

Institutionalizing Formula-based Fiscal Transfers System in Lao PDR¹

Knowledge Paper- In Brief

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1 Decentralisation and the Role of Fiscal Transfers

The economic rationale for decentralization rests on the proposition that it can improve the efficiency of public service delivery. Sub-national governments are expected to have a better understanding of citizen's requirements and therefore are better situated than the national government to provide services that the citizen's demand. A well-designed decentralized system can bring **allocative efficiency** by matching services to local needs; and also enhance **production efficiency** by providing these services at lower costs.

Since the primary objective of decentralization is to enhance the quality and efficiency in service delivery, it generally entails transfers of responsibility or expenditure to the sub-national governments. The national government may deliberately transfer limited revenue powers to sub-national governments in order to maintain their dependence on the national government. This imbalance created in sub-national government finances necessitates the transfer of grants (or fiscal transfers) from national government to sub-national governments. The imbalance may vary among sub-national governments depending on their capacity to raise own revenue and fiscal transfers also seek to address the inequity among local governments and regions in ability to provide services. In addition, fiscal transfers may serve the purpose of incentivizing sub-national governments to meet national objectives.

Table 1: Sub-national Government Share in Total Public Expenditure and Fiscal Revenue (Per Cent)

Country	Sub-national Government Share in Total Public Expenditure (Percent)	Sub-national Government Share in Total Public Expenditure (Percent)
Philippines	25	10
People's Republic of China	70	40
Thailand	10	2
Vietnam	45	35
Indonesia	35	8
India	66	33
Pakistan	33	7
Australia	36	20
New Zealand	9	8
Lao PDR	29	22

The figures are for the year 2009, except for Lao PDR for which the figures are for fiscal year 2009-10

Source: *Jorge Martinez-Vasquez*: "Fiscal Decentralization in Asia-Challenges and Opportunities", ADB, 2011

Table 1 compares the share of sub-national government in total public expenditure and total public revenue for various countries. We observe that the share of sub-national expenditure is higher than the share of revenue for all countries considered. In People's Republic of China (PRC) and India, subnational governments have a higher share of total public expenditure as compared to the national government. This represents that the service delivery is reasonably decentralized in both PRC and India. On the other hand, Philippines, Thailand and New Zealand and Lao PDR have centralized structures, as evidenced from low sub-national government share in both expenditure and revenue.

2 Country Context- Lao PDR

2.1 Vertical Imbalance in Lao PDR

We see from Table 2 that the share of central government in total government revenues is higher than its share in total expenditures in both fiscal years under consideration. On the other hand, provincial governments have higher share of total expenditure as compared to their share of total revenues. It indicates an imbalance in the budgets of provincial governments as compared to the central government. This imbalance, termed as **Vertical Imbalance**, will need to be covered by transfers from the central government to provincial governments (**Vertical Transfers**).

Table 2: Relative Shares of Central and Provincial Governments in Government Revenues and Expenditure

	2009-10		2010-11	
	Share in Total Government Revenues (in Per Cent)	Share in Total Government Expenditure (in Per Cent)	Share in Total Government Revenues (in Per Cent)	Share in Total Government Expenditure (in Per Cent)
Central Government	78%	71%	83%	73%
Provincial Governments	22%	29%	17%	27%

2.2 Horizontal Imbalance in Lao PDR

Horizontal Imbalance is defined as the imbalance between relative revenue performance and expenditure among local governments. Table 3 presents the total fiscal balance for each province and Vientiane Capital in the years 2009-10 and 2010-11. The fiscal balance of each province is also presented as the ratio of its own revenue to compare the magnitude of fiscal imbalance as ratio of own revenue.

We observe that except Champasak and Vientiane Capital, all other provinces have a negative fiscal balance in the two years under consideration. Vientiane Capital also has a negative balance in 2010-11. The magnitude of negative fiscal balance varies from 3 to 5 Per Cent of own revenues for Savannakhet to 715 to 720 Per Cent for Phongsali. In terms of actual quantum also, the deficit ranges from 16 billion Kip for Savannakhet to almost 200 billion for Xiangabouli.

