



FISCAL DECENTRALISATION AND SECTOR FUNDING PRINCIPLES AND PRACTICES

ANNEX 2

Overview of Costing Methods for LG Expenditures

The views expressed in this paper are those of the author(s) and do not necessarily reflect the view or policies of the Ministry of Foreign Affairs of Denmark

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Overview of Costing Methods for LG Expenditures - Based on International Experiences¹

The costing of core² local authority services can be done in a number of ways and has been subject for intense discussion in the international literature and practical implementation of reform programmes. The finance-follows-function rule defined in various international agreements and supported in most of the literature on Fiscal Decentralisation (FD), requires considerations about the costs of the expenditure assignments and related funding arrangements to ensure that LGs' functions are meaningful funded.³ The costing of expenditure needs has been controversial. First, there are disagreements amongst experts on the feasibility of costing the total LG expenditure needs, the realism and real possibilities to do this in cases with limited information, unclear definition of expenditure assignments, lack of service standards, etc. and risks that the end results can lead to highly unaffordable results. Second, there have been concerns that the results can be used to establish strict demands that every LG should adhere to these cost standards and spend a minimum level of funds on each service, compromising the efficiency gains of decentralisation.

E.g. the work by GSU in Tanzania concluded that: "A controversial feature of the current budget formulation process for local governments in Tanzania is the use of national minimum service standards (NMS). Whereas the current budget approach relies on NMS, the Government is preparing to discontinue the use of NMS for the allocation of local government resources. While the use of budget norms or minimum standards is not uncommon, the practice can have a number of serious undesirable effects. Perhaps most importantly, if the standards set by the central government as part of the NMS approach are in fact unaffordable, this could cause general disappointment in the decentralization process. In addition, an ill-conceived NMS approach would allow local governments to pass the blame for inadequate local service delivery to the central government's inability to pass down adequate resources. At the same time, line ministries often see the establishment of NMSs (which often includes detailed technical norms as well as lofty policy goals) as a tool to continue to assert control over the delivery of services, and an opportunity to expand sectoral funding. (GSU)"⁴. The GSU team therefore arqued for formula-based allocations, although the issue of a fair share of resources remains to be tackled in the case of Tanzania.

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¹ This Annex is an up-dated version of notes previously developed for various country programmes and assignments by Jesper Steffensen, senior partner in Dege Consult (www.dege.dk).

² This section draws greatly from similar experiences in other countries, particularly from the work of the consultants for the reform process in Yemen, 2005-06 (Jesper Steffensen with Gabe Ferazzi).

³ E.g. the European Charter of Local Self Government, which in Art. 9 says that "Local authorities' financial resources shall be commensurate with the responsibilities provided by the constitution and the law".

⁴ GSU, 2002. Other experts are more positive in their review on national minimum standards, e.g. Shah, Anwar, 2006 and Ferazzi, Gabe in several articles, particularly related to the work in Indonesia.

In the Danish debate on the equalization system, expenditure costing has often been discussed as well. J. Mau from the Ministry of the Interior has stated that:

"In principle there are two ways to measure the expenditure needs. Either the Central Government attempts to describe the production function (or equivalent the cost function) of the local governments in relevant areas, e.g. schools, nursery homes etc., the production function-method. Or alternatively the needs are assessed from the observed expenditures ("revealed preferences") of the single local governments, the expenditure method (see further below).

For the production function approach the Parliament needs to define a service level, e.g. how many elderly people of different categories (very needy, not so needy etc.) should receive care and support in how many hours per week and of a certain quality level. Next conditions of production needs to be taken into account in every municipality, i.e. the topographical and geographical characteristics. The production function-method is normative in the sense that the needs are computed from the perception of the Parliament of what should be the 'best' way, i.e. the norm of producing and delivering services, including how capital, labour and other inputs are combined in the most effective way. In a Danish context this production function-method has however only seldom been discussed in relation to the general equalization system. The method requires, cf. Finansieringsudvalget (1978), very good data and knowledge of production possibilities, - information that the Central Government simply do not have in many circumstances" (MAU)

However, it is very much a question of how the calculations are conducted, and how they are applied. It is also important to keep in mind that the resources are not unlimited and that the choice of models will often depend on the affordability, particularly in the developing countries. The costing of LG services has also received increased attention in relationship with the costing of the achievement of the Millennium Development Goals (MDGs), where comprehensive analytical work has been completed in a number of countries.

