for him.

- **The issue of access to finance for small entrepreneurs in the WSS sector**

At the programme level, it has been analyzed that MIREP credit mechanism is not incentive enough²⁷. Indeed, LDB's loans to small entrepreneurs investing in MIREP projects provide little advantages as compared to ones of other commercial banks: (i) the reimbursement period (loan term and grace period) is too short; (ii) the interest rates are too high; and (iii) the collateral requirements are too important. (Gret 2009, F. Naulet 2012).

More generally, various studies (ADB-WB 2007, GTZ 2008, P. S. Kyophilavong 2007, Kyophilavong 2011, P. Kyophilavong 2008) have showed that SMEs in Lao PDR are facing constraints for access to finance²⁸. If the difficulty to access to finance is an obstacle reported by most SMEs worldwide (ADB 2009), this feature is particularly enhanced in Lao where "very few SMEs are able to access loans from external financial sectors such as banks, financial institutions and micro-credit" (Kyophilavong 2011). Rather, the majority of financing for business set-up and operations comes from personal savings, retained earnings or loans from friends or relatives (Ibid.). What is more, even when they are able to obtain an exterior financial support, about 80% of SMEs affirm that they are not satisfied with financial institutions (Ibid.). Among the main constraints on access to finance are too short term of loans provided by Commercial Banks; collateral; the complex application process and lack of information from financial institutions. What are the main reasons accounting for this situation?

²⁶ Mahe (2006) also mentions this strategy of long-term business diversification as one of the investment strategies leading Cambodian small entrepreneurs to invest in the WSS sector. The other 2 main strategies he speaks of are: (1) a strategy to secure personal wealth; (2) the simplicity of system operation.

²⁷ The subsidy mechanism, however, is a necessary one (even in developed countries as France the water sector is subsidized) and the level of subsidy is already quite low (30%). The only modification that is needed regarding these subsidies is to progressively transfer them to the government (instead of GRET).

²⁸It is important to note nonetheless that the Lao Government is aware of the problem and that "SME's access to finance is one among six policy directions outlined in the Prime Minister's Decree No. 42/PM of 20 April 2004 on SME Promotion and Development" (SMEPDO 2011). The different actions taken by the Lao Government recently are enumerated in the presentation made by SMEPDO at the The Asia-Pacific Financial Inclusion Forum in 2011 (SMEPDO 2011).

The main explanation lays in the fact that the Lao Banking sector is still “scared” to take the risk of financing infrastructure projects in the WSS sector and that it prefers to collect savings. It lacks incentives to provide credit to SMEs (P. Kyophilavong 2008). In the case of MIREP for instance, only one bank – the LDB – was willing to invest in the credit fund. This fear to invest may in turn be accounted for, at least partially, by the characteristics of both the Lao Banking system; PPPs; and of small entrepreneurs in the WS sector. The Lao Banking sector, firstly and as mentioned in part 1.3.a, is still relatively small compared to the size of the economy. Keovongvichith (2012) concludes from his analysis of the Lao banking system that “very few formal financial institutions (FIs) have shown *capacity* to provide financial service to the small-scale entrepreneurs and rural operators”. In addition, the characteristics of PPPs themselves are not really reassuring for the banks. In particular, high information asymmetries in PPP projects involving small private enterprises limit lenders’ acceptance to fund them (GRET 2009). Finally, the lack of dynamism of the small entrepreneurs in the WS sector may be dissuasive for the banks ready to finance PPP projects (F. Naulet 2012).

b) Legal, regulatory and policy frameworks issues

- **Policy framework**

No policy framework currently explains the participation of the private sector in the WSS sector. In Decree 37PM of 1999, “private sector participation is not discussed until the very last articles; the other parts of the text refer only to NPSEs as the WS providers, and the word ‘supplier’ is not even mentioned” (Avrillier 2010).

