Assessment Report on Cost of Providing Municipal Services

Municipal Finance and Management Component
Bhutan Second Urban Development Project (BUDP-2)

Contents

Acronym

Acronym	Description
COA	Chart of Accounts
FY	Financial Year
HR	Human Resource
IT	Information Technology
MoF	Ministry of Finance
MoWHS	Ministry of Works and Human Settlement
NLC	National Land Commission
Nu	Ngultrum (Bhutanese Currency)
O&M	Operation and Maintenance
PT	Phuentsholing Thromde
RGoB	Royal Government of Bhutan
TT	Thimphu Thromde
ULB	Urban Local Body

Background

The Royal Government of Bhutan (RGoB) has secured an IDA credit to (a) strengthen municipal management systems starting in Thimphu and Phuentsholing and (b) improve infrastructure services in northern Thimphu. Accordingly, the Bhutan Urban Development Project II (BUDP II) has the following components:

a. Component #1: Municipal Finance and Management
b. Component #2: Thimphu Northern Area Development
c. Component #3: Capacity Building

This consultancy is being implemented by the Department of Engineering Services of the Ministry of Works and Human Settlement (MoWHS) in close consultation with Thimphu and Phuentsholing Thromdes and the Ministry of Finance (MoF).

Component 1 (Municipal Finance & Management) aims at strengthening the institutional systems and processes of the two city corporations of Thimphu and Phuentsholing to enable them to function effectively as efficient, transparent and accountable urban local governments. The report would focus on formulating options for a more coherent policy framework to strengthen public financial management in Thromdes. Through this component policy and programmatic support is being provided to the Ministry of Finance and Ministry of Works and Human Settlements on local government finance policy reforms including assistance to Thromdes in preparation of multi-year budget and developing plans and guidelines for expenditure rationalization and enhanced local revenue mobilization.

This report would enable the Thromdes to create awareness on importance and uses of having accurate service cost information and ascertaining the cost of providing municipal services. Suitable formats and reports are also enclosed to enable the Thromdes to monitor the cost of providing services and income expenditure gap.

Introduction

One of the prime reasons for the poor state of urban infrastructure services in most cities of developing countries is the inability of urban local bodies (ULBs) to efficiently price the services that they provide to the consumers. The issue of recovering costs adequately in order to sustain urban infrastructure services has received some attention in the recent years, as the cost of producing these services is no longer economical. The provision of municipal services is increasingly becoming costly and complex and municipal bodies are not able to recover the costs adequately due to lack of pricing policies and inefficient cost recovery mechanism, resulting in the neglect of services and maintenance of assets. The declining state of assets results in poor level of services which leads to unwillingness to pay among the consumers that further affect the asset formation for providing municipal services.

In summary, these result in the formation of a vicious circle of poor civic infrastructure and inadequate cost recovery, thereby perpetuating the decline of infrastructure asset service life, quality and coverage. The situation referred above is also attributed to the lack of commercial orientation of the municipalities towards the services that they provide. Even if an urban infrastructure project is unable to recover the capital costs initially, it should be able to generate enough revenues to fund its recurring costs of O&M. Therefore, it is important that the Thromde (or the municipality) shall levy user charges appropriately to recover the costs to local government or its agencies so that the resources mobilised are adequate to meet the expenditure commitments.

It is significant to mention that municipal infrastructure services provided by the Thromdes have certain characteristics similar to the public goods/services that make them different from private goods/services. Therefore, the general economic criteria of pricing of commodities do not apply for urban services. The goods and commodities that are marketable are usually priced on the basis of the equality between their level of demand and supply. Such kind of pricing system cannot be exercised by the Thromdes for providing basic municipal services mainly due to their characteristics of non-excludability and externality. Thus, most of the developing nations including South Asian region do not follow any pricing policy for urban services and most urban local bodies or other agencies concerned charge a very minimal price from the beneficiaries, which in no way even near to cost for provision and operation and maintenance of these services. Furthermore, most municipal services such as water supply are the basic need for the survival of human kind, and need to provide by the local body concerned irrespective of any charge or payment being paid by the consumers, it is difficult to adopt any pricing policy to recover the cost of the service.

In recent years, however, there was much discussion on the importance and role of cost recovery in the provision of urban infrastructural services. The genesis of the discussion lies in the fact that under-pricing of urban services or free provision of services, particularly water, whether it is part of a conscious policy or just a practice, has caused serious damage both to the consumers and producers of water and other basic urban services, which affected in poor level of services and reduced incentives to expand the spatial coverage of services. The primary rationale for the levy of user charges to adequate levels is to provide financial stability and effective recovery of all costs associated with a particular civic urban service. Such financially viable user charges may even generate resources for expanding or upgrading the service. Further, due to financial stress on the urban local bodies to provide basic services on the one hand and changing profile of consumers demanding quality services on the other, it is appropriate that private sector should participate in the provision of these services. In that

case, projects for urban services should be made commercially viable for the private sector, which calls for market-based mechanisms in the provision of these services. Thus, it has become imperative to work out cost estimates for provision and operation and maintenance of various municipal services with a view to design a proper pricing policy to charge for the services to make the development in this sector self-sustainable.

Likewise, in other urban local bodies (ULBs) of the world, Thromdes in Bhutan also provide a wide range of urban infrastructure services to their citizens. It includes both core municipal services such as water supply, sanitation, sewerage, drainage, street lighting, roads and solid waste management; and other services/amenities/facilities like parks, play grounds, crematoria, recreation centres, etc. The mandate for the delivery of these services as well as the authority to recover costs associated with them is also provided in Constitution of kingdom of Bhutan and other concerned legislations. Under Article 24 of the Constitution of Kingdom of Bhutan and Section 64 of the Local Government Act of Bhutan, 2009 (LGA), Thromdes are entitled to levy and collect appropriate taxes, fees, tolls, duties, fines etc. in accordance with such procedure and ensure that the charges are not excessive, oppressive, not contrary to law, and not higher than the cost of providing the most efficient services subject to limitations as may be provided for by the law/Parliament.

However, the recovery of costs incurred in the delivery of the services is not adequately planned in the current system and the user charges are not fixed on any economic/financial principles, which affect the financial self-sufficiency of services delivered. On the basis of discussions with the officials concerned of TT and PT and scrutiny of available records, it has been observed that presently there is no system to assess the cost of various services provided by the TT and PT. Records are not being maintained by the Thromdes to examine the cost determination factors in various services or even to analyze the receipts and expenditure under each of the service head.

Since in the present environment, it is not possible to work out the cost of any service, user charges are being fixed without any economic and financial considerations. For example, base water tariff as reported, has been decided in 1996 on the recommendations of an expert. However, the basis of calculation or components of water tariff are not available with the Thromdes to examine the cost elements in it. Thromde is said to revise the water charges in force without any set pricing policy or tariff designing system. However, in order to revise the tariff, Thromdes require prior approval from the Ministry of Finance, RGoB (Thromde Finance Policy, 2012).

In the absence of data on cost of services or even data on cost recovery, an attempt has been made to work out the revenue income - expenditure differential for TT and PT with a view to suggesting and support cost efficiency guidelines.

Table 1: Revenue Income – Expenditure Differential in TT for 2013-14

Components for Thimphu Thromde	Amount (Nu)
Collection from Tax Collection, Other sources and sale of items	9,78,42,493
Expenditure for providing Municipal services	21,87,57,286
Income – Expenditure Differential	-12,09,14,793
Percentage (%) Recovery of Revenue over Cost	44.73%

Table 2: Revenue Income – Expenditure Differential in PT for 2013-14

Components for Phuentsholing Thromde	Amount (Nu)
Collection from Tax Collection, Other sources and sale of items	4,59,95,804
Expenditure for providing Municipal services	6,20,10,956
Income – Expenditure Differential	-1,60,15,151
Percentage (%) Recovery of Revenue over Cost	74.17%

* The information in Table 1 & 2 is taken from the Comprehensive Financial Statements prepared under BUDPII for TT and PT for FY 13-14

Data in the tables above indicate that Thromdes are heavily dependent on the RGoB funds even to meet their revenue expenditure. However, such dependence on Intergovernmental Fiscal Transfers will not be tenable in the long run, given that the RGoB is contemplating of phasing out the grants and subsidies gradually particularly for the recurrent expenditure needs of the Thromdes. Therefore, it is necessary for the Thromdes to enhance their revenue generation capabilities by implementing an effective and efficient pricing/user charges system to charge for the services. To implement such as a policy decision, they first require working out the cost of various services provided by them.

