

# Preview of Medium-Term Expenditure Frameworks

*Muthuramu P\**

---

*Annual budgeting procedures largely ignore future costs and benefits of government programs. They involve determining affordability and implementation of policies in the limited time horizon. In the meantime, they also have to fulfill target group demands. Deficit financing, pro-cyclical fiscal stance, time inconsistency, transparency and good governance are important factors to be considered for achieving high quality durable government policies. It further also explores the manner in which it connects with initiatives from other sectors for future budgeting, feasible access and future policy projection of new programs with existing policies. However, Medium-Term Expenditure Framework (MTEF) approaches involve many fundamental and complex issues, about which much has been written and the debate for which still continues. It is still in its infancy in India with a brief experience at the level of the center. Few states have been found to implement MTEF on a preliminary basis for specific sectors with donor funding. A detailed review of the MTEF is performed in the present paper and it reveals that fundamentally, MTEF alone cannot deliver efficient public expenditure management. Hence, the paper shows that before designing MTEF, concerns regarding transparency and accountability of public expenditure have to be addressed.*

---

## Introduction

What determines the public expenditure of the government in recent years? Conventional economic arguments on public expenditure are influenced by many economic factors (Wagner, 1883; and Peacock and Wiseman, 1961) and politico-economic indicators (Kalecki, 1943; Nordhaus, 1975; Hibbs, 1977; Cukierman and Meltzer, 1986; Rogoff, 1987; Alesina, 1987; Alesina and Sachs, 1988; Rogoff and Sibert, 1988; and studies on India by Karnik, 1990; Sen and Vaidya, 1996; Chaudhuri and Dasgupta, 2005; and Khemani, 2007). A sound and transparent system of managing public expenditure is important. There is also a need to situate the annual budgets in a longer policy horizon. In any country, annual budgets are the centerpiece of government financial process. Domestic resources and external assistances support the development of government entitlement policies and programs. In general, it has been directed through the annual budget. Each financial or calendar year, the government or social policies require funding and yield benefits. Balancing a long-run fiscal position poses a challenge for any government. Specific annual budgets largely ignore future costs and benefits of government programs. Particularly, relevant time horizons for future

---

\* Research Scholar, Tata Institute of Social Sciences, Mumbai 400088, Maharashtra, India.  
E-mail: p.ramu@tiss.edu

consequences of government budget policies are inability to extend public decision making. Medium-term approach has made the necessary demonstrations, measures and tools for the government budget and line ministries to sort out the pressure through the budget cycle. The Medium-Term Frameworks (MTFs) promise to provide necessary directions of administrative and public interest in a specific line ministries or programs (World Bank, 1998; and OECD, 2001). MTFs involve many fundamental and complex issues, about which much has been written and the debate still continues.

The concept of 'MTFs' was first formalized in 1980s in Australia. This emerged through the paradigm of new public finance management but it was not operationalized until late 1990s (IMF, 2007). Similar attempts were made in India during 1980s, which was not followed until the implementation of the Fiscal Responsibility and Budget Management Act (FRBM Act) (Jena, 2010). Medium-Term Expenditure Framework (MTEF) is being recommended by many countries' governments which are not primarily concentrating on setting a target in the future policy making and planning. Moreover, many countries implemented MTEF without proper public financial management system rather than concentrating on the quality of spending. Step-wise MTEF operational mechanism has been suggested by the World Bank, International Monetary Fund (IMF), Asian Development Bank and EU. The concept of 'MTFs' was adopted in more than two-third of nations (132) across the world by 2008 (World Bank, 2013). MTEF is being implemented with the yearly budget preparation; from the donor agency perspective, it is necessary for Low Income Countries (LICs) to reach favorable outcomes of specific spending programs subsequent to scaled up aid and debt relief with particular time periods. Donors played a major role in encouraging the implementation of MTEFs (World Bank, 2013) and it is a feasible means of improving the budget (Levy, 2007). Against this backdrop, the present paper performs a detailed review of the MTEF in India.

The paper is organized as follows: it presents a review of literature on studies dealing with MTEF methodology, MTEF in practice across countries and expenditure management in India. Then it analyzes the implementation of MTEF in India, i.e., MTEF by the central government and a comparative analysis of MTEFs of states. Finally, the discussion is concluded.

## Literature Review

### MTEF Methodology

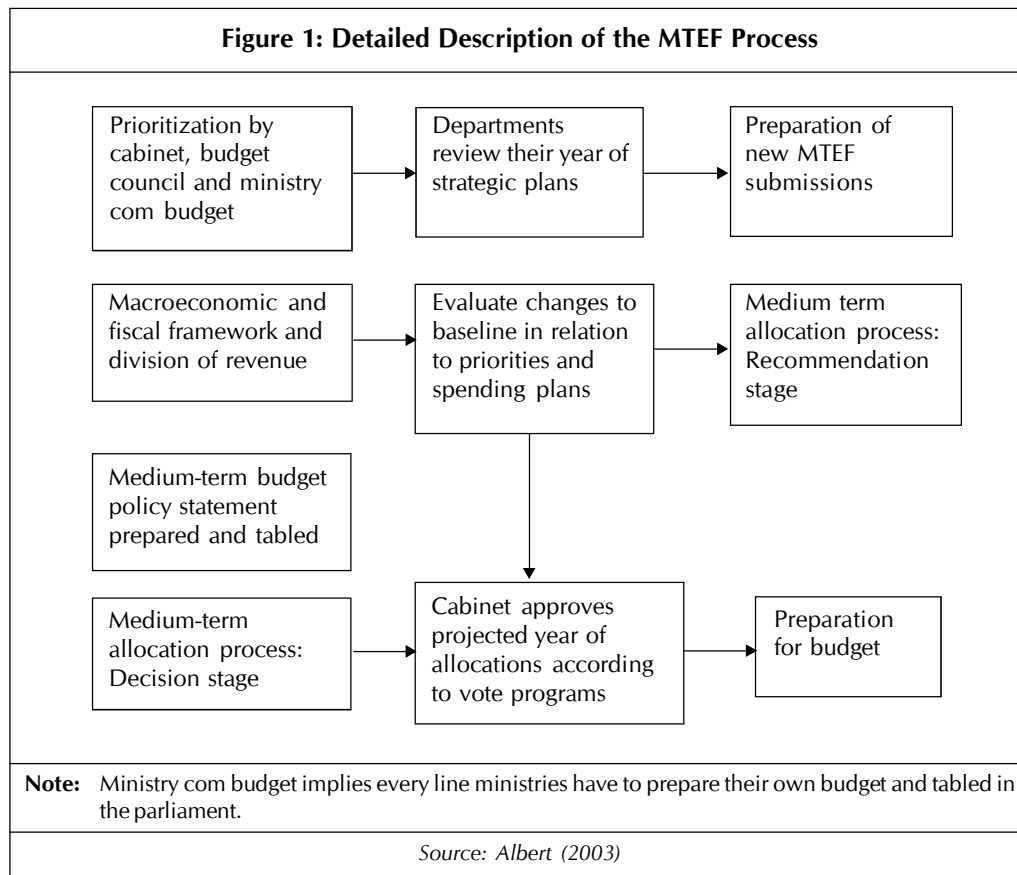
Hove and Wynne (2010) stated that the MTEF approach allows the linking of policy, planning and budgeting. It primarily concentrates on resource availability of "top-down resource envelope and a bottom-up estimation of the current and medium-term costs of existing policy (objectives, priority focus and to be financed). Finally, it would project in future resource availability, as prior to comparing the cost of available resources and existing policies" (World Bank, 1998, p. 48). MTEFs are supposed to be links between broad fiscal policy objectives and budgeting, thus signaling the government's responsibility to high quality adjustment based on prioritization of spending and reduction of wasteful expenditure (World Bank, 2013). Therefore, respective line ministries are expected to have greater independence in their resource allocation decisions. MTEF approaches increase the