- **Regulatory framework**

WASRO faces various challenges which limit its sphere of influence. First and foremost, WASRO has limited enforcement powers: “since the main targets of regulation are the publicly owned NPSEs, which are directly under the supervision of the provincial Governors, WASRO does not have much leverage with NPSE management. In fact, the main remits of WASRO are in policymaking, collection of data and benchmarking” (Avrillier 2010, Restrepo-Mieth 2012). Limited human capacity and sources of funding are two challenges constraining WASRO as well (Mongphachan 2010, Avrillier 2010). Finally, the structure of the water sector itself raises a problem of conflict of interests: “at present, WASA reports to MPWT, the same entity which supervises (through its provincial line agencies) the NPSEs which are among the water service providers regulated by WASA, posing genuine concerns of conflict of interest” (Binch 2007)²⁹.

²⁹ Quoted in (Avrillier 2010)

As for the efficiency of WS regulation, it may be measured through the evolution of NPSEs' performance (Avrillier 2010). Different aspects may be improved, among which accounting procedures and compliance with technical requirements. But the principal source of concern of WASRO remains the reliability of data collected by PNEs (Mongphachan 2010, Avrillier 2010). Even though a M&E database has been transferred to WASRO by MIREP so as to improve the latter aspect, some crucial problems still need to be tackled, especially the adaptation of this tool to regulatory functions (Avrillier 2010)³⁰.

It may be interesting to note while it is essential to strengthen regulation so as to avoid a total privatization of the WSS services, the reverse (namely the protection of private ownership rights) is crucial as well (Restrepo-Mieth 2012, Gomez-Ibañez 2003).

- **Legal framework**

According to Avrillier (2010), PPPs are not sufficiently addressed in the WS legislation. Indeed, "apart from the Contract Law of 1990, which provides general conditions for all kinds of contracts, there is no reference in the laws to public-private partnerships for WS" (Avrillier 2010). What is more, this Contract Law is outdated and there is a real need of a new legislation (USAID 2006).

Nonetheless, it is undeniable that the legal framework keeps evolving and that there is "new trend toward more extensive integration of private participation" (Avrillier 2010). The most evident example of this evolution is the new Water Supply Law of 2009³¹, which "defines the term 'concessionaire', enumerates different kinds of potential private participations (BOT, BOOT, BOO) and outlines the rights and obligations of concessionaires, as well as the maximum duration of concessions and causes for termination" (Ibid.).

Yet, the new water law still lacks some crucial elements to be considered as a consistent framework for PPP contracts. For instance, the term of 'concession' is not clearly defined and it is the only type of PPP which is described in details in the law (Hodgson 2008). Moreover, the provisions of the law remain very general and more details – regarding the role of each public entity; the basis for tariffs calculation; and ownership of assets among others – need to be further specified in future implementation decrees (Avrillier 2010, Hodgson 2008). Last but not least, the Law does not distinguish between the different types of service suppliers: between existing private investors and new private investors

³⁰ A good example where the role of WASRO could be improved is regarding tariffs policy: this is typically an aspect where the national policy is efficient, but where the implementation of the policy could be bettered (regarding both the utilization of the tools to set up an adequate tariff and the monitoring of the tariffs so as to adapt them constantly).

³¹ Approved by the National Assembly and President of Lao PDR since July 2009 (Mongphachan 2010)

on the one hand (Hodgson 2008) but also between NPSEs; private operators under PPP contracts and other types of suppliers such as local communities) (Avrillier 2010).

Therefore, the new Water Law is only a first step towards a consistent legal framework for PPPs in the WS sector: further application decrees and guidelines are needed to clarify the above mention issues and above all, 'it is important to arrive at a common national strategy regarding the laws that apply to the regulation of private suppliers" (Avrillier 2010).

Overall, there is still room for improvements in the legal, regulatory and policy frameworks for PPPs in the WSS sector. Another area of improvement for an effective implementation of PPPs in the Lao WSS sector deals with technical and institutional aspects. Indeed, even in areas where adequate legislation and regulatory policies are in place, they may not be sufficient as they are often inadequately operationalized (Restrepo-Mieth 2012).

