

Review of the Criteria and Grant Allocation Formulas for Block Grants to DDCs and VDCs in Nepal

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EXECUTIVE SUMMARY

Formula-based, performance-based grant have been provided to DDCs and VDCs on a nationwide basis since 2008, supported through the Local Governance and Community Development Programme (LGCDP). The LGCDP is a national program administered through the Ministry of Local Development and supported by a wide range of Development Partners (DPs).

Between the contributions made to Local Bodies (LBs) by the Government of Nepal (GoN) and the DPs, almost Rs 1.5 billion is being distributed among the country's 75 DDCs (on average, about Rs 56 per person), whereas almost Rs 9.2 billion is distributed among the country's 3,915 VDCs (in aggregate, approximately Rs 348 per person). Table I provides an overview of the current DDC and VDC grant formulas.

| Factor | DDC | VDC |
|---------------|--------------|--------------------------|
| Minimum grant | Rs 4,000,000 | Rs 1.5-3.0 million (GoN) |
| Equal share | - | 30% of remaining pool |
| Population | 40 | 60 |
| Poverty | 25 | - |
| Land area | 10 | 10 |
| Cost | 25 | 30 |
| MC/PM | MCs and PMs | MC |
| Caps | No | [Rs 320,000-820,000]* |

Note: * For LGCDP portion only.

The main objective of the current study is to undertake an overall review of the existing grant allocation formulas for DDCs and VDCs including indicators, and suggest appropriate methodology for improving the current formulas, including (as appropriate) improving the specification and measurement of the allocation criteria.

A review and analysis of the current DDC and VDC block grants (contained in Sections 2 and 3 of the report) concludes that the current grant formula system in Nepal is in relatively good shape. There are no major weaknesses in the allocation formulas that would undermine the overall system of local government finance. Furthermore, substantial changes in the formula or allocation factors (for instance, by developing more accurate measures of certain variables, such as geographic accessibility or cost variations) are not likely to result in a major improvement of resource distributions. Nonetheless, there is certainly space to improve the current DDC and VDC block grant allocation formulas in a number of ways.

Based on the technical review of the DDC and VDC formulas, however, a number of general options should be considered in guiding the possible revisions of the block grants formulas. The general suggestions and/or options for modifying the current allocation formulas for include the following considerations:

- 1. Align DDC and VDC block grant formulas.** It would be possible to enhance the transparency and coherence of the block grant systems by aligning the DDC and VDC grant formulas – in other words, applying the same allocation formula to both grant schemes.
- 2. Align GoN and LGCDP concepts and formulas.** Although the GoN and its development partners are working closely together in strengthening the system of local government finances, the bulk of GoN resources flowing to the LBs follow an allocation approach that is considerably different than the rest of the grant system, and largely based on an “equal shares” approach. It would be desirable to overcome these conceptual differences and to fully integrate the GoN’s VDC allocation and the LGCDP’s VDC grants in order to achieve a fully integrated formula-based grant system for Local Bodies.
- 3. Lower and standardize fixed amount (especially for VDCs).** Consideration should be given whether it is possible to lower the amount of the grant allocations that is based on a fixed lump sum (equal shares / “categorical” grant) principle, especially for VDC grants. The current emphasis by the GoN on providing local bodies (of each type) with a roughly equal amount in grants is resulting in very large variations in resource allocations per-person. Instead, it would be appropriate for the GoN to move towards a fully formula-based approach in allocating its VDC grant resources.
- 4. Revise relative weights to ensure that the allocation formula balances a population-focus with a poverty-focus.**
- 5. Use the latest population data (Census 2011).**
- 6. Use more recent poverty estimates (for both the DDC and VDC block grant formulas).**
- 7. Update the District Cost Index.** The current District Cost Index was computed in 2005 and is most likely outdated.
- 8. Update the land area factor to properly reflect the increased cost of (within-jurisdiction) inaccessibility within DDCs and VDCs.** The inclusion of land area in both the DDC and VDC formulas has a potentially distortionary impact, as there are a number of jurisdictions in Nepal with extremely low population density. This is resulting in extremely high allocations (especially in per capita terms) to a limited number of local bodies that are geographically large but small in terms of population. One option would be to adjust the land area factor by “capping” the land area measure for jurisdictions that are extremely large in terms of land area, for which the land area is not likely to be an adequate measure of “needs”.
- 9. Fine-tune the weighted cost factor to effectively support higher-cost DDCs and VDCs.** Despite improvements in the way in which the DDC and VDC grant formulas deal with higher-cost districts, the current block grant formulas still do not do a very good job at compensating for the higher expenditure needs of high-cost jurisdictions. Some adjustments could be made to the way in which cost is dealt with in the formulas in order to make the formulas more cost-sensitive.
- 10. Minimum Conditions and Performance Measures (MCPMs).** A final point of concern –which lies somewhat outside the scope of the current study, is whether the GoN might wish to consider a simpler and more transparent system of MCPMs.

An additional issue that is explored in this report is whether –in addition to (updated versions of) the existing allocation factors a measure should be constructed that would measure cost-differences within districts at the VDC level? The discussion in Section 4 suggests that it would probably not make a lot of

sense to pursue such a highly detailed VDC cost index at this time. In addition to the technical arguments, making this decision should be informed by the fact that there are more urgent issues that need to be addressed regarding the allocation formulas for the DDC/VDC block grants.

Based on the tentative options and recommendations identified above, it would be prudent for the Government to consider a variety of options for the way forward. As such, this report proposes a number of different scenarios, each of which should be considered on its merits, rather than recommending a single way forward.

Table II reflects two alternative block grant formulas which should be considered by the GoN as the basis for reforming the current DDC allocation formula. These proposed formulas are based on notion it is feasible to simplify the overall block grant system by aligning and harmonizing the formulas at the DDC and VDC levels.

Table II: Proposed allocation formulas for the DDC Block Grant

| Factor | Current DDC Formula | DDC Formula: Option 1 * | DDC Formula: Option 2 * |
|---------------------|----------------------------------|----------------------------|----------------------------|
| Equal share | 4,000,000 | 4,000,000 | 4,000,000 |
| Population | 40 | 55 | 65 |
| Poverty | 25 | 20 | 20 |
| Land area | 10 | 10 | 15 |
| District Cost Index | 25 | 15 | 0 |
| MCs / PMs | Yes (0% MC) / Yes (-20%,+30%) | Yes (50, 80, 100%) | Yes (50, 80, 100%) |

Note: (*) The measurement of the allocation factors differ between alternative scenarios, as described in the text.

The first proposed formula option reflects: (1) a slight modifications to the relative weighting of the current allocation formula, making the allocation formula slightly more population-focused; (2) reliance on more up-to-date data sources and some minor adjustment of the allocation factors; and (3) some fine-tuning of the manner in which the District Cost Index is incorporated into the formulas. The second proposed formula option makes similar adjustments but eliminates the District Cost Index as a separate allocation factor; instead, every allocation factor in this formula is adjusted by the District Cost Index.

Under both scenarios, it is proposed to simplify the MCPM process.

Similarly, Table III reflects two alternative block grant formulas which should be considered by the GoN as the basis for reforming the current VDC allocation formula. The most important change with regard to the VDC allocation formulas is the proposal to fully integrate the “categorical” VDC allocations currently being provided by the GoN (based on the classification of VDCs into categories I-VI) into the formula-based allocation mechanism (consistent with the LGCDP portion). Another important proposal is to discontinue the current “floor and ceiling” which is being applied to the LGCDP portion of the VDC block grant.

Table III: Proposed allocation formulas for the DDC Block Grant

| Factor | Current VDC Formula | VDC Formula: Option 1 * | VDC Formula: Option 2 * |
|--------------------------|---|----------------------------|----------------------------|
| “Categorical” allocation | Category I-VI (Rs 1.5 – 3.5 million) | None | None |
| Equal share | 30% of remaining pool (Rs 127,900) | 1,000,000 | 1,000,000 |
| Population | 60 | 55 | 65 |
| Poverty | 0 | 20 | 20 |
| Land area | 10 | 10 | 15 |
| District Cost Index | 30 | 15 | 0 |
| Floor/ceiling | Rs 320,000 / Rs 820,000 (applied to LGCDP only) | None | None |
| MCs / PMs | MCs (0%) – does not apply to categorical allocation (only to LGCDP portion) | MCs – 50%, 100% | MC – 50%, 100% |

Note: (*) The measurement of the allocation factors differ between alternative scenarios, as described in the text.

In considering the proposed options for reform of the formulas, some suggestions will be relatively easy to adopt, as they will simply update the formula and have a relatively limited impact on the allocation of resources (e.g., using more recent population figures). In other cases, there may be tensions between the proposed technical improvements of the formula and their political acceptability. In particular, moving away from “equal shares” approach (and moving away from the fixed allocations provided by type or category of VDC) is not likely to be political popular. While this approach will improve the equitable allocation of resources in per capita terms (and enhance the efficiency of the grant system), the proposed reform would result in “winners and losers” which would not likely be politically popular.

As the GoN considers its options with respect to the reform of the DDC and VDC block grant allocations, it would be appropriate to step back and consider two “big picture” questions. First, in light of the incomplete implementation of the Local Self Governance Act (1999), it would be good to clarify the objective for which block grants being provided to DDCs and VDCs. In other words, what functions and service delivery responsibilities are DDCs and VDCs supposed to fund with these grants? Second, it would be good to consider how the evaluation of the current grant system informs the intergovernmental fiscal system as Nepal moves towards a federalist system. The final section of the report (Section 7) provides some insights with regard to the relevance of the current formula-based grant system for the future state structure of Nepal.

Review of the Criteria and Grant Allocation Formulas for Block Grants to DDCs and VDCs in Nepal

1. Background

Overview

The current sub-national governance structure and the current system of intergovernmental finances in Nepal find their roots in the Constitution of 1990, which mandates peoples' participation through decentralization as a fundamental rule in the governance system of the country. A two-tiered system of local government was created, comprising 75 Districts as the intermediary level and Municipalities and Villages as the lower level of the government structure.

The *Local Self-Governance Act (LSGA)*, adopted in 1999, spells out the functional responsibilities of local governments and provides the foundation for the intergovernmental fiscal system. In practice, local bodies receive a minimum grant as per the LSGA as well as recurrent grants to pay for the salary and allowances of employees and to meet minimal operational expenditures at the local level. In addition, local bodies receive a mixture of capacity enhancement grants and social mobilization grants. Various line ministries and donor agencies also provide program-based grants. Most financial transfer resources come with strong central government directives, leaving little discretionary power to LBs to allocate according to local priorities (Kelly, 2011).

In addition to the recurrent transfers and earmarked resources, LBs in Nepal receive discretionary block grants to address the most urgent local development needs. The Government of Nepal (GoN) started providing block grants to the local bodies (LBs) in the early nineties, including grants to District Development Committees (DDCs), Village Development Committees (VDCs) and municipalities. The initial grants provided to LBs were small and were provided without pre-defined criteria. Over time, however, the amount of grants provided to the LBs has been increased considerably. In addition, the grants provided to the LBs have moved to being allocated on a formula-basis. Further, the grants to LBs are now subject to minimum conditions and performance measures (MC/PMs).

Formula-based, performance-based grant have been provided to DDCs and VDCs on a nationwide basis since 2008, supported through the Local Governance and Community Development Programme (LGCDP). The LGCDP is a national program administered through the Ministry of Local Development and supported by a wide range of Development Partners (DPs).

Different sets of criteria and weighing systems are being applied for the allocation of grants to the LBs. In the case of DDCs, the allocation criteria used for the distribution of both the GON and LGCDP grants include population, area, weighted poverty and weighted cost index. Population, area and weighted cost index form the basis of allocation of grants to VDCs, whereas population, area, weighted poverty and weighted revenue effort are the criteria for the municipalities. The evolution of these allocation formulas are discussed in greater detail in Section 2 of this report.

With the introduction of formula-based allocations, Nepal has been seeking to assure that its grants system follows universally accepted practices of sound transfer design, including elements such as predictability, objectivity, efficiency, equity and transparency. Despite the introduction and evolution of a formula-based grant system, a number of issues have cropped up in relation to the existing allocation criteria. The Local Bodies Fiscal Commission Secretariat (LBFCS), as a part of the annual strategic implementation plan of the Local Governance and Community Development Program (LGCDP), is therefore seeking to further study the design and impact of the allocation formulas to DDCs and VDCs. This study contributes toward the dialogue within LBFCS as well as the discussion between LBFCS, LGCDP and its partners by reviewing the current criteria and grant allocation formulas for Block Grants to VDCs and DDCs in Nepal.

Objective of the study

The main objective of the study is to undertake an overall review of the existing grant allocation formulas for DDCs and VDCs including indicators, and suggest appropriate methodology for improving the current formulas, including (as appropriate) improving the specification and measurement of the allocation criteria.

The review of the existing formulas for the VDCs and DDCs should assess the allocation criteria and their relative weights based on their impact on the allocation of grants against the policy objective(s) of the grant scheme. As part of this assessment, the review takes into account specific design concerns, such as:

- How do the allocation factors in each of the formulas contribute to –or detract from- achieving the objective(s) of the transfer scheme? In other words, do the formulas achieve an efficient and equitable allocation of resources, based on the stated objective of the grant scheme?
- What is the suitability of the allocation factors used, based on a review of the existing indicators in terms of their consistency, correlation/overlap, statistical validity, and so on?
- Considerable effort in recent years has been made to improve the cost component of the block grants for DDCs and VDCs. Therefore, this study will pay special attention to the construction of these cost indices (i.e. prices of construction materials and prices of labor) and examines the validity of the cost index with respect to the methodology for use at both the DDC and VDC level.

Based on the review of the existing transfer schemes, this study will propose option for improving the current formulas, including (as appropriate) improving the specification and measurement of the allocation criteria. The recommendations will look into the possibility of introducing accessibility-related criteria and see how far the criterion fits with the cost index.

Local governance and constitutional reform in Nepal: A changing context

The environment in which local governance and local government finance in Nepal is changing rapidly. Considerable turmoil over the past two decades has prevented the systematic implementation of the decentralized framework that was envisioned in the 1990 Constitution and the 1999 Local Self Governance Act. As part of this ongoing transition, in the near future, the country is expected to be transformed from a unitary country into a federal country. However, very little is known with certainty about either the future federal structure of the country, or about the intergovernmental (fiscal) arrangements under which public services will be delivered and financed.

What is clear, however, is that in the new set up, intergovernmental fiscal transfers, especially with respect to the would-be local governments, will be critically important in ensuring pro-poor service delivery across the country. As such, this study –in addition to narrowly reviewing the current formula-

based grant system- will seek to draw lessons as to how the current intergovernmental transfer system can usefully inform the transfer system under the future –as of yet, unknown- system of intergovernmental fiscal relations under the future federal constitution.

Structure of the Report

This report is structured as follows. Section 2 of this report provides a detailed description of sub-national finances in Nepal and background details on the current Local Bodies block grants for DDCs and VDCs. Section 3 presents a general review of the overall DDC and VDC grant formulas, in terms of the adherence of the current grant formulas to the basic principles of sound transfer design. Next, Section 4 discusses the role of accessibility and local cost variations in greater detail. Sections 5 and 6 provide a more detailed review and proposed revisions for the DDC and VDC grant formulas, respectively. Finally, Section 7 discusses the relevance of the formula-based grant system for the future state structure of Nepal.

2. Description of Sub-National Finances in Nepal and the current Local Bodies Block Grants

This section of the report provides a description of sub-national finances in Nepal and a general overview of the current Local Bodies Block Grants. To this effect, Section 2.1 presents a description of the subnational governance structure and the overall intergovernmental fiscal picture in Nepal. Section 2.2 provides a historical background to the evolving scope of Local Bodies Grants. Section 2.3 provides some background on the interaction between Nepal’s unique spatial patterns and the grant system. Finally, Section 2.4 discusses the preliminary next steps in the evolution of formula-based DDC and VDC grant allocations.

2.1 Subnational governance structure and the overall intergovernmental fiscal picture in Nepal

Subnational governance structure

Presently, Nepal has two-tier system of Local Bodies (LBs). The lowest tier of local governance is formed by village and municipal bodies. A total of 3915 Village Development Committees (VDCs) serve as local governance units in rural areas, while 58 municipalities serve the same purpose in urban areas. An intermediate level of local governance exists at the district level, where 75 District Development Committees (DDCs) function as a middle tier between VDCs/municipalities and the central government.

Due to the unique geography and settlement patterns in Nepal, there is an extremely high variation in the size of DDCs and VDCs, both in terms of population as well as land area. In addition, there are strong geographical patterns in the location of the population, with over 93 percent of the population living in the terai and hill ecological regions (generally north-to-south), and about 7 percent of the national population living in the mountain regions of the country. In addition, there are considerable concentrations of population also along the west-to-east axis along the country’s five development regions. In addition, there are clear patterns in poverty and cost across the national territory.

| | DDC Population | DDC Land Area (km ²) | VDC Population | VDC Land Area (km ²) |
|---|----------------|----------------------------------|----------------|----------------------------------|
| Average | 354,944 | 1,962 | 5,643.70 | 36.1 |
| Standard Deviation | 283,712 | 1,147 | 4,612.70 | 76.9 |
| Coefficient of Variation | 0.799 | 0.585 | 0.817 | 2.132 |
| Minimum | 6,527 | 119 | 67 | 0.9 |
| Maximum | 1,740,977 | 7,889 | 82,915.00 | 1,464.00 |
| Source: Computed by author based on preliminary Census 2011 data. | | | | |

In terms of the subnational governance structure in Nepal, it is worth recognizing the impact of the small average size of VDCs, which—on average- have a population of less than 6000 people. Although there is a widespread belief that the VDC is the appropriate level for the delivery of key public services in

Nepal, it should be noted that VDCs are too small to capture relevant scale economies in the delivery of most public services and are administratively too weak to function as serious local governance units. In fact, in the determination of the potential role that Local Bodies could play in the country's public sector, it is often ignored that VDCs only have one formal staff member (the VDC Secretary). As such, the VDC is rather far removed from the district-based civil service hierarchy, whereas in insecure areas, the VDC Secretary often sits at District Headquarters rather than staying at the VDC.

Description of the overall intergovernmental fiscal picture

The formal assignment of expenditure responsibilities to the different levels of Local Bodies takes place in the LSGA of 1999. The Act assigns most of the key service delivery functions to the VDC level, including the supervision and management of schools; to operate and manage village level health facilities (including health centers, health post and sub-health posts); to carry out agricultural development programs; to prepare and implement irrigation projects; to provide for the supply of drinking water; and prepare and maintain rural roads. In line with the important role envisioned for VDCs in the LSGA (and consistent with the broad-based perception that the VDC level should be the main local governance level, since it is closest to the people), the majority of grants provided to Local Bodies is funneled to the VDCs.

In practice, despite an attempt to devolve sectoral functions in the early 2000s, the functional assignments in LSGA (1999) are not respected. Instead, many sectoral ministries have sought to hang onto their functional responsibilities based on the (correct) assertion that VDCs generally lack the institutional capacity to deliver the public services assigned to them in the LSGA. As a result of the stalled devolution reforms, an awkward combination of delegation and deconcentration has emerged, which has largely converged on the DDC level. The situation has been considerably worsened by the fact that no local elections have taken place in Nepal since 1997, and that control over DDCs and VDCs reverted back to local public servants in 2002.

Thus, instead of the intended devolution of "functions, functionaries and finances" to the VDC level, the DDC level is where main "local" public service delivery somehow converges. For instance, although funding for certain local government functions is funneled through the District Development Fund (DDF) –which is the main financial account at the district level- primary education is essentially delivered in a deconcentrated manner by deconcentrated District Education Offices, which in turn deal directly with School Management Committees (SMCs). As a result, the DDC is said to function as a "post office" for receiving and transferring financial resources to District Education Offices through the DDF. In the absence of unified political, administrative or financial systems that are accountable to an elected local council, there is no planning oversight exercised by the DDC over district-wide operations, no horizontal or vertical accountability structure, and no incentives for efficient and effective public service delivery. Other than the management of the core administrative staff of the DDC, most district operations are still operated in a deconcentrated or delegated fashion under the supervision of central line ministries. Under the Ministry of Local Development itself, considerable operations are conducted through the Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR).

According to budget figures for FY 2009/10 (the latest year for which consistent budget execution figures are available), total grants to Local Bodies accounted for Rs. 21.5 billion, of which Rs. 2.2 billion was provided as DDC block grant, Rs. 7.3 billion was transferred as VDC block grants, and Rs. 361 million in municipal grants. In addition to these unconditional grants, Rs. 11.6 billion was provided in the form of other (conditional) grants to Local Bodies.

It is noteworthy that –with the exception of the formula-based block grants and a selected number of other grants, the national budget classification system (MOF Chart of Accounts) does not treat funding provided to Local Bodies consistently as funding provided to devolved local governance units. Whereas the Red Book (national budget) considers the DDC and VDC block grants as “Unconditional Capital Grant to Local Bodies” and “Unconditional Recurrent Grant to Local Bodies” (under budget code 26300: Grants to Local Bodies), the expenditures for District Education Offices are simply included in the budget as regular budget allocations (i.e., as ministerial spending, not as grants). The same is true for District Public Health Expenditures. In addition, financial resources for district-based sectoral services (such as resources for the “Education for All” program) are included in the budget either as regular budgetary allocations or as (conditional and unconditional) “Recurrent Grant to Government Agencies, Committees and Boards” (under budget code 26400: Grants to Social Service, rather than budget code 26300: Grants to Local Bodies). Because the latter budget code includes both transfers to deconcentrated local departments as well as to other government organizations (e.g., para-statals), there is no way of using official budget statistics to figure out the exact total amount of financial resources that is being provided to the local public sector in Nepal.

Subject to the data availability concerns noted, table 2.2 below provides an overview of local public sector finances in Nepal. The rudimentary picture of local public sector finances captured by this table shows formula-based DDC/VDC block grants only account for about 4 percent of national budgetary resources. Furthermore, these grants represent only about 20 percent of all resource that find their way down to the local level. The other 80 percent of local public finances find their way down to the LBs either as earmarked grants, or in the form of delegated expenditure allocations.

| Table 2.2: An Overview of Local Public Sector Finances, 2009/2010 | | | |
|---|-------------------------|----------------|-----------------|
| | Actual Exp (2009/10) | Pct. Local Exp | Pct. Gov Exp |
| Deconcentrated/delegated expenditures | 21,842,361 | 50.4 | 8.4 |
| Education | 16,595,228 | 38.3 | 6.4 |
| Health | 3,576,011 | 8.3 | 1.4 |
| Agriculture | 1,671,122 | 3.9 | 0.6 |
| Devolved expenditures | 21,461,738 | 49.6 | 8.3 |
| DDC | 2,229,610 | 5.1 | 0.9 |
| VDC | 7,276,972 | 16.8 | 2.8 |
| Municipal | 361,465 | 0.8 | 0.1 |
| Other (conditional) grants | 11,593,691 | 26.8 | 4.5 |
| Total Local expenditures | 43,304,099 | 100.0 | 16.7 |
| Government expenditures | 259,689,106 | -- | 100.0 |
| Source: Budget Speech of Fiscal Year 2011/12 and Estimates of Expenditures 2011/12. Note: table does not include own-source funded local expenditures | | | |

The remainder of this report is focused on the formula-based allocation of DDC/VDC block grants. Even if these resources are distributed based on imperfect allocation formulas (there is no such thing as a perfect allocation formula), these block grants are allocated using a transparent and objective resource allocation mechanism. The same cannot be said for the remaining 80 percent of budgetary resources

that are being allocated to the “local” level; the majority of these resources are most likely being allocated on a discretionary basis.

