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# SUSTAINABLE WATER AND SANITATION SERVICES FOR ALL IN A FAST CHANGING WORLD

# Output-Based Aid for delivering WASH services in Vietnam: Ensuring Sustainability and Reaching the Poor

M. Nguyen, P. Ljung, H. Nguyen

#### **BRIEFING PAPER**

Output-Based Aid is now being increasingly used and is recognized as one of the key financing mechanisms to expand targeted access to basic services for the poor and ensure sustainability. Since 2007, East Meets West (EMW), an international non-governmental organization (INGO) headquartered in USA, has been scaling up the OBA approach in the WASH sector in Vietnam, Cambodia and Laos. This briefing paper is to examine the lessons learned from the implementation of this output-based rural water supply, sanitation, and hygiene programs in Vietnam, the first of its kind in the country.

#### Introduction

In 2007, the Global Partnership for Output-Based Aid (GPOBA)<sup>1</sup>, a trust fund managed by the World Bank, awarded a grant to the East Meets West (EMW) to provide sustainable access to clean water services using output based aid (OBA)<sup>2</sup> to low income rural communities in the central region of Vietnam. In 2009, the project was expanded to include the Mekong Delta where EMW established an innovative partnership with the private sector to build, own and operate village water supply systems. In 2011, the project was successfully completed and demonstrated the feasibility and merits of greater private sector involvement in rural water supply. The success of this project has spurred major interest from donors and governments alike who see OBA as a useful tool to effectively realize water, sanitation and health targets under the MDGs and beyond.

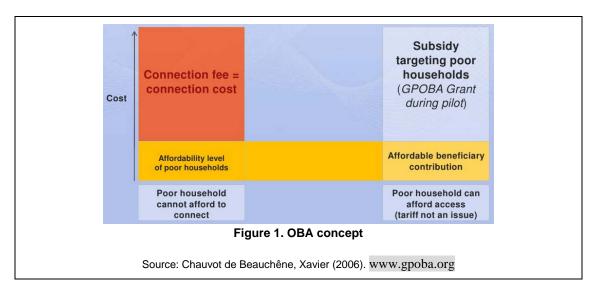
OBA is now being increasingly used and is recognized as one of the key financing mechanisms to expand targeted access to basic services for the poor. EMW is currently scaling up the OBA approach in the WASH sector in Vietnam, Cambodia and Laos with funding from the Bill and Melinda Gates Foundation and Australian Aid. The purpose of this briefing paper is to examine the lessons learned from the implementation of this output-based rural water supply, sanitation, and hygiene programs in Vietnam, the first of its kind in the country.

# Box 1 - East Meets West

East Meets West, an international non-governmental organization (INGO) headquartered in USA, has been operating in Vietnam for 25 years. Since its inception in 1997, EMW's rural clean water program has provided piped water supply to some 77,000 households (around 385,000 people) in the Central Region and the Mekong Delta. Since the Rural Water Supply Development Project was approved by GPOBA in 2007, EMW has received grants based on the output-based aid principle from AusAID for rural water supply and sanitation (USD 1.5 million) and from the Bill & Melinda Gates Foundation for rural sanitation in Vietnam and Cambodia (USD 10.9 million), and from Australian Government Department of Foreign Affairs and Trade (DFAT) for rural water supply and sanitation in Vietnam, Laos, and Cambodia (AUD 10.2 million). As a result, EMW has an extensive and varied experience in designing and implementing incentive-based WASH programs.

# **Defining Output-Based Aid (OBA)**

Improved water supply and sanitation result in community wide environmental health benefits. Public financing is a crucial avenue to stimulate the delivery of these services, however, historically the provision of public subsidies has been poor. Results-based financing (RBF) is an approach to finance basic services that is becoming increasingly popular. One type of RBF known as output-based aid (OBA) tends to be utilized to design financial rebate schemes that incentivize service providers to target poor customers or poor areas. OBA is well-known as a method for improving the delivery of basic services (e.g. water supply, electricity or health care) when the users are not able to pay the full cost of access to service and where performance-based subsidies to complement or replace user fees are justified (see Figure 1).