Cost Estimation

Since Thromdes of Bhutan have no guidelines or pricing policy for tariff fixing or user charges of municipal services provided by them, an attempt has been made to suggest guidelines and templates to work out the cost of various municipal services. This will not only create the awareness amongst the policy makers and Thromde officials of the importance of the having cost information of different municipal services for different uses but also help them in effective decision making and contributes to improved planning, implementation, and monitoring process. Templates and step by step guidelines suggested in the following paragraphs could be used as reference by the Thromdes to compute the cost of municipal services keeping in view the local socio-political and economic environment and such other compelling factors.

We have identified following services for Cost recovery report:

a. Property Tax (Core Services)
b. Building Plan Process Fees
c. Water Supply Services
d. Rental Income (Industrial)
e. Miscellaneous (Others To be specified as identified by the Thromde Management)

While estimating the cost of any service, Thromde need to look into:

a. Cost of all resources used to provide the service rather than expenditures made to operate department responsible for the provision of that service;
b. Cost includes all costs of providing the service, and not just those found in the budget or financial reports of the specific department responsible for delivery of the service;
c. Cost includes the cost of the resources used to provide a service during a given period of time, regardless of when cash disbursements are made to purchase these resources.

Efficient cost management system helps the Thromdes and policy makers with information they can use to make better management decisions in different areas of urban services management. Estimation of cost in providing various municipal services is an important component of effective decision-making process in order to understand what would be the cost of various services provided by the local body; how to make the tariff policy, how to bring the efficiency in cost of services and such other factors. Some of the advantages of the cost estimation are:

a. Analysing the efficiency of Thromde services: Service efficiency means providing the service at lowest possible cost. To analyse it, ULBs can be divided on the basis of level of services delivered and cost of providing them. Inter and intra city variations in the cost of various municipal services suggest the efficiency level of various local bodies in delivery of municipal services. Thromdes could analyse the reasons for such variance for bringing the efficiency in cost of municipal services.
b. Setting user charges/tariff for services: It will help Thromdes to decide the level of cost recovery which they are looking for in rendering a service. However, cost is only one aspect of what should be a multifaceted decision-making process. Other factors to be considered in any pricing decision are the directness of the benefit received; the existence of other, non-paying beneficiaries; the equity of the price; the desirability of encouraging consumption of the service etc.
c. Choosing among alternative methods of providing services, such as out sourcing, contracting out, entering into a concession agreement, or establishing separate municipal entities. For example, if a municipality wants to outsource a service, it must know its own cost for rendering the service so that it is able to compare this with the costs proposed by the private sector. If its own cost is less than those of the private sector, it would make no sense to outsource the service.
d. Explain and publicly account for the actual costs of the service: Cost estimation will help in explaining to the citizens how much a delivered service cost which it will equip them with additional knowledge for taking more informed decisions during their direct involvement in the governance of a municipality. Cost estimation may provide realistic information to citizens as well as respond to specific expectations and suggestions of the public.

Calculating the cost of a service is very critical and comprehensive exercise, and requires efforts to include: on-site costs of service, offsite costs of infrastructure; extensions to trunk infrastructure; costs of providing social and community services; and administrative overheads. Furthermore, the actual costs of an identical level of service may vary considerably across Thromdes due to variety of reasons, primarily due to variation in input costs. The costs also vary with population density i.e., a low-density population may require less infrastructure services than a high-density one, but fixed costs for providing public infrastructure services do not fluctuate proportionately. Capital costs will vary with the age of capital assets because of inflation and fluctuations in interest rates attached to any loans (when the capital is financed through loan or loan/grant mix). The typical costs that are incurred in producing goods/ services:

Elements of cost	**Definition/ coverage**
Costing	The process of defining a service and establishing the cost of providing it.

Direct cost	A cost that can be assigned specifically to a particular service. Direct costs typically include salaries and wages, repairs and maintenance and those general expenses (such as transport costs, purchase of goods and services and direct administration costs) directly associated with rendering the service.
Indirect cost	A cost necessary for the functioning of the organisation as a whole, but which cannot be directly assigned to any one service.
Marginal cost	The increase in total cost associated with an increase in the amount of service provided.
Unit cost	The cost of production of one "unit" of a given service.
Total cost	The sum of all costs, direct and indirect, associated with the provision of a particular service.

Process to be followed:

There are three major steps which need to be followed in the process of calculating the cost of any service. Following table will illustrate the process:

Process	Key Tasks (T) involved	Comments, if any
Step 1: getting organized	1. Defining the service 2. Defining the costs 3. Selecting the units of service 4. Collecting cost data/information	To specify which service or services are to be priced for which costs estimates are needed?
Step 2: calculating costs	1. Calculating direct costs 2. Calculating indirect costs 3. Total cost 4. Marginal cost	Data to be used to calculate the various costs to work out the total costs of a service. Unit cost or marginal cost of a service could be worked out using this data.
Step 3: using service cost information	1. Analyzing the efficiency of municipal services 2. Making budget decisions 3. Setting tariffs 4. Selecting alternative methods for delivery of municipal services	Cost information need to be used to take the policy and management decisions in pricing of services and cost recovery mechanism.

Getting Organised for Cost Assessment

There are four tasks involved in this process. These are:

a. **Defining the service:** As a first step in computing the cost of any service is to take the decision which service or services are to be coasted. Services identified include Property Tax, Building Plan Process Fee, Water Supply Services, Rental Income (Industrial) and Miscellaneous.

b. **Defining the costs:** The next step is to define the purpose of costing. It is essential as for different uses; different types of cost need to be calculated. For example, table below illustrates the types of cost analyses by giving the example of water supply.

Nature of cost	Issue	Explanation
Total Cost	What is the cost of all resources used to provide a particular service?	Total cost includes both direct and indirect cost to the Thromde to provide water supply to the consumers.
Unit Cost	What cost should be the basis for setting fee/ charges?	The cost per kiloliter of water sold.
Marginal Cost	What would it cost to expand the service?	The additional cost of expanding the water service to a new house (incremental cost).

c. Selecting units of the service: Once the costs and objective of the costing of the service identified, it is significant to give a thought that how the output and cost of the service will be measured. Measures of output and cost vary with the nature of the service.

Quantifying service units is necessary for measuring the delivery of services for efficient service delivery. Table below provide examples of output and unit cost for different nature of urban services.

Services	Output	Unit Cost
Water supply	Total kiloliters water sold in a month	Cost per kiloliter water sold
Building plan process Fee	Number of Plan Processed and Submitted	Cost per Plan/ Site

There are many possible units of service and for any particular service; the unit of service chosen should focus attention on outputs as much as possible. Thromdes spend money to achieve goals and thus units of service chosen should reflect the goals being pursued. Seen from this perspective, the cost per kiloliter of water sold is more appropriate if the purpose of the study is to determine the extent of cost recovery than say the number of houses serviced.

d. **Collecting Cost Information:** To calculate the cost of various services of the Thromdes, it is necessary to have an efficient and up-to-date data information system in the Thromde concerned. To determine the cost of any service, information is required both in terms of physical level of service and financial statements.

