

Financial sustainability of a newly formed enterprise: A case study in Vietnam

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Financial sustainability creates economic viability and autonomy in operating enterprises. This paper shares the experiences of a newly formed Vietnamese sewerage and drainage enterprise in its effort to achieve financial sustainability through creation of viable revenue policy. The needs, planning and challenges faced in implementation of viable revenue policy are discussed within the Project objective of full cost recovery. The attainment of financial sustainability, through full cost recovery, will allow the new enterprise the freedom to determine the future of its budgetary and spending policy.

Introduction

The Buon Ma Thuot Sanitation Sub-Component (hereinafter referred to as “the Project”) is a Danida-funded urban sanitation intervention located in the central highlands provincial capital city of Buon Ma Thuot City, Vietnam. Work on the Project commenced in late April 2001 and has been ongoing for the past 42 months.

Danida’s development objective for the Project is stated as follows:

“Improved living conditions for people in urban areas by an increased service level with sanitation provided in an environmentally, socially and financially sustainable manner, affordable to the poor.”

As clearly stated in the Danida’s development objective, financial sustainability plays a key role in the success of the Project. The purpose of this paper will be to present the Project’s experience as a case study for examining the need for financial sustainability and cost recovery, the planning for revenue streams and the public and governmental constraints facing implementation of revenue policy.

The Buon Ma Thuot Project is similar to many other Overseas Development Assistance (ODA) projects in Vietnam and elsewhere in other developing countries. The Project receives substantial (80%) donor support (in this case from Danida), which facilitates the planning, design and construction of necessary infrastructure. The Project’s constructed investment will include 50 km of sewerage collection pipes, 5500 household connections to the new separate sewerage system, one central sewerage pumping station, one central wastewater treatment plant, 15 km of storm water drainage pipes and an on-site sanitation program, with the completed works serving over 77,000 people in both the urban and

peri-urban areas. The total Project value, inclusive of the 20% Vietnamese Government contribution, is DKK 126.2 million (USD 21.7 million).

In order to optimally manage and operate the constructed investment, the Project has established a new Wastewater & Sanitation Enterprise (WW&SE). Since the earliest stages of the Project, there has been much focus placed on the financial sustainability of the new WW&SE and great effort spent in creating favorable revenue conditions from which the new enterprise can be realized. The new WW&SE was formed under the operating “umbrella” of the Urban Management Environmental Sanitation Company (UMESC), the recipient organization for the Danida grant funds.

The need for financial sustainability

Once the Project has been planned, designed and constructed, the new WW&SE shall commence management and operation of the constructed works. However, this can only be achieved by first creating a viable revenue stream which will financially sustain the new enterprise by providing the funding for cost recovery. Without a viable, functioning and politically acceptable revenue stream, the newly formed WW&SE will simply become yet another subsidy-dependent ward of the State. At a time when the Vietnamese Government is placing increasing pressure on SOE’s (State Owned Enterprises) to become financially sustainable, such dependence on subsidy funding is simply not an option. The new enterprise must be established with a viable revenue stream to facilitate financial sustainability. Independent from Vietnamese Government subsidy, the new WW&SE will enjoy much greater autonomy over budget making and expenditures. The decision to make necessary capital investments and to allocate adequate funds for operation and maintenance will now be made at the enterprise level, instead of being decided by other government agencies. This is logical, as such business decisions should be made

by those people who are most knowledgeable of the specific business enterprise.

Planning for a viable revenue stream

The Project experience in Buon Ma Thuot has shown that planning for financial sustainability must begin early, as developing a strong consensus for such politically sensitive actions such as fee assessment will prove to be time consuming. The Project has achieved its current goals only through continuing productive discussion and consensus-building with local relevant authorities. The first revenue workshop with relevant authorities was held in early April 2002, over 30 months ago.

In terms of financial planning, it is important to first clearly determine the budgetary requirements of the new enterprise for the first ten years of operation. By defining the organizational structure for the new enterprise, the manpower budget can be determined. Operation and maintenance costs can be estimated. Replacement cost for equipment can be scheduled, based upon estimated life, and budgets can be established for these expenses.

For the Project, it is estimated that the first full year operating budget for year 2006 will be USD 138,000. This estimate specifically excludes depreciation of fixed assets, as those assets will remain attached to the Provincial Authorities and not the new enterprise. Only short-term replaceable assets, such as pumps, vehicles and other M&E equipment will be considered as depreciated assets in the new budget. This is a key factor in financial sustainability, as the full depreciation costs of all fixed assets can place an unreasonable strain on the budget. Table 1 shows the projected WW&SE budgets for the years 2004 through 2009. During this time, the budget will increase as the responsibilities and activities of the WW&SE increase with the completion of the infrastructure scheduled for year 2007.