Reviewing international experiences, a number of methods seem be crystallize:

Method 1 - Relative shares

The first method (**Method 1**; see also Table 1 below) simply reviews the costs of similar functions in other countries, the relative share of the local authorities' functions vis-à-vis the central government functions against the total available public budget and the relative share of local authority budget, and then tries to fix the appropriate share and size of the local authorities' budget and the intergovernmental fiscal transfers. This is obviously a very

crude model, which will probably not provide very much information about the required resources to achieve the MDGs and service delivery targets at the central and local levels.⁵ Programmes specific support can sometimes also be classified in this group where grants are designed at reasonable relative level.

Method 2: Historical data

Where sufficient time is available prior to contemplated decentralisation, it is possible to cost the services as they are being delivered, using historically stable and reliable costs data⁶ (**Method 2**). This approach employs actual costs in existing institutional arrangements. Here is used a "retrospective" methodology and an attempt is made to calculate costs that is equivalent to the moneys spent on those services before they were decentralised. ⁷ Ideally, the costing of services should be done prior to decentralization, and be a guide in the realignment of financial relations. If done in this way, the postdecentralisation financing then is premised on pre-decentralisation data and about the desired institutional arrangements. assumptions can be tested after the main wave of decentralisation has occurred and refinements made in the grants or revenue assignment.

While the costs prior to decentralization should be relatively easy to compile, the effort is considerable nonetheless, particularly if all services and other functions to experience decentralization are to be included. Unfortunately, usually prepare poorly in most decentralization decentralization is often a political response that when it break, it proceeds under time pressure, even if the implementation turns out to be partial or Once decentralization is underway, it is not realistic to freeze institutional arrangements for the purpose of costing, and as decentralization proceeds, it becomes increasingly difficult to reconstruct the costing prior to decentralization's changes. The treasury reform in Ghana whereby budgeted expenditures are divided into district, regional and central cost centres, promote the future possibilities to make a fair sharing of related budget lines.

Method 3: Full bottom-up calculation

In the case where good costing does not exist and changes are already underway or imminent, a different bottom-up approach could be used provided there is consensus about the desired functional assignments and service delivery standards, etc. (Method 3). It is worth fleshing out this possibility as some countries could well decide to undertake such an approach, keeping in mind that it has already entered the decentralization stream (even if it is yet not even mid-stream). This approach would require

⁵ However this method has been used in various countries, where the government grants have been fixed to a rough share of the total public revenue, e.g. in countries like e.g. Ghana and Cambodia, without detailed calculations of the relative expenditure needs of central and local governments.

⁶ This is possible in principle; where leakages have been endemic there may be resistance to making all costs explicit.

⁷ According to Bahl and Vazquez (2006), this method has been used in Spain.

considerable effort, and in an idealized fashion would follow the steps indicated below:

- 1) Review all areas or demarcate the *core service* (sector) areas to be reviewed, e.g. the sectors, which have most direct implications for the achievement of the MDGs, such as Health, Agriculture, Roads and Water;
- 2) Demarcate the services/activities within these areas;
- 3) Clarify the <u>future</u> division of tasks and responsibilities across the various tiers of governance (central government, governorates and districts) and services to be delivered and financed by other stakeholders, e.g. the private sector. The analysis would be based on the **expected outcome** of the ongoing dialogue on the decentralisation of tasks and responsibilities to local authorities. Each sub-function, e.g. administration, governance functions, construction of buildings/facilities, maintenance and operational costs would be divided across the tiers of governments according to the expected future assignment of tasks;
- 4) Review the **minimum** standards related to these functions and subfunctions;
- 5) **Cost these services** in a situation with full compliance with the fixed standards and apportion the costs to the central government, governorate, district and other service providers (e.g. the private sector, users), using a combination of data and information from selected sample districts, governorates and centrally available information;
- 6) Review **savings** from various efficiency measures, like changing the balance between capital and maintenance/operational inputs making better use of the assets, organisational changes, etc.;
- 7) **Extrapolate** the costs from a sample of local governments to the entire country, and determine the graduated pursuit of these in order to achieve various targets, e.g. the MDGs by 2015;
- 8) Review the funding system and available amount of funds for local service delivery (own LG revenues, other local sources and grants) both in terms of sector specific revenues such as user fees and charges and general untied funding;
- 9) Review the relationship between the available funding and the required sources to comply with the targets (e.g. the MDGs) in a phased manner and make necessary adjustments.