The following information will be useful in identifying costs:

i. A copy of Financial Statements for last 3 financial years
ii. Copies of Working papers for the financial statements
iii. Operating and capital budgets for the respective financial years
iv. Fixed Asset Register for the respective financial years
v. Detailed General ledger for last 3 years
vi. Tariff reports for last 3 years
vii. Any other documents which is required as inputs to calculate the cost of

providing municipal services

It is important to collect information for at least three-year period to enable:

i. Identify trends over time
ii. Identify changes in costs and income to gain a better perspective of the major cost drivers in rendering each selected service
iii. Provide assurance on the accuracy and appropriateness of the information gathered, particularly qualitative data

Calculating Costs of Providing Municipal Services

For calculating costs, we need to identify each cost incurred by the Thromdes and classify as Direct Costs, Indirect Costs, Others (to be specified on specific basis).

For example:

Element of Costs	**Methodology of Allocation**
Contractual Services	Direct Cost (if direct usage)
Depreciation/ use allowance	Indirect Costs (Direct Cost if specific asset)
Emergency assistance payments	Direct Costs
Equipment rental and payments	Direct Costs (on the basis of actual basis if indirect)
Rent	Indirect Cost (on the basis of occupancy)
Office Supplies	Indirect Costs
Postage	Indirect Costs
Printing	Indirect Costs
Renovations and improvements	Direct Costs
Telephone	Indirect Costs
Travel	Indirect Costs

e. **Direct Costs:** it is easy to calculate as directly related to the service or department concerned. Direct costs typically include salaries and wages, repairs and maintenance and those general expenses (such as transport costs, purchase of goods and services and direct administration costs) directly associated with rendering the service. Following table illustrate the components of direct cost.

The following should be noted when calculating direct service costs:

a. Salaries, wages, and allowances should include staff directly involved in the rendering of service. The management cost apportioned on the basis of time is generally difficult to ascertain considering the organisation structure of the Thromde and the difference would also likely be immaterial.
b. Similarly, it is difficult to accurately determine direct general expenses such as telephone, stationary, insurance and training, the electricity consumed by the service department.
c. Indirect general expenses should be excluded while calculating direct costs for the services delivered.
d. Contributions are amounts set aside for future benefits and therefore do not represent a cost. Accordingly, these contributions are not costs directly associated with rendering a service and therefore should be excluded from the calculation of

direct, total and marginal costs.

Cost components	Amount (Actual Expenditure in Nu)				
	FY	FY	FY	Average of 3 years	Remarks (if any)
Salaries, wages and allowances					
General expenses-direct					
Repairs and maintenance					
Bulk purchases for the service					
Total Direct Costs					

f. **Indirect Costs:** Indirect costs are costs which are not directly attributable to a service or department. Examples of indirect costs include administrative charges allocated to the service from the treasurer's office, computer division; management cost allocations, Council General Expense's allocations, as well as an allocation of the cost from the municipal stores. Indirect costs should be allocated in proportion to the extent to which they contribute to the good/service production. The method of allocating costs should be formulated once and the bases for allocation may include their relationship with direct costs, number of staffs, amount of service and space used. Incidentals like legal charges are difficult to allocate, but attempt may be made to include them as indirect costs.

In fact, allocating indirect costs may not always be straightforward, but the department concerned should make a reasonable and logical assessment of indirect costs and their allocation against goods and services. This should take account of the type of organisation and its overall structure, to determine what level of cost allocation is appropriate.

Illustrative List for apportioning indirect Costs based on the nature of expenses incurred is indicated below:

Nature of Expenses	
Depreciation	Quality Control and Inspection
Factory Administration Expenses	Rent, facility and equipment
Indirect labour and supervisory wages	Repair Expenses
Indirect materials and supplies	Rework labour, scrap and spoilage
Maintenance and factory expenses	Utilities

Nature of Indirect Expenses	**Cost Drivers**
Volume Related	Direct Labour hours
	Direct Material Costs
	Floor Space
Transaction Related	Set – ups
	Volume of Transactions
Product Related	Physical Features (size, weight, surface area)
	Change orders/ Amount of Inventory
Administrative, General, Others	Direct Allocable Cost
	Direct Salary Cost
	Capital Investments

Typical procedure for allocating indirect costs is to accumulate all indirect costs into one or more cost pools, and then use an activity measure to apportion the costs. Thus, the indirect costs allocation formula is:

Cost pool/ Total activity measure = indirect cost allocation per unit.

The approach taken in this manual is to allocate indirect costs on the basis of revenue. This will ensure that a uniform basis of determining indirect costs will be applied to all Thromdes. The use of revenue is debatable and a number of other allocation bases or costing methodologies could have been used. The manual assumes that revenue will be a fair indication of the time and effort spent administering functions.

g. **Total Costs:** The total cost of rendering a service is the sum of all direct and indirect costs. The template of calculating total service cost is given below:

Table: Template for calculation of total costs of a service

Cost components	**Amount (Actual Expenditure in Nu)**				
	FY	**FY**	**FY**	**Average of 3 years**	**Remarks (if any)**
Salaries, wages and allowances					
General expenses-direct					
General expenses –indirect					
Repairs and maintenance					
Bulk purchases					
Capital charges-internal					
Capital charges-external					
Contributions to capital outlay					
Indirect cost					
Total costs (A)					
Unit Sold					
Cost per Unit Sold					
Income Generated from Servic					
Income generated per unit of s					
Net Income/ (Loss) of service					
Net Income/ (Loss) per unit of					

h. **Marginal Costs:** Marginal cost is the increase in total cost associated with an increase in the amount of service provided. It is computed in situations where the breakeven point has been reached: the fixed costs have already been absorbed by the already produced items and only the direct (variable) costs have to be accounted for. Thus, marginal costs are variable costs consisting of labour and material costs, plus an estimated portion of fixed costs (such as administration overheads and selling expenses). Where average costs are fairly constant, marginal cost is usually equal to average cost. The concept of marginal cost is

critically important in resource allocation because, for optimum results, Thromde management must concentrate its resources where marginal revenue is more than the marginal cost. Marginal cost also called as choice cost, differential cost, or incremental cost. It is necessary to express each of the cost components on a per unit basis while calculating marginal cost. In the template mentioned above, the marginal cost for example of selling an extra kilolitre of water is the unit cost per kilolitre water sold, less the indirect costs, capital charges and contribution to capital outlay.

No Single Cost Concepts addresses all needs

It may be mentioned that no single cost concept gives the answer of all municipal needs, Costing is a tool that can be used to provide cost information to the municipal mangers and policy makers that can be critical for efficient delivery of municipal services. Since such needs changes over the period of time, the type of cost information will vary with the nature of the problems and challenged faced by them. For example, if the issue is considered for pricing the services to recover costs, it would be desirable to examine the concept of total costs which includes all the costs incurred in the delivery of a particular service. On the other hand, if the municipal management wish to analyse the efficiency of a service, applying the concept of total costs would be inappropriate considering difficulties in its measurement. The total cost to a large municipality of rendering a particular service will be much higher compared to a smaller municipality mainly because of size of its establishment budget, area and population and such other economic and non-economic characteristics. To assess the efficiency in delivery of a service, unit costs would be much more appropriate parameter for performance measurement. Computing the unit costs of a particular service using feasible indicators can facilitate a comparison of one Thromde with another Thromde in delivery of that service with a view to improve it further. Thus, selecting which cost concepts is the most effective and suitable tool for addressing a given management problem, is an important step in estimating the cost of services.

Cost Estimation and Recovery for Municipal Services in Thimphu Thromde

For identifying the cost recovery Financial Statements prepared for FY 13-14 of Thimphu Thromde, all costs incurred were classified as Directly Allocated Cost, Allocable Indirect Cost, and Un-Allocable Costs on the basis of division wise cost category report generated from the accounting package. Further, Indirect Cost was allocated either on the basis of Direct Salary Cost or Directly Allocable Cost for the respective municipal services.

The Cost Category report is broken down on the basis of directly allocated costs to municipal services and Allocable Indirect Costs to the municipal services. Also, any expense not related to providing of municipal services is being ignored. (For example: Cost incurred by Project implementation Unit or one-time expenses).