IV. Recommendations

5.1. Commercial, financial and economic issues

As showed in part 4.4.a, MIREP credit mechanism is not incentive enough and private investors in the WSS sector are facing constraints for access to finance. The main reason is that the Lao Banking sector remains too "scared" to take the risk of financing infrastructure projects in the WSS sector. Which practical options could be envisaged to address the latter issue?

- *Suggestion 1: Develop discussion with CBs to reduce information asymmetry (Gret 2009)*

PPPs in the WSS sector present high information asymmetries which limit lenders' acceptance to fund them. In reality, water supply concessions are low-risk businesses due to the guarantee of monopoly in the long run (Gret 2009). Thus, enhancing discussion with Lao CBs on the "real" characteristics of PPPs in the WSS sector³² can contribute to encourage them to finance WSS networks by reducing information asymmetry (Ibid.).

- *Suggestion 2: Undertake high-level lobbying with international finance institutions for SME's access to credit (Gret 2009)*

³² Along with SME PDO which is already working on increased coordination with CBs (Gret 2009).

Another way of reassuring the Lao banking system would be to involve international financial institutions (IFIs), such as ADB or IFC, in MIREP credit scheme³³ (F. Naulet 2012). Indeed, IFIs have the financial capacity to invest substantial amounts of money in MIREP guarantee fund, which will in turn reassure CBs and encourage them to take more risks (by lowering the interest rates and increasing the reimbursing period of their loans to small private investors) (Ibid.).

5.2. Legal, regulatory and policy frameworks issues

The analysis of the existing legal, regulatory and policy framework regarding PPPs in the WSS sector in Lao PDR led to the conclusion that there is an urgent need to renew it. The 2 options mentioned below focus on the legal and on the regulatory aspects respectively, as they are expected to be the most urgent issues to be tackled.

- *Suggestion 1: Organize a national workshop involving strategic stakeholders from the local to the global level so as to create a new legislation dealing specifically with PPPs in the WSS sector*

It is acknowledged that a multi-actor concertation would enable a fruitful dialogue between all key stakeholders. On the one hand, the actors responsible for the implementation of the projects at the local level have the opportunity to raise the “on the field” problems that they encountered so that local needs may be better perceived by National Public Authorities (NPAs) and taken into account into the new legislation. On the other hand, NPAs would have the opportunity to better inform local stakeholders of current legislation in place.

- *Suggestion 2: Reinforce WASRO M&E capacities, especially concerning the quality of data collected*

An aspect essential for regulation and which especially needs to be enhanced is the quality of data collected by WASRO (Avrillier 2010). In this regard, it is suggested that WASRO should perform external field audits on PPPs in the long run, as prescribed by the Enterprise Law of 2005 (Article 153) (Ibid.).

In fact, this is M&E skills of WASRO in general which need to be strengthened (F. Naulet 2012). Among other things, a detailed analysis of PPPs performance should be performed and the results diffused at the different levels engaged in the process (from national to local) (Avrillier 2010). Regarding the M&E of water tariffs more specifically, the capacities

³³ Indeed, for the moment, ADB is only lending money to Nam Papas, and not to the private sector (Ibid.).

of WASRO needed to be bettered concern the use of financial analysis tools and of MIREP observatory (F. Naulet 2012).

5.3. Technical, institutional and capacity building issues

MIREP team's assistance and expertise is essential throughout the whole implementation of the projects in order to support concessionaires involved in MIREP who usually lack experience in WSS management. Yet, "this method is not viable since GRET will not be able to carry out this consulting work for the entire duration of the concessions" (Avrillier 2010). 2 ways of solving the latter problem are proposed below.

- *Suggestion 1: Reinforce the role of public authorities in taking up the role of GRET*

Capacities of public authorities, especially of WASRO as it is the key regulatory institution, need to be enhanced so as to enable them to replace GRET in its role of facilitator and regulator of the project (F. Naulet 2012).

It is important to note that GRET is already aware of this issue: among the main changes brought in by MIREP III is the enhancement of DHUP's role in the programme as well as of WASRO's (on M&E and contracting issues especially) (GRET 2012b). Nonetheless, as noted by F. Naulet (F. Naulet 2012), the transfer of capacities from GRET to public authorities remains a real challenge for GRET, especially due to the relatively short time frames imposed by the donors' conditionalities.