Table 3: Horizontal Imbalance among Provinces in Laos

Province	Region	Total Fiscal Balance (Million Kip)		Fiscal Balance (% of Revenue)	
		[+ for surplus in revenue over expenditure]		[+ for surplus in revenue over expenditure]	
		2009-10	2010-11	2009-10	2010-11
Champasak Province	South	26084	70774	9%	20%
Savannakhet Province	Central	-8814	-16357	-3%	-5%
Vientiane (Viengchan) Capital	Central	84668	-69888	17%	-16%

		Total Fiscal Balance (Million Kip)		Fiscal Balance (% of Revenue)	
		[+ for surplus in revenue over expenditure]		[+ for surplus in revenue over expenditure]	
Khammouan Province	Central	-52447	-94574	-41%	-64%
Vientiane Province	Central	-105411	-110573	-73%	-66%
Bolikhamxai Province	Central	-96973	-90576	-173%	-117%
Houaphan Province	North	-92771	-99943	-119%	-124%
Attapeu Province	South	-59333	-74311	-83%	-124%
Louangphabang Province	North	-107218	-144396	-99%	-131%
Salavan Province	South	-67193	-110620	-105%	-185%
Bokeo Province	North	-86568	-71917	-238%	-190%
Xiangkhouang Province	North	-140208	-134169	-424%	-266%
Xekong Province	South	-78390	-96181	-333%	-283%
Luang Namtha Province	North	-136478	-132974	-327%	-348%
Oudomxai Province	North	-154404	-177779	-500%	-441%
Xaignabouli Province	North	-197420	-198345	-964%	-688%
Phongsali Province	North	-95460	-115782	-720%	-715%

3 Current System of Fiscal Transfers in Laos

Ministry of Finance (MoF) has the overall responsibility for budgeting in Lao PDR. However, Ministry of Plan Implementation (MPI) has a key role in investment planning. There are two committees responsible for preparing overall budget envelope:

- (i) Committee for preparation of National Socio-economic development plan at MPI
- (ii) Committee for preparation of Budget Plan at Ministry of Finance

Budget preparation committee at MoF is headed by Finance Minister and it has representation from MPI besides representation from key departments from Ministry of Finance.

During the course of budget preparation, budget departments of line ministries and provinces meet with budget department at Ministry of Finance regularly for budget preparation. The two committees for budget preparation consider three parameters viz. (i) Poverty Index (ii) Population; and (iii) Area for deciding the devolution to each state. However, budget estimates for both recurrent and investment plan are finalized through negotiations and consultations.

3.1 Issues in the Current System of Fiscal Transfers

The current system of fiscal transfers largely follows a gap-filling approach where the central government compensates provinces for any shortfall in revenues over their expenditure requirement.

The current system of fiscal transfers has the following issues:

1. Although parameters like poverty index, area and population are considered for determination of transfers, the final decision is based on negotiations. The system, therefore, has elements of discretion involved.
2. The process may entail revisions requiring more effort and time
3. As shown in Table 3 above, there are wide differences in the fiscal performance of provinces in Laos. Since the system is largely based on filling up the gap between provincial resources and their expenditure plan, it entails the risk of moral hazard and provinces do not have incentive to improve their fiscal performance. It is apparent in the low revenue performance or high expenditure for many states.
4. The transfers are not known in advance. Provinces do not have a budget ceiling to work on when they prepare their plans. It impacts planning and may also take more effort in discussions and negotiations.

The purpose of this paper is to suggest an alternative that minimizes this risk while ensuring that service delivery standards are not compromised.

4 Designing a Formula-based System of Fiscal Transfers in Laos

Given the limitations of the current system, it is proposed that a formula-based system may be developed for determination of fiscal transfers. The suggestion is in line with international best practice for fiscal decentralization.