However, as long as the overwhelming majority of local public finances is being allocated on a discretionary basis, the formula-based grant system is unlikely to tame any inequalities and inefficiencies in the distribution of local government financial resources. As such, much more analysis should be done to take into account all financial flows to the local government level, including sectoral, resource flows.

Box 2.1: Need for more systemic monitoring of local public sector finances in Nepal

Due to the incomplete decentralization process, the nature of the local public sector is quite unclear, as it is stuck somewhere between deconcentration, delegation and devolution. As a result, the monitoring and reporting of LB finances seems to have equally fallen between the cracks. Ideally, the LBFC Secretariat would be monitoring all local bodies’ finances. In practice, however, the LBFC may not be institutionally empowered to really do so. By its institutional position, MLD’s predominant interest is in grants and devolved expenditures that it provides to local bodies, while monitoring deconcentrated expenditures generally seems to fall outside the mandates of MLD and LBFC. As the same time, MOF and NPC concern themselves with deconcentrated expenditures, while neither Treasury nor NPC follows up systematically with grants or own revenues. As a result, no-one has a comprehensive overview of local public sector finances. The absence of a comprehensive view of local public sector finances is a major shortcoming in the public financial management system, and is an important issue that needs to be addressed.

2.2 The evolving role of Local Bodies Grants

Grants to Local Bodies have been playing an increasingly important role in Nepal’s public sector finances over the past twenty years.

The legislative foundation for Local Bodies Grants

The Local Self-Governance Act addresses the provision central government grants to local bodies in Part 5, Chapter 1, Section 236 of the Act. Part 1 of this section reads:

“[The Government of Nepal] shall have to provide the Local Body each year with minimum grant prescribed and also with additional grants on such basis as population, level of development, possibility and capability of mobilizing resources, necessity of financial resources, regular record keeping of incomes and expenditures, situation of auditing and financial discipline of the concerned Local Body.”

What are the functions that should be funded from the resources provided through the grants described in this section of the LSGA? The Act is not completely clear on this matter. However, it appears that the grants covered under this section would provide funding not only for the overall operation of the Local Body, but also for the specific sectoral functions that have been assigned to Local Bodies in the Act, such as primary education, basic health services, and so on.¹

¹ Section 196 of the Act requires the DDC to prepare an estimate of its budgetary resources, including: (i) its own financial resources; (ii) “Lump sum grants obtained from His Majesty's Government”; (iii) “Lump sum means

It is important to emphasize what the legislative guidance does and does not say. First, the Act states that each Local Body should be provided each year with minimum grant. Although this clause has been operationalized in a way that provides each DDC with an “equal share” minimum grant, the law actually does not state that each DDC or VDC should be provided with the same level of minimum grant. Indeed, this is consistent with the fact that VDCs have been provided with different levels of “minimum” grants ranging from Rs. 1.5 million – 3 million, based on the nature of the VDC (Category I- VI). In other words, the “minimum grant” could in fact be a formula-based grant.

Second, the Act suggests that Local Bodies could be the recipient of multiple types of additional grants, presumably depending on the financial requirements of their different functional responsibilities.² There are several reference in the Act that suggest that the grants provided by the central government do not necessarily have to be unconditional in nature: they could also be sectoral block grants or earmarked conditional grants.³ As such, Section 236(1) should be read to provide only broad, general guidance with regard to the structure of the intergovernmental grant system, and should not be understood narrowly apply to unconditional grant schemes provided to DDCs and VDCs alone. Instead, whenever appropriate, “minimum grants” could be conceived of as being formula-based, whereas “additional grants” could be conceived of as being formed by a wide range of different types of grants (i.e., the term does not just apply to the “Expanded Block Grants” (EBG) provided under the current LGCDP.

Overall trend in the provision of Local Bodies Grants over time

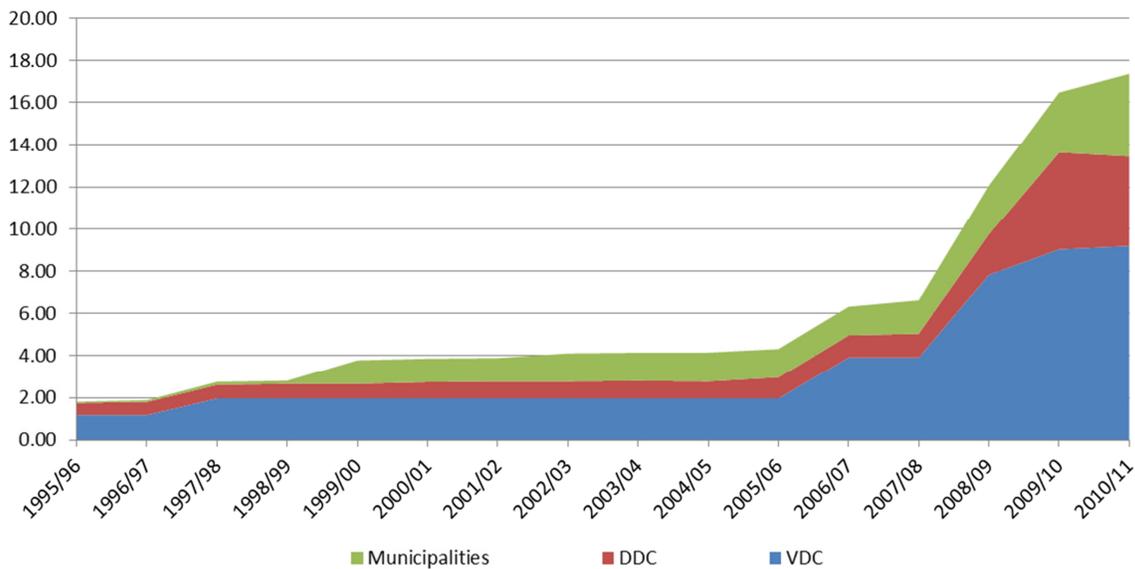
Local Bodies Block Grants have been provided since the mid 1990s, and have been evolving for almost two decades in Nepal, increasing over time in size and sophistication. Key milestones that are visible in the figure below include the very steady provision of basic (fixed amount /“categorical”) grants to DDCs and VDC until 2005/06; the introduction of the Local Development Fee as a transfer to municipalities in 1999/2000); and the introduction of additional funding to DDCs and VDCs under the Local Government and Community Development Programme (LGCDP) (2008-2012).

obtained from different sectoral Ministries of His Majesty's Government for sectoral investment.”; and (iv) “Assistance obtained from other organizations.” (It is presumed that “lump sum grants mean block grants).

² In fact, interestingly, in addition to the requirement for the central government to provide grants, Section 230 of the Act also assigns the responsibility to the DDC to provide grants to the VDC level.

³ Section 48(6) of the LSGA reads that “Special projects to be operated with the grants of His Majesty's Government shall be operated in accordance with the process prescribed by His Majesty's Government”, while Part 2 of Section 236 of the LSGA reads that “His Majesty's Government may prescribe the process of, and procedures for, the expenditure of the grant amounts to be obtained under sub-section (1)”.

Figure 2.1: Provision of grants to Local Bodies: 1995/96 – 2010/11



Source: Prepared by author based on data series prepared by LBFC/KL Devkota.

The evolution of formula-based VDC grant allocations

Since the mid-1990s, VDCs have been provided a grant allocation to cover both local capital development as well as recurrent needs. In absence of the necessary data to accurately determine each VDC’s level of expenditure needs, the GoN used to give a fixed grant amount per VDC. Although each VDC initially received a fixed lump sum amount of Rs 300,000 per VDC, this amount was increased in FY 1997/98 to Rs 500,000. After remaining the same for almost a decade, the fixed amount provided to each VDC was increased to Rs 1 million in 2006/07.

Box 2.2: The incidence of lump sum VDC grants in Nepal (in 2003)

“[In] Nepal, Village Development Committees (VDCs) receive a simple lump sum transfer from the central government in the amount of 500,000 Rupees (approximately US\$ 7,500) per VDC. Although fiscal policy experts may argue that the approach is unsuitable because it produces a highly unequal per capita allocation of local resources, central government officials have been disinclined to replace the existing “formula.” This is because, given the structure of local governments in Nepal, the formula tends to provide substantially more per capita resources to sparsely populated VDCs (especially in mountainous districts) that are perceived to have high fiscal needs, while more populous and more densely populated VDCs (particularly in the hill and terai regions of the country) receive substantially less on a per person basis. Although it is unlikely that this was an intentional design element of the lump-sum “formula” as the VDC grant evolved into its current form, the current VDC grant formula remains unchanged based on the general perception by policy makers that the resulting incidence pattern is generally fair.”

Source: Jameson Boex and Jorge Martinez-Vazquez. 2004. The determinants of the incidence of intergovernmental grants: A survey of the international experience. *Public Finance and Management IV*(4).

In 2008/09, the VDC grant was provided on a categorical basis, with the grant ranging from Rs 1.5 to VDCs that were deemed the least needy to Rs 3.0 million to those VDCs that were considered most need (according to a categorization into six distinct categories). In addition to the basic VDC grant provided by the Government of Nepal itself, the LGCDP started providing a “top up grant” or “expanded block grant” on a formula-basis in 2009/10.

VDC block grants are provided for the funding of capital development projects as well as for recurrent purposes. For each “categorical” grant level between Rs. 1.5 and 3.0 million a specific amount is set aside for recurrent activities.^{4, 5}

| | GoN | | LGCDP (including GoN & donor contributions) | | | | |
|---------|--------------------|----------------|---|--------------|------------|-----------|------------|
| | Total Amount (Rs.) | Amount per VDC | Total Amount | Equal share* | Population | Land Area | Cost Index |
| 1995/96 | 2,250 mn | Rs. 300,000 | | | | | |
| 1997/98 | 3,750 mn | Rs. 500,000 | | | | | |
| 2006/07 | 7,500 mn | Rp 1 mn | | | | | |
| 2007/08 | 7,830 mn | Rp 1 mn | | | | | |
| 2009/10 | 7,830 mn | 1.5-3.0 mn | 1,200 mn | 30% | 60% | 10% | 30% |
| 2010/11 | 7,830 mn | 1.5-3.0 mn | 1,360 mn | 30% | 60% | 10% | 30% |
| 2011/12 | 7,830 mn | 1.5-3.0 mn | 1,420 mn | 30% | 60% | 10% | 30% |

Note: * Equal shares is taken as a first charge, prior to distributing the remainder of the grant pool on the basis of the remaining allocation factors.

Two additional adjustments are made to the formula-based component of the VDC block grant. First, the VDC allocation is capped in nominal terms between Rs. 320,000 (minimum / floor) and Rs. 820,000 (maximum /ceiling) for the LGCDP portion of the grant. These caps are being applied to prevent large fluctuations in the total amount of the grant (although they in fact appear to exacerbate per capita fluctuations in VDC grant allocations).

Second, under the LGCDP, a set of so-called Minimum Conditions (MCs) are applied to the VDC block grant.⁶ VDCs that fail to meet these Minimum Conditions do not qualify for the LGCDP portion of the

⁴ The six categories of grants and their set-asides for recurrent purposes are as follows: Category I: Rs 1.50 million (Recurrent - Rs 350,000) ; Category II: Rs 1.76 million (Recurrent - Rs 393,000); Category III: Rs 1.95 million (Recurrent – Rs 400,000); Category IV: Rs 2.15 million (Recurrent – Rs 420,000); Category V: Rs 2.45 million (Recurrent – Rs 420,000); and Category VI: Rs 3.00 million (Recurrent – Rs 425,000).

⁵ This document (somewhat clumsily) refers to these minimum grants based on these six categories of VDCs as “categorical” grants. In the decentralization literature, the term “categorical grant” is sometimes used to describe a grant that can only be used for a specific type or category of expenditure. In this document, the term “categorical grant” should not be interpreted in this manner – instead, the term consistently refers to the grant provided to VDCs based on their designated type of category (Category I-VI).

⁶ These Minimum Conditions are part of the MCPMs : Minimum Conditions and Performance Measures. See the LGCDP Program Document (11July 2008) and the latest Performance Assessment Report (next footnote) for greater details on the MCPM process. Performance measures are currently not applied to the VDC level in order to provide performance incentives through penalties or bonuses.

grant, although they retain their categorical “minimum” allocation of between Rs. 1.5-3.0 million. Over the past three assessment cycles, between 88 and 93% of all VDCs met their Minimum Conditions.⁷

The evolution of formula-based DDC allocations

The evolution of district-level block grants is slightly different from the VDC-level grants. One prominent difference is that DDCs have been consistently funded at a considerably lower level (per capita) than VDCs. Another important difference is that DDCs receive a recurrent grant from the central government, which provides funding for the salaries of DDCs civil servants (LDO, POs, DTO staff, VDCs Secretaries and other permanent DDCs staff) as well as for the general administrative cost of the DDC. In addition, DDCs receive (sometimes quite considerable) conditional grant funding for specific activities.

In Nepal, a formula-based system for allocating grants to DDC system has been in place since 2004. Table 2.4 below illustrates the evolution of the grant formula used for providing unconditional capital funding to the DDC level. MLD initially used an interim formula for the distribution of block grant to DDCs which was based on district area (10%), rural population in the district (20%), level of human development (50%) and transport cost factors (20%). Although the GoN DDC allocation formula was loosely based on the DFDP allocation formula, the GoN allocation formula contained a number of problems. Previous studies identified a number of basic flaws in the initial allocation formula used for DDC unconditional capital grants, based upon which the allocation formula was subsequently revised (see Box 2.3).

| | GoN grant | LGCDP support | Minimum grant | Population | Poverty (1-HDI), | Land Area | Cost Index |
|---------|-----------|---------------|----------------|------------|------------------|-----------|------------|
| 2004/05 | | - | - | 20 | 50 U | 10 | 20 U |
| 2005/06 | | - | - | 20 | 50 U | 10 | 20 U |
| 2006/07 | | - | - | 20 | 50 U | 10 | 20 U |
| 2007/08 | | - | - | 20 | 50 U | 10 | 20 U |
| 2008/09 | 1295000 | 635250 | Rs 1.5 -2.5 mn | 20 | 50 U | 10 | 20 U |
| 2009/10 | 2080000 | 900000 | Rs 1.5 -2.5 mn | 40 | 25 W | 10 | 25 W |
| 2010/11 | 2430000 | 1000000 | Rs 2.5 -3.5 mn | 40 | 25 W | 10 | 25 W |
| 2011/12 | 2102960 | 1150000 | Rs 4 mn | 40 | 25 W | 10 | 25 W |

Note: U and W denote “unweighted” and “weighted” respectively. See further discussion in the text.

Box 2.3. Problems with the previous DDC allocation formula

There were several problems with the formula that was previously used to distribute capital resources to DDCs. For instance, see the commentary by Jesper Steffensen and Bandhu Ranjan. 2008. *Technical Note on Input to the Strategy for Topping-Up of Capital Grants to Local Bodies – the “Expanded Block Grants (EBGs)” in Nepal*. Many of these concerns were taken on board in the revision of the DDC block grant formula in 2009/10.

A first observation with regard to the “interim” DDC block grant formula (which was in place until 2008/09) was that the formula was not sufficiently population-based. Since it was felt that the initial formula should be very “pro-poor”, the fact was ignored that the main client or recipient of local public services are all local residents. As a

⁷ *Minimum Conditions And Performance Measures: An Analysis Of Local Bodies Performance, Performance Assessment Year 2007/08-2010/11*, Government of Nepal, Local Bodies Fiscal Commission Secretariat (LBFCS), Pulchok, Lalitpur, November 2011

result, only a very small weight was given to (rural) population (20%), relative to poverty (50%). This imbalance was (partially) adjusted in favor of population in the 2009 revision of the DDC block grant formula.

Second, the manner in which the Human Development Index (HDI) was included in the DDC block grant formula was deemed not to be appropriate. Prior to 2009/10, the HDI was included in the formula in an unweighted manner. This resulted in a situation where very small and poor LBs were getting essentially the same nominal amount of grants as very large (populous) LBs with the same poverty rate. However, in order for “finance to follow function” it is not the poverty rate or HDI itself that matters, but rather, the number of poor people or households in a district. This concern was addressed in 2009/10 by weighting HDI by population (and hence, forming a proxy for the number of poor residents in each district) rather than erroneously relying on the HDI rate itself.

Third, it was noted that the computation of the district-level is derived from a relatively small sample from 2005 that is not perceived as statistically robust. Steffensen and Ranjan therefore recommended to up-date the poverty indicator in the allocation formula as soon as robust figures become available or to include other alternative robust poverty indicators in the formula. However, it was not possible to act upon this recommendation during the 2009 revision of the DDC block grant formula.

Finally, the manner in which the “interim” formula dealt with district cost variations suffered from the same problems as the HDI. The initial allocation formula simply used the cost index figure as the allocation factor, rather than weighting the cost index against also a problem. During the revision of the DDC block grant formula in 2009, the District Cost Index was weighted by an amount equal to each respective DDCs grant allocation based on population, poverty and land area (see Box 5.1). As further discussed in Section 3.2 of this report (and subsequently, Section 4), while this is an elegant approach to ensure that district cost variations are weighted in the formula, there are further improvements that could be made in this area.

Unlike at the VDC level, where the VDC block grant takes place in a somewhat bifurcated manner (with the GoN’s continued funding of a categorical “minimum” allocation grants in parallel to LGCDP’s formula-based funding), the DDC capital grant has seen a near-complete integration of the GoN-funded portion of the grant and the DP-funded portion. For the current fiscal year (FY 2011/12), the following formula-based approach was used in the allocation of DDC capital grants:

- Fixed amount: 30 percent of the grant pool has been set aside for a “equal share” allocation of Rs 4 million each (Rs 300 million total). The remainder of the grant pool is distributed in accordance with the following allocation factors:
 - Rural population: 40 percent
 - Weighted poverty (HDI): 25 percent
 - Land Area: 15 percent
 - Weighted Cost Index: 15 percent
- Box 2.3 notes how the poverty measure and the district cost variation measure are weighted in the current DDC formula.
- Unlike the VDC formula, no minimum or maximum “caps” (floors or ceilings) are being applied to the nominal amount of the grants.

Introduction of MCs and PMs

An important feature of the grant system in Nepal is formed by the MCPMs, or the Minimum Conditions / Performance Measures. An elaborated system of minimum conditions and performance measures has been piloted in Nepal since 2004 under the DFDP program. The system has had a positive impact on the legal compliance, financial management and accountability in the 20 DDCs where it was applied. The

system installs a system of stronger accountability and transparency, promotes strong incentives to improve performance in pre-identified areas, and annually reviews and assesses the capacity and functional performance of DDC. After piloting and further testing of the tool over the period from 2004-2007, GoN decided to initiate a process of roll-out of system to all 75 DDCs with impact from the FY 2008/09. It has been noted that the assessment tool/manual has been reasonably well elaborated.

It has been argued that the MCPM process has had a major positive impact on the pilot assessment of the 55 non-DFDP districts was conducted in 2007, during which it was revealed that only 10 DDCs of the 55 non-DFDP districts could pass all MCs.⁸ It is unclear, however, if this was the result of the MCPMs themselves, or whether this result was caused by selection-bias or the capacity building support provided by GoN and DPs to the DFDP districts.

Although MCPMs have been successfully used in many countries, some reservations should be placed with the nature in which they should be applied. First, it should be noted that the governance environment has an important impact of the effectiveness of performance-based grants. One particular concern in Nepal is the absence of elected local councils, and the relative ineffectiveness of top-down controls over the district level. As a result, there may currently not be an appropriate institutional structure in place that is capable of responding to the incentives being produced by the MCs and PMs.

It should be noted that in the case of Nepal, there is a clear geographic pattern with regard to DDCs that fail their MCs. This underlying pattern is not desirable and may have political implications for the grant system. This pattern is reinforced by the fact that there is a high recidivism rate among failing DDCs. This makes it quite likely that there are underlying economic, fiscal or social conditions present that result DDCs from responding to the incentives provided by the MCPMs (e.g., high revenues from other sources or the complete lack of public and social accountability may make the grant irrelevant). This problem has an impact on the ultimate allocation of DDC resources and therefore warrants further research.

Another area for concern is that while MCPMs may be an appropriate mechanism to promote certain good local governance practices using the carrot of supplemental (typically DP-funded) grants, MCPMs should often not be applied in the same way to core government funding provided to local bodies. In particular, problems may occur if the MCs are specified in a way that is too strict.⁹ It is important to remember that MCs should only function as an “emergency break” which should only be applied if providing the grant would result in catastrophic failure or certain and complete abuse of funds. A final concern is that –especially in the case of joint government-donor grant schemes- the MCPM process get overloaded with MCs and PMs that are programmatic rather than systematic in nature, which starts to infringe upon the discretion of local governments. For instance, imposing requirements that a certain percentage of funds should be spent in a certain way (e.g., on a “woman’s project”) becomes highly arbitrary procedural issue, which is often unrelated to whether the grant is being spent in accordance with the true needs of the community (including its women’s members).

There is a further need to study the effectiveness and impact of MCs and PMs, both at DDC and VDC level, and it would be unwise to roll out any further MCPMs without further study of its overall impact.

⁸ Jesper Steffensen and K.L. Devkota, “Final Report: Local Governance And Community Development Programme Review And Refinement Of Fiscal Transfer Mechanisms For Local Bodies (DDCs and VDCs)”, MLD/LGCDP, October 2009.

⁹ It should be noted the GoN felt obliged to make adjustments to the assessment results during FY 2011/12, since it felt that the MCs were too strict. “Fixing” the results of the annual assessment after the assessment takes place is an obvious slippery slope.

Some indication should be sought that the system is objective, credible, and capable of incentivizing good local governance. In addition, the cost of engaging in ever-more complex MCPM assessments should be weighed against the expected governance benefits, particularly at the VDC level, whether the cost of engaging in a credible and objective MCPM system is considerable. In the absence of fundamental local PFM mechanisms, greater rewards may be reaped by further developing the local PFM infrastructure.

The increasingly conditional nature of DDC and VDC block grants

Although the DDC and VDC block grants are in principle unconditional, increase conditions have slipped into the provision of these grants. Local bodies are expected to make provisions for children (10%), women (10%), and disadvantaged or marginalized groups (15%), requiring LBs to earmark a share of their resources for each these purposes. In addition, instructions were given by Cabinet at the beginning of the current financial year for VDCs to set aside an addition 15% of their grant resources for agriculture projects.

This is not necessarily a good development. Not only does this practice reduce the discretion of the Local Bodies to use the limited grant resources for their highest priority, the practice also results in a (often undesirable) fragmentation of local spending.

2.3 The interaction between Nepal’s unique spatial patterns and the grant system

In comparison to most countries, Nepal has unique geographic and spatial settlement patterns. These spatial population distribution patterns and the spatial diversity of Nepal are captured in tables 2.5 and 2.6 below.