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
Depreciation - Street Lights	Depreciation	Depreciation charge on Street Lights	7,84,66,930
Maintenance of Property - Roads	Maintenance Expenses	Maintenance Of Thimphu Thromde Roads	56,24,748

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
Maintenance of Property - Plantation	Maintenance Expenses	City Beautification/Plant Protection	3,03,328
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Serbithang Compost Plant	2,90,966
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Coronation Park	2,15,784
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Mothithang Children Park	2,00,000
S & M - Text Books, Library Books, Stationeries& Sports Item	Consumables	Jigme Dorji Wangchuk Public Library	1,96,510
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Clock Tower	1,82,624
Maintenance of Property - Buildings	Maintenance Expenses	Maintenance Of Crematorium	1,32,221
Maintenance of Property - Roads	Maintenance Expenses	Maintenance Of Footpath	1,24,226
Pay & Allowances	Pay & Allowance	Dreams Project	1,00,000
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Labour Hutment	96,286
Maintenance of Property - Roads	Maintenance Expenses	Maintenance Of Parking	95,530
Maintenance of Property - Buildings	Maintenance Expenses	Maintenance Of Aqua Privy Toilet And Painting Of Railings At Jigme Loseling Primary School	94,222
Travel - In country	Travel	Dreams Project	73,000
Op. Exp. - Others	Advertising	Public Awareness And Education Program On Disaster Management	72,400
Maintenance of Property - Plantation	Maintenance Expenses	Maintenance Of Nursery (Cfm)	70,000
S & M - Office Supplies, Printing, Publications	Consumables	Dreams Project	69,268
S & M - Text Books, Library Books, Stationeries& Sports Item	Consumables	Direction Services	60,800
Op. Exp. - Transportation	Travel	Disposal Of Unclaimed Human Dead Body	60,000
Hospitality & Entertainment	Miscellaneous	Dreams Project.	42,048

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
S & M - Animal Feeds	Consumables	Direction Services	30,680
Rental of Properties - Buildings	Rent Expenses	Dreams Project	10,000
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Sunday Market	60
Maintenance of Property - Street Light	Maintenance Expenses	Maintenance Of Street Lights	19,45,823
Pay & Allowances	Pay & Allowance	Solid Waste	19,67,311
Pay & Allowances	Pay & Allowance	Library	7,83,863
Pay & Allowances	Pay & Allowance	Other - ESP Staff - Security Guard, Sweeper	3,89,775
Pay & Allowances	Pay & Allowance	Environment Division - City Beautification	11,04,999
Pay & Allowances	Pay & Allowance	Customer Service Division - Census & Civil Registration	2,00,617
Pay & Allowances	Pay & Allowance	Admin & Finance Division - Property Management	2,38,308
Pay & Allowances	Pay & Allowance	Urban Planning Division - South City Planning	6,70,543
Pay & Allowances	Pay & Allowance	Urban Planning Division - North City Planning	10,09,205
Pay & Allowances	Pay & Allowance	Urban Planning Division	11,92,335
Total Directly Allocated Cost – Property Tax			**1,76,47,480**

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Building Plan Process Fee			
Pay & Allowances	Pay & Allowance	Development Control Division - Architectural Division	9,60,509
Pay & Allowances	Pay & Allowance	Development Control Division - Structural Division	1,92,302
Total **Directly Allocated Cost – Building Plan Process Fee**			**11,52,811**
* Expenses such as Utilities Payments, Travel, etc. incurred for the Development Control Division were not available in the cost category report generated from the accounting package. Once, the details are available costs incurred by the division will be added under Directly Allocated Cost – Building Plan Process Fee for preparing Cost Report.			

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Water Supply			
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Sewerage Systems	10,50,000
Op. Exp. - Others	Advertising	Waste Management Awareness Campaign	27,419
Maintenance of Property - Others	Maintenance Expenses	Maintenance Of Water Supply	37,76,959
Pay & Allowances	Pay & Allowance	Sewerage	14,94,917
Pay & Allowances	Pay & Allowance	Water Supply	29,90,860
Pay & Allowances	Pay & Allowance	Engineering Division - Urban Road & Drainage	7,06,701
Pay & Allowances	Pay & Allowance	Water Supply - Other Personnel	3,28,710
Total Directly Allocated Cost – Water Supply			1,03,75,566
* Expenses such as Utilities Payments, Consumables, Travel, etc. incurred for were not available in the cost category report generated from the accounting package. Once, the details are available costs incurred will be added under Directly Allocated Cost – Water Supply for preparing Cost Report.			

Expense Particulars	Cost type	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Depreciation Expenses				
Depreciation - Street Lights	Directly Allocated Cost - Property Tax	Depreciation charge on Street Lights	7,84,66,930	
Depreciation -	Directly Allocated Cost - Water Supply	Depreciation charge on	21,000	

Expense Particulars	Cost type	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Sewerage		Sewerage Plant & Machinery		
Depreciation - Vehicles	Allocable Indirect Cost	Depreciation Charge on Vehicles	58,91,840	Total Allocable Cost
Depreciation - Office Equipment	Allocable Indirect Cost	Depreciation Charge on Office Equipment	5,85,650	Total Allocable Cost
Depreciation - Furniture Fixtures	Allocable Indirect Cost	Depreciation Charge on Furniture Fixtures	97,919	Total Allocable Cost
Total Depreciation Expense			**8,50,63,338**	

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Unallocated Cost				
Op. Exp. - Others	Miscellaneous	Chadi Expenses During The Visit Of Indian Prime Minister	67,44,307	One-time expenses against which revenue grant received from RGOB

For apportioning the indirect costs (Allocable) to different municipal services all such costs are accumulated into one or more cost pools. For Thimphu Thromde, the costs like maintenance, Rental of Properties, Travel, Utilities among others can be apportioned on the basis of Direct Allocated Cost to the services and other personnel emoluments, retirement benefits, etc. can be apportioned on the basis of Direct Salary costs. Therefore, Cost recovery is computed by deducting Directly Allocated Cost and indirect allocable cost to the tax revenue collected from Property Tax, Building Plan Process Fee, Water Supply and Miscellaneous (Others).

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Allocable Indirect Cost				
Pay & Allowances	Pay & Allowance	General Section	1,94,82,043	Direct Salary Cost
Other Personnel Emoluments	Pay & Allowance	Engineering Division - Direction Services	1,52,47,000	Direct Salary Cost
Other Personnel Emoluments	Pay & Allowance	Environment Division Direction Services	96,76,348	Direct Salary Cost
Pay & Allowances	Pay & Allowance	Engineering Division	94,61,709	Direct Salary Cost
Other Personnel Emoluments	Pay & Allowance	Direction Services	34,33,494	Direct Salary Cost
Pay &	Pay &	Admin & Finance		Direct Salary

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Allowances	Allowance	Division	16,56,985	Cost
Pay & Allowances	Pay & Allowance	Admin & Finance Division - General Administration	13,15,425	Direct Salary Cost
Pay & Allowances	Pay & Allowance	Admin & Finance Division - Human Resource	9,92,328	Direct Salary Cost
Pay & Allowances	Pay & Allowance	Admin & Finance Division - ICT Section	4,04,872	Direct Salary Cost
Pay & Allowances	Pay & Allowance	Admin & Finance Division - Vehicle Section	2,53,081	Direct Salary Cost
Pay & Allowances	Pay & Allowance	Admin & Finance Division - Dzongkhag Admin	1,76,217	Direct Salary Cost
Retirement Benefits	Pay & Allowance	Direction Services	1,34,660	Direct Salary Cost
Current Grants - Rural Life Insurance Scheme	Rent Expenses	Direction Services	8,05,162	Direct Salary Cost
Sub-Total Allocable Indirect Cost to be divided on the basis of Direct Salary Cost			**6,30,39,324**	
Op. Exp. - Advertising	Advertising	Direction Services	15,77,454	Total Allocable Cost
S & M - Office Supplies, Printing, Publications	Consumables	Direction Services	25,45,215	Total Allocable Cost
S & M - Uniforms, Extension Kits, Linens	Consumables	Direction Services	5,67,130	Total Allocable Cost
Depreciation - Vehicles	Depreciation	Depreciation Charge on Vehicles	58,91,840	Total Allocable Cost
Depreciation - Office Equipment	Depreciation	Depreciation Charge on Office Equipment	5,85,650	Total Allocable Cost
Depreciation - Furniture Fixtures	Depreciation	Depreciation Charge on Furniture Fixtures	97,919	Total Allocable Cost
Maintenance of Property - Vehicles	Maintenance Expenses	Direction Services	1,62,90,354	Total Allocable Cost
Maintenance of Property - Computers	Maintenance Expenses	Direction Services	4,68,000	Total Allocable Cost
Maintenance of Property -	Maintenance Expenses	Direction Services	2,46,350	Total Allocable Cost