4.1 Objectives of the Proposed System

The proposed options for system of fiscal transfers in Laos are expected to meet the following objectives:

1. Fiscal transfers system should address the sensitivities of stakeholders.
2. Fiscal transfers system shall be non-discriminatory and shall be based on objective measures representative of fiscal needs and capacity.
3. Fiscal transfers shall encourage gender responsive planning and increased allocation to meet MDG targets
4. Fiscal transfers system shall be transparent and the basis of computation shall be communicated to all stakeholders
5. Fiscal transfers shall be simple and easy to understand.
6. The system shall encourage fiscal performance among provinces
7. The system shall be applicable for a period of 5 years concurrent with the National Socio-Economic Development Plan (NSED). Initially, yearly reviews may be permitted to allow for adjustments before the system stabilizes and gets well accepted.

4.2 Sensitivities to be Addressed

While developing the transfers system, the following sensitivities should be given due consideration

Provinces need to be given the assurance that:

- Transfers to them will match their fiscal needs and they will not be at a disadvantage in the new system.
- Transfers will not vary significantly from the past in the short run so that provinces are not exposed to shocks and have time to adjust to the new system.
- Provinces will be consulted before adoption of the new system
- There will be a window in the budget for accepting additional/specific requirements for a province.

Central Government needs to be assured that:

- The mechanism for determination of transfers will not place unexpected fiscal burden on the central government finances
- The mechanism will be performance enhancing so that the dependence on transfers from the central government reduces in the medium term.
- The mechanism should allow discretion in specific cases

4.3 Steps in Design

Keeping the above objectives in view, the fiscal transfers system in Laos can be designed in the steps that follow:

4.3.1 Determination of Shareable Pool

The first step in designing a transfers system is to determine the total resources available with the central government that will be shared with the provincial governments. It is suggested to consider the total tax and non-tax revenues of the central government as the “Shareable Pool”.

4.3.2 Determination of Vertical Transfers (Total Grant Size)

The second step is to determine that portion of Shareable Pool, which will be transferred to the provinces (Vertical Transfers). After due consideration of available options of determining the vertical transfers as (i) fixed percentage of Shareable Pool; and (ii) based on Medium Term Budget Framework, it is suggested that the former option is preferable for its simplicity. Based on historical data for 2009-10 and 2010-11, we can consider that vertical transfers be fixed at 20 percent of shareable pool.

Table 4 shows the amount of transfers that would have gone to provinces in 2009-10 and 2010-11 had the Vertical Transfers been fixed at 20 Per Cent of Shareable Pool

Table 4: Vertical Transfers as Fixed Proportion of Shareable Pool (Million Kip)

	2009-10	2010-11
Total Shareable Pool (Tax and Non Tax Revenue)	7009400	9828440
Vertical Transfers (% of Shareable Pool)	20%	20%
Vertical Transfers (Million Kip)	1401880	1965688

Taking the approach outlined in Option 1, we can fix total Vertical Transfers to provinces in Laos as 20 Per Cent of the Tax and Non-Tax Revenues of the Central Government

4.3.3 Determination of Horizontal Transfers

Once the Vertical Transfers are determined, we have to consider options for determining the distribution of transfers across provinces. The transfers can be in three categories viz. (i) Unconditional Transfers (ii) Conditional Incentive Transfers; and (iii) Conditional Transfers based on Specific Requirements

The options for estimating transfers in each category are as follows:

4.3.3.1 Unconditional Transfers

Unconditional Transfers are those transfers that are given to the provinces without any condition to their use or allocation. They serve as minimum grant that provinces can be assured of. It is suggested that the proportion of unconditional transfers in Vertical Transfers be high, at 80 Per Cent while 15 Percent can be for incentive-based conditional transfers and the balance 5 Per Cent can be conditional for meeting specific requirements. High proportion of unconditional transfers itself is incentivizing and will also help provinces to plan their budgets in advance.