To the greatest extent possible, the standards used and the graduated achievement of the MDGs should rely on the work conducted (if any) on the national costing of the MDGs achievement. As well, expertise gained in conducting the national level exercise should be employed in the LG costing exercise.

The above bottom-up approach would then be contrasted with the national level costing where this exists to understand how the perspectives are complementary and useful for different purposes.

Method 4: Full bottom-up approach partly applied /existing arrangements

The bottom-up approach of Model 3 is not possible in the short term in many countries, in view of the ongoing dialogue on the actual pace of devolution in many places and another **Model (4)** is sometimes pursued as a more realistic start. The costing exercise would have to be delayed to allow the consensus on functional assignment to emerge. This would also mean that the costing would not be able to contribute to the dialogue on functional assignment.

It is worth noting that where costing of local services has been attempted in developing countries in the context of decentralization, this has tended to be done following key institutional changes (as in Indonesia and Uganda). While some fuzziness on functions and financing can be found even after the decentralization dust has settled, these are only a minor hindrance to costing exercises.

The timing of the anticipated service costing should come in the early stages of decentralization. If the services costed are those that are most critical to the Local Authorities in relation to particularly the MDGs, then the task need not be daunting and can be completed in a reasonable amount of time, although it requires time and efforts and some reasonable accounting systems. The results could provide a firmer base for more methodical and faster paced decentralization and services, and adjustments of the findings can be made along the process of decisions on changes of functional assignments.

It is often most feasible to use the <u>existing</u> institutional arrangements as the point of departure for the financial analysis and a subsequent adjustment of these calculations when final decisions have been taken on the future functional assignments and organisational arrangements (**Method 4**).

This Method may be combined with features of Method 5 if specific costing needs arise, such as the need to cost new structures at the LG level (both administrative and political structures).

The following step-wise approach should then be followed:

- 1. Demarcate the core service (sector) areas to be reviewed;
- 2. Demarcate the core services/activities within these areas;
- 3. Review the existing costs of these services analysis of budgets and accounts data from various tiers of governance;
- Review the minimum standards related to these functions and subfunctions (if available);
- 5. Cost these services in a situation with full compliance with the fixed standards and apportion the costs to the central government, LGs and other service providers (e.g. the private sector, users), using a combination of data and information from selected sample LGs;

- 6. Review savings from various efficiency measures, like changing the balance between capital and maintenance/operational inputs making better use of the assets, organisational changes, etc.;
- 7. Extrapolate the costs from a sample of LGs to the entire country, and determine the graduated pursuit of these in order to achieve the national targets, the MDGs by 2015 or other reasonable targets. These targets should be set in close dialogue with the central and local authorities;
- 8. Review the funding system and available amount of funds for local service delivery (taxes, revenues, other local sources and grants) both in terms of sector specific revenues such as user fees and charges and general un-tied funding;
- 9. Review the relationship between the available funding and the required sources to comply with the targets in a phased manner.

The results of the analysis should provide a good overview of:

- existing costs of the core services and division of these costs across the tiers of governance,
- possible efficiency savings if the input mix is adjusted to maximize capital and recurrence costs in relation to desired standards of service,
- the additional costs of improving the service level to address local or national goals (e.g. MDGs); the improvement scenarios to be determined in consultation with the LGs involved and relevant national ministries,
- financial implications of possible changes in assignment of functions across the tiers of governance; scenarios to be drawn from deliberations of government ministries.