There are two important reasons for contemplating these patterns. First, the highly uneven distribution of people and land area across DDCs and VDCs will have considerable impact on formula-based allocation patterns. A review of the allocation formulas will have to assess whether these patterns are desirable from a public finance and public service delivery viewpoint. Second, the tables below highlight that the distribution of grant resources across the national territory –regardless of which formula is ultimately used- will likely have important regional-political implications, particularly as the country is in transition to a federal system.

| | Far west | Midwest | Western | Central | Eastern | Total |
|----------|-------------------------|-----------|-----------|-----------|-----------|------------|
| Mountain | 465,247 | 393,374 | 20,326 | 521,439 | 394,968 | 1,795,354 |
| Hill | 863,508 | 1,713,197 | 2,831,753 | 4,443,185 | 1,623,358 | 11,475,001 |
| Terai | 1,214,594 | 1,477,815 | 2,093,111 | 4,749,078 | 3,815,856 | 13,350,454 |
| Total | 2,543,349 | 3,584,386 | 4,945,190 | 9,713,702 | 5,834,182 | 26,620,809 |
| | Percent of total | | | | | |
| Mountain | 1.7 | 1.5 | 0.1 | 2.0 | 1.5 | 6.7 |
| Hill | 3.2 | 6.4 | 10.6 | 16.7 | 6.1 | 43.1 |
| Terai | 4.6 | 5.6 | 7.9 | 17.8 | 14.3 | 50.2 |
| Total | 9.6 | 13.5 | 18.6 | 36.5 | 21.9 | 100.0 |

Source: Computed by author based on preliminary Census data (2011).

| | Population | Land Area | Pop. Density | Poverty Rate | Cost Index 2012 |
|----------------------|----------------|--------------|--------------|--------------|-----------------|
| Ecological Zone | | | | | |
| Mountain | 112,210 | 3,239 | 42.4 | 42.0 | 1.57 |
| Hill | 294,231 | 1,573 | 357.9 | 40.6 | 1.23 |
| Terai | 667,523 | 1,701 | 442.6 | 30.6 | 1.00 |
| Development Region | | | | | |
| Eastern | 364,636 | 1,779 | 247.9 | 39.7 | 1.24 |
| Central | 511,247 | 1,443 | 702.0 | 30.9 | 1.06 |
| Western | 309,074 | 1,837 | 204.4 | 33.9 | 1.20 |
| Midwest | 238,959 | 2,825 | 113.6 | 46.7 | 1.47 |
| Far west | 282,594 | 2,171 | 134.1 | 44.6 | 1.32 |
| National Avg. | 354,944 | 1,962 | 313.2 | 38.2 | 1.24 |

Source: Computed by author.

The tables reveal a number of interesting patterns. For instance, it is important to note that only 6.7 percent of Nepal's population resides in districts in the mountain ecological zone of the country, whereas 93.3 percent reside in the hills and terai areas of the country. Another important observation is that while in some respects hill districts are more like terai districts (most notably, population density), in many other aspects, they are a lot more like mountain districts (e.g., poverty rate). We also observe considerable variation across development regions, with the central development region being relatively well-positioned in many respects.

2.4 Next steps in the evolution of formula-based VDC and DDC grant allocations

The introduction of formula-based grants system is widely regarded (and correctly so) as one of the main achievements in the fiscal decentralization process in Nepal so far. Before formula-based grants were introduced, the government used to allocate grants to the LBs (especially to the DDCs and municipalities) on arbitrary basis. As a result, the transfer system lacked the elements of objectivity, equity, transparency, and predictability. In fact, these weaknesses continue to plague the majority of resources provided to the local level in Nepal, as around 75 percent of financial resources continue to be provided to the local level in Nepal without the use of formula-based grants.

By all accounts, the allocation formulas used for DDCs and VDCs in Nepal are already in quite good shape. Over the past decade, the evolution of Nepal's grant system has benefitted from technically sound analysis and guidance on the formulas. As a result, the basics of the formulas that are currently in place are sound.

Nonetheless, it was felt that the present allocation criteria and their weight needed revision for a number of reasons. A major concern has been the degree to which the formula takes into account variations in local expenditure needs due to accessibility. The district-wise cost index was developed in 2005 and it is felt that many things have changed since then in terms of connectivity, relative levels of development, and so on. In addition, there is concern within policy circles that there are no separate cost indices for. Since all VDCs in a district are given the same weight, the cost index does not take into

account the higher needs of VDCs that are relatively more remote and underdeveloped. Thus, some policy makers feel that there is a need to develop VDC-wise cost index to correct this situation.

Likewise, even after the introduction of equity-related criteria like poverty, cost index, the present system of transfers is being questioned on equity grounds. It is argued that local bodies in relatively remote and underdeveloped areas are not getting their “fair share” of resources to meet their basic expenditures. One possibility that has been raised in policy circles is whether an allocation criteria based on physical infrastructure could be introduced as a criteria for the allocation of transfers.

3. An initial review of the overall DDC and VDC grants

This section in the report provides an initial review of the overall DDC and VDC grants. In particular, it looks at the rationale for why allocation factors are included in the current formulas (Section 3.1) and what the current formula means in terms of LBs ability to finance local infrastructure (Section 3.2). Next, this section considers whether the formulas adhere to basic principles of sound transfer design (Section 3.3). This section concludes with general options for the revision of the DDC/VDC grant formulas.

We find that, given the structure of LBs in Nepal, the DDC and VDC allocation formulas are already in quite good shape. Nonetheless, improvements to the DDC/VDC formulas and allocation factors are possible. (Details recommendations for the DDC and VDC formulas are made in Sections 5 and 6, respectively). Furthermore, the initial analysis finds that substantial changes in the formula or allocation factors (e.g., accessibility) are not likely to improve distribution much; this is discussed further in Section 4. Nonetheless, a review of the current grant allocation formulas contains important lessons for the next steps in the reform of Nepal’s public sector structure, as discussed in Section 7.

3.1 Rationale for allocation factors in current formula: “finance should follow function”

There are a number of principles that are generally accepted as forming a sound foundation for the design of grant schemes. These principles will be discussed further below. However, the first question that should be asked is “what is (or was) the rationale for including the current allocation factors into the current DDC/VDC formulas?”

Although it has perhaps not always been clearly articulated, there seem good reasons for the selection of the current allocation factors into the DDC and VDC formulas. In discussing the current allocation factors contained in the respective allocation formulas (as captured in table 3.1 below), it is important to keep in mind that most allocation formulas seek to provide a measure of the relative need for local expenditures across different local jurisdictions.

| Factor | DDC | VDC |
|---------------|-------------|-----------------------|
| Minimum grant | 4,000,000 | 1.5-3.0 million |
| Equal share | - | 30% of remaining pool |
| Population | 40 | 60 |
| Poverty | 25 | - |
| Land area | 10 | 10 |
| Cost | 25 | 30 |
| MC/PM | MCs and PMs | MC |
| Caps | No | [Rs 320,000-820,000]* |

Note: * For LGCDP portion only.

Objective of the grant

It is important to assess any grant formula against the objective of the grant. As already noted in Section 2, the legislative framework provides relatively limited guidance in this regard, especially since the assignment of expenditure responsibilities in the LSGA was never truly implemented. We might take as

further guidance the overall program objective of the LGCDP, which sets as its over-arching goal **“to contribute towards poverty reduction through inclusive responsive and accountable local governance and participatory community-led development** that will ensure increased involvement of women, *Dalits, Adibasi Janajatis, Muslims, Madhesis*, disadvantaged groups in the local governance process. The stated purpose of the program is to support **“Improved access to locally and inclusively prioritized public goods and services”**. The LGCDP program document (p. 23) states that “LGCDP will be judged by the extent to which it **delivers real and tangible benefits to the poor and to citizens as a whole”**.”

Population

Population is the most dominant allocation factor in almost all grant allocation formulas, since the number of people that reside in a jurisdiction is one of the main indicators of local need in that jurisdiction. Quite simply put: if you have twice as many people in your jurisdiction, all else equal, you have to provide public services to twice as many residents.

Note that the grants provided to Local Bodies are expected to deliver real and tangible benefits –in terms of improved public infrastructure and services-¹⁰ not only to the poor, but to citizens as a whole. As such, it is important to make sure that there is a per-person base grant amount received by LBs for every resident in some proportion to their needs for infrastructure and service delivery to be funded from the grants.

Poverty

It is clear that the GoN and its DPs intend the grant to LBs to be pro-poor. However, this link is seldom explored beyond stating that the pro-poor nature of the grant is the result of equity concerns. However, unless there is as direct a link as possible between the grant allocation and a pro-poor activity, it is unlikely that the grant or formula will have any impact on poverty at all.

In this context, it is important to recognize that merely by including some measure of poverty into the allocation formula, the grant does not automatically become pro-poor. It is equally important (if not, more important) that the grant resources are actually spent on an activity that directly or indirectly helps poor people.

For instance, if grant resources are used to reduce local taxes on poor residents (by paying for local infrastructure that was previously paid for with own revenues levied on poor households), than the social and economic impact of the grant may in fact be pro-poor. Another way in which a grant can be used in a pro-poor manner is when poor residents are hired as labor for local construction projects. However, we generally expect that the pro-poor benefit from local capital grants comes from fund infrastructure that enhances the productivity of poor residents (as well as possibly, non-poor residents), such as by constructing markets or roads or irrigation schemes. All of these infrastructure projects are believed to enhance either the productivity of the poor, or enhances market access for the poor. As a result of these interventions, therefore, we believe that the value of their land or the value of their production is increased, or both.

As such, there are two reasons why we may include a measure of poverty in an allocation formula. First, to the degree that our policy objective specifically targets the poor, poor residents become the client base for some (if not all) of the grants’ efforts. Second, poor residents often have higher expenditure needs when compared to higher-income households. In other words, in some cases, it may cost more to

¹⁰ It is noted that benefits also include non-tangible benefits, such as the benefits of being provided voice.

provide poor households a certain level of public service. This is especially true in the provision of basic education and basic health services. This is not necessarily the case, however, in the provision of basic infrastructure services.

Box 3.1: Does inclusion of a poverty measure in the formula result in perverse incentives?

Some concern has been raised that by including a measure of poverty in the formula, local officials would have a perverse incentive to maintain a higher poverty rate in order to receive greater grants in the future. While we should expect local officials to act in a rational manner (for instance, we should expect headmasters to report higher enrolment if they receive greater grants as a result), it is less likely that local officials would actually seek to hinder social and economic progress for residents within their jurisdiction. Since poverty reduction is a major public policy objective of national and local leaders alike, even in the absence of local elections, there are numerous formal and informal (public and social) accountability mechanisms that track progress on a pro-poor agenda. As a result, it is not likely that inclusion of a poverty measure in a grant allocation formula will result in local official actually hindering local poverty reduction efforts.

A cautionary note should be made that it is often important for political economy reasons for government programs *not* to focus on poor households, since a government program that exclusively focuses on poor households produces no benefits for “non-poor” households. International experience suggests that this often results in a lack of political support for pro-poor programs from the non-poor segment of society. Instead, from a political economy perspective, it is often better to provide universal access to public services that benefit both poor and non-poor households. This will ensure sustainable support from both groups.

A final concern with regard to the pro-poor nature of local government grants is that –in practice- the DDC and VDC grants are not positioned to have a considerable impact on poverty reduction: after all, the DDC and VDC grant schemes only reflect a small percentage of total public expenditures. The bulk of public expenditures that reach the local level –for instance, the budgetary allocations that finance the provision of public education, public health services, agricultural extension services, and so on- are in fact allocated through central line ministries.

Thus, in order to improve the pro-poor nature of the public sector, it will be important to study the incidence (or allocation pattern) for these resources. International experience suggests that in many countries, these resources are not allocated in a pro-poor manner. In fact, there is evidence to suggest that public expenditures are often (sometimes unwittingly) allocated in a pro-wealthy manner, since urban areas are better positioned to deliver public services, whereas it is often difficult to post public servants (such as local administrators, teachers and health care workers) in remote or isolated areas. In addition, there is ample evidence to suggest that political factors at the national level play are an important factor in determining resource allocations between different local jurisdictions.¹¹

As such, rather than focusing exclusively on the potential pro-poor impact of the block grant system, it would be prudent to conduct a wider study of local public sector finances in Nepal, which explores in

¹¹ As such, it is important to note that the most realistic counterfactual for a per-capita based grant scheme is not a formula-based grant that is fully targeted at the poor, but rather, a discretionary grant that is provided in a discretionary manner by central government officials or politicians to benefit well-off (or politically well-connected) local jurisdictions, and/or politically powerful local elites. In contrast to the latter scenario, virtually any formula-based grant (even those that are simply based on population) would be considered pro-poor.

greater detail whether public resources across the board (including not only block grants, but also sectoral resources, such as primary education expenditures, health expenditures, and so on) are being allocated across the national territory in an efficient and equitable manner.

Land area

There are two closely-related reasons why land area is commonly included in allocation formulas. Both of these reasons are driven by the decreased accessibility that is typically associated with greater land area.

First, holding everything else (including the number of residents) equal, a jurisdiction with a larger land area will typically have greater expenditure needs in order to provide the same level of services. In order to provide roughly the same level of public services, the roads will need to be longer and there will be a need for more (albeit, probably smaller) schools, clinics, and other infrastructure.

In addition to the potential greater need for physical infrastructure, it is likely that this infrastructure (as well as the delivery of public services) will be more expensive. In many cases, greater land area means higher transportation costs. Greater land area can also result in higher service delivery costs because scale economies are harder to achieve in low density areas, or when it is more costly to entice public servants to reside in rural areas.¹²

It is important to note, however, that land area is in fact a weak measure of accessibility. As discussed further in Section 4, the higher cost associated with inaccessibility is driven by numerous factors other than land area.

In addition, care should be taken to balance efficiency concerns and equity concerns. While it may be “fair” to provide residents in inaccessible regions with the same level of access and public services as in other parts of the country, the cost of doing so may simply be unjustifiable or prohibitive. The economic impact of constructing a road in the mountains may be minimal (since only very few residents will use the road), constructing the same road in a densely populated area will have a much greater impact in terms of economic benefit. Is it a wise development strategy to set aside more resources and provide disproportionately greater financing for roads and infrastructure that produces less value for money in terms of economic impact?

Cost index

To the extent that differences in terrain and geography result in different local cost levels, it would be appropriate to compensate local bodies for the cost differences that they face, so that they can provide the same level of government services. After all, when the cost of construction is twice higher in a local jurisdiction, and everything else is the same, then the local expenditure need is twice higher in that jurisdiction.

Including a cost index in an allocation formula is not uncommon in countries that have considerable cost differences. For instance, Indonesia includes a cost index as one allocation factor in its unconditional grant scheme (known as the DAU).

¹² Public servants may be provided with a hardship allowance to accept a posting in a rural area. Alternatively, housing may have to be provided to teachers or other local staff in order to accept a position in a more isolated area.

One problem, discussed further below, is how to incorporate a cost index into the formula. When the cost index is included into an allocation formula as one factor among several other factors, it is unlikely that the allocation factor will compensate for the full difference in local expenditure needs that generated due to the difference in local price levels. In contrast, it is possible to incorporate the cost index in such a way that the formula fully takes into account the impact of cost differences across different local jurisdictions.

Equal shares / fixed lump sum

As discussed further below, sound principles of transfer design warn against excessive reliance on “equal shares”. The practice of equal shares is the case in which local jurisdictions are provided with an equal share of the grant pool, regardless of their population, land area, or other characteristic. For instance, for DDCs in Nepal, an equal share would entitle a district to receive 1/75th of the related grant amount.

Nepal is quite familiar with fixed lump sum approach, by which every jurisdiction receives the same nominal fixed lump sum grant amount (e.g., Rs 1,000,000 per VDC). An “equal share” approach is in essence a fixed lump sum grant that is determined as the ratio of the size of the grant window and the number of local jurisdictions.

There are a few reasons in favor of providing a portion of a formula-based grant on an equal shares or fixed lump sum basis, but the arguments differ somewhat for recurrent grants and capital grants. For recurrent grants, because any local jurisdiction faces a certain amount of fixed operational expenditures (regardless of population or geographical size), it is appropriate for recurrent grant formulas to allocate a small fixed amount for such fixed costs. In such cases, the allocation based on equal shares ensures that the cost of minimum recurrent administrative overhead expenditure is covered.

For capital grants, the rationale for providing a fixed amount or equal share is somewhat different, because there is no fixed annual requirement to cover certain capital expenditures as there is on the recurrent side of the budget.¹³ Instead, the typical rationale for providing a small fixed amount or lump sum (or equal shares) as part of capital grant schemes is to ensure that every jurisdiction at least has the minimum grant required to provide a single capital development project. This is necessary because most capital infrastructure investments are “lumpy” and not easily divisible. In other words, the equal shares allocation would make sure that each jurisdiction receives enough resources for one (or several small) local capital infrastructure investments.

As noted in Box 2.2, to some extent, the equal shares allocation has been used for “equalization” purposes, as the approach results in less populous jurisdictions—who are perceived to have much higher needs—receiving a larger amount per capita. However, one should be careful “equalizing” expenditure needs in this manner, as it is not possible to use the DDC or VDC block grant to address the infrastructure

¹³ There is perhaps a feeling by some that even in the case of local capital infrastructure, there are scale economies that dictate that jurisdictions with a smaller population intrinsically have a higher per-capita need for public infrastructure. The author would argue, however, that the per capita need for infrastructure is typically not driven merely by the size of the population of smaller (less populous) jurisdictions, but rather, that there is an underlying factor that causes two causalities: inaccessibility and difficult terrain cause both a greater need for capital infrastructure per household, while at the same time, inaccessibility and difficult terrain also causes a reduction in the (population) size of local jurisdictions. In accordance with this argument, in addition to the inclusion of a cost measure and land area into the DDC/VDC formulas, the equal share amounts in Nepal’s formulas function as a *de facto* proxy for inaccessibility. See next footnote why this is not likely to be an appropriate allocation factor or argument for the DDC and VDC block grants.

needs of residents in mountainous areas without having a major negative impact on the resources remaining for the infrastructure needs of residents in the hills and terai.¹⁴

Box 3.2: The distinction between equal shares and minimum grants

Note that there is a difference between the concept of an “equal share” or a “fixed amount” on one hand, and the concept of a “minimum grant” (as referenced in the LSGA, 1999) on the other hand. The concept of an “equal share” is merely an allocation factor that provides every jurisdiction the same nominal amount.

The concept of the “minimum grant” or “basic grant” as contained in the LSGA has thus far been operationalized in Nepal by allocating each VDC (or DDC) a fixed amount or a categorical amount. However, the fact that the “minimum grant” has hitherto been determined as a “equal share” does not mean that the basic requirement or minimum requirement for each DDC or VDC is in fact the same. In fact, it is highly unlikely that the minimum expenditure need for Jorpati VDC in Kathmandu District (population: 82,915) is in any way similar to Barsunchet VDC in Nuwakot District (population: 425). Yet, if either fails the Minimum Conditions, both would only receive their “categorical” grant (almost a fixed amount, falling in the range from Rs. 1.5 -3.0 million). In the case of Barsunchet VDC, this minimum grant would equal over Rs, 3,500 per person, whereas Jorpati VDC would only receive a minimum grant of Rs. 36 per person.

It should be agreed by all that the LSGA does not say that the minimum grant is a fixed amount, like an “equal share” or a lump sum minimum. In fact, even the current “categorical” grant for VDCs recognizes this, although the variation provided in the “categorical” grant is wholly inadequate. As such, it would be important to consider whether the “minimum grant” for each DDC or VDC could in fact be determined on a formula basis. If so, it is highly likely that the minimum grant for a jurisdiction would be expected to rise or fall with the same factors that are contained in the DDC/VDC allocation formula.

3.2 What do the current formulas mean in terms of financing functions?

In designing a grant allocation formula, the meaning of the relative weights is not straightforward: just because the weight associated with a specific allocation factor is greater does not necessarily mean that this is somehow better. Some additional analysis is required to determine the impact of the relative weight of an allocation factor on the funding available for public service delivery – by linking the grant allocation to the client or recipient of government services.

One of the main mantras in the design of intergovernmental fiscal transfer schemes is that “finance should follow function”. Consistent with this concept, it is often possible to “translate” an allocation formula into the per-person or per-client amount of funding that the formula provides. See the box 3.3 below for an example how a traditional, “mathematical” allocation formula can be linked to public service delivery levels by computing the allocation of resources per client.

¹⁴ None of the statements of the objectives of the DDC and VDC block grants suggest that resolving inter-jurisdictional inequities in Nepal is one of the objectives of these grant schemes. If the Government of Nepal sought to improve rural access (no doubt an important driver of rural poverty in the country), it has numerous programs that fall beyond the scope of these grant schemes to address this issue.

Box 3.3: Deriving the equivalence of per-client funding (example)

In this example, our “country” has a total population of 1000 residents (POP=1000), of which 400 residents are poor (POV=400). Imagine that policy makers decide to allocate a grant of \$10,000 among the district in the country in proportion to population (80%) and poverty (20%). How would we assess the impact of this formula in terms of the services that could be delivered to all residents, including the poor?

Let’s re-write the formula-based allocation in three steps (where the subscript i refers to each local jurisdiction):

$$\text{Step 1: Grant}_i = (\text{pop}_i / \text{POP}) \cdot 0.8 \cdot \$10,000 + (\text{pov}_i / \text{POV}) \cdot 0.2 \cdot \$10,000$$

$$\text{Step 2: Grant}_i = \text{pop}_i \cdot (0.8 \cdot \$10,000 / \text{POP}) + \text{pov}_i \cdot (0.2 \cdot \$10,000 / \text{POV})$$

$$\text{Step 3: Grant}_i = \text{pop}_i \cdot (\$8,000 / 1000) + \text{pov}_i \cdot (\$2,000 / 400)$$

Computationally, the relative importance of each allocation factors is not only driven by the relative weight assigned to each factor, but also by the underlying factor (i.e., the total size of the population versus the total number of poor). As a result, based on the numbers in the example, the formula-based allocation above is mathematically equivalent to providing a transfer of \$ 8 per resident (\$8,000/1000) plus \$ 5 per poor resident (\$2,000/400). These per client allocations can be directly linked for the services and infrastructure that ought to be funded by the grant. In this example, is it possible to perform the assigned function for \$ 8 per person? In addition, is it reasonable (in terms of higher needs or the higher cost of delivering services to the poor) to allocate an additional \$5 per poor person (for a total of \$13 per poor person) in order to provide roughly the same level of public services to a poor person and a non-poor person?

What does the current DDC formula mean in terms of financing DDC functions?

Using the analytical approach explained in the box above, Table 3.2 below presents an analysis of the current DDC grant formula in terms of what the current DDC formula means in terms of financing DDC functions.

| Table 3.2: An Analysis of the current DDC grant formula | | | | | |
|---|---------|--------------------|--------------------|--------------------|--------------------|
| | Rs. | per... | Per Capita Minimum | Per Capita Average | Per Capita Maximum |
| Equal share | 4,000.0 | district (Rs. 000) | 5.9 | 15.1 | 417.2 |
| Population | 24.0 | Person | 24.0 | 24.0 | 24.0 |
| Weighted Poverty | 32.4 | poor person | 9.9 | 14.4 | 21.1 |
| Land Area | 830.4 | km 2 | 0.7 | 4.0 | 221.7 |
| Percent of Cost Gap Covered | 43.1 | | - | - | - |

The table indicates that the current DDC block grant formula allocates every district an equal share amount of Rs. 4,000,000. This translates into an average per capita allocation of Rs 15 per resident. However, not every district receives an equal amount per resident: the most populous district only receives an amount of Rs 6 per resident, while the least populous district in practice receives a fixed lump-sum grant amount equivalent to Rs 417 per resident.