#### **OBA** core concepts

Given mounting concerns of aid effectiveness, it is critical that subsidies be linked to the actual delivery of services, or "outputs." Accordingly, OBA has six essential components (Mumssen, Y *et.al*, 2010), including:

- 1. Explicit and predetermined subsidies for defined outputs: helps ensure transparency who provides subsidies for what. The pre-determined output level helps to streamline identification of beneficiaries, ensuring resources and services are allocated to targeted beneficiaries.
- 2. Payment on output delivery for increasing accountability: Shifts performance and financial risk to provider, hence making him more accountable.
- 3. Encouragement of innovation and efficiency: Predetermined subsidy paid on outputs instead of contracts for inputs provides incentives for innovation and efficiency; competition or benchmarking proven to lead to value-for-money.
- 4. Mobilizing the private sector: Opportunity to leverage private funding and management expertise.
- 5. Enhancement of monitoring: Tracking the results embedded in the design.
- 6. Increased sustainability of public funding: Explicit recognition and identification of subsidies help reduce economic distortions that traditional subsidies tend to introduce. As accountability for the project increases, so does the oversight for management and operations.

# **OBA Models applied in Vietnam**

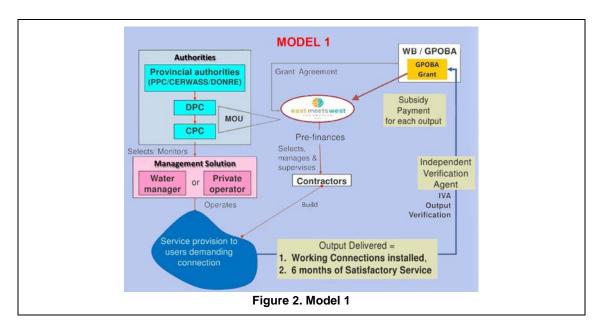
Since 2007, EMW has tried various models ranging from taking full risks to partial risks in working with central governments, local governments, private enterprises, mass organizations, and households. EMW has implemented three OBA models in rural water supply <sup>3</sup> as follows:

- Model 1: EMW acts as the project manager.
- Model 2: Private entrepreneurs are service providers.
- Model 3: Provincial Centres for Rural Water Supply and Sanitation (pCERWASS) are service providers. In sanitation and hygiene, OBA is adopted by utilizing consumer rebates and incentives to reach the poor and achieve open defecation free status (ODF) in project communes:

• Model 4: Consumer rebates and incentives in sanitation.

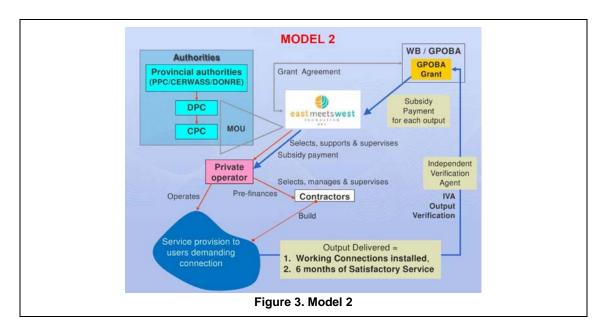
# Model 1 - EMW acts as the project manager

EMW acts as the project manager for construction of water supply facilities, taking performance and financial risk by pre-financing the capital cost and get reimbursed upon independent verification of household connections. GPOBA disburses 80% of the agreed amount for household connections, and 20% for 6 months of satisfactory delivery of services (see Figure 2). Upon completion, these schemes were handed over to Commune People's Committee that selects a water manager or private operator to operate and maintain the water supply schemes.



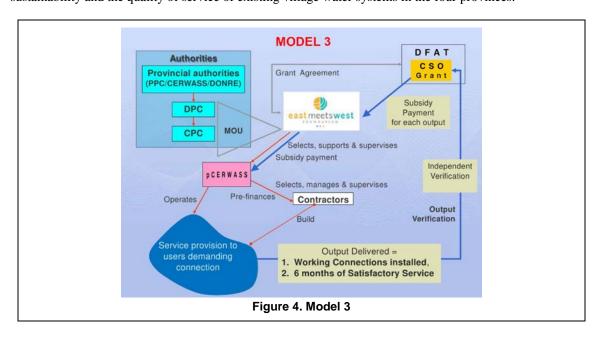
# Model 2 - Private entrepreneurs are service providers

Private enterprises are service providers, pre-finance capital cost, and get partial reimbursements upon verification of household connections. EMW not only acts as a fiduciary agent of donors' resources, but also takes performance and partial financial risks. In this way, EMW mobilizes private sources, passes on part of financial risks and helps upgrade skills of private sector (see Figure 3).