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Equipment				
Maintenance of Property - Buildings	Maintenance Expenses	Direction Services	1,81,637	Total Allocable Cost
Hospitality & Entertainment	Miscellaneous	Thromde Tshogde Meeting expenses	6,70,124	Total Allocable Cost
Hospitality & Entertainment	Miscellaneous	Direction Services	6,12,166	Total Allocable Cost
Op. Exp. - Taxes, Duties, Royalties, Handling Charges, Bank Charges	Miscellaneous	Direction Services	23,958	Total Allocable Cost
Rental of Properties - Buildings	Rent Expenses	Direction Services	23,59,732	Total Allocable Cost
Rental of Properties - Others	Rent Expenses	Direction Services	26,000	Total Allocable Cost
Travel - In country	Travel	Direction Services	56,15,196	Total Allocable Cost
Travel - In country	Travel	Human Capacity Building	15,48,271	Total Allocable Cost
Travel - Outside Bhutan	Travel	Direction Services	9,87,145	Total Allocable Cost
Op. Exp. - Transportation	Travel	Direction Services	50,000	Total Allocable Cost
Utilities - Electricity, Water, Sewerage	Utilities	Direction Services	59,77,628	Total Allocable Cost
Utilities - Telephones, Telex, Fax, E-mail, Internet	Utilities	Direction Services	16,38,632	Total Allocable Cost
Utilities - Telegram, Wireless Transmission, Postage	Utilities	Direction Services	93,774	Total Allocable Cost
Sub-Total Allocable Indirect Cost to be divided on the basis of Total Allocated Cost			**4,14,78,765**	

Cost Recovery Table for FY 13-14 of Thimphu Thromde:

Cost	Nature of Municipal Services				Total Amount
	Property Tax	Building Plan Process fee	Water Supply	Miscellaneous	
Tax Revenue (A)	6,10,33,403	77,90,392	2,43,12,248	47,06,450	9,78,42,493
Directly Allocated Cost					
- Pay & Allowances	76,56,956	11,52,811	55,21,188	-	1,43,30,956
- Maintenance Expenses	93,75,818	-	48,26,959	-	1,42,02,777
- Travel	1,33,000	-	-	-	1,33,000
- Consumables	3,57,258	-	-	-	3,57,258
- Rent Expenses	10,000	-	-	-	10,000
- Advertising	72,400	-	27,419	-	99,819
- Miscellaneous (Others)	42,048	-	-	-	42,048
Total Directly Allocated Cost (B)	1,76,47,480	11,52,811	1,03,75,566	-	2,91,75,858
% Share of Direct Salary Cost (C)	53%	8%	39%	0%	
% Share of Directly Allocated Cost (D)	60%	4%	36%	0%	
Allocable Indirect Cost					
- On the basis of Direct Salary Cost (Subtotal * C)	3,36,81,589	50,71,012	2,42,86,723	-	6,30,39,324
- On the basis of Directly Allocated Cost (Subtotal * D)	2,50,89,089	16,38,930	1,47,50,746	-	4,14,78,765
Total Allocable Indirect Cost (E)	5,87,70,678	67,09,942	3,90,37,469	-	10,45,18,089
Depreciation					
- Directly Allocated	7,84,66,930	-	21,000		7,84,87,930
- Allocable indirect	39,77,240	2,59,811	23,38,358	-	65,75,409
Total Depreciation Expenses (F)	8,24,44,170	2,59,811	23,59,358	-	8,50,63,339
Total Cost without depreciation (G=B+C+D)	7,64,18,158	78,62,753	4,94,13,035	-	13,36,93,947

Cost	Nature of Municipal Services				Total Amount
	Property Tax	Building Plan Process fee	Water Supply	Miscellaneous	
Total Cost with depreciation (H=B+C+D+E)	15,88,62,328	81,22,564	5,17,72,393	-	21,87,57,285
Deficit (A-G) (Without Depreciation)	-1,53,84,755	-72,362	-2,51,00,787	47,06,450	-3,58,51,454
Deficit (A-H) (with Depreciation)	-9,78,28,925	-3,32,173	-2,74,60,145	47,06,450	-12,09,14,792
Cost Recovery % (Without Depreciation)	80%	99%	49%	-	73%

Note:

1. The Costs and Revenue amounts are linked to the Comprehensive Financial Statements for Financial Year 2013-14.
2. Costs related to Property Tax, Building Plan Processing Fee and water supply is as per the cost category reported generated from the accounting package are considered as direct costs for the services.
3. Indirect costs are costs in the nature of administrative and other expenses common to all the services provided by the Thromde.
4. Assets are currently nominally valued due to which correct depreciation amount could not be ascertained for each municipal service provided by the Thromde.
5. Revenue from Property taxes includes rental income from municipal properties, fess and user charges, sale and hire income, and administrative receipts.
6. The per unit costs incurred and revenue collected from water supply can be calculated by dividing the total volume with the costs and revenue identified in the table above.
7. The unit costs of services provided is to be calculated through simple average of at least past 3 Financial Years by the management of the Thromde.
8. Directly Allocated Cost to building Plan Process Fee includes cost incurred by Development Control Division (both Architectural and Structural) of the Thromde.
9. Allocable Indirect Expenses were allocated either on the basis of directly allocated Salary Cost or Directly Allocated Cost for the municipal services respectively.
10. Expenses on utilities are currently under Allocable Indirect Cost for all the municipal services and are allocated on the basis of Total Directly Allocated Cost. After the service wise details are available, the same will be apportioned appropriately.

Cost Estimation and Recovery for Municipal Services in Phuentsholing Thromde

For identifying the cost recovery Financial Statements prepared for FY 13-14 of Phuentsholing Thromde, all costs incurred were classified as Directly Allocated Cost, Allocable Indirect Cost, and Un-Allocable Costs on the basis of division wise cost category report generated from the accounting package. Further, Indirect Cost was allocated either on the basis of Direct Salary Cost or Directly Allocable Cost for the respective municipal services.

The Cost Category report is broken down on the basis of directly allocated costs to municipal services and Allocable Indirect Costs to the municipal services. Also, any expense not related to providing of municipal services is being ignored. (For example: Cost incurred by Project implementation Unit or one-time expenses).