- *Suggestion 2: Enable local entrepreneurs to meet one another on a regular basis, either by creating an association of private entrepreneurs or by adapting the Water Works Training Center*

Another way of reducing GRET's centrality in capacity building issues would be to favour the "insourcing" of the reinforcement of small private entrepreneurs' financial and technical skills (Avrillier 2010).

One concrete way of doing so would be to create an association of private water suppliers: it would enable concessionaires to exchange on their respective experiences and to advise one another depending on their most developed skills (management, financial, technical, etc.) (Ibid.). Moreover, it would allow them to be taken more seriously by public authorities, by becoming a real corporation (F. Naulet 2012). Yet, "the previous experiences of such associations in Lao PDR (...) have not proved to be very helpful" and are bound to be very expensive due to high administrative costs (Avrillier 2010).

Therefore, another option, probably more realistic, would be to open the Water Works Training Center³⁴, currently aimed at training Nam Papas' staff only, to small private entrepreneurs (Avrillier 2010, F. Naulet 2012). In addition, the Center's capacities would need to be strengthened since it has not proved to be very effective yet (Ibid.).

5.4. Conclusion

With the recommendations above mentioned, we believe that the phasing out of MIREP would be possible, since:

- (i) The private sector would be strengthened through: (1) better financing mechanisms; (2) an association of small entrepreneurs; and/or (3) a professional training of the entrepreneurs;
- (ii) And the public sector would be more involved thanks to: (1) more consistent legal and regulatory frameworks; (2) the involvement of public funds in MIREP financing mechanisms³⁵; (3) the training of public authorities.

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³⁴ See part 4.4.c.

³⁵ Indeed, in MIREP III scheme, public authorities are expected to invest 5000 USD in the investment fund of each site (Vontobel 2012).

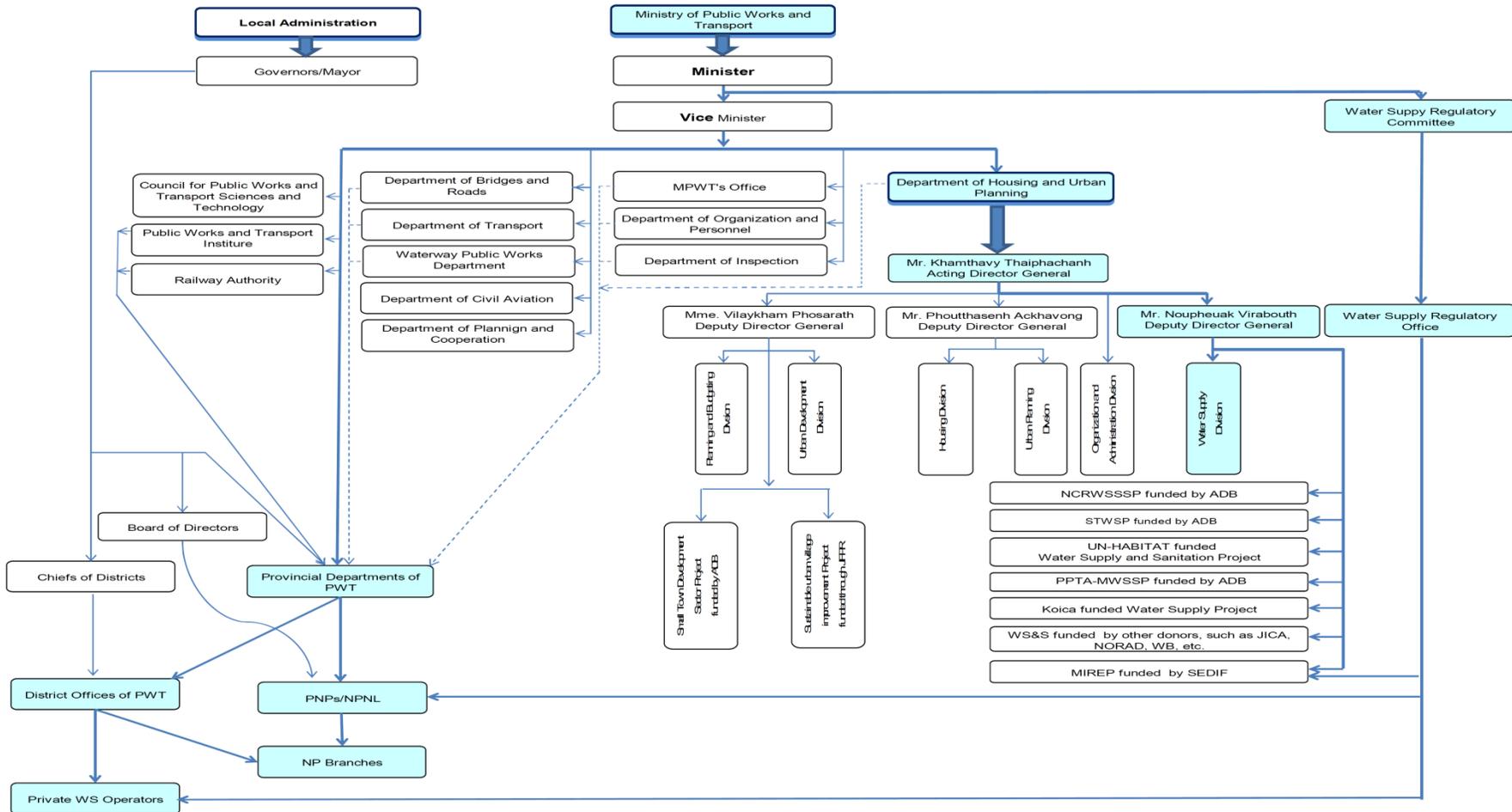
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7. Annexes