Design of Horizontal Allocation Across Provinces

The design of horizontal allocation of transfers is based on the following hypotheses:

- Provinces with high per capita GDP should be able to raise own resources and will need less support from the Central Government. Per Capita GDP includes both GDP, which is a proxy for fiscal capacity; and Population, which is reflective of fiscal needs. **Thus, we propose to use weighted difference in Per Capita GDP of a province from the province with highest Per Capita GDP as the first variable in our formula.**
- Provinces with higher poverty ratio may require higher support from the Central Government. This measure reflects fiscal needs. **We propose to use weighted factor of poverty ratio with population as the second variable in our formula.**
- Provinces with larger area may require higher per capita expenditure and therefore more transfers from the Central Government. This measure reflects fiscal needs. **We therefore propose to use proportion of area of a province in total area as the third variable in our formula.**

Approach for Determination of Formula

- We exclude Vientiane Capital, Champasak and Savannakhet from consideration for unconditional transfers because the fiscal transfers to these provinces have been nil or low
- We assign weightages to each factor and compute the weighted mean for each province. The weighted mean is the proportion of that province in the total transfers. The computation for a provinces is illustrated below:

Variables Considered	Weighted Per Capita GDP difference with highest	Weighted Ratio Poverty	Area (% of total)
	Y1	Y2	Y3
Weightage to each variable (Where $X_1+X_2+X_3=1$)	X1	X2	X3
Product	X_1Y_1	X_2Y_2	X_3Y_3
Share of the province	$X_1Y_1+X_2Y_2+X_3Y_3$		

- We carry out the computation for two years for which data is available (2009-10 and 2010-11)

- After determining the proportional share of each province, we compare it with the actual share of each province
- The percentage difference with actuals is computed
- We conduct sensitivity analysis to determine the weightages that give minimum deviation from historical data
- The weightages that give the lowest variation from actuals are selected
- If the variation is high for a many provinces, we divide the provinces into groups and compute the results with separate weightages to each group. The proportion so computed is normalized by dividing by 3 to get the final result. The combination that gives minimum variation from actuals is selected.
- It should be noted that grouping of provinces does not have sound theoretical basis and can be discriminatory. However, it has been suggested for now so that the variation from actual historical data can be minimized. We should target moving to equal weightages to the three variables for all provinces within two years.

Groupings of Provinces

Provinces have been grouped into three categories based on the approach proposed above. The groupings are shown below. Independent analysis has been carried out for each group.

Table 5: Provincial Groupings

Group 1	Group 2	Group 3
Xekong Province	Salavan Province	Xaignabouli Province
Luang Namtha Province	Vientiane Province	Houaphan Province
Phongsali Province	Louangphabang Province	Xiangkhouang Province
Oudomxai Province	Attapeu Province	
Khammouan Province		
Bokeo Province		
Bolikhamxai Province		

Sensitivity Analysis

As suggested above, after the share of each province is determined based on weightages of each variable in the formula, it is compared with the actual share of that province in the same year. The differences are converted to their absolute (positive) values. Average absolute differences are computed for each group for different combinations of weightages and the combination that gives minimum difference with actuals is selected. Based on the analysis, the following weightages are selected (Table 6):

Table 6: Final Weightages Assigned

	Weightages Assigned		
	Weighted Per Capita GDP Difference	Weighted Poverty Ratio	Area (% of total)
Group 1	30%	5%	65%
Group 2	10%	5%	85%
Group 3	0%	0%	100%

4.3.3.2 Conditional Incentive Transfers

A key objective of the proposed system is to induce and incentivize provinces for more efficient operations. Moreover, provinces have to be encouraged for gender responsive planning and increased allocation to meet MDG targets.

It is suggested that Conditional Transfer be linked to improvement in Revenue/GDP Ratio. If there is an increase of x% in Revenue/GDP ratio for a province, then the province shall be entitled to additional x% of total Shareable Pool.