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
Op. Exp. – Advertising	Advertising	Land Record Direction Services	50,000
Op. Exp. – Advertising	Advertising	Solid Waste Direction Services	50,000
Op. Exp. – Advertising	Advertising	Urban Planning Direction Service	50,000
Op. Exp. – Advertising	Advertising	Town Maintenance Direction Services	20,000
S & M – Uniforms, Extension Kits, Linens	Consumables	Solid Waste Direction Services	1,240
S & M – Uniforms, Extension Kits, Linens	Consumables	Electrical Section Direction Services	260
Maintenance of Property – water supply, sewerage, playfield	Maintenance Expenses	Solid Waste Direction Services	30,00,000
Maintenance of Property – Roads	Maintenance Expenses	Engineering Direction Services	20,00,000
Maintenance of Property – water supply, sewerage, playfield	Maintenance Expenses	Town Maintenance Direction Services	8,00,000
Maintenance of Property – water supply, sewerage, playfield	Maintenance Expenses	Electrical Section Direction Services	4,00,000
Maintenance of Property – Others	Maintenance Expenses	Street Light Maintenance	2,17,836
Maintenance of Property –	Maintenance Expenses	Renovation of Thromde Infrastructure	1,81,198

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
Buildings			
Maintenance of Property – Others	Maintenance Expenses	Solid Waste Direction Services	93,588
Maintenance of Property – Equipment	Maintenance Expenses	Survey Sector Direction Services	52,000
Maintenance of Property – Computers	Maintenance Expenses	Urban Planning Direction Service	20,000
Maintenance of Property – Equipment	Maintenance Expenses	Urban Planning Direction Service	17,235
Pay & Allowances	Pay & Allowances	Urban Planning Direction Service	18,58,000
Pay & Allowances	Pay & Allowances	Electrical Section Direction Services	16,00,000
Pay & Allowances	Pay & Allowances	Land Record Direction Services	8,50,000
Pay & Allowances	Pay & Allowances	Survey Sector Direction Services	6,90,000
Pay & Allowances	Pay & Allowances	Solid Waste Direction Services	6,50,000
Pay & Allowances	Pay & Allowances	Town Maintenance Direction Services	5,80,000
Contributions – Provident Fund	Pay & Allowances	Electrical Section Direction Services	1,45,000
Contributions – Provident Fund	Pay & Allowances	Urban Planning Direction Service	1,27,000
Contributions – Provident Fund	Pay & Allowances	Land Record Direction Services	77,000
Contributions – Provident Fund	Pay & Allowances	Survey Sector Direction Services	63,000
Contributions – Provident Fund	Pay & Allowances	Solid Waste Direction Services	59,000
Contributions – Provident Fund	Pay & Allowances	Town Maintenance Direction Services	52,000
Rental of Properties – Buildings	Rent Expenses	Survey Sector Direction Services	91,200
Op. Exp. – Survey/Census	Survey Expenses	Survey Sector Direction Services	8,00,000
Travel – In country	Travel	National Cadastral Re-Survey Program	32,39,005
Travel – In country	Travel	Urban Planning Direction Service	2,77,344
Travel – In country	Travel	Electrical Section Direction Services	2,43,632
Travel – In country	Travel	Solid Waste Direction Services	1,38,909

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Property Tax			
Travel – In country	Travel	Survey Sector Direction Services	1,34,214
Travel – In country	Travel	Land Record Direction Services	1,30,284
Travel – In country	Travel	Town Maintenance Direction Services	39,280
Utilities – Electricity, Water, Sewerage	Utilities	Electrical Cost Street Light	8,44,276
Utilities – Telephones, Telex, Fax, E-mail, Internet	Utilities	Solid Waste Direction Services	30,000
Utilities – Telephones, Telex, Fax, E-mail, Internet	Utilities	Electrical Section Direction Services	19,538
Total Directly Allocated Cost – Property Tax			**1,96,92,039**

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Direct Allocated Cost – Building Plan Process Fee			
Op. Exp. – Advertising	Advertising	Architectural Control Direction Services	50,000
Pay & Allowances	Pay & Allowances	Architectural Control Direction Services	12,06,000
Pay & Allowances	Pay & Allowances	Building Control Direction Services	10,00,000
Contributions – Provident Fund	Pay & Allowances	Architectural Control Direction Services	92,944
Contributions – Provident Fund	Pay & Allowances	Building Control Direction Services	90,000
Travel – In country	Travel	Architectural Control Direction Services	1,94,741
Travel – In country	Travel	Building Control Direction Services	1,65,294
Total Directly Allocated Cost – Building Plan Process Fee			**27,98,979**
* Expenses such as Utilities Payments, etc. incurred for the Development Control Division (Building and Architectural) were not available in the cost category report generated from the accounting package. Once, the details are available costs incurred by the division will be added under Directly Allocated Cost – Building Plan Process Fee for preparing Cost Report.			

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Water Supply			
Op. Exp. -	Advertising	Sewerage Direction Services	

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount
Directly Allocated Cost – Water Supply			
Advertising			20,000
S & M - Medicines & Laboratory Consumables	Consumables	Environment & Water Supply Direction Services	1,48,134
S & M - Uniforms, Extension Kits, Linens	Consumables	Environment & Water Supply Direction Services	70,000
Maintenance of Property - water supply, sewerage, playfield	Maintenance Expenses	Environment & Water Supply Direction Services	21,21,000
Maintenance of Property - water supply, sewerage, playfield	Maintenance Expenses	Sewerage Direction Services	15,71,000
Maintenance of Property - Others	Maintenance Expenses	Environment & Water Supply Direction Services	14,88,020
Maintenance of Property - Equipment	Maintenance Expenses	Sewerage Direction Services	43,295
Pay & Allowances	Pay & Allowances	Environment & Water Supply Direction Services	23,02,000
Pay & Allowances	Pay & Allowances	Sewerage Direction Services	5,50,000
Contributions - Provident Fund	Pay & Allowances	Environment & Water Supply Direction Services	2,08,000
Contributions - Provident Fund	Pay & Allowances	Sewerage Direction Services	50,000
Travel - In country	Travel	Environment & Water Supply Direction Services	4,54,393
Travel - In country	Travel	Sewerage Direction Services	1,16,406
Utilities - Electricity, Water, Sewerage	Utilities	Water Supply – Electricity	33,46,122
Utilities - Electricity, Water, Sewerage	Utilities	Sewerage Direction Services	1,80,635
Utilities - Telephones, Telex, Fax, E-mail, Internet	Utilities	Environment & Water Supply Direction Services	70,000
Total Directly Allocated Cost – Water Supply			**1,27,39,005**

Expense Particulars	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Depreciation Expenses			

Depreciation - Street Lights	Depreciation charge on Street Lights	29,01,515	Directly Allocated Cost - Property Tax
Depreciation - Plant & Machinery (Sewerage)	Depreciation charge on Sewerage Plant & Machinery	96,346	Directly Allocated Cost - Water Supply
Depreciation - Vehicles	Depreciation Charge on Vehicles	44,75,837	Indirect Allocable Cost – To be allocated on the basis of Total Directly Allocated Cost.
Depreciation - Office Equipment	Depreciation Charge on Office Equipment	10,03,665	
Depreciation - Furniture Fixtures	Depreciation Charge on Furniture Fixtures	1,80,330	
Depreciation - Others	Depreciation Charge on Other Assets	11,928	
Depreciation - Plant & Machinery (Others)	Depreciation charge on Other Plant & Machinery	8,658	
Total Depreciation Expenses		**86,78,281**	

Expense Particulars	**Expense Head**	**Division Name (Cost Category)**	**Amount**	**Allocation Basis (Remarks)**
Un-Allocable Cost				
Op. Exp. - Advertising	Advertising	ADB/ PIU Direction Services	1,00,000	The unallocated cost includes expenditure incurred for ADB/ Project implementation unit Division which is engaged in development projects and not for day to day municipal activities.
S & M - Uniforms, Extension Kits, Linens	Consumables		15,000	
Pay & Allowances	Pay & Allowances		8,67,000	
Contributions - Provident Fund	Pay & Allowances		79,000	
Travel - In country	Travel		2,16,179	
Utilities - Telephones, Telex, Fax, E-mail, Internet	Utilities		40,000	
Total Un-Allocable Cost			**13,17,179**	

For apportioning the indirect costs (Allocable) to different municipal services all such costs are accumulated into one or more cost pools. For Phuentsholing Thromde, the costs like maintenance, Rental of Properties, Travel, Utilities among others can be apportioned on the basis of Direct Allocated Cost to the services and other personnel emoluments, retirement benefits, etc. can be apportioned on the basis of Direct Salary costs. Therefore, Cost recovery is computed by deducting Directly Allocated Cost and indirect allocable cost to the tax revenue collected from Property Tax, Building Plan Process Fee, Water Supply, rental Income (Industrial) and Miscellaneous (Others).