# Model 3 – Provincial Centres for Rural Water Supply and Sanitation (pCERWASS) are service providers

In the most recent Water, Sanitation, and Hygiene Output-Based Aid program (WASHOBA) financed by Australian Government Department of Foreign Affairs and Trade (DFAT), the water supply schemes are implemented by the provincial Centers for Rural Water Supply and Sanitation (pCERWASS) are the key partners, assuming the same role of service providers as the private enterprises did in the Mekong Delta (see Figure 4). It is also structured on an incentive basis with pre-determined reimbursements based on the number of new households connected to systems (and paying for the service). Besides lowering investment costs and increasing connection rates, WASHOBA seeks to improve the technical and financial sustainability and the quality of service of existing village water systems in the four provinces.



# Box 2 - Provincial Centre for Rural Water Supply and Sanitation (pCERWASS)

The national Center for Rural Water Supply and Sanitation (NCERWASS) under the Ministry of Agriculture and Rural Development (MARD) articulates government policy and provides technical guidance to entities in rural water supply and sanitation sector in Vietnam. The provincial Centers for Rural Water Supply and Sanitation (pCERWASSes) are responsible for implementation of rural water supply schemes under governmental programs (e.g. the National Target Program for Rural Water Supply and Sanitation). The pCERWASSes fall under the provincial Departments of Agriculture and Rural Development (DARDs). The provincial People's Committees (PPCs) allocates budgets, approves plans etc. and, thus, effectively control the operations of the pCERWASSes.

#### Model 4 – Consumer rebates and incentives in sanitation

Since 2012 EMW has embarked on a large-scale rural sanitation program in Vietnam and Cambodia. The USD 10.9 Million Community Hygiene Output-Based Aid (CHOBA) program seeks to provide improved sanitation to more than 100,000 poor families in eight provinces in Vietnam over 44 months. Through complimentary actions by the communes—incentivized by EMW—the aim is to improve sanitation for nearly 1.5 million people in Vietnam. The CHOBA program is designed to influence households at critical stages of their decision making process using (see Figure 5):

- An information and education campaign;
- Access to affordable credit (primarily from the Vietnam Bank for Social Policy);
- Supply chain improvement through training of masons; and
- Incentives to poor households, the Women's Union and its volunteers and to communes to participate in the program.

| Local groups<br>educate<br>communities   | Households<br>invest in<br>latrines   | Local masons install latrines  | Results are independently verified                                   | EMW<br>rewarded<br>results   |
|--|---|--|--|--|
| EMW and local partners hold community meetings and public events to educate the community about hygiene and sanitation and build community support for installing sanitary facilities. | EMW and partners connect families to credible sources of financing. Financial incentive encourages families to act immediately. | Workers trained by EMW and its partners build and maintain latrines. Supply chain are strengthened and neccessary building materials made available. | Progress is monitored and latrine installation and use is confirmed. | Households get cash rebate to offset the cost of their latrines. Community volunteers get cash bonus for installation. Communes get conditional cash transfers when they increase sanitation coverage by 30 percentage points or reach 95% coverage. |
| Figure 5. Model 4 - OBA Sanitation Implementation Process  |   |  |  |  |

CHOBA focuses primarily on poor households, the only households eligible for the consumer rebate. As a result, all stakeholders, including EMW get paid only for latrines built by poor households. In addition, local governments (communes) receive conditional cash transfers (CCT)<sup>4</sup> based on their progress towards the goal of 95% sanitary latrine coverage in their commune. These cash payments are earmarked for commune sanitation investments. As investment costs of new sanitary toilets meeting MOH standards typically well over VND 5 million (including the superstructure), the consumer rebate covers on average 5-7% of the cost in Vietnam. Thus, it does not fundamentally change the cost-benefit calculation for the household, it acts primarily as a "carrot" encouraging the household to build now rather than wait. Before payments are made, EMW verifies the latrine and the poverty status for a 30% sample of households.

# Results since 2007

The following are the results achieved in OBA programs in Vietnam:

- 22,900 household connections were completed and verified under Model 1.
- 20,800 connections were completed under Model 2 which mobilized about USD 1 million from private sources.
- As Model 3 has just been implemented in December 2013, the results have not been collected yet.
- 44,000 household latrines were completed and disbursed under Model 4.

Since 2013, the Government of Vietnam has formally supported the scaling up of the OBA approach within the National Target Program for Rural Water supply and Sanitation, the main government vehicle for expanding rural water supply and sanitation services targeting the rural poor.