Method 5: Focus on new tasks and costing of these

Method 5 is a subset of model 4, but does only look at the few **incremental** tasks over the time. Both models 4 and 5 require some knowledge about functions, unit costs, data for breakdown of expenditures and service standards. This approach is used in Denmark as part of the annual adjustments of the block grant system where new tasks and costs implications lead to adjustment of the grants to LGs.

Method 6: Hybrid of existing costs and partial adjustments

Method 6 is the most straightforward model and is often used when the time is limited, and or data is not available on existing standards, unit costs, variations in these or if the funds are greatly less than the expected standards needs. It is method, which can be carried out in the short term, whereas some of the other models are being prepared for the medium to longer terms. It will have to review:

1. Existing costs of service provision within areas to be decentralised

- a. Costs within existing institutions (line ministries)
- b. Costs broken down on districts
- c. Type of costs (direct, indirect recurrent, capital costs)
- 2. Existing revenues within these areas (if any)
 - a. Fees and charges,
 - b. Other revenues
- 3. Fiscal implications of change in service provision (if possible to measure)
 - a. Efficiency gains
 - b. Extra costs or no changes
- 4. Ways and means to compensate
 - a. Grant system (types of grants, flow of funds etc.)
 - b. Other funding channels

Method 6 is particularly useful when:

- Time for costing is limited;
- Data on unit costs are very limited;
- Service standards are not available in most areas, nor are they related to available funding
- It can be combined with more detailed costing during the roll-out of the decentralised service provision modalities.

This model has been used in the preparation of the fiscal decentralisation reform in East Timor (2009).

Below is a summary of the various methods.

Table 1: Various ways to measure the overall or incremental size of the Local Governments' Expenditure Needs

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
Method 1: Rough division of the total public revenue and expenditures across tiers of governance using international data and crude "common sense" estimates or fixed percentage of GDP or Public Revenues	Quick results Transparent Affordable results as the method divides the available funds across the tiers of governance	Not related to the actual costs of local service delivery /expenditure needs Does not ensure that the funding covers the mandatory functions (will often lead to many un-funded mandates) Cannot be used for planning and budgeting purposes and efficiency initiatives May be static and	When there is very limited data on expenditure assignments, standards and unit costs When quick reforms are pursued, as the method may be preferred to other existing and more random, arbitrary and non transparent principles	A crude guess has to be made on finances that accords with the division of tasks across the tiers of governance Should the local share be linked to the public revenues (and which) or GDP?	Ghana (in the determination of the District Assemblies Common Fund (DACF), which is at the moment 7.5 % of public revenues) Cambodia (CS fund), which has been set at between 2.5-3.0 % of the national budget.

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
		gradually without relations to the actual division of functions if not updated over time			
Method 2: Review of the existing costs of all services and other functions prior to decentralisation at various tiers of governance This method reviews the costs of all services at all tiers of governance.	Provides a base- line for future calculations when tasks are transferred; adjustments are then made at the margin It is easier to get reliable information on costs of services prior than after decentralisation has just taken place. It avoids the	It is hard to link the results directly to the grant system, as it is not based on the legal framework, but prevailing practice. It does not, if a stand alone exercise, provide and answer of the costs of a decentralised system, required grants etc., as this system has not been defined. Costs may not be	In cases where the future assignment of tasks is likely to change, but where it is hard to predict the outcome In case where there has been no costing of actual services In case where there is time for this kind of exercise, which requires significant input and time	Requires data on budget and accounts, on service standards on costing etc. Is a first step which may later be supplemented with a review of cost in cases where the assignments are changed and /or where assignments are clarified	This was to some extent conducted in the Philippine with the calculations made to determine the Internal Revenue Allotments (IRA) (grant). However, the calculations in the Philippines went beyond this rude calculation. Spain has used some variant of this approach as well (Bahl &Vazquez, 2006)