- Annex 1: Organization of the Water Supply sector in Lao PDR
- Annex 2: Regulatory powers in the WS sector in Lao PDR
- Annex 3: logframe of the project
- Annex 4: MIREP's main stakeholders
- Annex 5: Diagram of the main stakeholders of Thabok project
- Annex 6: MIREP financing mechanism

Annex 1: Organization of the Water Supply sector in Lao PDR



Source: Mongphachan (2010)

Annex 2: Regulatory powers in the WS sector in Lao PDR

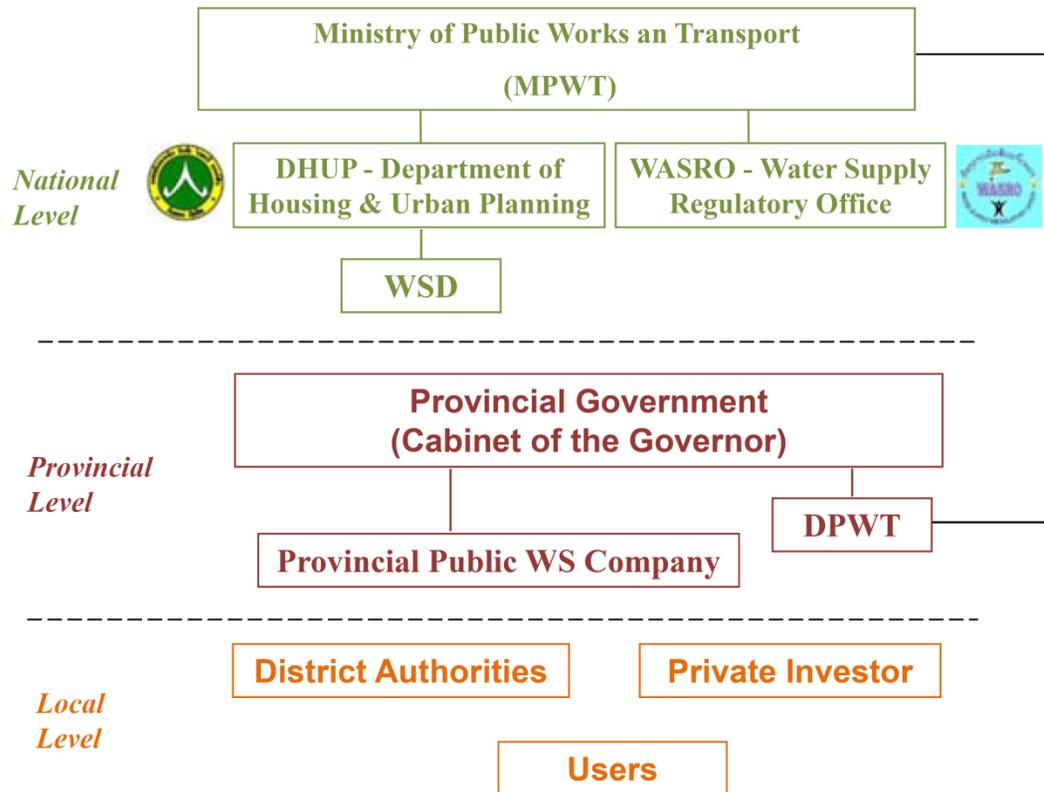
Regulatory aspects	Tariff setting	Quality of service	Quality of water	Customer relations
Monitoring and evaluation				
<i>Collection of data and information</i>	WASRO (receives reporting from NPSEs, but no audit is done).	WASRO (receives reporting from NPSEs, but no audit is done).	WASRO (receives reporting from NPSEs, but no audit is done).	NPSEs maintain a complaints register.
<i>Monitoring the implementation of policies</i>	WASRO (checks compliance with Tariff Policy through its annual reviews). Provincial Governor has final authority.	WASRO (through annual reviews). No detailed targets to apply yet.	WASRO (through annual reviews). Only pH, turbidity and chlorine are tested, no bacterial testing so far.	WASRO consults the complaints register.
Making rules				
<i>Developing new policies</i>	MPWT updates the WS Tariff Policy. WASRO issues recommendations in its guidelines.	WSD (DHUP) WASRO is drafting policies to define performance targets.	MOH WASRO is drafting a ministerial decision on Water Quality Regulations.	PM 191 is very vague. WASRO is drafting guidelines for customer relations.
Conflict resolution				
<i>Sanctions and conflicts settlement</i>	Enforcement notice from WASRO . Sanctions if notices are ignored. Provincial Governor has authority.	Enforcement notice from WASRO . Sanctions if not addressed (but based on limited information).	MOH should be involved.	Dispute between supplier and customers: amicable resolution efforts, then to WASRO , then to provincial court .

Source: Avrillier (2010)