Once a budget is established, it is necessary to identify appropriate sources of revenue, sources which can be readily identified by the benefits they receive from the Project. The Project serves two basic public needs. First, the Project is a drainage project, which will provide relief from flooding for all the residents of Buon Ma Thuot City. Thus, all city residents will receive benefit from the drainage aspects of the Project. Second, the Project is a sewerage project for the 5500 households connected to the new piped sewerage system. Each of these connected households will receive benefit from the sewerage aspects of the Project. Thus, two benefit-receiving revenue sources will be established, revenues which are drainage system-based and revenues which are sewerage system-based.

Various models have been created to express a fair and equitable balance between the revenue derived from drainage systems users and the revenue derived from sewerage system users. An "Ability and Willingness to Pay Survey" was carried out by the Project in late year 2002, with over 700 households surveyed. Based upon that survey, numerous meetings with local authorities and a financial evaluation

Table 1. Projected Operating Budget of the New Enterprise

O&M Cost (in USD x 1000)	2004	2005	2006	2007	2008	2009
1) Wastewater O&M	24	35	52	60	60	60
2) Drainage O&M	14	21	31	34	38	41
3) OH cost (20% * [(1) + (2)])	8	11	17	19	20	20
Total O&M Cost	46	67	100	113	118	121
Depreciation of replaceable assets	16	27	38	38	38	38
TOTAL COSTS	62	94	138	151	156	159

performed by specialists consultants, it was agreed that the revenue should be derived from two sources of fee, with both sources collected as surcharges and fees attached to the water bill, proportional to actual water usage.

All water supply system users would be charged a "Drainage Surcharge" equivalent to 10% of the water bill amount, to pay for benefits received from the use of the new drainage system infrastructure. Currently 20,000 customers are connected to the water supply system. The current income associated with this Drainage Surcharge is estimated to be USD 70,000 annually. This amounts to a Drainage Surcharge fee of USD 0.30 per month for the average water supply system customer, based upon an average consumption level of 23 cubic meters per month. As the water supply system customer base will continue to be expanded in the future, the revenue source for drainage will also expand.

For sewerage system users, it is proposed that the 5500 customers connected to the new piped separate sewerage system would be charged a "Wastewater Fee" equivalent to 20% of the water bill amount, to pay for benefits received from the use of the new sewerage system infrastructure. This amounts to a Wastewater Fee of USD 0.66 per month for the average water supply system customer connected to the sewerage system. By year 2008, when all 5500 customers will have been connected, the annual revenue generated by the Wastewater Fee will be USD 44,000.

It should be noted that the current 5500 connected households represent only the initial phase of Project development. The sewerage system has been designed to facilitate expansion to over 17,000 households in the future, providing the sewerage system has proven itself to be financially sustainable.

The projected revenue streams for Drainage Surcharge and Wastewater Fee are shown in Table 2, for years 2004 to 2009. The table also shows both the annual and accumulated surplus (and deficit) for each year. Surplus funds can be utilized to support further capital investment in the sewerage and drainage system as well as to provide a reserve for funding unplanned, emergency repairs or maintenance.

Constraints to financial sustainability

Constraints to financial sustainability can originate from two sources. First, there may exist resistance to implementation of revenue policy from the customers to be served. No one enjoys paying increased fees for public utilities and public authorities often resist taking responsibility to impose such fees, due to the unpopularity of such action. This resistance can only be overcome by a long-term program of education and awareness of all parties regarding the benefits of Project and through a realization of ownership and financial responsibility by the beneficiaries.

Second, there may exist in central government certain regulations, which actually constrain the development of sound financial policy. Whereas the Government of Viet-

nam has correctly recognized the importance of financially sustaining the new infrastructure for sewerage and drainage through creation of a suitable framework for revenue, these well-intentioned efforts have been executed without proper consideration for the actual costs of operating and maintaining sewerage and drainage work. The resulting central government use of restrictive tariff limitations on revenue, imposes serious constraints to local revenue policy. Such restrictions can lead to perpetual subsidy by local government, thus placing in jeopardy the opportunity for financial sustainability (and independence) of the new enterprise.