In addition to the equal share amount, every district receives an allocation of Rs 24 per resident, plus another Rs 32 per poor resident.

Finally, each district also receives an allocation based on land area that is equivalent to Rs 830 per square kilometer. Of course, the allocation is not used for the benefit of the land itself, but rather, for the people on the land. As such, this allocation translates into an average allocation of Rs 4 per person, ranging from Rs 0.7 in the most densely populated district to Rs 221.7 in the least densely populated district. In practice, this means that while the least densely populated districts receives Rs 24 per person as a per-person allocation (based on the population factor), that it receives an addition Rs 221.7 per person (a ten-fold greater amount) to offset the presumed higher costs and needs associated with greater land area and lower accessibility.

What does the current DDC formula mean in terms of financing DDC functions?

Similarly, Table 3.3 below presents an analysis of the current VDC grant formula in terms of what the current DDC formula means in terms of financing VDC functions. The interpretation of the results is similar to the district analysis discussed above, although the variations at the VDC level are greater across the board, since the underlying variations in the allocation factors at the VDC level (e.g., population and land area) are greater (see Table 2.1).

| | Rs. | per... | Per Capita Minimum | Per Capita Average | Per Capita Maximum |
|-----------------------------|------------|--------------------|---------------------------|---------------------------|---------------------------|
| Categorical Basic Grant | 1,999.8 | district (Rs. 000) | 24.1 | 354.3 | 29,848.3 |
| Equal share | 109.2 | district (Rs. 000) | 1.3 | 19.4 | 1,630.4 |
| Population | 27.1 | Person | 27.1 | 27.1 | 27.1 |
| Weighted Poverty | 0.0 | poor person | 0.0 | 0.0 | 0.0 |
| Land Area | 706.8 | km 2 | 0.1 | 2.0 | 1,809.0 |
| Percent of Cost Gap Covered | 5.2 | - | - | - | - |

Table 3.3 indicates that the current VDC block grant formula allocates every village (VDC) a categorical grant ranging in amount from Rs. 1.5-3.0 million. This translates into an average per capita allocation of Rs 354 per resident. However, not every VDC receives an equal amount per resident: the most populous district only receives an amount of Rs 24 per resident, while the least populous district in practice receives a categorical grant amount equivalent to almost Rs 30,000 per resident.

In addition, to the categorical grant, every VDC receives an equal share allocation funded by 30% of the remaining grant pool. This translates into an average allocation of Rs 19.4 (ranging from Rs 1.3 to Rs. 1,630.4 for the most populous VDC versus the least populous VDC). In addition to these amounts, every VDC receives an allocation of Rs 27 per resident. There is no allocation based on poverty in the VDC allocation formula.

Finally, each VDC also receives an allocation based on land area that is equivalent to Rs 7.6 per square kilometer. This allocation translates into an average allocation of Rs 2 per person, ranging from Rs 0.1 in the most densely populated VDC to Rs 1809 in the least densely populated VDC.

To what extent do the current formulas correct for local cost differences?

A positive feature of the DDC and VDC grant formulas in Nepal is the fact that they try to account for the considerable cost differences across the national territory. As discussed earlier in this report, cost-levels are not a stand-alone issue –but rather, differences in cost levels impact the expenditure needs for every client included in the formula. As a result, cost levels should not simply be included in the allocation formula as a regular allocation factor. Instead, weighting the cost index by using the formula-

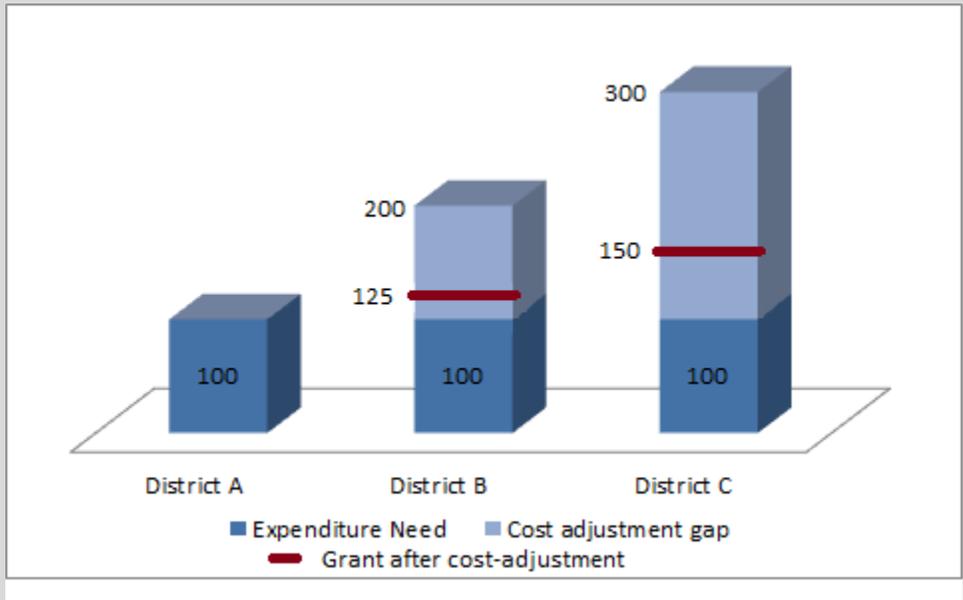
based allocations for population, land area and poverty as the relative weight (as recommended by Stefanssen and Ranjan, 2008: Annex 3) is quite an elegant approach and a major improvement over the previous practice.

Box 3.4: Explaining the Concept of Cost Gaps – An Example

Assume we have three districts, each with the same population, and a total expenditure need (based on their population, land area and poverty rate) of \$100. In other words, before taking into account the cost allocation factor in the formula, the allocations provided under the first three allocation factors for each of the jurisdictions – which is a measure of their relative expenditure needs (before taking into account price differences)- equals \$100.

However, in this example, price levels are different in the three jurisdictions. District A has a price level of 1, while District B has a price level of 2 (twice higher) and District C has a price level of 3 (three times higher than District A). As a result, the actual expenditure need (after taking into account the cost differences) in District B is \$200, while it is \$300 in District C. One could say that District B has a “cost gap” of \$100 while District C has a “cost gap” of \$200. Thus, the total (aggregate) cost gap is \$300.

Since District A has already received an allocation fully in proportion to its expenditure needs, if we wanted to be fair to Districts B and C, we would have to fully fill their cost gap. In this example, this would require the grant pool to set aside \$300 (\$100+\$200) specifically for this purpose.



However, relative weights are often set in a somewhat more haphazard way. Imagine that the total grant pool is \$375, and the relative weights are determined by policy makers in such a way that (probably inadvertently) the formula sets aside only 20% of the total grant pool for cost adjustments. This \$75 is distributed in proportion to districts B and C in proportion to their cost gaps (since District A has a cost gap equal to zero). As a result of the limited resources available, only 25% of the total cost gap can be filled (\$75 available / \$300 total cost gap). Since only a small amount of resources is set aside for cost adjustment, District B only ends up receiving \$125 (only 62.5% of its total expenditure needs of \$200), while District C receives \$150 (only 50% of its total expenditure needs of \$300). In contrast, the low-cost District A receives a grant equal to \$100, which is equal to 100% of its total expenditure needs.

However, careful review of the existing formula as well as the analysis above, provides cause for some concern. The specific concerns are somewhat technical in nature, but the main concern is that because cost-variations in Nepal are quite large and the relative resources assigned to the cost-factor in the formula are relatively small, the result is that local bodies with higher expenditure needs due to higher cost levels only receive partial compensation for the higher expenditure needs that are driven by higher cost levels.

The concept how the current (and proposed) formulas deal with local cost variations requires some additional explanation. These explanations may be facilitated by defining the concept of a “cost gap”, as is done in the example in box 3.4 (previous page).

Based on the concept of a “cost gap” as defined in the box (box 3.4), the first (rather technical, but nonetheless important) point that should be noted is that the current DDC and VDC formulas actually do not seek to fill the cost gap (as they arguably should). After all, as a result of the way in which the cost allocation factor is currently defined, even districts where costs are low (cost index = 1) receive an additional grant amount for “cost adjustment”. This means that even fewer resources are actually available for filling the actual cost gaps of higher-cost jurisdictions. This problem is easily corrected as part of the formula, by multiplying local expenditure needs by (cost index – 1), rather than computing the cost allocation in proportion to local expenditure needs by multiplied by the cost index.¹⁵

Second, the current DDC/VDC formula approach excludes the categorical amount and the equal shares amount from the cost weighting / cost adjustment. This is counter-intuitive, and means that DDCs and VDCs are not receiving cost-adjustments for the bulk of their “expenditure needs”. Indeed, at the VDC level, the categorical grant accounts for the vast majority of VDC resources.¹⁶ If these amounts are considered to be part of the local bodies’ expenditure needs, they should be included in the base used for computing the cost allocation.

Finally, the analysis above (presented in Tables 3.2 and 3.3) suggests that only a small portion of the actual cost gap is filled, especially for VDCs. Due to the relatively limited resources allocated for this allocation factor, VDCs located in high-cost jurisdictions are currently only receiving a very small adjustment (5.3 percent) for their higher costs. For DDCs, the corresponding number is 43 percent, which still suggests that less than half of the additional needs of high-cost DDCs are currently being addressed by the DDC allocation formula.¹⁷

3.3 Basic structure and design of the grants: adherence to basic principles

Many students and practitioners of fiscal decentralization have arrived at a list of a dozen or so “universally accepted” principles of sound transfer design (e.g., Bahl and Linn, 1992; Shah, 1995; Martinez-Vazquez and Boex, 2001). These universal principles are regularly cited in fiscal

¹⁵ The “political” ramification is that under a proper formulation of cost adjustment, districts with low cost levels would receive no additional resources under this allocation factor.

¹⁶ One could argue that the categorization is already supposed to take into account these cost differences. However, the very limited range of the “categorical” grants –compared to the cost variations and especially the variations in the population size of VDCs- suggests that it is unlikely that the “categorical” grants have accomplished this.

¹⁷ These cost gap estimates are based on the District Cost Index 2005.

decentralization studies in Nepal.¹⁸ How do the DDC/VDC formulas fair when their adherence to these basic principles is assessed?

1. Clear objective

The first element of a sound transfer scheme is that the grant should have a clearly specified objective. Ideally, such guidance would come from the legislative framework. As already noted in Section 2.2, the LSGA (1999) is not entirely clear on what exactly grants should fund. In addition, in contrast to the stipulations in the Act, there are no elected DDC and VDC bodies in place, and the assignment of functions and expenditure responsibilities contained in the Act were only partially implemented, at best. As such, the objectives of DDC and VDC block grants are quite unclear, and it is unclear what infrastructure and service delivery should be funded with these resources. Thus based on the *de facto* implementation of the LSGA, it is not clear at all what “minimum grant” the central government would be required to provide to the Local Bodies and for what purpose. Nonetheless, this tenuous legislative link seems to be the foundation for the GoN’s support for the block grant schemes.

Perhaps the strongest guidance in terms of a clear objective for the block grants comes from the LGCDP, which considers that the objective of the grants is to “contribute towards poverty reduction through inclusive responsive and accountable local governance and participatory community-led development”. In this interpretation, the DDC and VDC block grants are relatively narrow instruments that are provided to local communities through their local bodies to engage in community-led efforts to improve livelihoods, reduce poverty, and address local priorities.

This conceptualization is somewhat at odds with the legislative framework which assigns much more substantive responsibilities to the local bodies, and which conceptualizes the block grant as a broad-based mechanism for local bodies to fund a broad range of public services and infrastructure.

In practice, the LGCDP-formulation of the objectives of the DDC and VDC block grants most closely matches reality. These grant schemes should not be considered funding instruments that allow Local Bodies to perform a broad range of expenditure responsibilities at the local level.¹⁹ Instead, these funds should be seen as relative small funding flows to the community level which allow local bodies to implement a limited number of small schemes which are a priority to the local communities. As such, the objective of the block grants is not to achieve any of the other policy objectives concurrently being pursued by the central government.²⁰

¹⁸ For instance, see Section 2.3 “A Study on the Design of a Formula Based Grants System for VDCs and Update Grant System for DDCs in Nepal” by Policy Research and Development Nepal (PRAD Nepal), Shanti Basti, Lalitpur, July 2009; “Designing Intergovernmental Fiscal Transfer Formula And Expenditure Needs Assessment Of Selected Devolved Tasks” (DASU,2005); or Jamie Boex, Developing an Allocation Formula for the Decentralized Financing and Development Program and Implications for the Design of a System of Intergovernmental Fiscal Relations in Nepal (UNCDF, October 2002).

¹⁹ If this were truly the case, the GoN should substantially improve the discretion and accountability of Local Bodies across the political, administrative and fiscal dimensions, and would require a substantial increase in the resources provided to Local Bodies (most likely several times greater than the current allocation).

²⁰ In other words, if the central government wishes to enhance rural accessibility by pursuing substantial road construction, it has its own programs and resources available to pursue this objective. As discussed further below, it should not impose this mandate on Local Bodies, to be funded from the block grants.

2. Revenues adequacy

A second element of a sound transfer system is that transfers should provide adequate resources for purpose at hand, and that unfunded mandates should be avoided. In the absence of clear expenditure assignments and a clear objective for the DDC and VDC grants, it is difficult to assess whether the resources being provided through these grant mechanisms are adequate. However, there are two sides to this coin.

On one hand, in the absence of a clear and formal objective for the DDC and VDC block grants, central government officials may reasonably argue that local bodies are generously funded, because there is no clear benchmark against which to measure their functions. Indeed, in absence of elected councils and proper PFM controls at the local level, there may even be concerns that –based on the current VDC grant pool and the current formula- the current VDC grant is often too large (especially for less populous VDCs). On the other hand, to the degree that central officials cite the functional responsibilities assigned to Local Bodies in the LSGA, the DDC and VDC grants would be clearly and completely inadequate.

In order to prevent unfunded mandates from arising, it would be important for the GoN to clearly stipulate that the purpose of the DDC and VDC Block Grants (both covering the DP portions of these grants, as well as its own contributions to these schemes) are provided for the limited purpose of providing funding for small, pro-poor and community-prioritized activities at the local level. It should be made clear that these resources should be seen as additive to line ministry programs and efforts, and should in no way a substitute for centrally-led program to attain the country's development objectives.

3. "Finance should follow function" (focus on service delivery)

A third element of a sound transfer system is that "finance should follow function": the allocation factors included in the formula should link the grant allocations to the demand for local government service delivery and infrastructure based on the number of clients and the cost of providing these public services.

In this regard, the DDC and VDC grant allocation formulas are doing well. The formulas generally include the right allocation factors and the link between finance and functions has improved considerably over time with changes in the allocation formulas (increases in population, and corrections being made in the measurement and weighting of poverty and the price index).

Concerns continue to exist, however, in several areas. The impact of equal shares (fixed lump sum) allocations and categorical allocations (in case of the VDC formula) causes extremely large variations in per capita allocations that are hard to justify based on the objective of the grant schemes.²¹ Similarly, one could strongly question whether the impact of land area –particularly in the least densely populated jurisdictions- is representative of higher costs associated with within-district inaccessibility (for instance, recall that each VDC receives an allocation of Rs 27 per person based on population, but that the least

²¹ It should be borne in mind that the poverty reduction impact of the grant is likely to result from two mechanisms that are closely linked to the size of the population and much less to the geographical size or geology of the jurisdiction. First, poverty is reduced by making investments in livelihoods-related projects that improve productivity or employment. Second, poverty is reduced by employing the poor in constructing the projects and schemes funded by the block grants. As such, one should dispel the notion that "equity" implies that poor residents in mountainous locations require the same level of road access or the same per capita stock of public infrastructure that is enjoyed by residents in more densely populated areas.

densely populated VDC receives an additional allocation of Rs 1809 per person based on land area).²² Finally, the inclusion of poverty in the DDC formula is significant (with a poor person being allocated two times more resources than a non-poor person), whereas poverty is excluded from the VDC allocation formula altogether.

4. Balancing national priorities with local budget autonomy

A fourth element of a sound transfer system is that conditions placed on transfers should balance national priorities and local autonomy. In this regard, again, it should be re-stated that the objective of the DDC and VDC block grants should clearly be understood to be a block grant that is specifically intended for prioritization at the community level. In this light, we should be surprised if there are any requirements imposed on the use of the grant resources (beyond the requirement that the resources are used for their intended purpose).

Box 3.5: Balancing national priorities with local priorities?

To the extent that local communities may have different development priorities or poverty reduction priorities than the national government, which priorities should prevail? How this question is answered has an important impact on the design of the intergovernmental fiscal system.

On one hand, if the national government believes that only national development priorities are important, there is no need for an inclusive or participatory planning process at the local level. On the other hand, if the national government believes that only local development priorities are important, then local bodies should exclusively be provided with an unconditional grant, over which local communities should be given full discretion to prioritize what the resources are spent on.

Many countries, however, believe that reality falls between these two extremes. In these cases, it is often considered that the local community and local bodies are best positioned to establish local priorities in some functional areas (for instance, the development of local markets, local roads, and the development of basic community amenities and local public services), whereas in other areas (such as education or other national priority areas) the central government may be best positioned to determine development priorities (even though the service may be delivered by Local Bodies). In this case, the concept that “finance should follow function” suggests that conditional grants should be provided to fund national priorities which are delivered by Local Bodies, whereas block grants should be provided (in addition to own source revenues) to fund locally-determined priorities.

Because in practice *de facto* expenditure responsibilities are not clearly defined in Nepal, the current practice in Nepal is to transfer a limited grant amount to the local government level without clearly identifying the functions which should be funded from this amount. However, by labeling this grant a “block grant”, it is suggested that this block grant should suffice for a wide range of public sector functions which are notionally to be provided at the local level. This ambiguity allows central officials to “hijack” the block grant system and impose specific grant conditions on the block grants which reflect central government priorities. This impinges on the block grant system to function as a grant that is supposed to be priorities at the local level in accordance with local priorities. Instead, it would be more appropriate to introduce conditional block grants to fund national priorities, while allowing the block grants to fund local priorities.

²² The reader is also reminded that Local Bodies also already receive compensation for the overall inaccessibility of the district through the cost index factor.

While it is appropriate to indicate that these grant resources should be prioritized and spent by Local Bodies in a participatory and inclusive manner, this does not necessarily mean that the center should force “inclusion” by earmarking portions of the grant for specific groups of the population. Nonetheless, under the LGCDP guidelines, requirements are currently imposed for setting aside a certain portion of the grant resources for children, women and disadvantaged. A recent cabinet decision further requires local bodies to set aside a certain portion of these resources for enhancing agriculture production.

The imposition of top-down guidance on how the DDC and VDC grant resources should be used goes against the philosophy of decentralization. Careful thought should be given to whether these conditions are achieving their intended policy objective or whether it is possible to retrench the existing conditions. Central government officials and politicians should be sensitized to the fact that these resources are provided for a very limited purpose, and that in order to pursue national policy objectives –such as increased agricultural productivity- line ministries should pursue this by providing additional resources to the local level, rather than imposing its central priorities on the limited resources that are made available to the local level for funding community-identified local priorities.

5. Enhancing equity and fairness

A fifth element of a sound transfer system is that the transfer mechanism should support a fair allocation of resources. In general, the DDC and VDC block grants perform well in this regard, as their intent is to be equitable and fair.

In reality, however, the intent of the formula and the resulting resource allocation seems to diverge on several points. As already noted, the impact of the equal shares factor and the land area factor result in highly unequal per capita allocations. Similarly, a consequence of the current allocation formula is that only a small portion of differences in expenditure needs due to district-level cost variations are compensated through the allocation formula (especially in the case of the VDC formula).

It will be important to increasingly link the equity and fairness of the allocation formula to the per capita allocation that is received, rather than a concept of equity based on equality among local bodies. Likewise, observers should resist the temptation to impose a standard of equity that requires every citizen in Nepal to have access to the same level of public infrastructure. Not only would this result in an extremely inefficient allocation of public resources, but this would go well beyond the remit of the DDC and VDC block grant.

6. Stability

A sixth element of a sound transfer system is that grant allocations should be stable and predictable over time. In this regard, grant allocations in Nepal have been relatively stable, both in terms of aggregate funding as well as in terms of the steady application of the formulas. It should be seen as a positive feature that the allocation formulas have not changed frivolously from year to year.

One potential source of potential instability in the transfer system in the near future is what will happen to DP funding of block grants under LGCDP. In contrast to the stable increase over time in DDC and VDC block grants (see Figure 1), a reduction in the block grants caused by falling away of donor resources could potentially result in some instability. Also see the point made under point 11 below.

7. Simplicity and transparency

A seventh element of a sound transfer system is that the grant mechanism should be simple and transparent. In this regard, the DDC and VDC grants perform well. The formula-based allocation is based

on a limited number of factors, and the Local Bodies Fiscal Commission posts formula-based grant allocations online, ensuring a high degree of transparency.

Any potential reform of the DDC and VDC block grant allocation formulas should maintain the relative simplicity of the current grant formulas. In fact, one improvement in simplicity and transparency might be achieved if grants would be allocated using the same formula for the DDC and VDC block grant schemes.

8. Incentive compatibility

The next element of a sound transfer system is that the transfer scheme should not provide negative incentives. Negative incentives might exist –for instance- if a grant is allocated in proportion to a local government’s budget deficit. Such a grant structure would most likely encourage local governments to engage in inefficient local spending and would encourage local governments to reduce their revenue collection efforts. Incentive compatibility is not a major concern as part of the grant allocation formula in Nepal, as the allocation factors used in the DDC and VDC block grant formulas are objective measures that cannot be manipulated or influenced by Local Bodies.

Two minor caveats should be noted. First, as already noted in box 3.1, it is unlikely that local officials would fail to reduce poverty in an attempt to secure a greater allocation of resources in the future. Second, as noted under point 10 below, the equal shares factor may possibly provide an (indirect) incentive to keep the VDC level highly fragmented.

9. Focus on demand, not current inputs

A ninth element of a sound transfer system is that transfer allocation should focus on the demand for local public services (e.g., clients and cost-variations) rather than the supply (inputs and infrastructure) of local government services. To the degree that the DDC and VDC grant formulas are population-based, poverty –based and client-based, the allocation formulas are consistent with the feature.

To the degree that the formulas rely on “equal shares” and categorical lump sum grants, it appears that the current formulas might focus more on perceived fairness and on the administrative cost of operating local bodies rather than on the providing (cost-adjusted) per-client allocations. Similarly, the limited filling of the cost-gap (especially for VDCs) seems to introduce a gap between the demand or need for public services and the allocations that are being provided.

10. Avoid equal shares

The tenth feature of a sound transfer system is that excessive reliance on the “equal shares” principle as a major allocation factor should be avoided. There are a number of reasons why excessive reliance on “equal shares” should be avoided. First, an excessive reliance on equal shares fails to establish a link between the funding allocation and the efficient delivery of government services. Second, the equal shares approach often results in a highly inequitable allocation in per capita terms. Third, an excessive reliance on equal shares might result in an incentive to create many new jurisdictions (as a jurisdiction that splits up into two jurisdictions effectively doubles its combined resource allocation).