predictability of resource flows, improve accountability and transparency within government, and ultimately the efficient allocation of resource towards strategic priorities is more effective within and between sectors (Hove and Wynne, 2010). For a large majority of countries, budgets are on annual basis. They typically start with the previous year's budget with some incremental schemes with a few suggestions for different ministries. The reprioritization of the policies and spending is a difficult task in specific departments and ministries. These weaknesses cast doubt on the feasibility of MTEFs. However in recent years, over 60% of OECD countries, all EU states and some other countries have framed macro-fiscal policies with medium-term horizon. Especially, it has been guided by debt sustainability analysis, multi-year fiscal targeting and permanent fiscal rules.

In Table 1 the contrast between traditional budget and MTEFs are given which makes the case for medium-term management frameworks. MTEF is a budget formulation process for a particular time frame and it constitutes budget as an output-based budget. It has to incorporate expenditure outlines with disaggregated medium-term projections. This will deliver the

<b>Table 1: Comparison Between Budget and Medium-Term Frameworks</b>		
<b>Objective</b>	<b>Traditional Budget</b>	<b>MTFs (Three-Year Rolling Program at Sector Level)</b>
Aggregate Fiscal Discipline	Focused on short-term macroeconomic concerns (with international agencies providing the discipline in many countries).	Situates short-term macroeconomic concerns within a medium-term macroeconomic and sector perspective (Three years: $n+1$ , $n+2$ , and $n+3$ ). Involves building domestic macroeconomic modeling capacity.
Link Between Policy, Planning, and Budgeting	Very weak because policy choices are made independent of resource realities. Thus, policy is not sustainable and spending patterns may not reflect the priorities articulated by government.	Policy making tightly disciplined by resource realities. Thus, a much stronger link exists between policy making, planning, and budgeting. Spending reflects the stated priorities of government.
Performance and Service Delivery	Incentives for results in terms of outputs and outcomes are generally low because the emphasis is on input control. Little attention to the predictability of budget funding.	Emphasis is on the delivery of agreed outputs and outcomes with available resources. Incentives are structured to increase the demand for evidence of good performance (accountability for sector managers for results). Consequently, service delivery should improve.
Autonomy of Credit Managers	Generally low, because lack of discipline within the traditional budget framework is translated into detailed input controls.	Generally high because of greater discipline in setting and enforcing hard budget constraints plus accountability mechanisms that make it possible for managers to be given more authority to determine how agreed outputs and outcomes should be achieved.
<i>Source: World Bank (2000), p. 198</i>		

effects of an appropriate sectoral expenditure statement. In addition, it preserves available government entitlement programs and policies in the long term. However, this explains a mechanism for controlling new or additional government investment in a sector. Subsequently, it has to keep on tracking sectoral expenditure beyond the current fiscal year. This includes detailed aggregate and sectoral expenditure measures with the monitorable cost of performance (IMF, 2007). The preparation of MTEF could provide a chance to present various key deficiencies of policy making, planning, budgeting and outcomes of the existing system. The major objectives of MTEF are outlined below (IMF, 2007). They range from changes in accounting practices to performance and accountability issues. A detailed description of the MTEF process is given in Figure 1.



Major objectives of MTEF:

- Government budget process would focus more on performance and participatory nature of every sector.
- Integration of capital and recurrent budget.
- To curtail the gap between available policies and actually allotted resources.
- To improve macroeconomic balance through fiscal discipline.

- Proper utilization of public resources on inter- and intra-sectoral allocation.
- Outcome budget due to advance predictability for line department and ministries.
- Efficient utilization of public resources; and
- To include necessary political accountability for public expenditure and decision making.

Before implementing MTEF, one has to assess the preconditions as discussed by Levy (2007) in his book. International organizations such as the IMF and the World Bank had worked jointly and gained experience through the examination of the MTEF. Subsequently, both the institutions have reviewed and identified the necessary and important stages. Finally, they have concluded that when circumstances and capacities permit, the development of comprehensive MTEFs can be effective. Otherwise, this could have consumed greater time and public resource. In light of this IMF (2007), Levy (2007), and Kasek and Webber (2009) stated that there would be a risk of reform overload. Subsequently, this might distract attention from MTEF to budget improvement and budgeting process.

However, the primary and most important lesson learnt is that there is a need for strengthening of public financial management systems and to improve the feasibility of budget management system. Levy (2007) has shared some of the important guidance offered by the IMF. Kasek and Webber (2009) have also pointed out similar guiding principles. These are as follows:

- In a stable economic environment, there would be a reliable macroeconomic projection and this would be linked to fiscal targets.
- Budget classifications are satisfactory and accurate and involve timely accounting.
- Fiscal management, especially policy decision making would be disciplined. It includes budgetary discipline, political discipline and technical capacity.

If a country is not able to meet the above-mentioned preconditions satisfactorily, then MTEF will become merely a pilot study. In addition, Kasek and Webber (2009) noted that strengthening of public financial management systems and improving the feasibility of budget management system would depend on dedication of government institutions to the operation of MTEF. Such MTEF reform requires a strong leadership, both at bureaucratic and political level. Because they have a primary source of each and every stage of operation, guidance and direction have been provided to the government. Typically MTEF reforms assist with intricate steps. Starting from changes to the budget classification, some of the new managerial concepts follow MTEF reforms. Following are the tools and programs required at the government level:

- Significant computerized financial management information system.
- Significant public financial reform program and administrative reform program.