In addition, the following parameters may also be considered for incentive transfers

- Incentive for gender responsive planning
- Incentive for meeting MDG targets

When we compute conditional transfers based on the above method of computing incentives, based on the assumption that those provinces that have revenue to GDP ratios lower than the average for all provinces in 2010-11 will achieve the average of 3 Per Cent in 5 years, we observe that the total incentive transfers in this illustration are 2.72 Per Cent of Shareable Pool or 13.6 Per Cent of Vertical Transfers. Taking these reasonable assumptions, our allocation of 15 Per Cent of Vertical Transfers to Conditional Transfers is in order.

The actual system of incentive transfers can be finalized in consultation with stakeholders.

Total Conditional Incentive Transfers to provinces in Laos can be fixed at 15 Per Cent of the Vertical Transfers

4.3.3.3 Conditional Transfers for Specific Requirements

We have proposed to allocate 5 Per Cent can be considered for discretionary transfers based on specific requirements. This transfer can be as additional incentive for performance on social, MDG and fiscal parameters or for additional capital requirement.

Total Conditional Transfers for Specific Requirements of Provinces in Laos can be fixed at 5 Per Cent of the Vertical Transfers

4.4 Comparison of Results

The results of the proposed system have been presented below for the year 2010-11. Table 7 presents the computation of Vertical Transfers and their breakup into Unconditional and Conditional Transfers in the year 2010-11. Figure 4 illustrates the breakup of transfers for each province based on the formula and its comparison with actual transfers in 2010-11.

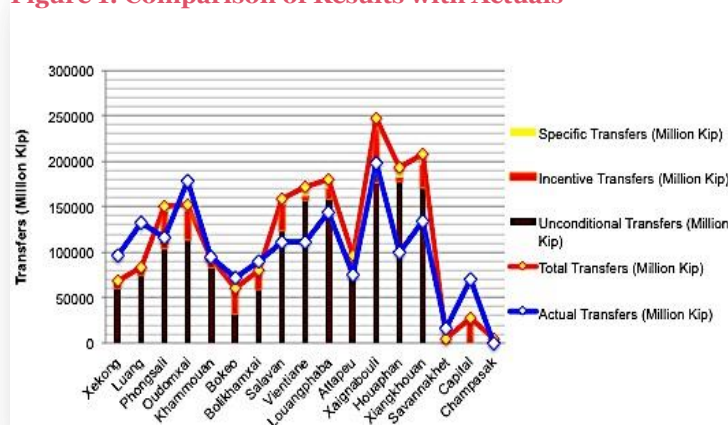
The comparison assumes that the provinces that have revenue/GDP ratio above the average will also improve their ratio by 0.05 Per Cent. Other provinces will achieve annual increase so that they achieve revenue to GDP ratio of 3 Per Cent in 5 years. Incentive transfers in this case are slightly higher at 15.7 Per Cent of Vertical Transfers.

As regards Conditional Transfers for Specific Purposes, we have assumed that they will be distributed in the same proportion as Unconditional Transfers. These are simplistic assumptions only for illustration.

Table 7: Computation and Breakup of Vertical Transfers for 2010-11 based on the Proposed Formula

	% of Vertical Transfers	% of Shared Pool	Amount (Million Kip)
Total Shareable Pool			9828440
Vertical Transfers		20%	1965688
Unconditional Transfers	80%	16%	1572550
Conditional Incentive Transfers	15%	3%	294853
Conditional Specific Transfers	5%	1%	98284

We observe that transfers to provinces are at some variance with the actual transfers but they are largely in line. Formula-based Unconditional Transfers are able to meet the requirements of all provinces, except Xekong, Luangnamtha, Phongsalai, Oudomaxai, Bokeo and Bolikhamxai. If the actual requirement is higher, these provinces can be compensated through Conditional Transfers.

Figure 1: Comparison of Results with Actuals

5 Roadmap for Transition to Formula-based Transfer Mechanism in Lao PDR

5.1 Suggested Roadmap for Institutionalizing the Fiscal Transfer Mechanism in Lao PDR

Internalization of non-discretionary transfer mechanism by all stakeholders holds the key to its successful implementation. In this regard, priority needs to be to first address the sensitivities among stakeholders so that they build confidence in its applicability. As the acceptance builds, the system can be further evolved and improved. The system can then be institutionalized with sufficient safeguards regarding objectivity, continuity and review at periodic intervals.