The reliance of the DDC and VDC block grant formulas on equal shares (and the related reliance on categorical grants) is perhaps the area of greatest concern. As noted on several occasions earlier in this report, the reliance on a fixed lump sum has resulted in major variations in per capita allocations. Although some of these variations may be biased in favor of jurisdictions with higher needs, there is no

reason why these higher needs could not be addressed using different measures of need (such as price levels and/or land area).

A second potential concern is the fact that excessive reliance on the equal shares principle may give an incentive to (central and local) government officials to promote fragmentation of local jurisdictions. This has not been a problem in the recent past, as the number of DDCs and VDCs has been relatively stable over time. However, given that the VDC level is already extremely fragmented (and given that most VDCs are inefficiently small), what is needed (especially at VDC level) is to provide VDCs with a fiscal incentive to consolidate. The current reliance on fixed lump sum allocations (whether equal shares or categorical grants) counteracts the direction that the VDC level should be moving in.

11. Avoid sudden large changes

A final element of a well-designed and effective transfer system is that it should avoid sudden large changes in resource allocations, which could result in sudden reductions in public service delivery. This advice should be taken on board as the current study considers whether –and if so, what- improvements can be made to the DDC and VDC block grant allocations.

As already noted under point 6 above, one source of potential change that may be beyond the control of Government is what will happen to the DP contribution to these block grant schemes. It could be argued that perhaps the size of block grants (particularly to the VDC) may have grown too fast over time, both in terms of the Government's own ramping up of the VDC block grant, as well as the donor contribution to DDC and VDC block grants. To some extent, the institutional elements of a sound system of local governance have fallen behind. As such, a silver lining of a potential decline in DDC and VDC funding might be that it would give greater time and focus for the GoN and its development partners to strengthen democratic, participatory, responsive and inclusive governance at the local level; improve local financial management systems; and improve the monitoring and reporting of local finances.

3.4 Overall conclusions and general options for possible revisions of the formulas

Based on the initial review of the DDC and VDC block grants contained in this section, it is fair to conclude that the current grant formula in Nepal is in good shape. There are no major weaknesses that would undermine the overall system of local government finance. Furthermore, substantial changes in the formula or allocation factors (for instance, by developing more accurate measures of certain variables, such as geographic accessibility or cost variations) are not likely to result in a major improvement of resource distributions.

Nonetheless, there is certainly space to improve the current DDC and VDC block grant allocation formulas. However, in considering several options for reform of the formula, there may be some tensions between 'technical improvements' of the formula and political acceptability. A number of general options have been explicitly or implicitly raised in the preceding section up to this point that could guide the possible revisions of the block grants formulas. The options –which will be explored further in Section 5 and 6 of this report- include the following:

1. **Align DDC and VDC block grant formulas.** The block grant formulas for VDCs and DDCs have evolved somewhat separately. However, in the absence of clear *de facto* expenditure assignments to either the DDC level or the VDC level, these block grants serve a very similar (if

not the same) purpose. As such, it may be appropriate to apply the same formula to both grant schemes. Doing so might enhance the simplicity and transparency of the overall grant system.

2. ***Align GoN and LGCDP concepts and formulas.*** Although the GoN and its development partners are working closely together in strengthening the system of local government finances, there seems to be a difference how the block grants are conceptualized by the different stakeholders, with many (central) government officials seeing the block grants as a broad-based grant to the Local Bodies (from which many functions should in principle be funded), whereas the LGCDP conceptualized the block grants as a much narrower instrument. This difference of perceptions seems to be contributing to a bit of a gap in how DDCs and VDCs should be funded, with the government leaning more substantially on its traditional approaches (equal shares and categorical grants) and the DPs leaning more toward the side of fully formula-based grants which are increasingly based on formula-based computations of expenditure needs. It would be desirable to overcome these conceptual differences and to fully align the allocation of the DDC and VDC grants funded (directly) by the GoN with the allocation formulas used for the allocation of the DDC and VDC grants funded under LGCDP.
3. ***Lower and standardize fixed amount (especially for VDCs).*** Consideration should be given whether it is possible to lower the amount of the grant allocations that is based on a fixed lump sum (equal shares / categorical grant) principle. Since a formula-based approach is a superior solution to a categorical grant approach, it would be appropriate for the GoN to formally move away from the former approach and move towards a fully formula-based approach in allocating its VDC grant resources.
4. ***Revise relative weights to ensure that 'finance follows function'.*** The analysis in this section revealed that the concept of 'finance follows function' is not always adhered to. In particular, thought should be given to the relative weight assigned to population versus poverty at the DDC level, as it appears that districts receive a total allocation for poor residents (Rs 24+32= Rs 56) that is more than twice the amount received for non-poor residents (Rs 24).
5. ***Use the latest population data (Census 2011).*** Preliminary data for DDC and VDC population are now available based on the 2011 Census. Since considerable population shifts can occur over a ten year period, it would be prudent to make grant allocations based on the latest population data available.
6. ***Use more recent poverty estimates (for both the DDC and VDC block grant formulas).*** If the Government sought to align the DDC and VDC formulas, it would not be able to rely on HDI as an indicator for poverty.²³ Instead, poverty could be included in both the DDC and VDC formulas based on more recent poverty count data, for which small-area poverty estimates for the VDC level are available.
7. ***Update the cost index to properly reflect main cost differences between districts.*** The current measure of cost variations across districts was computed in 2005. As discussed further in Section 4 of this report, it would be prudent to update the measure of cost variations.

²³ Despite the government's preference for the HDI as a measure of poverty, some concerns about the methodology by which this measure has been computed at the district level has been raised by some observers.

8. **Update the land area factor to properly reflect the increased cost of (within-jurisdiction) inaccessibility within DDCs and VDCs.** The inclusion of land area in both the DDC and VDC formulas has a potentially distortionary impact, as there are a number of jurisdictions in Nepal with extremely low population density. This is resulting in extremely high allocations (especially in per capita terms) to a limited number of local bodies that are geographically large but small in terms of population. One option would be to adjust the land area factor by “capping” the land area measure for jurisdictions that are extremely large in terms of land area, for which the land area is not likely to be an adequate measure of “needs”.
9. **Fine-tune the weighted cost factor to effectively support higher-cost DDCs and VDCs.** As discussed earlier in this section, the current block grant formulas do not do a very good job at compensating for the higher expenditure needs of high-cost jurisdictions. Some adjustments could be made to the way in which cost is dealt with in the formulas in order to make the formulas more cost-sensitive. One possibility in this regard would be to adjust the formula so that low-cost VDCs and DDCs would not receive a top-up grant as part of the cost allocation factor.
10. **Minimum Conditions and Performance Measures (MCPMs).** A final point of concern –which lies somewhat outside the scope of the current study, is whether the GoN might wish to consider a simpler and more transparent system of MCPMs. (This point will be elaborated later in this report).

3.5 Next steps: moving towards specific proposals for revising the DDC and VDC formulas

Based on the tentative options and recommendations identified above, it would be prudent to consider three basic options for the way forward, rather than recommending a single way forward.

The first option would be for the GoN not to make any changes to the DDC and VDC grant formulas, based on the conclusion that the current formulas do not reveal any major shortcomings. This way forward is generally not recommended, as the current review provides sufficient indication that the formulas could benefit from incremental changes.

The second option would be to maintain the same structure of current formula-based block grants, but to make some minor changes at the margin of the grant system. While the changes would be relatively minor, introducing these changes now could nonetheless help improve the block grant allocations as the country is positioning itself for a future federal structure, in which block grants are likely to play an important role.

A third policy option would be to pursue a more rigorous overhaul of the grant system, which would bring the DDC and VDC block grants close to an (technically) ‘ideal’ grant system. This is likely to include numerous changes to the formula which might not be politically acceptable at this stage, as the political leadership is preoccupied with the overall re-structuring of the public sector. A large-scale overhaul of the grant system may thus not be desirable. However, we will explore the option further, as this analysis will show whether a more moderate reform approach can bring about close to the same results that would be achieved by a more substantial reform of the block grant formulas.

Before moving ahead with specific analysis and recommendations in Chapter 5 and 6 of this report, two other issues need to be addressed. Because of the importance of cost variations across the national territory in Nepal, Section 4 of this report will address some concepts and measurement issues related to the role of accessibility and local cost differences.

Even before moving on to Section 4, however, we should recognize that –as we start developing specific recommendations and simulations to consider different changes to the DDC and VDC block grant formulas, we will need to be able to compare different allocation patterns and scenarios. A useful approach to comparing two different block grant allocations is known as the Index of Fit (IOF). How this index is computing is explored in box 3.6 (next page) before proceeding to the remaining sections.

Box 3.6: Comparing two different allocation patterns using the Index of Deviation / Index of Fit

A special measure can be used to quantify exactly how closely actual grant allocations match a formula-based allocation pattern, or how closely two different grant allocation patterns resemble each other. This measure of divergence is known as the Index of Deviation (IOD).

The Index of Deviation is defined as half of the sum of absolute deviations for each observation between one allocation pattern (for instance, the formula-based grant amount) and another allocation pattern (for instance, a non-formula based allocation), expressed as a share of the total grant pool allocated.²⁴ The interpretation of the IOD allows for comparisons across grant schemes, as the measure indicates the share of the grant pool that would have to be re-allocated from one group of local governments (i.e., those that received “too much” according to the formula) to another group of local governments (those that received “too little”) in order to achieve perfect adherence with the formula-based pattern. As a result, the IOD varies in its extremes between zero (indicating no divergence from the formula-based pattern) and unity (indicating complete divergence from the formula-based pattern). The Index of Fit (IOF) can then be defined as 1 minus IOD. An example may be useful in illustrating the use of the Index of Deviation / Index of Fit.

The table below shows 3 districts (District A, B, and C), each of which would receive a certain formula-based grant amount (Column I), and each of which in reality receive an actual grant amount different from the formula-based amount (Column II). The total grant pool distributed in this example (both in Columns I and II) equals Rs. 1000. Column III shows the absolute difference between the grants received by each district and the formula-based grant; for example, the absolute difference for District A is $220-200=20$. Next, we compute the sum of these absolute differences. In the example, the sum of the absolute differences is 240 (bottom Column III). When the totals of Column I and II are the same, 50 percent of the sum of the absolute differences (the number 120 in this example) has a practical interpretation: you would have to take 120 Rupees away from some local bodies and distribute it to other local bodies in order to achieve the same grant incidence pattern (or fit) between the two grant patterns.

| Example of Index of Fit | | | | | |
|-------------------------|--------------|--------------|--------------------------|-----------------------|------------------------|
| Districts | I. Formula | II. Actual | III. Absolute Difference | IV. Received too much | V. Received too little |
| A | 220 | 200 | 20 | | 20 |
| B | 600 | 500 | 100 | | 100 |
| C | 180 | 300 | 120 | 120 | |
| Total | 1,000 | 1,000 | 240 | 120 | 120 |
| IOD | | | 0.120 | | |
| IOF | | | 0.880 | | |

Next, the Index of Deviation (IOD) is computed by dividing 50% of the sum of absolute differences ($50\% * 240 = 120$) by the total grant pool (1000) in order to express the IOD as a percentage. In the example, the IOD of 0.120 suggests that 12% of the grant pool would have to be redistributed from one set of councils to another in order to achieve an identical “fit”. In the most extreme cases, the IOD would range from zero (no difference between the two patterns) to one (completely imperfect fit; redistribution of all resources is necessary to achieve fit). Finally, the Index of Fit (IOF) is defined as $1 - \text{IOD}$. The IOF ranges from zero (completely imperfect fit; 100% redistribution needed to attain same pattern) to one (100% fit; no redistribution necessary to attain perfect fit).

²⁴ In case the analysis is comparing distribution patterns that do not allocate the same total grant pool, one of the allocation patterns would have to be adjusted so that the total grant amount between the two scenarios is the same.

4. Formula-based grant allocations: the role of accessibility and local cost differences

Nepal is a country that has considerable variations in its geography and ecology across its national territory. This results in some parts of the country being considerably more accessible than others. In studies in Nepal and around the world, accessibility has been found to be closely linked to a variety of economic indicators, as access to markets for agricultural generally ensures higher incomes and greater economic production and productivity. At the same token, great accessibility general causes lower prices for economic inputs, both for households and the private sector as well as for the public sector. In other words, the differential degree of access to national transportation networks causes the cost of certain productive inputs that are used by local bodies to vary significantly between local jurisdictions.

Because of the importance of the issues of accessibility and cost variations across the national territory, the TORs for this study directed the author to pay special attention to the construction of these cost indices (i.e. prices of construction materials and prices of labor) and examines the validity of the cost index with respect to the methodology for use at both the DDC and VDC level. As such, this section explores how differences in accessibility and local cost differences impact the DDC and VDC block grants.

4.1 The impact of accessibility and cost variations on local expenditure needs: a short conceptual background

It is general sense as important and fair for Local Bodies in Nepal to receive a greater grant allocation if they are less accessible or if they face higher costs. However, in order to arrive at the right measure(s) of accessibility and cost, it is important to carefully break down the arguments why and under what conditions Local Bodies should receive greater grant allocations on account of these factors.

Accessibility versus cost: what matters? The first thing this requires us to do is to disentangle the accessibility argument and the cost argument. This requires us to answer the basic question: do local bodies in Nepal that are less accessible inherently require greater transfers, or is the reason that less accessible jurisdictions might be deserving of greater transfers only due to indirect effects?

Perhaps surprisingly, our analysis supports the latter argument: local bodies in Nepal that are less accessible do not inherently require greater transfers: while accessibility may be used as one measure of the higher cost and greater demand faced by local bodies in the provision of local public services, we do not believe that inaccessibility itself is a justification for greater block grant allocations.

Resolving this debate should start with the policy objective of the DDC and VDC block grants, which was touched on in Section 2.1 and discussed in greater detail in Section 3.1. The stated objective of the block grants is “to contribute towards poverty reduction through inclusive responsive and accountable local governance and participatory community-led development.” It is important to agree that the DDC and VDC block grant explicitly do not have the objective in itself to improve the accessibility of local communities; however, local bodies are free to implement road infrastructure projects and similar schemes whenever improved infrastructure access is prioritized by the local community as a specific and targeted poverty reduction measures. This means that the primary burden of improving accessibility across the national territory in Nepal mainly lies with others –including the Ministry of Physical Planning

and Works. DOLIDAR builds local infrastructure out of earmarked funds in project basis, suggesting that the LBs are responsible for small scale infrastructure in limited scale..²⁵

Indirect relevance of accessibility. This does not mean, however, that the local expenditure needs of Local Bodies under the DDC/VDC block grants are unrelated to poor accessibility. First, poorly accessible locations have a higher demand for poverty reduction, since the proportion of the people that is poor is generally higher in accessible locations. Second, the cost of building infrastructure in less accessible areas is most likely higher, since the cost of inputs (especially cement, steel rods, and so forth) rises with transportation costs. Third, inaccessibility and larger geographical area are generally associated with higher demand for public infrastructure, since lower population density may mean that rural communities are not able to fully benefit from the same economies of scale as more densely populated areas.

However, in each of these cases, accessibility plays an indirect role in increasing local expenditure need, and in most of these cases, more direct measures of expenditure needs are available – and already incorporated into the allocation formula. For instance, while inaccessibility increases poverty and thereby pushes up the need for pro-poor community spending, poverty is already included in the DDC block grant formula (and in Chapter 6, we propose to include it directly into the VDC block grant formula as well). As such, including accessibility in the allocation formula to account for the increased poverty associated with inaccessibility would be unnecessary and duplicative. Likewise, cost variations between districts are already accounted for in the formula through the inclusion of a District Cost Index in both the DDC and VDC block grant formulas. Furthermore, the impact on higher costs due to within-jurisdiction inaccessibility is captured to a large extent by including a measure of land area into the DDC and VDC formulas.

4.2 Measures of accessibility and cost variations in Nepal

Because of the importance of the cost and accessibility dimensions in determining local expenditure needs in Nepal, the country took the step to include a District Cost Index into its DDC and VDC grants formulas.²⁶ Considerable effort in recent years has been made to improve the cost component of the block grants for DDCs and VDCs.²⁷ Based on the review of the existing transfer schemes, this study was asked to look into the possibility of introducing accessibility-related allocation criteria and to see whether such a criterion would fit with the existing cost index.

²⁵ An argument that should be considered for proponents of enhancing rural accessibility based on equity purposes (whether within or outside the context of the DDC/VDC allocation formulas) is the efficiency argument: what is the cost-benefit ratio of investing in the construction of road infrastructure in some of the least densely populated areas in Nepal? What would the economic impact be on economic growth poverty reduction if those same resources would be invested in public infrastructure in more densely populated areas of Nepal? Would alternative poverty reduction strategies –other than investments in road access- be more cost effective ways to reduce poverty in highly inaccessible areas? These questions –while interesting and important- fall beyond the scope of the current study.

²⁶ Only a few countries –in particular, those with considerable cost variations across their national territory- have such a feature in their grant systems. Indonesia is one of the most well-known examples in this regard.

²⁷ Note, for instance, the emphasis on improving the cost measures by "A Study on the Design of a Formula Based Grants System for VDCs and Update Grant System for DDCs in Nepal", Policy Research and Development Nepal, July 2009.

Based on the discussion in Section 4.1, we believe that to the extent that the indirect impacts of accessibility are already measured by more direct measures of local expenditure needs such as poverty, the district cost index and land area, it would be a step back –rather than a step forward- to include a measure of accessibility into the DDC and VDC allocation formulas. This does not mean, however, that accessibility has no role to play whatsoever.

As already discussed in some detail in Section 3.2 (including in Box 3.4), the DDC and VDC block grants formulas already include a District Cost Index to take into account the fact that ecology and the presence or absence of road infrastructure in different parts of the country result in different input prices for construction materials and other inputs into the construction of public sector infrastructure. While this cost measure accounts for cost variations between the district headquarters for each district, this measure fails to take into account the additional transportation costs that are imposed for within-district transportation. While the inclusion of land area is an attempt to compensate less accessible DDCs and VDCs for these additional transportation costs (in addition to captured the fact that infrastructure usage is less efficient in less populous areas), it should be readily acknowledged that the land area of a DDC or VDC is an imperfect measure of these additional costs.

That leaves the question: should –in addition to the existing allocation factors- a measure be constructed that measure cost-differentials to the VDC level based on the existing (or updated) District Cost Index as well as inaccessibility, for instance, from the district headquarters? Four intermediate questions might help answer this broader question: (1) Is constructing such a measure in an objective manner be possible? (2) Would such an indicator add value to the current formulas? (3) Would the added value offset the added cost of such a measure? (4) Would the resultant measure be politically acceptable? The answers to these four intermediate questions – addressed below- suggest that it would probably not make a lot of sense to pursue such a highly detailed VDC cost index at this time. In addition to the technical arguments made below, making this decision should be informed by the fact that there are more urgent issues that need to be addressed regarding the allocation formulas for the DDC/VDC block grants, and that Nepal is transitioning away from the current structure of the local public sector towards a federal system.

Is constructing a VDC cost index possible in an objective manner? In principle, yes, it would be possible to construct a VDC cost index in an objective manner. However, it would be highly impractical. Conceptually, there would be two obvious approaches to accomplish this feat. First, one could conduct a survey of VDC-level markets in order to get cost information at the VDC level. Second, one could attempt to impute VDC cost levels by starting with the District Cost Index and adding the additional input transportation costs in taking the necessary materials from the district headquarters to each VDC.

Both approaches would have considerable constraint. A VDC-level market survey would prove to be extremely difficult, as most village-level markets would not have consistent price data for the materials necessary to construct a meaningful cost index. In practice, this is unlikely to be a viable approach in Nepal.

Similarly, imputing transportation costs to achieve a VDC-level cost index is a perilous road to travel. First, the distance between district headquarter and the VDC is a poor proxy for the added transportation cost – the terrain or road conditions would also play an important role.²⁸ Second, the size and the terrain of the entire VDC could potentially matter, since not all projects or schemes are built at

²⁸ The study prepared by PRAD (2009) account for these differences in terrain.

the location of the VDC headquarters. Third, although many VDCs may rely on the district headquarters as a supply point, many other VDCs might have different access points to the national road network that provide lower-cost access to construction inputs and other goods. Fourth, transportation costs for different materials would vary considerably; hence depending on the exact scheme and the exact mix of inputs, there could be a huge cost differential in different projects within exactly the same location. For instance, substituting locally available materials for imported materials (or focusing on more labor-intensive projects versus more capital intensive projects) can result in a major cost differences that are almost impossible to capture by a single price index.

Because of the impracticality of producing cost indices at the lowest-local level, there is no country in the world that has introduced a village-level cost index into its grant allocation formula at the village level.

Would such an indicator add value to the current formulas? It is possible that a marginal improvement in the allocation of resources would result from the introduction from a VDC-level cost index. However, given the complexities of computing such an allocation factor for over 4000 VDCs, it is likely that village-level cost estimates would contain some degree (in fact, possibly a considerable degree) of inaccuracy. At the same time, it is not clear at all whether the grant allocation pattern that would be caused by the introduction of a VDC-level cost index would be terribly different from current allocation pattern.

Would the added value offset the cost of such a measure? Given the complexity and cost associated with producing a detailed cost index for over 4000 VDCs (and the inevitable inaccuracies of such a measure that would remain), the added-value of producing a VDC-level cost index would most likely not be sufficient to justify the added cost of such a measure.

Would the resultant measure be politically acceptable? Given that any estimate of cost levels will inevitably be inaccurate to some degree, it is likely that the resulting measure of VDC cost levels would most likely not be fully politically acceptable when compared to the current allocation approach, which incorporates both the District Cost Index as well as a jurisdiction's land area.

Retaining a balance between accuracy and transparency. A final note should be made with regard to the question whether it would be desirable to incorporate a more accurate measure of the variations of local expenditure needs caused by cost variations or accessibility into the DDC and VDC block grant formulas. Policy makers in Nepal should bear in mind that formula-based grant allocations are a rather blunt instrument.

When compared to politicized, discretionary or ad hoc budgetary decisions, formula-based grants compare very favorably, as formula-based allocations are typically much more objective, fair, transparent and efficient. However, as addition allocation factors are added to a simple transfer formula, and as the computation as individual allocation factors is made more complex, the accuracy of the formula-based allocation may still increase a little, but the transparency and political acceptability of the formula is likely to decrease by a lot. As such, there is a need to constantly keep in mind (as noted in Section 3) that a sound allocation formula should be simple and transparent, based on allocation factors that are generally acceptable to all stakeholders.

4.3 Updating the District Cost Index for Nepal

District Cost Index 2012. The current DCC and VDC block grant formulas currently rely on a district cost index that was computed by the Local Bodies Fiscal Commission Secretariat in 2005. As such, in March 2012, LBFCS undertook an exercise to update the price index by collecting updated price data for a broad set of construction inputs from all districts in the country. After a concerted effort, price data were gathered from 66 districts in the country.²⁹ These price data points were then verified against consumer and producer price data sets collected by the Central Bank, which collects data on current market prices for key and sub-key market centers.