Those processes could have a proper consideration, if a positive and determined attitude is shown by the government. Occasionally or more often necessary communication is required

between the government and the Ministry of Finance, line ministries and spending agencies. Table 2 describes the World Bank's stages of MTEF in detail.

Table 2: Stages of MTEF Operation		
	Stage	Characteristic
1.	Development of macroeconomic and fiscal framework	Macroeconomic model that projects revenues and expenditure in the medium term (multi-year)
2.	Development of sectoral program	i) Agreement on sector objectives, outputs and activities ii) Review and development of programs and sub program iii) Program cost estimation
3.	Development of sectoral expenditure framework	i) Analysis of inter and intra-sector trade-offs ii) Consensus building on strategic resource allocation
4.	Definition of sectoral budget	Setting medium term sector budget ceiling
5.	Preparation of sectoral budget	Medium term sectoral programs based on budget ceilings
6.	Final political approval	Presentation of budget estimates to cabinet and parliament for approval
<i>Source: Houerou and Taliercio (2002) Time frame</i>		

Some countries have a three-year and others have four and five-year time frame. It is predominantly based on government planning and structure. Moreover, expenditure and revenue forecast is based on a reasonable compromise between the value of long-term planning and shorter periods (Kasek and Webber, 2009).

### **MTEF in Practice**

In late 1990s, 52% of African countries (Benin, Burkina Faso, Gabon, Ghana, Guinea, Kenya, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania and Uganda) implemented the MTEF. It was adopted in the five-year period between 1997 and 2001. Most of the countries have implemented MTEF in the central government level, because they did not have a feasible administration at the sub-national and regional level. MTEF ignores capital expenditure in the budget process, as it is arduous to add upon donor funding to the budget (Houerou and Taliercio, 2002).

In the initial period, many countries had achieved their fiscal targets and major objectives through the implementation of MTEF. Some countries were able to control fiscal deficit through MTEF, which was evident during 1985-2000. South Africa's fiscal deficit in the pre-MTEF was negative at 5.23% of GDP and in the post-MTEF period, it reduced to 4.57%. In Tanzania, fiscal deficit in the pre-MTEF was negative at 4.02% of GDP and in the post-MTEF phase, it was 2.93%. Simultaneously, a few countries adopted poor functional mechanisms, and this has led to macroeconomic forecasts made with real term rather than the nominal term. However, they did not follow MTEF stages of operation and utilization as

<b>Table 3: Preliminary Impact Assessment of MTEF Reforms in Africa</b>	
<b>Expected Outcomes</b>	<b>Actual Outcomes</b>
Improved macroeconomic balance through fiscal discipline	No clear empirical evidence of improved macroeconomic balance
Better inter- and intra- sectoral resource allocation	Limited empirical evidence that MTEFs are associated with reallocations to subsets of priority sectors
Greater budgetary predictability for line ministries	No empirical evidence of link between MTEFs and greater budgetary predictability
More efficient use of public money	No evidence that MTEFs are developed enough to generate efficiency, gains in sectoral spending
<i>Source: Houerou and Taliercio (2002)</i>	

part of their sector-wide approach (Table 3). These drawbacks have resulted in mismanagement of public finance rules (Houerou and Taliercio, 2002). Overall, the following drawbacks were observed in the above-mentioned countries.

- Sufficient attention was not given to the public finance management reforms and administrative reforms.
- Many countries were unable to review the necessary conditions of MTEF in sectoral policies, because they have implemented a huge number of different sectoral programs without program codes or with lack of expenditure control in their budget preparations.
- Imbalanced unit cost of program was observed, i.e., structure of program did not synchronize with its administrative structure. It had extended formulation of budget targets as well as a weak budget.
- Inadequate external aid management and poor cash management.
- Lack of political participation.
- Unable to include MTEF target in budget as period of implementation differed from financial year.
- Social sector was not given sufficient attention in its budgets during the major economic crisis, war and natural disasters.

Daban *et al.* (2003) analysis is based on the design of rules-based fiscal frameworks in France, Germany, Italy and Spain. These four largest economies in the EU have argued in favor of, avoiding pro-cyclicality; interlinking the government spending rules with deficit and debt targets is necessary. Earlier reviews stated that overall, there were implementation issues with the fiscal rules and medium-term macroeconomic framework, when applied in the central government and also with regard to use of comprehensive expenditure targets.

UNESCO (2009) in their study has covered five countries, including Mongolia, Nepal, the Republic of Korea, Thailand and Vietnam. The main objective was to develop a knowledge-



based society provided by moral standards and to provide free and equal access to all nationals, subsequently, within three years to get high quality education in 2010. In addition, government policy aims to decentralize central administrative power to the ESA offices and schools, and to support local participation in education. The sectoral development framework has an evaluation section of Medium-Term Expenditure Planning (MTEP) and Ministry of Education for the period of 2007-08. Since 2002, Strategic Performance-Based Budgeting (SPBB) system was adopted in Thailand. SPBB has six core features: budget devolution, expanded budget coverage, monitoring and evolution, good governance, results-based orientation and the MEF. In Thailand, 'MTEF' is the only common term used in medium-term planning. It has focused resource allocation for developing the bottom-up framework and issues for further consideration in education sector and financial strategies. New strategies to circumvent this burden are to mobilize resources from the business and household sectors through tax incentives and to enhance the role of the private sector in education provision.

Kiringai and West (2002) focus on the budget reforms with MTEF in Kenya. Post independence, many African countries had focused on planning system, but later they did not pay sufficient attention to the planning targets. However, emerging public expenditure management reforms recognized a need to link both planning and budgeting to attain future targets. More recently the process of MTEF has re-oriented the annual budget in a medium-term focus. They have reviewed budget reform initiatives with focus on the MTEF approach and described the budget system with reform efforts prior to 2000. It was recognized that budget system merely controlled inputs rather than focusing on outputs; subsequently they experienced some issues pertaining to implementation and sustaining the budget management system. This study described recent innovations in the MTEF process and outlines the main goals of the approach in terms of sequencing the process, strengths and threats suggested for a developing country. It describes previous reform efforts, notably the program review, forward budget, the budget rationalization program, and the public investment program and then outlines the causes of failure and the outstanding problems. They recommended MTEF to deliver a sustained improvement in public expenditure management. It is necessary to secure political commitment to a wide-ranging reform program. Critical steps in institutionalizing the MTEF process include adhering to fiscal discipline and developing a budget negotiation framework to ensure that inter-sectoral resource allocations reflect the full cost of ongoing programs and the attainment of performance indicators. This implies a radical change in the culture of the civil service away from the traditional line—item budgeting and focus on delivery of outputs. Although decentralization and greater managerial autonomy are long-term objectives of the MTEF approach, it requires effective control mechanism in the right place.