Annex 3: logframe of the project

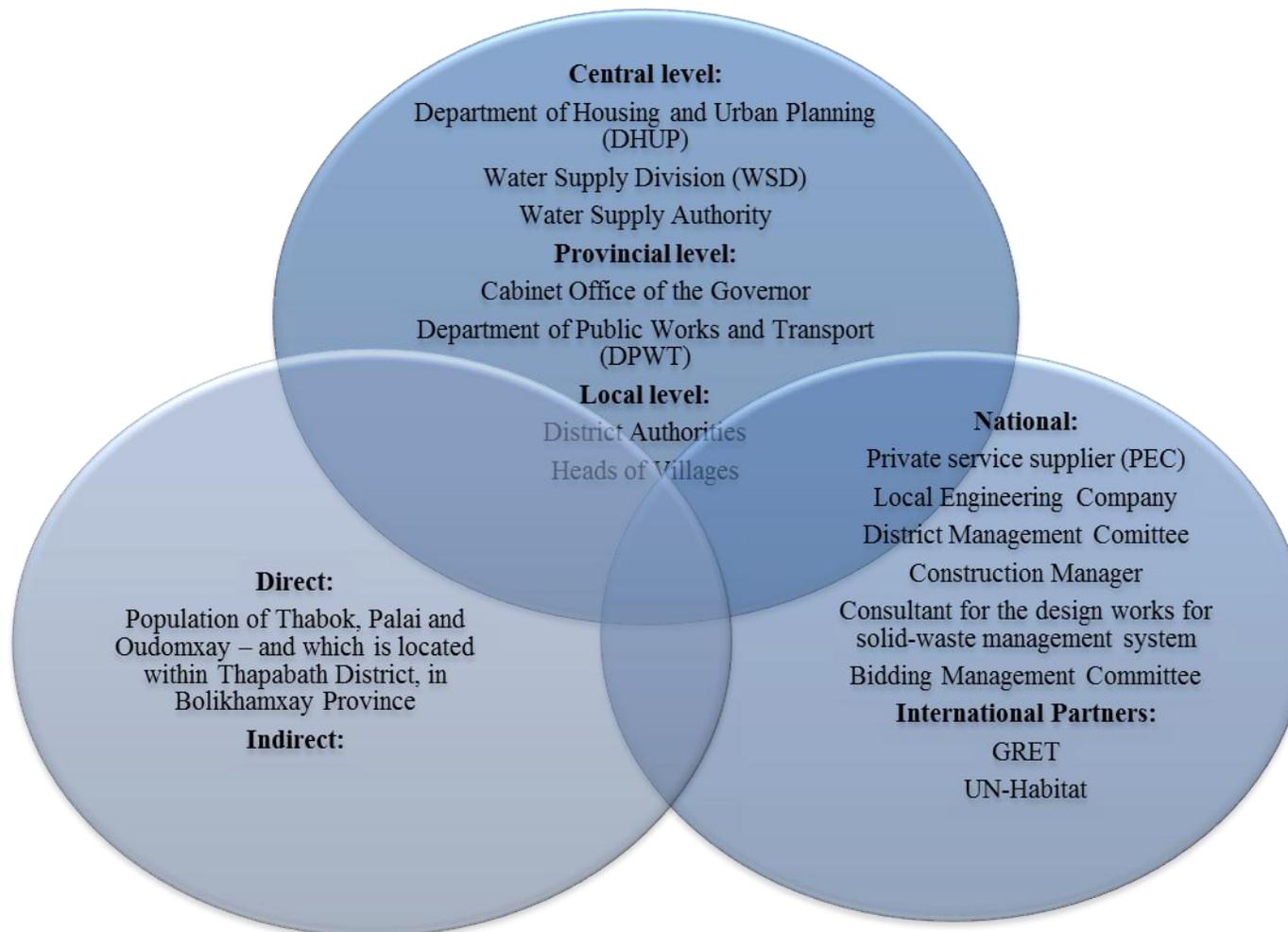
Activities	Timeframe																								Outputs
	2009		2010										2011												
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	
A. Rapid Situation Assessment																									
1. Planning at District level with district leaders and heads of villages	x																								Output A1. Report on planning at district level
2. Identification of poor households through socio-economic survey (definition of poverty criteria, preparation of list of poorest households and assessment of their demands), technical field survey and financial analysis	x																								Output A2. Report on socio-economic field survey, technical field survey and financial analysis
B. Selection of Small-Scale Private Entrepreneur/Investor																									
1. Selection of small-scale private entrepreneur/investor including training on tendering process, preparation of tender documents and bidding process	x																								Output B1. Report on selection of small-scale private entrepreneur/investor including training on tendering process, preparation of tender documents and bidding process
C. Detailed Physical Work Design Preparation and PPP Contract																									
1. Detailed design works including selection of local consulting firm, preparation of detailed designs and validation process with public authorities for small scale water supply.	x																								Output C1. Report on detailed design works for small scale water supply
2. PPP contract negotiation (including training to District authorities and heads of village on concessionaire contracting) and set up of financing mechanisms (subsidy and credit including preparation of Output-Based Aid (OBA) subsidy contract and transfer of the OBA subsidy to provincial water supply and investment fund)	x																								Output C2. Report on PPP contract negotiations and set up of financing mechanisms
3. Design works for solid waste management system					x	x	x	x	x	x	x	x	x												Output C3. Report on final design works for solid waste management system