The commodity basket upon which the DDC cost index is based includes: skilled labor (20.13%); unskilled labor (32.83%); cement (7.46%); iron rod (3.26%); zinc sheet (2.17%); wooden frame (1.00%); sand (3.26%); boulder/stone (11.23%); pipe fitting (7.0%) and supervision (10.38%). The relative weight for each of these input categories was estimated by PRAD (2009). Due to data unavailability, commodity prices for paint and window glass were not included in the commodity price basket that was used to compute the updated DDC cost index. Descriptive statistics for the District Cost Index for 2012 are presented in Table 4.1 (in comparison with the District Cost Indices for 2005 and 2009).³⁰ The detailed computation of the DDC Cost Index 2012 is attached to the report in Excel as Attachment A.

| District | Cost Index 2005 | Cost Index 2009 (Continuous) | Cost Index 2009 | Cost Index 2012 (Continuous) | Cost Index 2012 |
|---------------|-----------------|------------------------------|-----------------|------------------------------|-----------------|
| Average | 1.772 | 1.652 | 1.641 | 1.264 | 1.243 |
| Minimum | 1.000 | 0.998 | 1.000 | 1.000 | 1.000 |
| Maximum | 3.500 | 3.707 | 3.500 | 2.322 | 2.500 |
| St Dev | 0.394 | 0.478 | 0.495 | 0.223 | 0.222 |
| Correl (2005) | 1.000 | 0.787 | 0.765 | 0.918 | 0.873 |

It should be noted that compared to the 2005 and 2009 iterations, there appears to be a considerable (and apparently relatively steady) decline in cost variations in Nepal. It is unclear at this stage this decline is the result of a measurement anomaly or whether this reflects a real trend in the decline of cost variations across the national territory. Certainly, increases in road access, reductions in transportation costs, and increases in economic activity have the potential to lower inter-district cost variations. Further exploration of this observation falls beyond the scope of the current analysis. In any case, the correlation between the 2005 District Cost Index and the 2012 index is quite high, indicating that the 2012 cost index is likely to be a relatively reliable indicator of inter-district cost variations.

Composition of the Basket for the District Cost Index 2012. The weighting for the District Cost Index 2012 is based on the cost analysis conducted PRAD (2009), which conducted an analysis of inputs used by a small sample of DDCs. There is some concern that this sample is not representative of the basket of infrastructure inputs being purchased by DDCs and VDCs using the DDC/VDC block grants. For instance,

²⁹ District-level price data were received from all districts except Panchathar, Ilam, Bhojpur, Dhankuta, Sunsari, Khotang, Saptari, Dhanusa and Mahotari. Commodity prices for these districts were estimated based on the adjoining/ neighboring districts.

³⁰ Note that the cost index computed by PRAD in 2009 was never used by LBFC.

none of the inputs reflect inputs into road construction, which appears to be a type of project that is produced widely using DDC/VDC block grant funding.³¹

In considering the impact of the basket of goods and the relatively weighting that is used in the construction of the district cost index, it is important to note that –based on the individual project priorities of each local body, every DDC and VDC has its own mix of inputs. It is thus not possible –nor is it the intent of the District Cost Index- to measure the exact cost variations faced by each individual district or village based on their specific choice of inputs. As such, the District Cost Index will merely be able to reflect a reasonably weighted combination of different inputs that is used by local bodies as they spend their grants resources.

However, it should be noted that district cost variation patterns are highly consistent across different construction inputs. The lowest correlation between the district cost variation pattern for any construction material for which data are collected by LBFCs (regardless whether the construction material is included in the computation of the cost index) and the overall District Cost Index (2012) is 0.91. This means that the prices for different construction inputs more or less follow the same patterns of variation across Nepal’s 75 districts. Because the cost variations for different construction inputs (including those for road construction) are all highly correlated, the relative weighting of the different inputs –for the purpose of constructing the district cost index- will not have a considerable impact on the resulting cost index.

Recommendation going forward. For the upcoming financial year, it is recommended that the LBFC rely on the most recent District Cost Index (2012). This index is based on the most recent cost data available, and there is no indication to suggest that this index is at any point less accurate or a poorer reflection of district cost variations when compared to the earlier cost indices.

However, the concern over the relative weighting is a reasonable one. It should be possible for LBFC Secretariat –based on existing LGCDP records and/or with limited further analysis- to identify the actual baskets of inputs that is currently being procured with resources from the DDC/VDC block grant schemes. A re-weighted cost index could then be produced to be used in the formula-based allocation of DDC/VDC block grants for subsequent years.

4.4 Using capped land area as a better measure of within-district cost variations

A final consideration with regard to the measurement of cost variations and accessibility is the role of land area in the DDC and VDC block grant formulas. Conceptually, land area has two impacts on local expenditure needs, where a local body’s expenditure needs could be defined as the relative demand per person, multiplied by the cost level faced by the LB, multiplied by the number of people in the jurisdiction.³²

First, large land area –holding all else equal- results in greater need for physical infrastructure – longer roads are needed to connect residents to markets, and generally more public infrastructure is needed per person in order to ensure access to certain public services and to provide a similar level of public

³¹ A sample prepared by LGCDP suggests that DDCs spend between 30-45 percent of their grant resources on road construction.

³² Of course, the need of “demand” for public services should be understood to be tempered by resource availability.

service. While public infrastructure is often divisible or adjustable (i.e., using a one-room school rather than a regular sized school building) , many VDCs in Nepal operate at such a small level, that even the lowest degree of scale economies are not attained. Therefore, smaller, more isolated communities require a (somewhat) greater degree of public infrastructure per person.

Second, as already noted in Section 4.2, land area is also a proxy for the higher costs and expenditure needs associated with lower accessibility. It should be acknowledged that land area is a weak measure of the higher costs associated with lower accessibility, as accessibility is influenced by many other factors, including road access, the difficulty of the terrain, settlement patterns (whether the population is concentrated in a small part of the territory or spread out over the jurisdiction, and so on).

Box 4.1: Is there are proportional relationship between land area and increased costs or needs due to accessibility?

By including land area in an allocation formula, we often implicitly assume or expect that there is a more-or-less proportional relationship between land area and increased costs or needs. However, let us make the (admittedly simplifying) assumption that local jurisdictions are more or less circular in shape, and that costs increase in proportion to the distance between the jurisdiction's center and the outer edge of jurisdiction, so that a jurisdiction with a radius of 4 km faces transportation costs that are twice higher than a jurisdiction with a radius of 2 km.

However, as geometry teaches us, the area of a circle increases at a quadratic rate with its radius (after all, $A=\pi r^2$). If these assumptions are more or less accurate, then land area will considerably over-estimate the expenditure needs of larger local government compared to smaller local government jurisdictions.

At the same time, the structure of local bodies in Nepal suggests that transportation costs may increase more than proportionally (but quite possibly less than quadratically) with the radius of a jurisdiction. Indeed, Table 2.6 suggests that districts with large land area have frequently more difficult terrain (i.e., DDC/VDC land area in typically much greater in jurisdictions with mountainous terrain). As such, land area may potentially be a reasonable measure of the increased cost associated with diminished access, after taking into account between-district cost variations.

We already uncovered in Section 3 that extreme variations in population density in Nepal are resulting in extreme variations in per capita allocations due to the inclusion of land area in the formula. Recall that Table 3.3 showed that whereas a VDC will receive an average allocation of Rs 27.1 per person, every square kilometer of land area will contribute another Rs 706.8 per km². For an average district, this results in only an additional of Rs 2 per person. However, for the geographically large, mountainous VDCs, in the extreme case, the land area factor results in an additional allocation of Rs 1,809 per person. Given that other allocation factors already provide greater allocations to this jurisdictions due to the higher cost level being faced and the smaller population (on account of the fixed lump sum and/or categorical grant), it is hard to imagine that the incremental need due to large geography results in a level of expenditure need that is 50 times larger than an average-sized district.

To counteract the disproportionate impact of extremely large area, two approaches could be taken. Mathematically, one could include the square root of land area into the formula (or use other non-linear transformations of land area), rather than using the size of a jurisdiction's land area itself. While mathematically this might be a satisfactory solution (under the assumptions noted in Box 4.1), this is not

likely to be a solution that finds wide acceptance. Instead, some countries that rely on land area in allocating formula-based grants rely on an adjusted or “capped” measure of land area. This technique is illustrated in Table 4.1 below.³³

| | A: Population | B: Land Area | C: Pop. Density | D: Formula Grant | E: Per Capita Grant | F: Adjust. Land Area | G: Formula Grant | H: Per Capita Grant |
|--------------|------------------|-----------------|--------------------|------------------------|---------------------------|----------------------------|------------------------|---------------------------|
| District A | 5,000 | 850 | 5.88 | \$850,000 | \$170.00 | 250 | \$625,000 | \$125.00 |
| District B | 200,000 | 80 | 2,500 | \$80,000 | \$0.40 | 80 | \$200,000 | \$1.00 |
| District C | 300,000 | 40 | 7,500 | \$40,000 | \$0.13 | 40 | \$100,000 | \$0.33 |
| District D | 495,000 | 30 | 16,500 | \$30,000 | \$0.06 | 30 | \$75,000 | \$0.15 |
| Total | 1,000,000 | 1,000 | 1,000 | 1,000,000 | \$1.00 | 400 | 1,000,000 | \$1.00 |

Columns A-E in Table 4.1 show the problem that a skewed population density can impose on a formula-based grant system when land area is included in the allocation formula. A grant pool of \$1 million is allocated in proportion to land area. Yet, whereas the majority of the population lives in District B, C, and D, District A receives a per capita grant that is more than 100 times greater than average due to its significant land area (relative to its population). This is representative of the situation in Nepal, where the proportionality between local expenditure needs is distorted (at least, for certain local jurisdictions) due to inclusion of land area in the formula.³⁴

Columns A-E in Table 4.1 show the potential solution: adjusting the land area for each district that exceeds a certain level of population density. The example above places a cap on the land area for every jurisdiction that exceeds a certain limits – in this case, the cap is set (in Column F) at 20 people per square kilometer. For every jurisdiction that exceeds this limit (in this example, District A), the land area is adjusted downward or capped at that level. As such, the adjusted land area for District A is set based on 20 people per km², resulting in an adjusted land area of 250 km². The cap can be adjusted upward or downward as appropriate in order to restore a certain degree of proportionality between land area and the additional expenditure needs associated with greater land area.

In order to mitigate the impact of the outliers with regard to land area and population density in Nepal, we proposed using “capped land area” in the DDC and VDC block grant allocation formulas. The national average population density in Nepal (based on preliminary 2011 Census figures) is 180 residents per km² (and a unweighted district average of 313 residents per km²), but ranging from fewer than 3 residents per km² (in the least densely populated district) to over 4400 residents per km² in the most densely populated district.³⁵ An analysis of population density in Nepal further suggests that a majority of districts (62 districts) have a population density of less than 500 residents per km². However, only 21 districts have a population density of less than 100 residents per km² and even fewer districts (5 districts) have a population density of less than 20 residents per km². Rather than providing a per capita

³³ One example of a transfer system that relies on capped land area in the Local Government Development Grant (LGDG) in Tanzania.

³⁴ An alternative approach would be to reduce the weight associated with the land area factor in the formula. However, this would impact all jurisdictions and might be unwarranted, if the main/only problem is a few geographically very large jurisdictions.

³⁵ The variation at the VDC level is even greater.

grant to the least densely populated district that is over 100 times larger per person than an average district (313/3), it is proposed to cap land area in the formula at 20 residents per km² so that on account of the land area factor, jurisdictions are limited to receiving 15 more per resident based on this factor. It is likely that this is a more reasonable and proportionate indicator of the added local expenditure needs that result from greater land area within a DDC or VDC. As discussed further in Sections 5 and 6, it is proposed to introduce this cap for both the DDC block grant formula, as well as for the VDC block grant formula.

5. The DDC grant formula: review and proposed revisions

Based on the analysis and review contained in the first four sections of this report, the current section contains two main proposals for the revision of the DDC block grant formulas. The first option which will be explored in this section would maintain the current structure of current formula-based block grants, but to make some minor changes at the margin of the grant system. While the changes would be relatively minor, introducing these changes now could nonetheless help improve the block grant allocations as Nepal is positioning itself for a future federal structure, in which block grants are likely to play an important role. The second policy option which will be considered in this section is to pursue a more rigorous overhaul of the grant system, which would bring the DDC and VDC block grants close to a (technically) ‘ideal’ grant system. This is likely to include numerous changes to the formula which might be technically complex, and perhaps less politically acceptable at this stage.

In addition to describing the options in this sections, Attachment B to this report contains an Excel-based simulation model, while contains simulated allocations of DDC grant resources based on the two proposed options and formulas.

The simulations and estimates are based on the size of the DDC grant pool for 2011/12. For this financial year, the Government of Nepal contributed Rs 840 million to the formula-based DDC block grants. Whereas donors committed to a contribution of Rs 1.15 billion to the block grant pool for 2011/12, only Rs 655 million materialized, for a total grant pool of Rs 1.495 billion (US\$18-20 million). In per capita terms, the size of the DDC block grant is approximately Rs 58 (US\$ 0.73). While it is hard to determine the total size of relative expenditure needs at the DDC-level, it would be hard to argue that the DDC grant provides for plentiful resources for all but the most narrowly-defined set of district functions.³⁶

5.1 Overall structure of the proposed DDC formulas and factor weights

Table 5.1 reflects the current DDC block grant formula, as well as the two alternative block grant formulas currently being proposed. As will be discussed in Section 6, we believe it is feasible to simplify the overall block grant system by aligning and harmonizing the formulas at the DDC and VDC levels. (In other words, the same formula options albeit with a different equal shares allocation- will be proposed for the VDC level).

Table 5.1: Proposed allocation formulas for the DDC Block Grant

| Factor | Current DDC Formula | DDC Formula: Option 1 * | DDC Formula: Option 2 * |
|---------------------|----------------------------------|----------------------------|----------------------------|
| Equal share | 4,000,000 | 4,000,000 | 4,000,000 |
| Population | 40 | 55 | 65 |
| Poverty | 25 | 20 | 20 |
| Land area | 10 | 10 | 15 |
| District Cost Index | 25 | 15 | 0 |
| MCs / PMs | Yes (0% MC) / Yes (-20%,+30%) | Yes (50, 80, 100%) | Yes (50, 80, 100%) |

Note: (*) The measurement of the allocation factors differ between alternative scenarios, as described in the text.

³⁶ It should be noted that the DDC receives a grant for recurrent purposes in addition to the block grant.

The first proposed formula option reflects: (1) a slight modifications to the relative weighting of the current allocation formula, (2) reliance on more up-to-date data sources and some minor adjustment of the allocation factors; and (3) some fine-tuning of the manner in which the District Cost Index is incorporated into the formulas. The second proposed formula option makes similar adjustments but eliminates the District Cost Index as a separate allocation factor; instead, every allocation factor in this formula is adjusted by the District Cost Index.

Under both scenarios, it is proposed to simplify the MCPM process. Currently, failure to meet the MCs results in the elimination of the entire grant, whereas poor or above-average good performance (once the MCs are met) may result in a penalty or bonus of 20/30 percent, respectively. Instead, it is proposed to have a simpler, three-tiered performance incentive structure: failure to achieve MCs reduces a jurisdiction's grant by 50% (compared to the total formula-based grant amount), whereas poor performance results in a 20% reduction. Under this approach, DDCs that perform adequate or well retain the entire formula-based grant amount.^{37 38}

5.2 Details of the proposed DDC formula: Option 1

As noted above, the first proposed formula-based option proposes a number of relatively minor modifications to the DDC block grant formula compared to the current formula. This section discusses the underlying reasons for the proposed changes, and considers the expected impact.

Equal Shares

Every DDC currently receives an “equal share” fixed lump sum amount of Rs 4 million. The main advantage of this arrangement is that every district receives a minimum amount of roughly US\$50,000 in order to secure a minimum level of capital infrastructure, regardless of population size of other allocation factors. The main disadvantage is that the equal shares allocation results in some -not inconsiderable- inequities in terms of per capita allocations, which are somewhat hard to justify based on expenditure needs.³⁹

Although it would conceptually be preferable to reduce the overall size of the fixed lump sum in order to reduce the inequities in per capita allocation, lowering the amount would result in clear “winners and

³⁷ Note that currently, the Minimum Conditions are not applied to the Equal Share allocation of Rs 4 million per district. This is quite inconsistent, since this fixed amount/ equal share is not in any way reflective of the “minimum expenditure needs” of the district that result from its specific conditions (e.g., population, geography, poverty, and so on). As a result of this arbitrary decision, every district thus receives the fixed lump sum, even when MCs are not met. Excluding this fixed amount from the MCs potentially reduces the incentive for DDCs to perform well under the MCPM system.

³⁸ Furthermore, the MCs are not fully implemented as designed, since relatively minor infractions (partially) beyond the control of the DDC are able to trigger failure to meet MCs. In response, the GoN has reinstated partial funding for several DDCs, even though the MCs were not met. While this decision was arbitrary and contravened the rules of the LGCDP system, the steps were a reasonable response to the excessive rigidity of the LGCDP system.

³⁹ As noted in Box 2.2, a fixed lump sum was (arguably) justifiable in the past in Nepal due to the fact that less populous districts were correlated with a series of factors that reflected higher expenditure needs. However, with the introduction of formula-based grants over the past years, it should be noted that the remainder of the formula now makes adjustments for poverty, geography/accessibility and cost. It is difficult to argue that -after already taking into account these factors- less populous districts (which are typically higher cost, mountainous districts) still have greater expenditure needs.

losers” and would likely raise political and institutional opposition among some (central and local) stakeholders. Therefore, it is proposed to leave the fixed lump sum at Rs 4 million at this time. Rather than reducing this amount, it is proposed to hold the fixed lump sum steady in nominal terms over time. In that case, as the DDC grant pool gradually grows over time, the importance of the fixed lump sum amount would gradually decrease in relative terms over time, thereby reducing the inequitable allocation of resources introduced by this allocation factor.

Population

Since the residents that form local communities are the main clients of Local Bodies, it makes sense that population is the main allocation factor in the formula. Accordingly, the proposed relative weight for population is increased from 40% to 55%.

Going forward, three different measures of population should be considered for the DDC grant formula. The first option would be to maintain the status quo, and allocate the DDC block grant in proportion to each DDC’s rural population. This would be appropriate if DDC spending only benefits residents outside of the main urban areas, and if urban local bodies have adequate funds from other funding sources (e.g., from a Municipal Development Grant or from own revenue sources) which would allow them to provide the same level of public services within the boundaries of their urban jurisdictions. As a second option, instead of relying on rural district population figures (based on Census 2011), it could be proposed to use the total district population levels as the basis for the DDC block grant (preliminary figures drawn from the 2011 census). The adjustment would be reasonable if we believe that the need for public infrastructure is less per person in urban areas than in rural areas. Third, a compromise might be to base the DDC block grant allocations on total population (including all municipal areas), but to exclude the population that resides in the Kathmandu metropolitan area and all sub-metropolitan areas.⁴⁰

The changes proposed under the population window of the DDC block grant essentially cancel each other out. While the amount of grant resources being allocated under this window increases (from Rs 478 million to 657.25 million), so does the population base upon which these resources are distributed (from 19.9 million rural district residents to 24.8 million non-metropolitan residents).⁴¹ As a result, the per-client (per person) allocation that results from this allocation factor increases only slightly, from Rs 24 per person to Rs 26.5 per person.

Poverty

Option 1 proposes a slight reduction in the relative weight used to distribute DDC block grant resources on the basis of poverty, from 25% to 20%. This reduces the grant sub-pool distributed in proportion to poverty from Rs 298.7 million to Rs 239 million, or from Rs 32 per (equivalent) poor person to Rs 28 per poor individual.

Although this move may be seen as “anti-poor”, there are two good reasons for doing so. First, one could argue that the current allocation formula leans a bit too much in favor of those living below the poverty, compared to “non-poor” residents, many of whom live not too far above the poverty line themselves. As discussed in Section 3.2, the current DDC formula-based allocations provide more than twice as many resources per poor resident when compared to a “non-poor” resident. It is unlikely,

⁴⁰ For the purpose of the simulations accompanying the current report, the DDC grant allocations have been simulated based on total non-metropolitan DDC population.

⁴¹ The increase is due both to population growth since the previous census, as well as due to the wider definition being applied.

however, that this reflects the actual relative needs for local public infrastructure and/or local public services of poor versus non-poor residents. If we agree that the local expenditure need of a “non-poor” person (who is likely to be not that much wealthier than a person that is officially classified as being poor) is probably not less than half as big as the local expenditure need of a “poor” person, then we should not have a problem shifting the relative weight slight in favor of population, and away from poverty.⁴²

Second, the main reason for making this adjustment is to facilitate the inclusion of poverty into the VDC block grant formula as part of the harmonization of the DDC and VDC formulas. So, whereas a slight reduction takes place in pro-poor spending in the DDC formula (Rs 60 million), Rs 1,000,000,000 (one billion) will now be allocated in a pro-poor manner as part of the VDC block grant formula.

Finally, it is proposed to switch from the current poverty measure to a more up-to-date and detailed poverty count. The current poverty measure (based on the HDI) is quite outdated and its statistical accuracy is debatable. Given that the block grant in practice focuses heavily on income poverty, it would be appropriate to rely on a poverty measure that is more statistically accurate, more intuitive in terms of its interpretation, and that can be broken down in order to be included in the VDC block grant formula (as discussed in Section 6).

Land Area

It is proposed to retain the allocation for land area steady at 10% as part of the DDC block grant formula.

The only adjustment proposed with respect to the inclusion of land area in the DDC formula is to somewhat reduce the impact by a few outliers (in terms of land area), who now receive a disproportionately large share of the grant pool relative to their expenditure needs. As discussed in greater detail in Section 4.2, it is proposed to “cap” land area in the DDC block grant formula for districts that have a population density less than 20 residents per km². This means that for the five districts that have a land area smaller than 20 residents per km², their land area allocation factor will be adjusted in line with a population density of 20 residents per km², so that the grant formula stays focused on funding people, rather than on funding empty space.

District Cost Index

The first proposed adjustment with regard to the inclusion of the District Cost Index under the first proposed scenario is to update the index: rather than relying on the District Cost Index 2005, it is proposed to start relying on the District Cost Index 2012.

As discussed in Section 4.1, the new cost index relies on the most recent cost data available in Nepal. Furthermore, the new cost index almost exclusively on actual district-level cost data collected by LBFC Secretariat itself (as opposed to relying extensively on estimated cost estimates). The 2012 iteration of the cost index should be seen as the most up-to-date, transparent and most accurate measure of inter-district cost variations that is currently available in Nepal. There is no convincing reason not to adopt this latest cost index.

One major difference between the 2012 District Cost Index and the current index is that the most recent measure suggests that inter-district cost differences are considerable lower than suggested by the

⁴² In fact, the relative weight on the poverty factor is of minor significance. In order for the DDC block grant to be pro-poor, it is much more important that the grant is spent in a prudent, inclusive and pro-poor manner.

previous measure. However, this does not necessarily mean that higher-cost districts will necessarily receive less by the newly proposed allocation formula. Indeed, this apparent pattern creates the space in order for the allocation formula to be adjusted slightly to focus this allocation window more heavily on the higher-cost districts.