MTEF in Afghanistan was started around 2008; it was operationalized through the National Development Strategy document to achieve the Nations Millennium Development Goals. To achieve these goals they have introduced reform process for financial control, improved planning and strengthening public expenditure management, i.e., public finance and expenditure management law and regulations to develop expenditure priorities and budget



plans over medium term. Through budget plan allocation decisions they have fix the socioeconomic priorities of the country. Besides the Government of the Islamic Republic of Afghanistan, international donors provide support for Afghanistan's development. MTEF precisely includes the social, economic, governance and security agendas for Afghanistan for next five years (Principles of Budgeting in Afghanistan, 2011). Pertaining to MTEF operationalization, many countries are in the preliminary stage and primarily depend on donor funding agencies. No clear description emerges from studying the synoptic view of MTEF practices of the particular countries like Albania, Armenia, Brazil, Bulgaria, Croatia, Ethiopia, Guinea, Ghana, Jordan, Kenya, Korea, Latvia, Malawi, Mozambique, Namibia, Nepal, Nicaragua, Philippines, Poland, Russia, Rwanda, South Africa, Slovakia, Turkey, Thailand, Tanzania, UK, Uganda and Zambia.

### **Public Expenditure Management in India**

Concerns regarding sound public finance have been expressed by Finance Commissions and many other agencies since 1980s. Prior to 1982-83, revenue receipts were used to cover a part of the capital expenditure. However, after changes in the fiscal regime from revenue surplus to revenue deficit, an increasing part of capital receipts was used to finance the revenue expenditure. In the late 1990s, there were reforms in small savings front. As a result of the expansionary policies implemented by the government, interest, wages and salaries have emerged as major components of expenditure. Since, these cannot be reduced in the short term, it has generated a tendency towards deficit resulting in a move towards expenditure-based budgeting. While the monetized deficit has been reduced significantly, there has not been a corresponding reduction in the fiscal deficit resulting in a rise in the proportion of other forms of borrowing. Hence, the unit cost of financing the government expenditure has been causing concerns as it has led to a rise in the revenue deficit in proportion to the fiscal deficit. The usual practice of borrowed financing of government expenditure is a burden of interest payment as the revenue expenditure cannot show financial returns. On the other hand, the capital expenditure provided inadequate returns. The consequent build-up of public debt and the interest burden, which was the largest and fastest growing items of expenditure further fuelled the growth of revenue expenditure (X FC, Para 2.7 to 2.11). To combat this rise in expenditure, the 12<sup>th</sup> Finance Commission recommended to the Government of India to establish the Government Accounting Standards Advisory Board (GASAB). This would avoid accrual accounting system as the government followed double entry method of book keeping. Double entry is considered more time consuming. Delay and double counting in every head of the budgetary system will affect transparency and accountability (GoI, 2004). 13<sup>th</sup> Finance Commission suggested that when the government obtains better output and outcomes necessary to improve the quality of government expenditure, it will ensure higher productivity, enhanced efficiency and greater effectiveness (GoI, 2009).

Although various committees and commissions have spoken about public expenditure management, the 13<sup>th</sup> Finance Commission has brought a different kind of explanation; a growth-oriented fiscal consolidation. It does not imply that the roles and functions of state

need to be reduced, but, it would improve the process of public expenditure and resource mobilization through quality and effectiveness. Primarily the fiscal consolidation would create fiscal space in both public and private expenditure and without compression of development expenditure. Ideally, the expenditure reform was an important driving force of the 13<sup>th</sup> Finance Commission's approach<sup>1</sup>. This expenditure reform is to cover all levels of the government and enhance fiscal road map in future. Subsequently, this would improve the supply side of the public goods and reduce untargeted and regressive subsidies, finally this would simplify audit procedures and bring down institutional dependency, etc. (XIII FC, Para 3.13).

The 13<sup>th</sup> Finance Commission's recommendation regarding the principles for expenditure of different grants has a conditionality element. Three objectives have determined the approach to setting conditionality's, which are as follows:

- Reducing the use of grants and substituting it with spending on the purpose for which the grant is being given.
- Incentivizing transparency and accountability in public spending thereby improving the effectiveness of public expenditure while simultaneously improving delivery leading to citizen empowerment.
- Assisting in better monitoring of expenditure.

In India, MTEF mechanisms were recommended by the 13<sup>th</sup> Finance Commission, Union Budget 2012-13 and FRBM Act. Post-FRBM recommendation on government's public finance management initiatives mandate preparation of the 'Result Framework Document' by respective ministry or departments. Empirically, this would lead to measurable outcomes on government spending rather than allocations. For example, in 2009-10 budget, there was an allocation of around 10% towards defence expenditure, interest payment was at 23%, subsidies were at 16%, and forecast results were followed in 2011-12 budget. In recent years, India is struggling to produce scheme-wise information and accounts, in the absence of one-to-one specific schemes and heads of accounts. To overcome this issue, the government finally set up the Central Plan Scheme Monitoring System (CPSMS) (GoI, 2011). Controlling current account deficit is one of the major objectives of FRBM. For that, it is planning to concentrate on medium-term perspective of fiscal indicators (macro forecasts, revenue, expenditure, fiscal deficit and public debt) and it has prepared medium-term fiscal policy statement. This is expected to provide better understanding of existing government policies and current economic scenario. As a part of FRBM, many states have also prepared medium-term fiscal policy statements and in continuation medium-term fiscal framework presented in the macroeconomic context.

---

<sup>1</sup> The Comptroller and Auditor General of India has prescribed, under the Article 150 of the Constitution of India to keep the account of the union and the state in the form that the president may approve. It has consolidated fund, contingency fund and public account of receipts and expenditure and those accounts have 19 statements, including a number of appendices. The 13<sup>th</sup> Finance Commission found that there are many areas which require reform and this will make those accounts more meaningful, reliable and comparable.