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Allocable Indirect Cost				
Pay & Allowances	Pay & Allowances	General Administration & Finance	47,16,485	Direct Salary Cost
Pay & Allowances	Pay & Allowances	Engineering Direction Services	18,85,000	Direct Salary Cost
Retirement Benefits	Pay & Allowances	General Administration & Finance	3,39,560	Direct Salary Cost
Contributions - Provident Fund	Pay & Allowances	General Administration & Finance	3,32,000	Direct Salary Cost
Contributions - Provident Fund	Pay & Allowances	Engineering Direction Services	1,70,000	Direct Salary Cost
Current Grants - Rural Life Insurance Scheme	Pay & Allowances	General Administration & Finance	75,000	Direct Salary Cost
Sub-Total Allocable Indirect Cost to be divided on the basis of Direct Salary Cost			**75,18,045**	
Op. Exp. - Advertising	Advertising	General Administration & Finance	7,38,323	Total Allocable Cost
Op. Exp. - Advertising	Advertising	Engineering Direction Services	1,50,000	Total Allocable Cost
S & M - Office Supplies, Printing, Publications	Consumables	General Administration & Finance	6,81,966	Total Allocable Cost
S & M - Uniforms, Extension Kits, Linens	Consumables	General Administration & Finance	6,000	Total Allocable Cost
S & M - Uniforms, Extension Kits, Linens	Consumables	Engineering Direction Services	3,720	Total Allocable Cost
Maintenance of Property - Vehicles	Maintenance Expenses	General Administration & Finance	54,78,034	Total Allocable Cost
Maintenance of Property - Buildings	Maintenance Expenses	Engineering Direction Services	1,67,141	Total Allocable Cost
Maintenance of Property -	Maintenance Expenses	General Administration &	68,673	Total Allocable Cost

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Allocable Indirect Cost				
Equipment		Finance		
Maintenance of Property - Computers	Maintenance Expenses	General Administration & Finance	67,060	Total Allocable Cost
Maintenance of Property - Equipment	Maintenance Expenses	Engineering Direction Services	4,795	Total Allocable Cost
Op. Exp. - In country Meetings and celebration	Miscellaneous	General Administration & Finance	4,60,000	Total Allocable Cost
Hospitality & Entertainment	Miscellaneous	General Administration & Finance	3,50,000	Total Allocable Cost
Op. Exp. - Taxes, Duties, Royalties, Handling Charges, Bank Charges	Miscellaneous	General Administration & Finance	68,549	Total Allocable Cost
Travel - In country	Travel	General Administration & Finance	9,67,406	Total Allocable Cost
Travel - In country	Travel	Engineering Direction Services	5,99,428	Total Allocable Cost
Travel - Outside Bhutan	Travel	General Administration & Finance	1,99,999	Total Allocable Cost
Utilities - Telephones, Telex, Fax, E-mail, Internet	Utilities	General Administration & Finance	3,17,999	Total Allocable Cost
Utilities - Telephones, Telex, Fax, E-mail, Internet	Utilities	Engineering Direction Services	1,68,000	Total Allocable Cost
Utilities - Electricity, Water, Sewerage	Utilities	General Administration & Finance	44,411	Total Allocable Cost
Utilities - Telegram, Wireless Transmission, Postage	Utilities	General Administration & Finance	30,000	Total Allocable Cost
Utilities -	Utilities	Engineering Direction	13,104	Total Allocable

Expense Particulars	Expense Head	Division Name (Cost Category)	Amount	Allocation Basis (Remarks)
Allocable Indirect Cost				
Electricity, Water, Sewerage		Services		Cost
Sub-Total Allocable Indirect Cost to be divided on the basis of Total Allocated Cost			**1,05,84,608**	

Cost Recovery Table for FY 13-14 of Phuentsholing Thromde:

Cost	Nature of Municipal Services					Total Amount
	Property Tax	Building Plan Process fee	Water Supply	Rental Income (Industrial)	Miscellaneous	
Tax Revenue (A)	1,45,94,937	75,540	1,20,61,014	1,68,25,544	24,38,770	4,59,95,804
Directly Allocated Cost						
- Pay & Allowances	67,51,000	23,88,944	31,10,000	-	-	1,22,49,944
- Maintenance Expenses	67,81,857	-	52,23,315	-	-	1,20,05,172
- Travel	42,02,668	3,60,035	5,70,799	-	-	51,33,502
- Utilities	8,93,814	-	35,96,757	-	-	44,90,571
- Advertising	1,70,000	50,000	20,000	-	-	2,40,000
- Consumables	1,500	-	2,18,134	-	-	2,19,634
- Survey Expenses	8,00,000	-	-	-	-	8,00,000
- Rent Expenses	91,200	-	-	-	-	91,200
- Miscellaneous (Others)	-	-	-	-	-	-
Total Directly Allocated Cost (B)	1,96,92,039	27,98,979	1,27,39,005	-	-	3,52,30,023
% Share of Direct Salary Cost (C)	55%	20%	25%	0%	0%	
% Share of Directly Allocated Cost (D)	56%	8%	36%	0%	0%	
Allocable Indirect Cost						
- On the basis of Direct Salary Cost (Subtotal * C)	41,43,229	14,66,145	19,08,672	-	-	75,18,045
- On the basis of Directly Allocated Cost (Subtotal * D)	59,16,332	8,40,933	38,27,343	-	-	1,05,84,608
Total Allocable Indirect Cost (E)	1,00,59,561	23,07,078	57,36,014	-	-	1,81,02,653
Depreciation						
- Directly Allocated	29,01,515	-	96,346	-	-	29,97,861
- Allocable indirect	31,75,106	4,51,302	20,54,012	-	-	56,80,420

Cost	Nature of Municipal Services					Total Amount
	Property Tax	Building Plan Process fee	Water Supply	Rental Income (Industrial)	Miscellaneous	
Total Depreciation Expenses (F)	60,76,621	4,51,302	21,50,358	-	-	86,78,281
Total Cost without depreciation (G=B+C+D)	2,97,51,600	51,06,057	1,84,75,019	-	-	5,33,32,676
Total Cost with depreciation (H=B+C+D+E)	3,58,28,220	55,57,359	2,06,25,378	-	-	6,20,10,957
Deficit (A-G) (Without Depreciation)	-1,51,56,663	-50,30,517	-64,14,006	1,68,25,544	24,38,770	-73,36,872
Deficit (A-H) (with Depreciation)	-2,12,33,283	-54,81,819	-85,64,364	1,68,25,544	24,38,770	-1,60,15,152
Cost Recovery % (Without Depreciation)	49%	1%	65%	-	-	86%
Cost Recovery % (with Depreciation)	41%	1%	58%	-	-	74%

Note: (1) The Costs and Revenue amounts are linked to the Comprehensive Financial Statements for Financial Year 2013-14.
(2) Costs related to Property Tax, Building Plan Processing Fee, Rental Income (Industrial) and water supply is as per the cost category reported generated from the accounting package are considered as direct costs for the services.
(3) Indirect costs are costs in the nature of administrative and other expenses common to all the services provided by the Thromde.
(4) Assets are currently nominally valued due to which correct depreciation amount could not be ascertained for each municipal services provided by the Thromde.
(5) Revenue from Property taxes includes rental income from municipal properties, fess and user charges, sale and hire income, and administrative receipts.
(6) The per unit costs incurred and revenue collected from water supply can be calculated by dividing the total volume with the costs and revenue identified in the table above.
(7) The unit costs of services provided is to be calculated through simple average of atleast past 3 Financial Years by the management of the Thromde.
(8) Directly Allocated Cost to building Plan Process Fee includes cost incurred by Development Control Division (Both Architectural and Structural) of the Thromde.
(9) Allocable Indirect Expenses were allocated either on the basis of directly allocated Salary Cost or Directly Allocated Cost for the municipal services respectively.