Box 5.1: Current inclusion of cost scale into the DDC block grant formula

In the current block grant allocation computations, cost scale calculations are adjusted by weighting it with and initial allocation derived from *rural population, land area and poor population*. Thus:

$$\begin{aligned}
 \text{InitialAllocation}_i &= \text{Allocation}_{\text{LandArea}} \times (\text{landarea}_i / (\sum_{\text{for all } i} \text{landarea})) + \\
 &\quad \text{Allocation}_{\text{ruralPopulation}} \times (\text{ruralPopulation}_i / (\sum_{\text{for all } i} \text{ruralPopulation})) + \\
 &\quad \text{Allocation}_{\text{poorPopulation}} \times (\text{poorPopulation}_i / (\sum_{\text{for all } i} \text{poorPopulation})) \\
 \\
 \text{FinalAllocation}_i &= \text{Allocation}_{\text{LandArea}} \times (\text{landarea}_i / (\sum_{\text{for all } i} \text{landarea})) + \\
 &\quad \text{Allocation}_{\text{ruralPopulation}} \times (\text{ruralPopulation}_i / (\sum_{\text{for all } i} \text{ruralPopulation})) + \\
 &\quad \text{Allocation}_{\text{poorPopulation}} \times (\text{poorPopulation}_i / (\sum_{\text{for all } i} \text{poorPopulation})) + \\
 &\quad \text{Allocation}_{\text{costScale}} \times (\text{DCI}_i \times \text{initialAllocation}_i / (\sum_{\text{for all } i} \text{DCI}_i \times \text{initialAllocation}_i))
 \end{aligned}$$

Compared to the current practice, highlighted in Box 5.1, two adjustments are proposed to make the allocation formula more cost-sensitive. First, the current allocation formula does not include the fixed lump sum (i.e., the equal shares amount) in the expenditure base that requires to be adjusted based on the cost scale. We propose to correct this oversight by including the equal share amount in the “initial allocation”.

Second, we propose not simply include the District Cost Index (DCI) into the formula, but rather, to reduce DCI by one (DCI – 1). After all, as discussed in Section 3.2 and in Box 3.4, as a result of the way in which the cost allocation factor is currently defined, even districts where costs are low (DCI = 1) receive an additional grant amount for “cost adjustment”. By reducing the cost index by one in the formula for every district, we make sure that only districts that face higher costs will receive a cost adjustment grant. The resulting proposed formula is contained in Box 5.2.

Box 5.2: Proposed inclusion of cost scale into the DDC block grant formula (Option 1)

In the proposed block grant allocation computations, cost scale calculations are adjusted by weighting them with and initial allocation derived from equal shares, *rural population, land area and poor population*. In addition, the District Cost Index (DCI) is further adjusted from DCI to (DCI – 1). Thus, the computation of the proposed formula-based block grant (Option 1) can be described as:

$$\begin{aligned}
 \text{InitialAllocation}_i &= \text{Equal Share Allocation} + \\
 &\quad \text{Allocation}_{\text{LandArea}} \times (\text{landarea}_i / (\sum_{\text{for all } i} \text{landarea})) + \\
 &\quad \text{Allocation}_{\text{ruralPopulation}} \times (\text{ruralPopulation}_i / (\sum_{\text{for all } i} \text{ruralPopulation})) + \\
 &\quad \text{Allocation}_{\text{poorPopulation}} \times (\text{poorPopulation}_i / (\sum_{\text{for all } i} \text{poorPopulation}))
 \end{aligned}$$

$$\begin{aligned}
FinalAllocation_i = & Equal\ Share\ Allocation + \\
& Allocation_{LandArea} \times (landarea_i / (\sum_{for\ all\ i} landarea)) + \\
& Allocation_{ruralPopulation} \times (ruralPopulation_i / (\sum_{for\ all\ i} ruralPopulation)) + \\
& Allocation_{poorPopulation} \times (poorPopulation_i / (\sum_{for\ all\ i} poorPopulation)) + \\
& Allocation_{costScale} \times ((DCI_i \times X - 1) \times initialAllocation_i / (\sum_{for\ all\ i} (DCI_i \times X - 1) \times initialAllocation))
\end{aligned}$$

Because the cost-adjustment process is now more finely targeted, and due to the inclusion of the updated District Cost Index (2012) which reflects lower inter-district cost variations, a greater share of cost-variations can be addressed by the formula. In fact, even though the proposed relative weight for cost-adjustment is reduced from 25% to 15%, the proposed DDC grant formula (option 1) fills 82% of the “cost gap”.

5.3 Details of the proposed DDC formula: Option 2

The second possible DDC grant formula option is more ambitious. Option 2 reflects a technically superior formula-based allocation, but does so at the expense of being more technically complex, and therefore somewhat less transparent and possibly less politically acceptable.

Equal Shares, Population, Poverty and Land Area

In virtually all respects, Option 2 is identical to Option 1 with respect to the measurement and inclusion of Equal Shares, Population, Poverty and Land Area. However, it uses slightly different weightings for the different allocation factors: Equal Shares (Rs 4 million), Population (65%), Poverty (20%) and Land Area (15%).

District Cost Index

In the second scenario of the proposed DDC block grant allocation (Option 2), every allocation factor - including equal shares, rural population, land area and poor population- is weighted by the District Cost Index (DCI). As such, to the extent that every allocation factor is a measure of local expenditure needs, each measure is already fully adjusted for cost variations across districts. The resulting formula for Option 2 is presented in Box 5.3.

Box 5.3: Computation of the DDC block grant formula (Option 2)

In the proposed block grant allocation computations (Option 2), every allocation factor (including *equal shares*, *rural population*, *land area* and *poor population*) is weighted by the District Cost Index (DCI). Thus:

$$\begin{aligned}
FinalAllocation_i = & Allocation_{EqualShare} \times (DCI_i / (\sum_{for\ all\ i} DCI_i)) + \\
& Allocation_{LandArea} \times (DCI_i \times landarea_i / (\sum_{for\ all\ i} DCI_i \times landarea)) + \\
& Allocation_{population} \times (DCI_i \times population_i / (\sum_{for\ all\ i} DCI_i \times population)) + \\
& Allocation_{poorPopulation} \times (DCI_i \times poorPopulation_i / (\sum_{for\ all\ i} DCI_i \times poorPopulation))
\end{aligned}$$

5.4 A comparison of current DDC allocations and simulations for Option 1 and Option 2

How do the proposed allocation patterns (Option 1 and 2) compare to the current formula-based allocations? Simulations were prepared for the different scenarios, which are contained in Attachment B. Table 5.2 presents a comparison of the current formula-based allocations and simulations for Option 1 and Option 2. The table relies on the concept of “Index of Deviation” and “Index of Fit”. These measures were explained in detail in Box 3.6.

Table 5.2: Comparison of current DDC allocations and simulations : Index of Fit

| | Comparison (Actual, Option 1) | Comparison (Actual, Option 2) | Comparison (Option 1, Option 2) |
|---------------------------|----------------------------------|----------------------------------|------------------------------------|
| Index of Deviation | 0.0586 | 0.0627 | 0.0086 |
| Index of Fit | 0.9414 | 0.9372 | 0.9913 |

What do the figures in Table 5.2 mean? Overall, they suggest that the allocation patterns that result from the current allocations and the proposed options are very similar in the way in which they distribute resources.

Let us first consider the comparison between the current allocation formula and Option 1. The Index of Deviation is 0.0586 (or 5.86%) and an Index of Fit of 0.9414 (or 94.14%). These figures suggests that the two allocation patterns are 94.14% the same, and that we would have to shift only 5.86% of the total grant pool from some DDCs to other DDCs in order to get a perfect match between the two allocation patterns. Next, the comparison between the current allocations and Option 2 show a close fit that is nearly the same in size, with a deviation of only 6.27%. Finally, the comparison between Option 1 and Option 2 indicates that the outcomes of these two allocation formulas are more than 99% the same. The fact that the changes in allocation patterns are relatively small should come as no surprise, as efforts were made to keep the incidence of the proposed formulas more or less the same.

Although the IOF suggests a relatively close fit overall (or an average) between the different simulated allocation patterns, this does not necessarily mean a close fit exists for every DDC. As such, it is important to also scrutinize the simulated allocations to each individual DDC (see Attachment B). Table 5.3 presents descriptive statistics of the per capita allocations for the different formula-based allocation patterns.

Table 5.3: Comparison of current DDC allocations and simulations: Descriptive statistics, per capita allocations

| | Current allocation formula | Simulation: Option 1 | Simulation: Option 2 | Difference: Option 1 – current alloc. | Difference: Option 2 – current alloc. |
|----------------------|----------------------------------|-------------------------|-------------------------|---|---|
| Average | 103.2 | 100.3 | 99.1 | -2.9 | -4.1 |
| Minimum | 15.2 | 14.2 | 14.4 | -173.9 | -278.5 |
| Maximum | 1,147.5 | 973.6 | 869.0 | 74.2 | 93.6 |
| Max-Min Ratio | 75.3 | 68.5 | 60.4 | | |
| Std Deviation | 154.1 | 129.1 | 119.4 | | |

A number of lessons can be drawn from Table 5.3 First, the table confirms that on average, the two proposed allocation formulas are quite similar in nature to the current allocation formula: they have

relatively similar average (per capita) grant allocations, and the average difference between the proposed allocation patterns and the current allocations is small (in the range of Rs 3-4 per person).

A second lesson is that the proposed options appear to result in incrementally “fairer” or “better” allocation patterns. Although it is not a guaranteed measure of fairness, the per capita variations in grant allocations (as judged by the standard deviation) are somewhat less for Option 1 and Option 2 when compared to the current allocation formula. In addition, the table shows that the “best-off” DDC receives incrementally less in per capita terms under Options 1 and 2, which (although still 8-10 higher than an average allocation) is likely a reflection of a somewhat fairer or more reasonable allocation of grant resources.

A third lesson is that although Options 1 and 2 are likely incrementally better allocation formulas in terms of the resulting allocation of resources, the proposed changes in the formula would result in large differences in grant allocations for individual councils. Although the average difference between the scenarios (current, Option 1 and Option 2) are small, there are some big “winners” and “losers”. While the biggest “winner” under Option 1 would receive an increase of Rs 74.2 per person (Mugu), the biggest loser under Option 1 (vis-a-vis the current allocation) is Manang, which would lose Rs 173.9 per person under the same option. However, we should be very careful to use the terms “winners” and “losers”, since Mugu would only receive Rs 288.1 under the proposed allocation formula (Option 1), whereas Manang (the so-called “loser”) would still receive three times more per person than Mugu (Rs 973.6). In fact, both districts would receive several times more than an average district in per capita terms.

Finally, it should be noted that overall –as expected- Option 2 seems to produce a technically more desirable allocation pattern, but that there is a large risk of this pattern not being immediately politically acceptable. The second scenario results in more DDCs that would consider themselves “losers” under the new formula, and their losses would generally be larger than under Option 1.⁴³

Before moving forward in selecting whether either Option 1 or Option 2 is more desirable (and in fact, whether either option is considered preferable over the current allocation pattern), careful review of the simulated allocation results is needed by the LFBC and its Secretariat to make sure that the detailed allocation pattern resulting from these options are technically and politically justifiable.

⁴³ In addition, regression analysis –not further presented here- suggests that Scenario 1 and 2 do a progressively better job providing greater allocations to DDCs with higher costs levels and higher poverty levels.

6. The VDC grant formula: review and proposed revisions

Based on the analysis and review contained in the first four sections of this report, the current section contains two main proposals for the revision of the VDC block grant formulas. The two options presented here for the VDC block grant run closely parallel to the policy options recommended for the DDC level. In fact, in the absence of any reason why the VDC block grant formula should be different than the DDC grant formula, we believe that the simplicity and transparency of the grant system can be enhanced by following the same basic formula for both grant schemes.

As such, the two options for the VDC grant are essentially identical to the options proposed for the DDC block grant. The first option explored in this section would maintain the current structure of current formula-based block grant, but would make some minor changes at the margin of the grant system. The second policy option that is considered in this section pursues a more rigorous overhaul of the grant system, which would the VDC block grant close to a technically 'ideal' grant scheme. In addition to the discussion in this Section, Attachment C to this report contains an Excel-based simulation model, which compares the current allocation of VDC grants with simulated allocations of VDC grant resources based on the two proposed options and formulas.

The simulations and estimates are based on the total size of the VDC grant pool for 2011/12. For this financial year, the total VDC grant comprised Rs 9.2 billion (or Rs 9,255,500,000). This amount consisted of VDC categorical grants funded by the Government of Nepal in the amount of Rs. 7,829,350,000. In addition, the international donor community contributed Rs 1.425 billion to the grant pool for the formula-based VDC block grants. The total VDC block grant is considerably larger than the DDC block grant scheme: the total VDC grant pool is about US\$120 million, which is approximately six times larger than the DDC block grant pool. In per capita terms, the size of the VDC block grant is approximately Rs 350 (approximately US\$ 4.50), which is quite considerable by international comparison. Similar transfer funds to the lowest government level within the public sector or similar community bodies are typically funded around US\$1.50 per person. While it is hard to determine the total size of relative expenditure needs at the VDC-level, concern should be raised that in the absence of elected VDCs and in the absence of strong financial accountability mechanisms, there is considerably fiduciary risk in channeling a grant of this size to the VDC level.

6.1 Overall structure of the proposed VDC formulas and factor weights

Table 6.1 reflects the current VDC block grant formula, as well as the two alternative proposed block grant formulas. As already noted, we believe it is feasible to simplify the overall block grant system by aligning and harmonizing the formulas at the DDC and VDC levels.⁴⁴

Beyond harmonizing the DDC and VDC formulas, we also believe it is preferable to shift away from the categorical VDC grants that have been provided to the VDC level since 2008/09, and to completely integrate the formula-based/categorical grants funded by the Government of Nepal and the donor-funded portion of the VDC block grant.

⁴⁴ One difference that should be kept in mind between the DDC and VDC block grants is that the VDC block grant includes a recurrent portion that can be used at the VDC level for administrative and operational expenditures.

In addition to the changes being proposed to the allocation formula itself (discussed further below), we propose eliminating the grant floor and ceiling that are currently imposed on the non-categorical portion of the formula-based VDC grant. Currently, the non-categorical portion of the VDC allocation (i.e., the LGCDP portion) is capped in nominal terms between Rs. 320,000 (minimum / floor) and Rs. 820,000 (maximum /ceiling). While these prevent large fluctuations in the total amount of the grant in nominal terms, they in fact cause considerable and unwarranted fluctuations in per capita VDC grant allocations. The main impact of the current floor and ceiling is to provide greater allocations to smaller, less populous VDCs and smaller allocations to VDCs with higher total expenditure needs. This is approach is quite inconsistent with the desire to make sure that “finance follows function”.

Table 6.1: Proposed allocation formulas for the DDC Block Grant

| Factor | Current VDC Formula | VDC Formula: Option 1 * | VDC Formula: Option 2 * |
|------------------------|---|----------------------------|----------------------------|
| Categorical allocation | Category I-VI (Rs 1.5 – 3.5 million) | None | None |
| Equal share | 30% of remaining pool (Rs 127,900) | 1,000,000 | 1,000,000 |
| Population | 60 | 55 | 65 |
| Poverty | 0 | 20 | 20 |
| Land area | 10 | 10 | 15 |
| District Cost Index | 30 | 15 | 0 |
| Floor/ceiling | Rs 320,000 / Rs 820,000 | None | None |
| MCs / PMs | MCs (0%) – does not apply to categorical allocation (only to LGCDP portion) | MCs – 50%, 100% | MC – 50%, 100% |

Note: (*) The measurement of the allocation factors differ between alternative scenarios, as described in the text.

Under both scenarios, we propose to simply the MCPM process at the VDC level. Currently, failure to meet the MCs results in the elimination of the entire grant from the LGCDP, with the exception of the categorical allocation (which is a large majority of the VDC-level grant). Whereas the Government is considering introducing a performance-based component to the VDC grant, there is no evidence to suggest that such performance grants have a meaningful impact on the actual performance of Local Bodies (especially not in the absence of elected councils). Furthermore, it is highly unlikely that the LBFC is sufficiently able to monitor the performance of 3915 VDCs in way that would allow on objective and meaningful performance-based grant. Instead, it is recommended that the VDC block grant continues to rely exclusively on the MCs. Similar to the proposed DDC approach, failure to achieve its minimum conditions would reduce a VDC’s grant by 50%, VDCs that meet their perform conditions would retain the entire formula-based grant amount (100%).

6.2 Details of the proposed VDC formula: Option 1

Consistent with the description of the proposed DDC grant formula in Section 5.2, the first proposed formula-based option for the VDC block grant proposes a number of relatively minor modifications to the VDC block grant formula compared to the current formula. This section discusses the underlying reasons for the proposed changes, and considers the expected impact.

“Categorical” Minimum Grant and Equal Shares

Every VDC currently receives a “categorical” allocation between Rs 1.5 million and Rs 3 million, based on classification of each VDC (i.e., Category I-VI). The reliance on a “categorical” grant is a vestige of a pre-formula-based era, which was seen as a transitional step from the previous exclusive reliance on an equal shares approach to a formula-based approach. Similar to the equal shares portion of the DDC grant, the categorical allocation is resulting in considerable variation in per capita allocations, which does not appear to be justifiable based on our understanding of VDCs’ expenditure needs.

As such, it is recommended that now is a good time for Nepal to make a break with the final remnant of its pre-formula based grant system and abandon the categorical grant, especially since there are no formal, objective criteria that determine why a specific VDC is assigned to each of the six categories. Furthermore, continued adherence by the GoN to categorical allocations –albeit with the context of the broader, formula-based grant allocations to the VDC level- reinforce the perception that VDCs receive two different grants: a categorical Government grant versus a formula-based donor-funded LGCDP grant. This perception should be avoided.

In addition to the categorical allocation, every VDC receives an “equal share” fixed lump sum amount of Rs 127,900 as part of its LGCDP allocation. This amount was determined as 30% of the remaining grant pool (after taking into account the categorical grant). There is no convincing policy argument why VDCs should receive both a (very large) categorical allocation as well as a (much smaller) equal shares allocation. In fact, the arguments for even including a single allocation factor based on equal shares at the VDC level only has debatable merit, and the inclusion of the categorical / equal share allocation is resulting in considerable per capita variation.

However, VDCs have received a categorical or equal shares allocation of at least Rs 1 million since 2006/07, and abandoning this practice would most likely result in considerable political dissonance. Therefore, we propose retaining an equal shares allocation of Rs 1 million as part of the proposed VDC block grants formula (Option 1).

Population and Poverty

Since the residents that form local communities are the main clients of Local Bodies, it makes sense that population is the main allocation factor in the formula. However, the VDC block grant should also have a substantial pro-poor outlook. However, hitherto, poverty has not been included in the VDC allocation formula. Accordingly, we propose to slightly reduce the relative weight for population allocation factor from 60% to 55%, while increasing the relative weight on the poverty allocation factor from 0% to 20%.

It is proposed to use total VDC population levels as the basis for the VDC block grant, based on preliminary figures drawn from the 2011 census). VDC-level poverty figures were based on small-area poverty estimates prepared at the Ilaka level (small sub-district groups of several VDCs).

Despite lowering the relative factor weight for population, the per-person allocation under the proposed VDC grant would increase considerably. Whereas the current per-person VDC allocation based on population is Rs 27 per person, under Option 1, this allocation would increase to Rs 133 per person. This increase is due to the fact that a much larger share of the VDC block grants would now be distributed on a non-categorical basis. Likewise, by introducing the poverty allocation factor into the VDC block grant formula, each VDC would Rs 128 per poor person, in contrast to Rs 0 under the current grant scheme.

Land Area

It is proposed to retain the allocation for land area steady at 10% as part of the VDC block grant formula. Similar to the DDC block grant formula, the only adjustment proposed with respect to the inclusion of land area in the VDC formula is to reduce the impact of outliers (in terms of land area) who now receive a disproportionately large share of the grant pool as a result of their large land area. We proposed to “cap” land area in the VDC block grant formula for VDCs that have a population density less than 20 residents per km² so that the grant formula focuses on funding people (including poor people), rather than on disproportionately funding empty space.

District Cost Index

Similar to the proposed DDC block grant formula (Option 1), it is proposed to rely on the most recent District Cost Index (2012) rather than on the 2005 version of the index. In addition, we propose to make the same two adjustments to the cost scale element of the VDC block grant formula that were made in the case of the DDC block grant. First, the proposed allocation formula would include the fixed lump sum allocation (i.e., the equal shares amount) into the expenditure base or “initial allocation” that is adjusted based on the cost scale. Second, we propose based the cost scaling on (DCI – 1) rather than on the full value of the DCI. By reducing the cost index by one in the formula for every district, we make sure that only districts that face higher costs will receive a cost adjustment grant.

The resulting proposed formula is contained in Box 6.1.

Box 6.1: Computation of the proposed VDC block grant formula (Option 1)

In the proposed VDC block grant allocation computations, cost scale calculations are adjusted by weighting them with and initial allocation derived from *equal shares*, *rural population*, *land area* and *poor population*. In addition, the District Cost Index (DCI) is further adjusted from DCI to (DCI – 1).

As a result, the computation of the proposed VDC block grant can be described as:

$$\begin{aligned} \text{InitialAllocation}_i &= \text{Equal Share Allocation} + \\ &\quad \text{Allocation}_{\text{LandArea}} \times (\text{landarea}_i / (\sum_{\text{for all } i} \text{landarea})) + \\ &\quad \text{Allocation}_{\text{ruralPopulation}} \times (\text{ruralPopulation}_i / (\sum_{\text{for all } i} \text{ruralPopulation})) + \\ &\quad \text{Allocation}_{\text{poorPopulation}} \times (\text{poorPopulation}_i / (\sum_{\text{for all } i} \text{poorPopulation})) \end{aligned}$$

$$\begin{aligned} \text{FinalAllocation}_i &= \text{Equal Share Allocation} + \\ &\quad \text{Allocation}_{\text{LandArea}} \times (\text{landarea}_i / (\sum_{\text{for all } i} \text{landarea})) + \\ &\quad \text{Allocation}_{\text{ruralPopulation}} \times (\text{ruralPopulation}_i / (\sum_{\text{for all } i} \text{ruralPopulation})) + \\ &\quad \text{Allocation}_{\text{poorPopulation}} \times (\text{poorPopulation}_i / (\sum_{\text{for all } i} \text{poorPopulation})) + \\ &\quad \text{Allocation}_{\text{costScale}} \times ((\text{DCI}_i - 1) \times \text{initialAllocation}_i / (\sum_{\text{for all } i} (\text{DCI}_i - 1) \times \text{initialAllocation}_i)) \end{aligned}$$

Because the cost-adjustment process is now more finely targeted, and due to the reliance on the updated District Cost Index 2012 (which reflects lower inter-district cost variations), a greater share of cost-variations can be addressed by the proposed formula. In fact, even though the proposed relative weight for cost-adjustment is reduced from 30% to 15%, initial analysis suggests that the proposed VDC grant formula (option 1) fills 55% of the “cost gap”.

6.3 Details of the proposed VDC formula: Option 2

Just like the second DDC block grant scenario, the second VDC grant formula option is more ambitious, reflecting a technically ‘ideal’ formula which fully takes into account cost-variations between districts, by multiplying each of the remaining allocation factors by the District Cost Index. The added level of accuracy comes at the expense of being more technically complex, and therefore somewhat less transparent and possibly less politically acceptable.

Equal Shares, Population, Poverty and Land Area

In virtually all respects, VDC Option 2 is identical to VDC Option 1 with respect to the measurement and inclusion of Equal Shares, Population, Poverty and Land Area. However, like DDC Option 2, it uses slightly different weightings for the different allocation factors: Equal Shares (Rs 1 million), Population (65%), Poverty (20%) and Land Area (15%).