## **Implementation of MTEF in India**

MTEF was proposed in the parliament by Shri Pranab Mukherjee, in his last budget 2012-13. He had introduced the Finance Bill 2012 in the parliament as part of the amendment to the FRBM Act. In this, two steps of expenditure reforms were discussed. The first is, the concept of Effective Revenue Deficit (ERD); it will help to create space for capital expenditure and reduce revenue deficit of the budget for consumptive component. Secondly, MTEF statement which was introduced as a part of this Act. This would allow efficiency in expenditure management, strengthen macroeconomic environment and improve supply-side management of the economy. It follows a three-year rolling framework of 12 Five Year Plans, adopted by Administrative Ministry/Department of Health, Education, Energy, Rural and Urban Development and Transport (Gol, 2013).

## **An Analysis of MTEFs in India**

At the central level, MTEF projections are based on GDP, revenue deficit, effective revenue deficit, liabilities, revenue and capital expenditure. MTEF projections are done for 26 revenue expenditure categories, 15 categories in capital expenditure across 30 ministries and departments. For the central government, a comparison of MTEF projection and the budget figures was done to understand the extent of the bearing that MTEF had on budget exercise.

At the state level, a few states are implementing MTEF on preliminary basis for specific sectors with donor funding. These are Andhra Pradesh (Health), Madhya Pradesh (School Education), Rajasthan (Water and Sanitation), Odisha (Health), and Chhattisgarh (Health). For the policy direction, the state governments are expected to implement MTEF soon as part of FRBM. The initial plan was to do a primary survey to understand the operationalization of MTEF and challenges involved in its implementation by closely observing the process and interacting with the state representatives. The researcher made a visit to the Andhra Pradesh during December, 2013 for collecting information. However, this exercise could not be conducted as such information was inaccessible during the course of the study. Hence, as alternative, secondary information was utilized to compare the operationalization of MTEF in different states.

## **MTEF of the Central Government**

Here, the comparison of MTEF projections with budget provisions for three years (2014-15 to 2016-17) is done to understand the level of integration in the two exercises. In India, the impact of the global financial slowdown has been reflected in some of the significant fiscal measures in the budget 2009-10. As a fiscal measure, through the FRBM Act, the government presented three policy statements in the parliament: a medium-term fiscal policy statement, fiscal policy strategy statement and macroeconomic framework policy statement. The main objective of the government was for closer integration between the expenditure and medium-term fiscal targets. Budget 2010-11 introduced the concept of effective revenue deficit. The aim was to reduce revenue deficit below 2.0% by 2015-16. Hence, in the same year, it has to eliminate the effective revenue deficit. To resolve structural problems in the revenue

expenditure, the MTEF lays greater emphasis on development-related expenditure and combines it with the fiscal target to reduce the debt and liabilities as a percentage of GDP to a more sustainable level through the creation of capital assets. This would thereby help in increasing resources for financing investment and capital expenditure including grants. "The MTEF is essentially a vertical expansion of the aggregates of the expenditure projections in the fiscal framework presented along with the Annual Financial Statement and the Demand for Grants" (Gol, 2015).

Subsequently, through the FRBM Act, as well as the Financial Act, 2012, the central government had to present the MTEF in both the houses of parliament (Gol, 2015). For the first time, MTEF statement was laid in the parliament in the monsoon session of 2012. MTEF is suppose to provide confidence to various government ministries/departments such as education, health, energy, rural and urban development, transport, etc., for better planning and allocating funds efficiently to various government programs. For the central government, MTEF projections are based on three-year rolling framework on major expenditure indicators. The major objective is to make available a closer amalgamation between annual budget and FRBM statements. This would provide fiscal management and fiscal consolidation towards government commitments in the medium term. Recently the Expenditure Management Commission (EMC) recommended that MTEF projections have to comprise the demand for grant-wise revenue-capital expenditure in the Expenditure Budget (Volume II).

As a part of public expenditure management, treasury computerization was introduced on April 1, 2010. It is a modern public expenditure management practice and the aim is to support the functions of the state/Union Territories (UT). The purpose of the treasury computerization project was to make budgeting processes more efficient, strengthen systems, improve accuracy and timelines, bring about transparency and efficiency in public delivery systems and improve the quality of governance in state and UT. Here a comparison of the MTEF projections and the budget figures are done to understand the impact of MTEF on budget analysis.

The first MTEF projection in India was done under the Finance Minister, P Chidambaram (August 2013). This projection was for the financial years 2014-15 and 2015-16. It has followed some assumptions like: for an increase from 6.1 to 6.7% of GDP growth, fiscal deficit to be reduced from 4.2 to 3.6%, revenue deficit is to fall from 2.7 to 2%, effective revenue deficit is to be nil and the outstanding liabilities to be reduced from 45.7 to 42.3% of GDP. Over medium-term, a nominal amount of disinvestment to the tune of ₹20,000 cr to ₹15,000 cr is expected. Major heads of revenue and capital expenditure are included in projections and the major heads are exhibited in Table 4. In this table, a comparison of government expenditure and MTEF projection is carried out for three years (2014-15, 2015-16 and 2016-17). However, only for one year the comparison is between actual figures and MTEF figures. For the other two years, the comparison is between the budgeted figures and MTEF figures.

The difference between the budgeted expenditure and MTEF projection is within the range of 10% and it has come down in the latest year. However, for 2014-15 the gap between actual and MTEF projection was very high. It was particularly high for capital

Expenditure Head	2014-15	2015-16	2016-17
<b>Total Expenditure (Actual)</b>	<b>1,663,673.05</b>		
Budgeted	1,794,891.96	1,777,477.04	1,978,060.45
MTEF Projection	1,781,091.00	1,946,146.00	1,921,442.00
<b>% Difference (Actual Over MTEF)</b>	<b>-7.05</b>	<b>-9.49</b>	<b>2.86</b>
Revenue Expenditure (Actual)	1,466,991.73		
Budgeted	1,568,111.43	1,536,046.40	1,731,036.83
MTEF Projection	1,549,629.00	1,685,966.00	1,660,475.00
<b>% Difference (Actual Over MTEF)</b>	<b>-5.63</b>	<b>-9.79</b>	<b>4.08</b>
Capital Expenditure (Actual)	196,681.32		
Budgeted	226,780.53	241,430.64	247,023.62
MTEF Projection	231,462.00	260,180.00	260,967.00
<b>% Difference (Actual Over MTEF)</b>	<b>-17.68</b>	<b>-7.77</b>	<b>-5.64</b>

expenditure (18%). Hence, the comparative exercise suggests that budgeted figures are closer to MTEF figures. However, the need for bringing actual and budgeted figures close remains a challenge mainly in the case of capital expenditure. A finite comment on the convergence of budget and MTEF exercise cannot be made as the data is for a very limited time frame.