Table 2.
Projected Budgets and Revenues of the New Enterprise

Budgets/Revenues (in USD x 1000)	2004	2005	2006	2007	2008	2009
Budgets (including deprec. replaceable assets)	62	94	138	151	156	159
Revenues						
1) Drainage surcharge (WSC – 10%)	81	89	98	108	118	130
2) Wastewater fee (WSC – 20%)	2	15	30	42	44	44
Total Revenue	83	104	128	150	162	174
Annual Surplus (Deficit)	21	10	(10)	(1)	6	15
Accumulated Surplus (Deficit)	25	35	25	24	30	45

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It is important that central government policy establish the mechanism for sewerage and drainage companies to impose fees to the beneficiaries of the infrastructure. However, the amounts of the fees should not be dictated at the central government level, but instead be determined by the operating authority, based upon the actual operation and maintenance costs. It is only then that an appropriate revenue stream can be developed to facilitate full cost recovery, allowing the enterprise to become financially sustainable. Local sewerage and drainage enterprises must be allowed the flexibility to

Implementation of revenue streams

When the planning and consensus-building with local relevant authorities has been achieved, then the agreed financial revenue policy can be implemented. Effective 1 August 2003, a Drainage Surcharge, equivalent to a 10% surcharge on current water rates, was integrated into the current water pricing structure to be collected by the Buon Ma Thuot Water Supply Company. This was an important first step in achieving financial sustainability for the new WW&SE.

The proposed Wastewater Fee of 20% of the water bill amount will only be assessed on those households who have already been connected to the piped separate sewerage system. It is envisioned that the Provincial authorities will issue the decision for establishment of a Wastewater Fee in the second quarter of year 2004. Based upon that decision, the Wastewater Fee will then be implemented in the third quarter of year 2004, given the commencement of construction of household connections to the sewerage pipeline collection system.

Conclusions and recommendations

Financial sustainability of the new Wastewater & Sanitation Enterprise can be achieved only through implementation of viable revenue policy. For the Project, this revenue policy will be achieved through implementation of two revenue streams as follows:

1. “Drainage Surcharge” of 10% (of current water bill) assessed on all water supply system customers. (Implementation commenced 1 August 2003).
2. “Wastewater Fee” of 20% (of current water bill) assessed for only those households connected to the new piped sewerage system. (Decision by the Provincial authorities expected in Q2 2004, with implementation commencing Q3 2004).

The Drainage Surcharge will result in a cost of USD 0.30 per month for the average water supply system user.

The Wastewater Fee will result in a cost of USD 0.66 per month for the average water supply system user connected to the piped separate sewerage system.

The above revenue policy shall result in a positive cash flow by the year 2008. Subsequent fiscal surpluses shall be utilized for increased investment in the sewerage and drainage system and for the creation of an emergency reserve fund. The projected WW&SE budgets and revenues are shown graphically in Figure 1, along with the resulting surpluses (and deficits)

Planning for the identification and implementation of revenue sources must commence early in the Project formation, as the process of achieving agreement with relevant local authorities will take considerable time and effort.

Financial sustainability is one of the key parameters used to judge the success of the Project, and this financial success

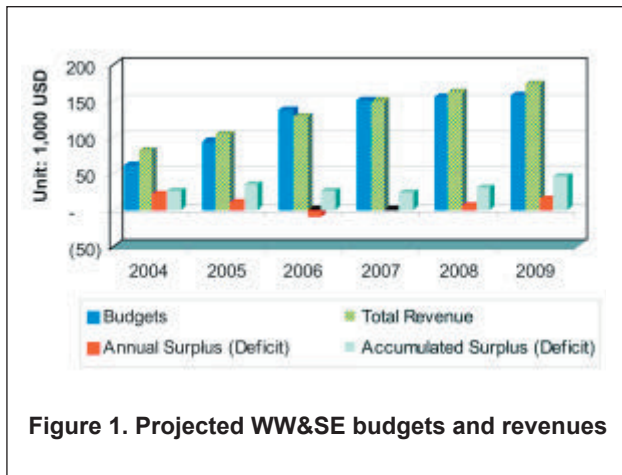


Figure 1. Projected WW&SE budgets and revenues

will create the necessary enthusiasm with the local authorities to further expand the sewerage system to serve additional customers. The initial 5500 connected households represents only a small percentage of the potential customer base, providing the investment has proven itself to be financially sustainable. Ultimately, the sewerage system has the capacity to be expanded to over 17,000 households. Expansion on this scale will surely provide visible improvement in the sanitary environmental health of the City.

It is hoped that through careful planning of appropriate revenue policy, the new WW&SE will achieve financial sustainability. The autonomy created by such financial sustainability will allow the new WW&SE to determine its budgetary and spending policy and future. The Buon Ma Thuot Project is presented as a test case, with the outcome (and success) to be determined in future years to come.

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