District Cost Index

In the second proposed VDC block grant allocation (Option 2), every allocation factor -including equal shares, rural population, land area and poor population- is weighted by the District Cost Index (DCI). As such, to the extent that every allocation factor is a measure of local expenditure needs, each measure is already fully adjusted for cost variations across districts. The resulting formula for Option 2 is presented in Box 6.2.

Box 5.3: Computation of the VDC block grant formula (Option 2)

In the proposed block grant allocation computations (Option 2), every allocation factor (including *equal shares*, *rural population*, *land area* and *poor population*) is weighted by the District Cost Index (DCI). Thus:

$$\begin{aligned} FinalAllocation_i = & Allocation_{EqualShare} \times (DCI_i / (\sum_{for\ all\ i} DCI_i)) + \\ & Allocation_{LandArea} \times (DCI_i \times landarea_i / (\sum_{for\ all\ i} DCI_i \times landarea_i)) + \\ & Allocation_{population} \times (DCI_i \times population_i / (\sum_{for\ all\ i} DCI_i \times population_i)) + \\ & Allocation_{poorPopulation} \times (DCI_i \times poorPopulation_i / (\sum_{for\ all\ i} DCI_i \times poorPopulation_i)) \end{aligned}$$

6.4 The recurrent portion of the VDC block grant

Currently, a specific fixed portion of the categorical VDC allocation is set aside as an allocation which can be used for recurrent purposes at the VDC level (Table 6.2). Since it is recommended to discontinue reliance on categorical grants, how should the recurrent portion of the VDC block grant be determined? It is recommended to have a simple and fair norm-based approach to determine the amount of the VDC block grant which can be used for recurrent purposes.

For the first Rs 1,000,000 of the VDC block grant, VDCs will be entitled to use up to 30% of the grant for recurrent purposes. For any grant amount exceeding Rs 1,000,000, VDCs will be entitled to use 10% of the additional amount for recurrent purposes. For instance, going forward, a VDC that receives a formula-based block grant of Rs 3 million would be entitled to spend Rs 500,000 on recurrent expenditures, constituting 30% of the first Rs 1 million (Rs 300,000), plus 10% of the remaining Rs 2

million (Rs 200,000). Table 6.2 shows that in the proposed approach for computing the recurrent share of the VDC block grant is quite similar to the current categorical amounts. Of course, to the extent that a new fully formula-based (non-categorical) approach will result in greater allocations for some VDCs, the recurrent allocation will be proportionately greater as well.

Table 6.2: Recurrent portion of VDC block grant allocation: comparison of current and proposed allocation

| | Current categorical allocation | Current recurrent allocation | Proposed recurrent allocation |
|-----|--------------------------------|------------------------------|-------------------------------|
| I | Rs 1.50 million | Rs 350,000 | Rs 350,000 |
| II | Rs 1.76 million | Rs 393,000 | Rs 376,000 |
| III | Rs 1.95 million | Rs 400,000 | Rs 395,000 |
| IV | Rs 2.15 million | Rs 420,000 | Rs 415,000 |
| V | Rs 2.45 mn | Rs 420,000 | Rs 445,000 |
| VI | Rs 3.00 mn | Rs 425,000 | Rs 500,000 |

6.5 A comparison of current allocations and simulations for Option 1 and Option 2

How do the allocation patterns that result from the proposed allocation formulas (under both Option 1 and 2) compare to the current formula-based allocations for the VDC block grant? Simulations of the proposed allocation formulas were prepared for both formula-based scenarios, which are contained in Attachment C. A comparison of the current formula-based allocations and the simulated allocations under formula-based Options 1 and 2 are contained in Table 5.2.

Table 6.3: Comparison of current VDC allocations and simulations : Index of Fit

| | Comparison (Actual, Option 1) | Comparison (Actual, Option 2) | Comparison (Option 1, Option 2) |
|--------------------|----------------------------------|----------------------------------|------------------------------------|
| Index of Deviation | 0.0801 | 0.0905 | 0.0278 |
| Index of Fit | 0.9199 | 0.9095 | 0.9722 |

In comparing the different allocations, the table again relies on the concept of “Index of Deviation” and “Index of Fit” (see Box 3.6). Again, the Index of Fit suggests that the allocation patterns that result from the proposed allocation formulas are quite similar to the way in which the current formula distributes grant resources among VDCs. When compared to the current allocation pattern, the allocation patterns for Options 1 and 2 are 91.9% and 90.9% the same, respectively. The two alternative options are even more similar to each other, with an Index of Fit of 97.2 %.

Although these figures suggest that the allocation patterns resulting from the proposed allocation formulas are not terribly dissimilar to the current allocation pattern, when compared to the Index of Fit obtained for the DDC block grant formulas, the current levels of deviation are a few percentage points higher. This was to be expected: while efforts were made to keep the incidence of the proposed formulas more or less the same, the changes and improvements that are being proposed to the VDC allocation formula are somewhat more substantive in nature than what was the case for the DDC formula. In particular, shifting away from a heavy reliance on the categorical allocation, and eliminating the caps (floor and ceiling) on the non-categorical portion of the VDC grant should be expected to result in greater nominal variations of the VDC grant, but should be expected to result in smaller variations in terms of per capita grants.

Table 6.4 presents descriptive statistics of the per capita allocations for the current –as well as the alternative proposals- for formula-based allocation patterns for the VDC block grant.

Table 6.4: Comparison of current VDC allocations and simulations: Descriptive statistics, per capita allocations

| | Current allocation formula | Simulation: Option 1 | Simulation: Option 2 | Difference: Option 1 – current alloc. | Difference: Option 2 – current alloc. |
|----------------------|----------------------------|----------------------|----------------------|---------------------------------------|---------------------------------------|
| Average | 660.1 | 580.9 | 588.7 | -79.1 | -71.4 |
| Minimum | 46.1 | 153.0 | 156.7 | -14,314.9 | -14,461.1 |
| Maximum | 33,880.6 | 19,565.7 | 19,419.5 | 618.1 | 1,169.0 |
| Max-Min Ratio | 735.4 | 127.9 | 123.9 | | |
| Std Deviation | 853.4 | 515.8 | 549.0 | | |

Consistent with the expectation noted above, Table 6.4 indeed shows that both simulated options result in a considerably smaller amount of variation in terms of per capita allocations when compared to the current allocation formula and approach. Whereas under the current allocation formula, the best-off VDC (in terms of per capita grant) receives a grant that is 735 times larger than the VDC with the smaller per capita grant, the new (proposed) formulas reduce this ratio to a more palatable 124-128 times. This is likely a reflection of a fairer or more reasonable allocation of grant resources (where the formula-based allocation more closely reflects the expenditure needs of the population being served).

While either of the proposed formulas (Options 1 and 2) are likely to result in a more efficient and equitable allocation of resources that is more in line with the stated objective of the VDC block grant scheme, the proposed changes in the formula would result in large differences in grant allocations for individual councils. While the “winners” tend to gain relatively modestly, some of the losers may face a considerable reduction in per capita grants, particularly as some of the “protections” or benefits fall away that the current formula-based process gives to extremely small VDCs.

At the extreme, Ghyaru VDC in Manang –with a population of 67 residents- which currently receives a grant of Rs 2.27 million would lose would lose half of its grant based on either of the proposed formulas (to around Rs 1.3 million). While this signifies a per capita reduction from Rs 33,880 to around Rs 19,500, Ghyaru VDC would continue to be the council that receives the largest per capita VDC grant, which is 33 times higher than the average per capita grant. As such, the fact that some VDCs as “losers” should not be understood as a failure of the proposed allocation formulas, but rather should be understood to mean that the current allocation approach allocates an excessive share of grant resources to sparsely populated VDCs, where it is unlikely that these resources will have a meaningful impact on sustainable economic development and poverty reduction anyway.

Based on the current analysis and recommendations, it will be important for the LBFC and its Secretariat to review the allocation patterns that result from the proposed allocation formulas (Options 1 and 2). Although political economy determinants are important in guiding the selection of an option, it is important to keep that both options being proposed signify considerable improvements at the margin over the current allocation formula, and that the proposed formulas would result in an allocation pattern that is more efficient and equitable and more in line with the objective of the block grant schemes.

7. The relevance of the formula-based grant system for the future state structure of Nepal

It would be imprudent for this report to ignore the fact that Nepal is transitioning from a highly centralized unitary country to an ostensibly decentralized federal system as part of its state re-structuring process.

On one hand, improved block grant allocation formulas to the local level (and by extension, better implementation of block grants) will not matter if local bodies do not survive the constitutional reforms. On the other hand, if local bodies (in some shape) do survive the state re-structuring process, an opportunity would be missed if the revised grant system would not be able to serve as stepping stone towards an effective and equitable grant system under a future federal arrangement.

Accordingly, a few thoughts are added in this final section with regard to the relevance of the formula-based grant system for the future state structure of Nepal.

7.1 Concerns with regard to the existence and structure of the local public sector

Although the political discourse reveals some details, little is currently known with certainty about the future shape a federal Nepal. It is highly likely that the main subnational level in a federal Nepal will be formed by a provincial or state level, with perhaps around 10-14 states. In fact, little mention is made of a local government level in the current policy debate. The quality and accountability of public service delivery would be weakened if Nepal ends up without a strong, elected local government level with clearly assigned expenditure responsibilities.

In the current policy debate around the new constitution, it does not appear that both the DDC level and the VDC level will survive state re-structuring. If there is to be a federally or constitutionally recognized local government level in the new federal structure at all, it is likely that this level will more closely resemble the current VDC level than the DDC level.⁴⁵

The analysis of the intergovernmental fiscal transfer system shows that the current institutional and fiscal structure of the local levels may not strongly support local public service delivery. In particular, when we consider the functions assigned to the VDC level in the LSGA (1999), VDCs are generally too small to be viable governance units and too small to achieve the scale economies necessary to engage in efficient service delivery. At the same time, it is almost impossible to deal with a VDC with a population of 67 residents based on the same approaches and systems as a VDC that serves the needs of 82,915 residents.

Whereas DDCs are much better positioned as a viable governance unit that could efficiently take on considerable service delivery responsibilities, the current grant system –both in its governance focus, as

⁴⁵ For a more detailed discussion, see “Toward a Federal Constitution in Nepal: What is the Future Role and Structure of Local Governments?”, IDG Policy Brief, Jamie Boex, April 2012.
<< <http://www.urban.org/publications/412538.html> >>

well as in terms of the amount of resources being allocated to the VDC level- heavily favors the VDC level compared to the DDC level. If the DDC level were to cease to exist (and be replaced by state level governments), it is difficult to see what role the VDC level could meaningfully play in terms of governance and service delivery unless it were to be significantly reformed or reorganized

7.2 Does the current block grant system form a sound basis for a transfer system under a new federal constitutional arrangement?

A closely related concern is whether the formula-based grant system for DDCs and VDCs will be in the position to be a conceptual or practical starting point for a future federal transfer system? The short answer is that the current (and proposed) block grants formulas contain a strong conceptual underpinning that will allow it to serve as the conceptual (and perhaps practical) basis for potential unconditional grants to either the state or local level. It is likely, however, that the future intergovernmental fiscal transfer mechanism for a federal system will be considerably more complex.

To a large extent, the shape of the future (federal) transfer system will depend on how functions are assigned between the different government levels, and whether all funding will flow from the federal level to the state level, or whether the federal level will retain direct financial relations with local governments. It is possible -likely, in fact- that future funding of local bodies (or even state governments) under a federal system would include an unconditional block grant that is similar in nature to the current block grants. In this case, much can be borrowed from the current (proposed) block grant formulas.

One element that has received little attention in this study –but that would be very important in the design of a future federal system- is how the size of the transfer pool should be determined. In the transition to a more decentralized or federal system, it is not unusual to define the size of the transfer pool to the local level upfront – for instance, by specifying the vertical allocation as a percentage of national budgetary resources.

Another issue that will need to be considered as part of the design of the federal intergovernmental fiscal system is that –as noted in Section 2- formula-based allocations only cover a small portion of grants being provided to Local Bodies, and that most sectoral resources are currently being allocated to the local level on a discretionary basis. It is not likely that discretionary determination of sectoral allocations will be an acceptable way of funding subnational governments (whether they be states or local governments) in a federal system. However, it is quite possible that Nepal might choose a transfer system that relies on sectoral block grants to fund the delivery of sectoral services, rather than relying exclusively on a single unconditional block grant.⁴⁶

As such, it is likely that a future intergovernmental fiscal system in Nepal will rely extensively on formula-based sectoral (block) grants. This is true regardless whether these resources will be provided to the new states, or whether these funds will flow directly to local bodies within the new states. Although the design of sectoral grants may “look” considerably different from a cross-sectoral block grant (e.g., in terms of the allocation factors that they would use), the conceptual background and the

⁴⁶ Even if Nepal switches to a single block grant that is intended to fund sectoral public services at the local level, the nature of the block grant would change drastically, most likely requiring a major re-design of the block grant to include sectorally-relevant allocation factors.

philosophy of the current (/proposed) allocation formulas should be tremendously helpful in engaging with sectoral officials in terms of discussing formula-based sectoral grant options.

7.3 How can the formula-based DDC/VDC block grant system be positioned to strengthen the role of Nepal's local public sector in the near term?

Building on the proposed reforms of the DDC/VDC block grant formulas contained in this report, there are a number of steps that the Government of Nepal and other champions of federalism and decentralized local governance may wish to consider in order to support a future smooth transition from the current or recommended formula-based schemes to a viable local public sector under a federal structure that is funded on a formula-basis. These observations include:

- Considerable resources are flowing down to local bodies in Nepal through the DDC/VDC block grant formulas. Yet, there is little or no systematic reporting and monitoring of local public finances, nor is there a system in place that allows the LBFC to aggregate and report on the aggregate amount and types of infrastructure that is being put in place by DDCs and VDCs using block grant resources (or their own resources). As a result, it is impossible to quantify the benefits to the DDC and VDC block grant schemes at the national level, either in terms of direct provision of local infrastructure, or in terms of poverty reduction impact. Being able to quantify the positive impact on the lives and livelihood of local bodies would be an important step to enhance the legitimacy of the local level.
- In addition to concerns about the absence of monitoring systems that would allow the LBFC to know “what is going on” at the local level in Nepal, there are considerable concerns about the weakness of fiduciary controls. Although the Ministry of Local Development has recently drawn up an action plan to improve the financial accountability of DDCs and VDCs, the document provides more of context analysis than a focused operational plan to address the weakness of the PFM system at the local level. Basic financial management controls should be strengthened in order to enhance the credibility of the block grant system. Put bluntly, an improvement of the block grant formula by changing the relative weight for an allocation factor by 10 percent is irrelevant if 50 percent of the block grant is diverted before it reaches the local community.
- Another fundamental weakness of the local governance system in Nepal that undermines the long-term legitimacy, responsiveness, and accountability of local bodies is the absence of elected local councils. The benefits of decentralization will not materialize by focusing (almost) exclusively on intergovernmental fiscal transfers and other aspects of fiscal decentralization without tackling the governance aspects of decentralized local bodies.
- The formula-based “horizontal” allocation mechanism for allocation the DDC/VDC block grants in Nepal is quite sound, especially the concerns raised in the current report are addressed. However, the lion-share of financial resources that flow down to the local level is currently being allocated in a discretionary manner by central governmental officials without the use of an allocation formula. A first step that the LBFC can take is to start reporting on the consolidated finances of local bodies. In addition, the LBFC should start preparing analytical reports on the horizontal incidence of non-formula-based funding flows to the local level. Consideration should

be given to what other steps can be taken to start sensitizing sectoral policy officials to the benefits of formula-based grant allocations.

- The MCPM system is currently being conceptualized within the context of a very traditional local government development grant system. Beyond the lack of evidence that performance grants actually have a causal impact on the quality of local governance and the efficiency of local spending, little thought seems to have gone into contemplating the role (if any) of MCPMs in a future federal system. For instance, it is highly unlikely that it would be appropriate to impose MCPMs on grants to future state governments. At the same time, it is unclear at this stage whether DDCs will survive the state re-structuring process and it is nearly impossible to objectively and credibly apply performance measures to 3915 VDCs. What meaningful role can the MCPMs play in this context?
- A final observation is that -from an institutional viewpoint- the LBFC is currently poorly positioned to take on the concerns raised above. By being placed under (or attached to) the MoLD, the LBFC does not have the institutional gravitas or purview to analyze or intervene in the local-level spending of sectoral line ministries. Likewise, its current position weakens its voice to criticize the extensive non-formula-based, discretionary allocations made by MoLD itself to the local government level. In federal systems, the National Fiscal Commission is typically provided greater autonomy and authority by attaching such a commission to an organization like the Prime Minister's Office, the Ministry of Finance, or the National Planning Commission. The future placement of the LBFC should be considered as Nepal continues to explore its transition to a federal system.

ANNEXES AND ATTACHMENTS

ANNEX 1: TOR's

ATTACHMENT A: DDC Cost Index 2012

ATTACHMENT B: Simulation Model, DDC block grant

ATTACHMENT C: Simulation Model, VDC block grant

ANNEX 1

TERMS OF REFERENCE

EXPERT FOR THE REVISION AND REFINEMENT OF GRANTS ALLOCATION FORMULA INCLUDING INDICATORS /CRITERIA FOR VILLAGE DEVELOPMENT COMMITTEES (VDCs) AND THE DISTRICT DEVELOPMENT COMMITTEES (DDCs)

1. GENERAL BACKGROUND

The Government of Nepal (GoN) started providing block grants to the local bodies (LBs), namely Village Development Committees (VDCs), municipalities and District Development Committees (DDCs), in the early nineties. In the beginning, on the one hand, the amount provided was small and on the other, the grants were provided without pre-defined criteria. In recent years, however, not only has the amount of grants to be provided to the LBs has been increased sharply, but also it has been formula-based. Further, the grants amounts are being tied up with the minimum conditions and performance measures (MC/PMs). With the introduction of formula-based allocation, Nepali grants system has been characterized by such elements as predictability, objectivity and transparency etc, to a significant extent. Despite this, a number of issues have cropped up in relation to the existing allocation criteria, specially pertaining to the VDCs and need revision/updating. The Local Bodies Fiscal Commission Secretariat (LBFCS), as a part of the annual strategic implementation plan of the Local Governance and Community Development Program (LGCDP), is going to commission a study on the revision of the allocation formula. The terms of reference (ToR) are prepared to seek services from an international consultant towards that end.

Presently, Nepal has two-tier system of LBs, with village and municipal bodies as the lower tier and district bodies as the higher. The VDCs serve as local governance units in rural areas and Municipalities serve the same purpose in urban areas. The District Development Committees (DDCs) function as middle tier units between VDCs/municipalities and the central government. The government has been providing different types of grants to the LBs. Of them, general purpose grants, also known as block grants, are the only grants that the LBs can spend in their discretion within the limits specified by the law. The block grants are also divided into two: basic entitlements and additional grants. The additional grants, which are much bigger in size compared to minimum grants, are being formula-based.

Currently, different sets of criteria and weighing system are being applied for the allocation of grants to the LBs. Population, area and weighted cost index form the basis of allocation of grants to VDCs, whereas population, area, weighted poverty and weighted revenue effort are the criteria for the municipalities. In the case of DDCs, the allocation criteria are population, area, weighted poverty and weighted cost index. The relative weight of the criteria is given in annex one.

Formula-based grants system is regarded as one of the achievements in fiscal decentralization in the country. Before the system was in place, the government used to allocate grants to the LBs, specially the DDCs and municipalities on arbitrary basis. As a result, the transfer system lacked the elements like equity, predictability, objectivity, transparency etc. With the introduction of the system, there has been marked improvement in the transfer system of the government. Because of this, on the one hand, transfer system has been relatively objective and transparent, on the other; equity aspect is also being taken care of to a considerable extent.

Of the criteria, population, area and HDI are all given. Revenue effort and cost index are the values that need separate preparation by the LBFC. Revenue effort is the average-two-years increase in revenue of the respective municipalities, but it is easy to calculate. Cost index is the cost of inputs of the physical works, and are challenging to develop and update periodically.

The present allocation criteria and their weight need revision for a number of reasons. The district-wise cost index was developed in 2005 and many things have changed since then in terms of connectivity, level of development etc. What is more, there are no separate cost indices of VDCs and the ones developed for the districts are being applied for VDCs of respective districts. Since all VDCs in a district are given the same weight, it is not becoming fair on the part of VDCs that are relatively remote and underdeveloped. Thus, it has been essential to develop VDC-wise cost index to correct this situation.

Likewise, even after the introduction of equity-related criteria like poverty, cost index, the present system of transfer is being questioned on equity ground. It is argued even at policy level that local bodies of relatively remote and underdeveloped regions are not getting fair share of revenue to meet the basic expenditures. Therefore, it is being discussed in policy arena if a criteria based on access to physical infrastructure could be introduced as a criteria for the allocation of transfers.

Coincidentally, the Central Bureau of Statistics is going to finalize the results of the national census in a few months. It is highly likely that population pattern over the last decade has undergone significant changes, implying that population as a criteria for the allocation of funds may need revision. The census data together with the new cost and accessibility index will form sound basis for the revision and refinement of allocation criteria.

In immediate future Nepal is going to be transformed into a federal country. In the new set up, intergovernmental fiscal transfer, especially with respect to the would-be local governments, will be critically important. This project will draw lessons as to how the intergovernmental transfer system can be designed, namely in regards to the allocation criteria.

2. OBJECTIVES OF THE ASSIGNMENT

The main objective of the study is to undertake an overall review of the existing grant allocation formulas for DDCs and VDCs including indicators, and suggest appropriate methodology for improving the current formulas, including (as appropriate) improving the specification and measurement of the allocation criteria.

3. SCOPE OF WORK

This work will require the following specific activities:

- a. Review the existing formulas for the VDCs and DDCs, including the allocation criteria and their relative weight in the light of their impact in the allocation of grants against the policy objective(s) of the grant scheme. To this end, the consultant will do the following:
 - Analyze the impact of the formulas –including the role of each indicator against the objective of the transfer scheme (e.g., does the formula achieve an efficient

and equitable allocation of resources, based on the stated objective of the grant scheme?

- Review the existing indicators in terms of consistency, correlation/overlap, statistical validity etc.,
 - Review the inputs in the cost index (i.e. prices of construction materials and prices of labour) and examine the validity of the cost index with respect to the methodology for use at both the DDC and VDC level, including its suitability for capturing variations in expenditure needs, based on factors such as equity, remoteness etc.,
- b. Look into the possibility of introducing accessibility-related criteria and see how far the criterion fits with the cost index.
- c. Based on the recommended revisions of the grant allocation formula, suggest a methodology to revise the cost index and/or introduce an accessibility index, as needed.

Different approaches shall have to be adopted to complete the study. They will include, among others, review of literature, field visits, analysis of existing data (available within and without the LBFCS), focus group discussion and key informant interviews. Small Area Estimation (poverty mapping) of the VDCs carried out by the Central Bureau of Statistics can also be used as reference material. The consultant will be based at LBFCS and will work under its overall supervision. UNCDF shall ensure the provision to Consultant by the LBFCS of all relevant and available district-level data (and where available, VDC-level data) upon commencement of the assignment. Required logistic support and in-country transportation will be provided by the LBFCS.