### **A Comparative Analysis of State-Level MTEF Procedures**

Operationalization of MTEF in India was first exercised in Andhra Pradesh, Department of Health, Medical and Family Welfare (DoHMFw). They have adopted MTEF in the year 2006-07 and three year rolling framework with bottom-up estimations of existing programs. Financial support for the same was provided by the Department for International Development and the World Health Organization (WHO) offered technical support. They have followed National Health Accounts (NHA) methodology and collaborated with Institute of Health System to develop the report. The major objectives were to ensure the operationalization of MTEF mechanism within the institutional level and to roll out policy making and departmental resource allocation with association of bottom-up approach. This was expected to bring the budget convergence. The secondary objective is to improve the health performance of Andhra Pradesh, to avoid duplication in the budget categories/National Rural Health Mission (NRHM) planning process, etc. Macroeconomic Commission for Health, India had recommended bottom-up approach of existing policies. Specifically, this approach focuses on the review of existing policies at the grass-root level and assessment of the real cost of these policies for a particular period (Surender *et al.*, 2009). Other states have also concentrated on MTEF in various departments which are exhibited in Table 5.

State	Department	Timeframe
Andhra Pradesh	Department of Health and Family Welfare	2008/09 – 2012/13
Chhattisgarh	Department of School Education	2010/11 – 2013/14
Chhattisgarh	Department of Health and Family Welfare	2012/13 – 2014/15
Madhya Pradesh	Water Resource Department	2010/11 – 2014/15
Odisha	Department of Health and Family welfare	2007/08 – 2011/12
Odisha	Department of Women and Child Development	2011/12 – 2013/14
Rajasthan	Water Resource Department Public Health and Engineering Department Ground Water Department Command Area Development Watershed Development and Soil Conservation State Water Resource and Planning Department	2008/09 – 2012/13

This framework begins with review of health accounting principles of Andhra Pradesh. That is financing sources, financing agents, healthcare functions, healthcare providers of Andhra Pradesh, resource cost classification and coding.

Table 6 shows the projection of health expenditure in the Government of Andhra Pradesh. It shows expenditure by healthcare covering departments, resource categories, major programs and overview of healthcare providers. Healthcare expenditure was expected to grow from

Function	State Health Covering Departments and Societies		Three Years Projection		
	2008-09 (RE)	2009-10 (BE)	2010-11	2011-12	2012-13
Direction and Administration	113.79	126.45	172.46	197.73	239.53
Primary Healthcare	2,478.49	3,475.05	4,667.30	5,744.38	7,220.64
Secondary Healthcare	449.93	484.85	890.22	1,084.38	1,311.39
Tertiary Care	515.63	514.26	685.08	748.39	912.46
Medical Education	264.62	285.92	337.24	411.72	502.94
Health Statistics and Research	6.89	9.72	43.48	49.21	55.84
Social Protection Schemes	496.75	945.00	1,814.63	2,060.80	2,362.29
Repayment of Loans	65.84	66.00	77.85	95.04	116.10
Others Function	141.25	151.24	178.39	217.79	266.05
<b>Total</b>	<b>4,533.20</b>	<b>6,058.49</b>	<b>8,866.64</b>	<b>10,609.44</b>	<b>12,987.23</b>
Percentage of GSDP	1.22	1.44	1.87	1.98	2.14

*Source: Surender et al. (2009)*

₹4,533.20 cr to ₹12,987.23 cr between 2008-09 and 2012-13. However, it was not done at district level. It is done at the aggregate level of health sector.

Certain concerns regarding this procedure are as follows: (a) assumptions were applied to describe next three years. Overall, there may be a central government functional absence of health sector in Andhra Pradesh. But, the rate of growth of health spending is expected to increase from 11.5% to 22.9% between 2008-09 and 2012-13. Such assumptions or expectations are not always well founded. (b) There was little flexibility in the fund reallocation of budget; under such circumstances, allocation of current programs funding was proportionately distributed to respective departments. These are problematic standardizations (Surender *et al.*, 2009).

MTEF was also prepared for health sector in Odisha and Chhattisgarh. Projections for Odisha are given in Table 7. A comparative analysis of MTEF in Odisha and Chhattisgarh is presented in Table 8. The major parameters for the analysis are time frame, coverage, resource allocations, health scenario, methodology and estimation of expenditure categories.

<b>Expenditure Heads</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Total Expenditure (BE)	27,948.49	32,797.53	33,133.42	44,878.98
MTEF Projection	23,877.59	26,636.73	29,953.94	33,541.12
<b>Percentage Changes</b>	<b>17.05</b>	<b>23.13</b>	<b>10.61</b>	<b>33.80</b>
Revenue Expenditure (BE)	22,706.55	28,919.17	32,481.94	36,323.23
MTEF Projection	19,615.43	22,093.35	24,410.17	27,108.76
<b>Percentage Changes</b>	<b>15.76</b>	<b>30.90</b>	<b>33.07</b>	<b>33.99</b>
Capital Expenditure (BE)	5,241.94	3,878.36	6,514.77	8,555.75
MTEF Projection	4,261.64	4,543.38	5,543.77	6,432.36
<b>Percentage Changes</b>	<b>23.00</b>	<b>-14.64</b>	<b>17.52</b>	<b>33.01</b>
Interest Payment (BE)	4,312.30	4,592.60	3,952.12	4,047.33
MTEF Projection	4,312.30	4,592.60	4,938.22	5,520.08
<b>Percentage Changes</b>	<b>0.00</b>	<b>0.00</b>	<b>-19.97</b>	<b>-26.68</b>

The outcome of National Health Policy in India (2002) has followed many centrally sponsored schemes and it largely increased the volume of public resources in the State of Odisha. Odisha Health Sector Plan (OHSP) came into operation in 2005. Under NRHM, OHSP strategies were implemented since 2005-06. With the help of this, the Government of Odisha had planned to improve the health status of its state population. In that they have adopted vision 2010 strategy. The objective is to provide the facilities which are equitable, accessible and affordable in health sector. To improve the resource allocation, Government of Odisha adopted MTEF in 2007-08. They have followed an approach which is similar to what already exists in the department of health of the Government of Andhra Pradesh.