Challenges for Achieving Full Cost Recovery

Based on several findings and analysis, most urban local bodies face significant challenges related to tariff setting, human and institutional capacity, infrastructure development and financing. Principal challenges to achieving Full Cost Recovery (FCR) include:

Revenues/Tariffs

a. Most ULBs have insufficient revenue to cover O&M costs and capital costs.
b. With insufficient revenues, ULBs lack incentives to extend coverage to the poor, promote water conservation, reduce Net Revenue Water and properly manage meters and infrastructure.
c. Low salaries, benefits and professional advancement opportunities prevent many ULBs from attracting quality managers and technicians.
d. For cash-strapped ULBs, maintenance is a low priority, which can reduce the life of the asset. Poor maintenance often results in pipe leakages and high NRW.

Capital Expenditure (Depreciation)

a. Many ULBs struggle to establish financial autonomy and prioritize capital projects.
b. Utilities often do not consider inflation versus replacement costs for their operations and do not properly analyze the depreciation costs of an asset against the principal still due on their outstanding debt.

General and Administrative

a. Many ULBs lack important internal controls, such as operating policies and procedures, as well as timely, accurate and transparent billing and accounts receivable records.
b. Mismanagement of meter installation, maintenance, reading and billing and collection also contribute to inefficient operations.

Customer Relations

a. Users in the region too often assume quality water and wastewater services should be free or low-cost. Educating customers about the true costs of operating and maintaining quality water services is crucial for promoting efficient Cost Recovery.
b. Paying customers must understand that they are subsidizing illegal connections. Artificially low water bills may, in fact, serve as a disincentive for customers to pay, since they reinforce the notion that water services are low-cost commodities.

Efficient Cost Management Strategies

As mentioned, cost information can be used to make better management and improved strategies for providing efficient municipal services. The key areas for this are:

A. Analysing efficiency of the municipal services;
B. Making budget decisions;
C. Setting tariffs for the municipal services;
D. Adopt national policy and/ or setup regulatory body for sharing of tax revenue; and
E. Selecting alternative methods/ strategy for efficient cost management.

A. Analysing the efficiency of municipal services: Service efficiency means providing the service at the lowest possible cost. Cost information can be used to provide a variety of questions about service efficiency. Some of the questions which Thromde officials should be asking themselves are:

1. Are there cost differences between the Thromdes and/or the benchmark and on what accounts?
2. What are the key drivers of the cost of the service?
3. Have the cost drivers changed and if so, how? What caused this?
4. Are there any long-term trends apparent from the cost drivers?
5. What steps can be taken to control the cost drivers?

B. Making Budgetary Decisions: In preparing budgets and financial operating plan of a Thromde, officials are interested in many of the issues of efficiency mentioned above. In particular year-to-year cost comparisons reveal changes in costs, while the breakdown between direct and indirect cost indicates which costs and departments relate directly to the service and which are needed to support it indirectly. Following are some of the questions which officials should be asking themselves while taking budget decisions:

1. Why has the service cost changed from year to year?
2. How much will it cost to increase a service?
3. How much money can be saved if the service is reduced?
4. How much increase in amount can be justified for increase in budgets for respective services?

C. Setting Tariff: Currently, the rates services provided by the Thromde are charged based on rates decided in 1994 taxation policy. In order to levy the fee or charges for services, Thromde officials need to know the amount of service provided and unit cost of a service. They also need to know the income from the service in the given period to examine the cost recovery ratios in the service concerned. Following Table illustrate this:

Table: Cost Recovery Template

Components (service wise)	Amount (Actual in Nu)				
	FY	FY	FY	Average 3 years	Remarks (if any)
Direct Costs (A)					

Indirect Costs (B)					
Total costs (C=A+B)					
Income generated – during the period (I					
Net income/ expense differential (E=D-					

Some of the questions the officials may ask themselves are:

1. Why is the service operating at a loss?
2. What trends are evident from the cost information?
3. What is recovery of per unit cost of service sold?

It should be remembered that costing a service is not the same as pricing it. A service does not necessarily have to be priced to recover the full cost of the service because pricing is a management decision which should include total cost as one factor, but also weighs other, non-financial factors. Such considerations might include the willingness and affordability of consumers to pay, the perceived presence of a general benefit to society of a subsidised price or the desirability of encouraging consumption.

Other Efficient way to fix tariff:

Purpose	Implications
Cost recovery	Operation and maintenance costs of supply should be recovered in full. There can be a gradual increase in recovery of capital maintenance costs and cost of capital. In addition, the revenue stream should be relatively stable and not cause cash flow or financing difficulties for the utility
Economic efficiency	Prices should signal to consumers the costs that their decision to use water imposes on the rest of the system.
Equity and fairness	Prices should treat similar customers equally, and ensure that customers in different situations are not treated the same.
Resource conservation	Prices should discourage excessive or wasteful use of water, thus promoting conservation.
Acceptability	To mitigate political controversy, customers and interest groups should be given due opportunity to provide inputs and raise concerns in the process of price determination
Simplicity and transparency	A tariff design should be easy to understand as far as consumers are concerned. Prices must also be determined in a transparent manner.

D. Adopt national policy and/ or setup regulatory body for sharing of tax revenue: RGoB may consider adopting tax revenue sharing mechanism with the local bodies to make the ULBs financially sustainable. It may also setup independent regulatory body for undertaking tariff review and adjustments. The regulatory body should be made responsible to provide necessary expertise and authority to evaluate ULBs financial performance and work to protect interest and needs of consumers.

E. Selecting alternative strategies for efficient service delivery mechanism: It has been observed that most Thromdes/municipalities of developing nations including the

Thromdes of Bhutan are financially sick with weak revenue base and high costs in rendering municipal services. Therefore, there is a need to look in to alternative arrangements to provide efficient and effective delivery of services to the residents of these local bodies. Various options like Elimination of service, reassigning personnel, reduce service, improve productivity, outsource of service, increase tariff or retain status quo among others should be considered by the management of the Thromde.

This would ensure that the current or proposed municipal services are delivered to the citizens through most efficient method.

A matrix for assessing the most efficient method of providing municipal services can be made to make a list of the selected services with possible management options to help the Thromde to reduce costs, increase output, or raise revenue.

Service Issue/ Actions	**Eliminate service**	**Reassign Personnel**	**Reduce Service**	**Improve Productivity**	**Outsource**	**Increase Tariff**	**Retain Status Quo**
Water supply: Production Distribution Meter reading							
Sewerage Maintenance							
Refuse collection							
Street lighting							
Parks and playgrounds							
Data processing							
Building permissions							
Parking							
Open spaces							

Both the services/activities and options which the municipalities would like to examine vary considerably from one Thromde to another Thromde. Therefore, each of the Thromde is suggested to analyse by its own on what services and activities those services they would like to consider for suitable management action to improve the quality of concerned service/services.

The proposed matrix will provide a platform to the Thromde officials and policy makers to discuss the merits and de merits of various management options for dealing with each service issue. For example, if a check mark placed under “outsource” against the water meter reading activity, it will indicate that outsourcing should be considered as a management response to the cost/ service issues related to the reading of water meters. Similarly, a check mark if placed under reducing the service in the refuse collection line, it will indicate that reducing the frequency of refuse collection should be considered as a response to cost/service issues related to the collection of refuse.

It is significant to note that while making a decision on a particular management action

on a particular activity or activities of service concerned, it is important to examine the financial implications of such action and possible side effects. For example, if frequency of collecting waste to be changed from once a week to once every two weeks, how much money will be saved by the municipality, and will this action result in a health problem to the residents.

In sum, making a cost analysis of municipal services is an important tool for municipal managers and policy makers in effective decision-making process and contributes to improved planning, implementation and analysis of every aspect of municipal endeavour. However, costing of a service is only the one side of the mirror in rendering services by any municipality/ Thromde, other factors also need to be considered by the municipal authorities concerned in the process of decision making in delivery of basic municipal services especially in the case of alternative institutional arrangements issue where reducing the cost using different means is one of the suggested management options. Some the important factors in this regard are:

1. Past history: How was the service provided in the past?
2. Acceptability: Will a change be acceptable to both providers and users of the service?
3. Legal issues: Is the change has a legal backing?
4. Administrative implications7: is there any impact on the employment status or strength of the staff in various departments – job loss
5. Cost recovery: How important is cost recovery and up to what extent?

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