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
	issue of unclear mandatory functions, as it deals with the existing division in practice Useful for planning and budgeting purposes Useful to estimate realistic and affordable standards.	the same when functions are transferred to the LG levels. The process of decentralisation is already ongoing in most countries.			
Method 3: Review the costs of the LGs' mandatory functions as they are supposed to be or expected to be after final	May provide information of use for determining the future size of the grants to	Hard to predict the outcome of the future assignments	In systems where the final decisions on decentralisation and major standards have been made and when fundamental reforms	Clarify mandatory functions with no ambiguity Clarify service standards (is often	Indonesia A process on this started in Yemen but

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
decisions about decentralisation and assignment of functions have been made – real costing of all services by use of a bottom-up approach studying costs of services	LGs (fiscal gap analysis) Useful for planning and budgeting purposes	The costing cannot contribute to the dialogue, and assumptions may not be fulfilled Very labour intensive and time-consuming. Standards are often not available for the costing May lead to unaffordable results	are on the agenda	very demanding) Make a realistic phasing	was not completed.
Method 4: Review of "localised" selected local services as they are delivered in practice (and costs the real expenditure needs of these) Only the facilities up to the main	Provides a base line for future calculations when tasks are transferred, adjustments at the margin can be made It is easier to	It is hard to link the results directly to the grant system, as it is not based on the legal framework, but the prevailing practice. If it is a stand - alone exercise, it	In cases where the future assignment of tasks is likely to change, but where it is hard to predict the outcome In cases where there have been no costing of	Requires data on budget and accounts, on service standards on costing etc. Is a first step which have to be supplemented with a review of cost in cases where the	Latvia (studies in 1998-2000) Estonia (1999-2000) Uganda – Local Government Finance

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
service delivery level of government are included in the costs and only core basic services which will be decentralised, by use of combination of existing expenditure and actual needs	get reliable information on costs of services prior than just after decentralisation has taken place It partly solve the problem of unclear mandatory functions, as it deals with the existing division in practices and the costing does not depend on the assignment Useful for planning and budgeting purposes	does not provide the answers about the costs of a decentralised system, required grants etc., as this system has not been defined. It requires significant input and surveys. It is a very demanding method, which is very labour intensive. Standards are often not available for the costing.	actual services It is a good starting point for the full scale costing mentioned in Method 2 or 3.	assignment is changed and /or where assignments are clarified	Commission (Revenue share studies from 2001-03)

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
	Useful to estimate realistic and relatively affordable standards				
Method 5: Calculation of costs when tasks are going to be transferred case by case, i.e. a partial method	More simple and with less input Faster than some of the other models.	Limited to review of the cost of the new tasks, assuming the existing system is in balance between expenditure needs and revenues, but this may not be a valid assumption Requires very good information on the existing costs.	In mature systems when the overall system of expenditure and revenues are largely in balance When specific isolated tasks are transfers across tiers of governance Often used to adjust the size of the grant pool up and downwards	Review historical costs of the previous form of service provision or similar tasks Need to be based on an overall method, e.g. for calculation of unit costs to avoid various arbitrary adjustments.	Denmark through the so-called DUT principle where all transfers of tasks with cost implications are being compensated through adjustment of the block grants. This principle is also included in several international announcements. Several other OECD countries are using same principles.

Method	Advantages	Disadvantages	When is it most useful	Requirements and issues be to considered	Country Examples
		Standards may not be available for the costing.			
Method 6: Review the existing costs of LMs' service delivery within the areas which will be decentralised functions (selective based on historical data) + marginal adjustments	It is quick and cost cautious. The allocation will be within the national available resources.	It may not be very detailed in terms of reviewing the various expenditure needs a the local or the cost implications of decentralisation	When there is very limited information on unit costs, and shortage of time to do more elaborated cost-calculations	Review a break down of the LMs budgets in various cost centers. The LMs may try to underestimate the expenditures used on functions to be decentralised.	This process has started e.g. in East Timor (sectors of health and water/sanitation) where some selected ministries have been requested to fill in the formats below (which combines the existing costs with some estimates of future implications –combined with features of model 4), see below.