Table 8: A Comparative Analysis of MTEF in Health Sector		
	Odisha	Chhattisgarh
Time Frame	Health sector reviewed from 2002-03 to 2007-08 MTEF projected from 2007-08 to 2011-12	Health sector reviewed from 2001-02 to 2011-12 MTEF projected from 2011-12 to 2014-15
Coverage	The Orissa Health Sector Plan (OHSP), National Health Account (NHA) Framework, National Rural Health Mission (NRHM) and National AIDS Control Programs (NACP), Department of Health and Family Welfare (DoHFW), Orissa State AIDS Control Society (OSACS), etc. For the health sector reform Composite Medical Services (CMS) Index was developed and covered each district of Odisha Sources of funds (financial resources), health providers and functions of care and resource categories (human resource management and equipment) were considered	European State Partnership Program and Program Implementation Plan (EC-SPP PIP), National Health Account or Statistics (NHA), National Rural Health Mission (NRHM), National AIDS Control Programs (NACP) and Department of Health and Family Welfare (DoHFW) all districts.
Assumption	Since 2007-08 NRHM contribution through state budget was 20% per annum. Government of India's (GoI) contribution to the state budget was 12.5% per annum. GoI's contribution to NRHM incentive was excluding family welfare annually at 30% and annual family welfare incentive at 10%. For medium-term, external aid contributed via Department for International Development (DfID) was ₹300 cr to NRHM and remaining inflated 4.5 % per year.	Socio-demographic goals were introduced to achieve the State Health Sector Policy in 2016; figures in parentheses are based on 2011 health outcomes. Birth rate < 15 (27.4) Death rate < 5 (7.7) Life expectancy at birth = 72 (61.4) Infant mortality rate = 30 (63) Child mortality rate = 60 (122.7) Maternal mortality rate = 100 (379) Total fertility rate = 2.1 (3.4) Contraceptive prevalence rate = 53.2% (65) Registration of births, deaths and marriages = 100 Unmet needs of family planning = 0 (10.5) Median months of use of spacing methods = 48 (31.6) Median age at marriage of women = 21 (18.1) Median age at first childbirth of women = 21 (18.1)

Table 8 (Cont.)

	Odisha	Chhattisgarh
Resource Allocation Scenario	<p>Three different scenarios were considered.</p> <p>Low: Col, GoO and external aid in health expenditure annual average rate was projected at 9.18%. The percentage share of total expenditure to health expenditure was increased by 5.5% in 2007-08 to 6% in 2009-10.</p> <p>Medium: GoO annual average contribution to health was projected at 13.5%. Then the percentage share of total expenditure to health expenditure was increased by 6.34% in 2009-10 to 6.76% in 2011-12. Health expenditure was increased to 1.38% of GSDP in 2007-08 to 1.48% of GSDP in 2011-12.</p> <p>High: Health expenditure was projected to reach 2% of GSDP in 2011-12. GoO annual average contribution to health was projected to reach at 30%. Then the percentage share of total expenditure on health increased at 8.17% in 2009-10 to 9.12% in 2011-12.</p>	<p>The Government of Chhattisgarh resource envelope projection criteria was based on normal scaling scenarios of growth (percentage share, GSDP), which will be 17 to 23, 25 and 30%.</p>
Methodology	<p>Stage 1: Medium-term fiscal framework (medium-term revenue and expenditure projections of a budget).</p> <p>Stage 2: Top-down budget estimation (each financial year this could estimate resource envelope of plan, non-plan, development, non-development and revenue and capital expenditure and off-budget resources).</p> <p>Stage 3: Bottom-up estimation – prioritised objective and goals, mapping and measurement of output and gap analysis.</p> <p>Stage 4: Reprioritization of top-down and bottom-up approach in future.</p>	
Estimation	<p>Detailed estimation of on-budget and off-budget resources (source of funds, providers, functions of care and resource categories). Subsequently, DoHFW, NRHM and OHSP.</p>	<p>Detailed estimation of on-budget and off-budget in NRHM, human resource categories, buildings and infrastructure. Subsequently, allopathic, ayush, medical education, public health and family welfare.</p>

Subsequently, Odisha has adopted five-year rolling framework of MTEF that is from 2007-08 to 2011-12. They have developed the bottom-up estimation of existing government programs using NHA. They acquired funds from different sources including, health providers and functions of care and resource categories. All the financial and technical support was provided by Department for International Development.

Assumptions associated with the projection purpose of resource envelop:

- Overall budget allocation of health expenditure was expected to increase from 15% in 2007-08 to 20% in 2011-12.
- Annual budget contribution of center to state health expenditure was expected to increase at a rate of 12.5% in the above-mentioned period.
- Annual incentive of central sponsorship of NRHM was expected to increase at a rate of 30% and family welfare incentive at a rate of 10%.
- In the medium-term, ₹300 cr aids supported by Department for International Development were expected to be given to Odisha Health Sector. This external aid has contributed 4.5% annually in meeting the existing budget commitment.

Recently governments of India and EU enhanced EU-State partnership program (2006-13) in the state of Rajasthan and Chhattisgarh. The State Partnership Program (SPP) was prepared by the European Commission's Country Strategy Paper and National Indicative Program in India. It has concentrated on multi-sector poverty alleviation program with long-term strategy specifically for water sector innovation. The national indicative program is concerned with the State of Rajasthan for its water scarcity. The SPP has enhanced funds in 2007 for five years from 2007-08 to 2011-12. Rajasthan's water sector has received EU financial support of €73.5 mn and €6.5 mn each for technical support. The major aim was to improve departmental resources availability and capacity building in the line ministries, while subsequently, to provide sustainable water supply in the state partnership program and user group investment and capacity development plan.

It is in this context, MTEF in Rajasthan was operationalized in 2008-09 to 2012-13 (see Table 9). The table focuses on Rajasthan's water sector budget. It has included on-budget and off-budget components. On-budget categories consider Rajasthan's spending of plan and non-plan, central assistance of centrally sponsored schemes and central schemes. Off-budget components have concentrated on state implemented flagship programs (total sanitation campaign and Rajiv Gandhi National Rural Drinking Water Mission). The institutional structure of water sector has spread across several departments like: (1) state water resource planning department; (2) public health and engineering department; (3) command area development and water utilization (Indira Gandhi Nagar Project and Ganga Canal Project); (4) Panchayati Raj department which focuses on total sanitation campaign scheme; (5) water resource department which concentrates on minor, medium and major irrigation projects; (6) ground water department and (7) rural development

<b>Table 9: MTEF for the Water Sector, Rajasthan</b>					
(₹ in cr)					
<b>Expenditure Components</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12 (BE)</b>	<b>2012-13 (RE)</b>
<b>On-Budget</b>					
Water Resource Department	1,845	1,874	1,827	2,062	2,386
Public Health and Engineering Department	3,505	3,334	2,452	2,904	3,109
Ground Water Department	52	55	55	62	60
Command Area Development	92	104	132	93	134
Watershed Development and Soil Conservation	26	38	22	33	22
State Water Resource and Planning Department	22	1	14	69	98
<b>Total</b>	<b>5,542</b>	<b>5,406</b>	<b>4,502</b>	<b>5,223</b>	<b>5,809</b>
<b>Off-Budget</b>					
Total Sanitation Campaign	22	32	38	31	90
National Rural Drinking Water Program	0	671	853	1,429	1,660
MGNREGS	1,846	1,937	1,379	1,280	803
IWMP	0	0	0	1	0
<b>Total</b>	<b>1,868</b>	<b>2,640</b>	<b>2,270</b>	<b>2,741</b>	<b>2,553</b>
<b>Grand Total</b>	<b>7,410</b>	<b>8,046</b>	<b>6,772</b>	<b>7,964</b>	<b>8,362</b>
<i>Source: Government of Rajasthan (2012)</i>					

department which concentrates on directorate of watershed development, soil conservation and it is focused on integrated watershed management program.