# **Lessons Learnt**

The following are the key lessons learned that are found based on EMW's operational experiences:

# OBA for rural water supply program

- The OBA approach provides strong incentives to reduce costs and streamline implementation.
- The two-part grant payment ensures that the service provider not only connect households but also operate the system properly so that customers are satisfied with the service and are paying their bills.
- Service quality rather than the tariff level seems to be the main determining factor for households' willingness to pay for clean piped water.
- Private and non-government service providers that do not have robust cash flow or access to reasonable
  financing in the market might find it difficult to take the entire pre-financing risk necessary under OBA.
  This potentially presents a case for advances or interim payments in OBA that need to be evaluated on a
  case by case basis.

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- By its very nature, OBA linked directly to capital costs and completion of certain targets does not address
  the long-term sustainability of village water supply systems—which is a global problem. This issue must
  be tackled not only through traditional capacity building but also through greater attention to asset
  management, such as long-term concession contracts with cooperatives or private operators and adoption
  of a life cost cycle approach.
- EMW conducted several customer satisfaction surveys (CSS) shortly after project completion in 2011 and another in 2013. The CSS results showed that private operators in the Mekong Delta have higher labor productivity, lower water losses, better collection performance, and fewer system breakdowns, attend to repairs more quickly and provide for greater reserves to meet future repairs compared with schemes owned by Commune People Committee (CPC), the local authorities. Thus, for future sustainability and performance of the rural water supply sector, governments as well as official donors should enhance and expand the role of the private sector.

# OBA for rural sanitation and hygiene program

- The OBA sanitation model is working effectively in terms of reaching the poor, and the consumer rebate is an essential trigger to encourage the poor to build hygienic latrines "not later, but now".
- The operational experience confirms that the program is scalable and cost efficient.
- The availability of microcredit enables the poor to move up the sanitation ladder. It appears that the decision to borrow for hygienic latrines is both rational and conscionable. The rationality of the decision to build a hygienic latrine lies in the sustainability benefits and consumer preference towards the hygienic options. As long as a loan is appropriately structured coupled with an effective hygiene campaign, the sustainability benefits of a hygienic latrine (vs. a low cost option) outweigh the burden of the debt.

#### References

Tremolet S., Evan B. and D., S.-J. (2010) *Output-Based Aid for Sustainable Sanitation*. GPOBA Working Paper Series. The World Bank, Washington DC, USA.

Chauvot de Beauchêne, Xavier (2006) *Designing and Implementing an OBA project in the Bank/GPOBA Training Workshop Presentation*, 29 July 2006. The World Bank, Washington DC, USA. www.gpoba.org.

Mumssen, Y., Johannes, L., and Kumar, G. (2010) *Output-Based Aid: Lessons Learned and Best Practices*. The World Bank, Washington DC, USA. http://www.gpoba.org/gpoba/ebook

# Note/s

- <sup>1</sup> The Global Partnership on Output-Based Aid (GPOBA) was set up in 2003 as a World Bank-administered donor-funded pilot program in order to test the OBA approach with a view to mainstreaming this approach within the International Development Association and with other development partners.
- <sup>2</sup> Output-Based Aid (OBA) is a results-based funding mechanism where the disbursement of public funding (donor or government) is tied to the successful delivery of pre-defined outputs.
- <sup>3</sup> Regarding the three OBA models in rural water supply, the Memorandum of Understanding (MOU) to be signed between EMW and the local authoriries (e.g. Provincial People's Committee (PC), District PC, and Commune PC) prior to implementation of each water scheme describes their respective roles and responsibilities. By signing the MOU, the local authorities agree to provide the project at no cost, including: all land required for the water supply system, legal access to raw water sources, and access to reliable electricity; active support for project promotion in the beneficiary communities and so on.
- <sup>4</sup>Conditional-cash transfers (CCTs) are other forms of results-based payments, are provided to the purchasers of the services (typically poor households). In sanitation, the distinction between CCTs and OBA is more difficult to draw than in other sectors given that households can either be service provider themselves (e.g. when they construct and empty their own latrines) or the purchaser of the service (e.g. when calling on an entrepreneur to empty their latrines).

#### Contact details

Minh Chau Nguyen Per Ljung

Dang Thai Mai Street, Hanoi, Vietnam Dang Thai Mai Street, Hanoi, Vietnam

# NGUYEN, LJUNG & NGUYEN

Tel: +84438347790 Tel: +84438347790 Fax: +84437624136 Fax: +84437624136

Email: Minhchau.nguyen@eastmeetswest.org Email: Per.ljung@eastmeetswest.org

Hong Hanh Nguyen

Nam Dong Street, Hanoi, Vietnam

Tel: +84982078820 Fax: +84437624136

Email: hanh.nguyen1@eastmeetswest.org