Annex 4: MIREP's main stakeholders

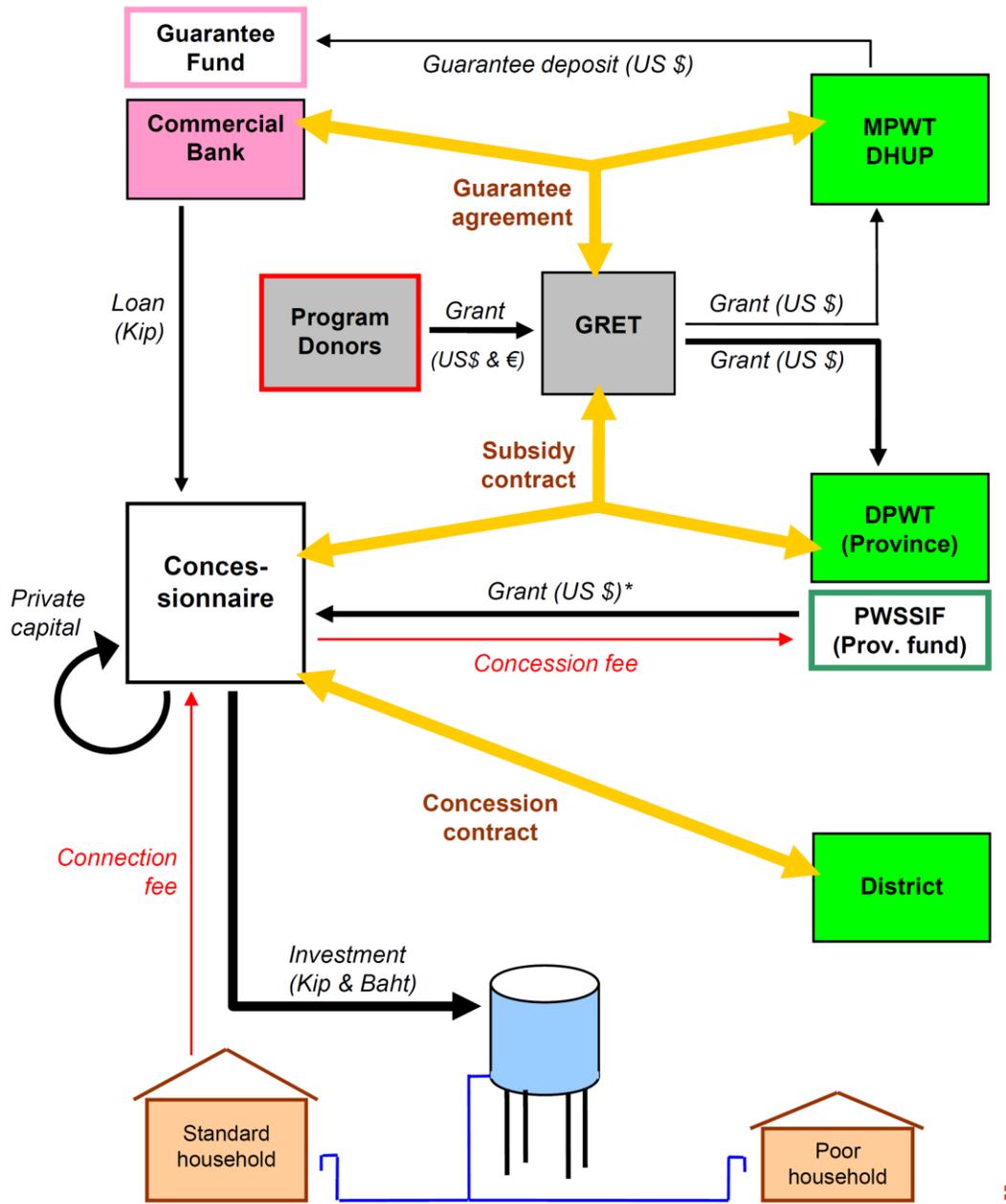


Source: Output F1 – Yearly progress report due January 2011.

Annex 5: Diagram of the main stakeholders of Thabok project



Annex 6: MIREP financing mechanism



Source : GRET (2012b)