The following roadmap can be considered for evolution and institutionalization of formula-based transfer mechanism in Lao PDR:

Short Term (Till end of FY 2014-15):

- (i) Deliberation and acceptance of the design proposed in this paper, with suitable modifications to incorporate feedback from stakeholders.
- (ii) Communication of estimated unconditional and conditional transfers to provinces for budget process for FY2015-16.
- (iii) Formation of a high level co-ordination committee for annual review of the transfer mechanism. It is suggested that the committee be headed by DG, Budget Department, Ministry of Finance. Key

departments from MOF and ministries like MPI and MOHA should be represented in the committee

Medium Term (Till end of FY 2017-18):

- (i) Annual review of transfer system by the high-level co-ordination committee
- (ii) Decision on the institutional mechanism for decision and updates of formula-based system beyond 2017-18. This could be through a National Finance Commission (NFC) that can either be constituted every 5 years to align its recommendations with NSEDP or it can be created as a permanent body that can constitute its advisory panel every 5 years.
 - a. If constituted every 5 years, the NFC should be chaired by an eminent economist who should be assisted by an advisory panel of four members comprising two economists/public policy experts and one senior official each from Ministry of Finance (MOF) and Ministry of Planning & Implementation (MPI)
 - b. If constituted as a permanent body, it should be headed by an eminent economist or public policy expert or senior government official. The chairperson will be assisted by an advisory panel that can be constituted every 5 years. The advisory panel may comprise four members with two economists/public policy experts and one senior official each from Ministry of Finance (MOF) and Ministry of Planning & Implementation (MPI). NFC shall have minimum administrative staff and research associates who will assist the advisory panel and Chairman.

Long Term (FY 2018-19 and onwards)

- (i) Constitution of National Finance Commission (NFC)
- (ii) Dissolution of the high-level coordination committee
- (iii) NFC to continue the tasks hitherto assigned to the coordination committee
- (iv) NFC to give its recommendations by March 2020 for the years 2021-2025 (in alignment with Ninth NSEDP)

5.2 Roadmap for Evolution of Formula

Stage 1 (Current Study): The formula design proposed in this study attempts to address the sensitivities of various stakeholders. While objective measures have been used to determine the fiscal devolution, the approach focuses on minimization of variance from actual transfers to various provinces in the past. Provinces have been divided into three categories to achieve this objective.

Stage 2 (Medium Term- till FY 2019/20): The formula design can be modified to assign uniform weightages to the considered variables for all provinces. Change in underlying variables can also be considered.

Stage 3 (Long Term- including and beyond 2020/21): The formula can be further evolved, if necessary, to base it on assessment of relative fiscal needs and fiscal capacity measures across provinces. However, it will be advisable to keep the formula simple and easy to apply.

6 Recommendations

1. It is preferable to institutionalize an objective system for fiscal transfers to provinces and districts
2. It is an internationally accepted practice to compute fiscal transfers based on formula(e)

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3. To begin with, total transfers to provinces can be a fixed percentage of total shareable pool of tax and non-tax revenue collections of the Central Government (20 Per Cent).
 4. The horizontal distribution of transfers can be in three main categories
 - a. Unconditional Transfers: 80% of Total Transfers divided among provinces on the basis of three parameters viz. GDP per Capita, Area and Poverty Ratio
 - b. Conditional Transfer for Performance: 15% of Total Transfers divided among provinces on the basis of improvements in targeted ratios for revenue, MDG targets or gender responsive planning
 - c. Conditional Transfers for Specific Requirement: 5% of Total Transfers
 5. The roadmap for institutionalizing formula-based fiscal transfer mechanism covers three phases viz. Short Term, Medium Term and Long Term. Activities within this roadmap have been assigned to ensure gradual transition to an effective formula-based system.