Template for costing of decentralised functions in East Timor – combination of existing costs with some estimates for future cost implications of decentralisation from central to local governments⁸

Existing Budget and staff for functions, which will be delegated or devolved and cost implications i.e. extra costs and savings (a fictive example is included in the table below)

Function: Roads

Sub-function: Road maintenance

PRESENT AND FUTURE 'DISTRICT' BUDGETS - WITH 4 Districts/Municipalities of batch 1 (Dili, Oecusse, Bobonaro, Baucau) with Decentralisation in 2010

	BEFORE DECENTRALISATION / PRESENT BUDGET		ESTIMATED BUDGET 2010 / After decentralising to 4 districts	COST IMPLICATIONS* of decentralisation to 4 districts (2010 versus 2009)
	2008	2009	2010	2010
Number of staff	2	2	5	3
Salary costs	25,000	25,000	60,000	35,000
Goods and services	5,000	5,000	15,000	10,000

⁸ Template submitted to a number of core ministries as part of the review of cost implications of fiscal decentralisation in East Timor (May 2009). The process of decentralisation was planned to start with 4 districts and then move gradually to cover all 13 districts in the country.

Capital investments		20.0		
Total budget	30,000	30,0 00	75,000	45,000

SAME for CENTRAL MINISTRIES / REGIONAL OFFICES - with four Municipalities in 2010

	BEFORE DECENTRALISATION / PRESENT BUDGET		ESTIMATED BUDGET 2010 / After decentralising to 4 districts	COST IMPLICATIONS* of decentralisation to 4 districts (compare 2010 / 2009)
	2008	2009	2010	2010
Number of staff	12	12	9	-3
Salary costs	140,000	150,000	120,000	-30,000
Goods and services	35,000	40,000	35,000	-5,000
Minor capital investments		etc.	etc.	
Capital investments				
Total budget	175,000	190,000	155,000	-35,000

NET IMPLICATION: 10,000

THE ABOVE TO BE DONE FOR ALL SUB-FUNCTIONS TO BE DECENTRALISED

FROM 2011 ONWARDS, ALL 13 DISTRICTS WILL BE CHANGED TO MUNICIPALITIES AND THE DECENTRALISATION WILL COVER ALL. AS ABOVE, PLEASE ESTIMATE THE COSTS OF PREVIOUS PROVISION AS WELL AS THE IMPLICATIONS

PRESENT AND FUTURE 'DISTRICT' BUDGETS - With decentralisation in 13 Municipalities

	BEFORE DECENTRALISATI ON / PRESENT BUDGET		ESTIMATED BUDGET 2011 / After decentralising to 13 districts	COST IMPLICATIONS* of decentralisation to 13 districts from 2009 to 2011 (compare 2011 with 2009)
•	200			
	8	2009	2011	2011
Number of staff	2	2	5	3
Salary costs		120,000	150,000	30,000
Goods and services		90,000	130,000	40,000
Minor capital investments			etc.	
Capital investments				
Total budget	0	210,000	280,000	70,000

IN 2011 WHERE ALL 'DISTRICTS' ARE MUNICIPALITIES

PRESENT AND FUTURE BUDGETS - CENTRAL MINISTRIES / REGIONAL OFFICES

	BEFORE DECENTRALISATION / PRESENT BUDGET		DECENTRALISATION / After	
	2008	2009	2011	2011
Number of staff	12	12	8	-4
Salary costs	150,000	150,000	120,000	-30,000
Goods and services	etc.	120,000	90,000	-30,000
Minor capital investments				
Capital investments				
Total budget	150,000	270,000	210,000	-60,000

NET IMPLICATION: 10,000

MAKE AN OVERVIEW FOR EACH SUB-FUNCTION, E.G. REGISTRY OF SMALL SCALE

BUSINESS and DECRIBE HOW THE CALCULATIONS HAVE BEEN MADE

1) Please list other funding implications

2) Suggest ways of allocating the funds across the districts, e.g. Equal

^{*} Implications means whether there are cost savings or extra costs related to the decentralisation of the function

share,

based on size of the population etc.