The review of MTEF across states reveals that: (a) there are different goals on the basis of which MTEF exercise is conducted; (b) there are very different assumptions which are not always justified. Outcome of MTEF exercise is highly sensitive to the following assumptions: (c) highly time consuming exercise and requires book keeping at various levels; (d) political and administrative support may not be available; and (e) convergence between MTEF and budget is still a problem.

## Discussion

At the national level many countries' government policies are based on particular time frame (medium-term/long-term) (Houerou and Taliercio, 2002; Heller *et al.*, 2006; IMF, 2007; Levy, 2007; UNESCO, 2009; and World Bank, 2013). Many countries have to determine affordability and implementation of policies and in the mean time they have to

fulfill target group demands with future targets. Deficit bias, time inconsistency, pro-cyclical fiscal stance, transparency and good governance can also play an important role in achieving high quality, durable adjustment of government policies. MTF began in the late 1970s and was supposed to identify a new policy or program and allocate funding mechanism in the future budget. A MTF is implemented to solve these problems. The success of MTFs is particularly the growth response and depends on the quality and durability of the specific measures that underpin it.

Looking at the international perspective of the MTFs over time, OECD countries, during 1980s, faced two major issues: (a) During the projection period, there was a tendency to overestimate the economic resources and this would mislead the allocation system. (b) Cross verification of the entitlement programs projection shows that they are overoptimistic in the economic assumption. Until 1982, in the UK, multi-year expenditure programs revealed that the use of projection based on expenditure in real term created problem. With the rapid rise in inflation due to the fall in growth, there was an automatic adjustment of the expenditure projections which further led to a pressure on public finances. Hence, the annual budget in 1976 included cash limits which were run parallel to the expenditure programs till 1982. Thus, there was a shift in expressing expenditure estimates in nominal terms.

In the UK, the expenditure forecast system was abandoned in 1995 and there was a move to a three-year budget in 1998. On the other hand, the Australian government has been preparing forward estimates since 1973. However, it has not given much importance to the estimates for the rolling years due to little relevance it had in the budget preparation. These estimates became similar to the wish lists. Some of the major disputes that this led to and that had to be addressed in the Cabinet were related to the different interpretations of a continuing policy as some were extension of existing programs, while others were new programs. Other disputes were related to the corresponding costs as well as time invested in deliberations. During the same time period, i.e., in the early 1980s, in Canada, the Policy and Expenditure Management System (PEMS) was implemented which included the preparation of a five-year rolling fiscal program. Under the PEMS, expenditure programs were grouped into 'policy envelopes' with committees to manage them within the fiscal framework. However, the results of this system were found to be unsatisfactory as it failed to promote coherent policy choices, despite being successful in the procedural aspects. The work under PEMS began to become transactional rather than allocational as a result of the 'programming reserve' that was kept for any unforeseen events and viewed as an excess that the government was willing to spend. The system of policy envelopes was eliminated and there was a shift in focus to policy issues henceforth. While the benefits and disadvantages were easier to assess in these countries, in other countries where the budget is the primary document, it becomes difficult to do the same. For instance, in the USA, forward estimates became a part of the budget in 1979 although it was unsuccessful in expenditure control. However, improvements in the multi-year budgeting techniques have possibly led to recent achievements. When considering the developing economies that prepare a forward budget, the results have been found to be uneven. The National Public Expenditure Plan (NPEP) of

Papua New Guinea was seen to reduce the growth of expenditure through its macroeconomic policy although it has been a yearly exercise. Hence, it proved to be difficult to create sectoral programs that went beyond the budget which was one of the limitations along with the links to political objectives which was the other limitation. In Kenya, forward budget was introduced in 1973, though by 1985, expenditure cuts were made due to resource shortages but as the wage components were increasing, capital expenditures were hampered as there was no strict limit on expenditure.

## Conclusion

Over the years, it can be seen that multi-year programming did not achieve expected results due to the technical difficulties as well as the lack of commitment on the part of some governments. The application of long-term fiscal limits was found to have a greater impact on the fiscal performance. Fundamentally, MTEF alone could not deliver efficient public expenditure management. Before designing MTEF, concerns regarding transparency and accountability have to be addressed. Necessary steps are required in the budgets, which are full-fledged/comprehensiveness of budget management, budget execution and budget accountability. Subsequently, insufficient attention is paid to the political and institutional mechanism in the MTEF. Operationalization of MTEF is not about merely keeping a textbook mechanism, it has to find the feasible resource availability and provide future financial performance as well as output and outcome of a budget.

Countries across the world have introduced some institutional structure for controlling/monitoring government spending in last two/three decades. Such mechanism can be divided broadly into the following categories: legislation to control deficits (e.g. FRBM Act), rolling budgets beyond annual budget (e.g. MTFs) and budgetary innovations (e.g. performance and outcome budget, etc.). In this paper, MTFs are considered for understanding how the budgetary processes are incorporated in a MTF. MTEF is a component of MTFs and has been mandatory since 2011-12. The methodology involves a top down and bottom up approach. It involves estimation of resource envelope and expenditure predictions are done for a continuous period of three financial years based on a medium-term plan with certain assumptions. Despite its theoretical appeal, its implementation has been far from satisfaction. In this paper, mainly the MTEF initiatives of various ministries of the central government for the period 2013-14 to 2015-16 were analyzed. A comparison of MTEF exercise conducted for certain sectors by various state governments is also done.

The major finding of these exercises are: first, MTEF is still in its infancy and has been adopted in a limited manner. Second, the methodology is far from being rigorous. The input-output matrix used for MTEF purpose is based on limited and restrictive assumptions. At the level of the state government, such exercises are limited only to a few sectors. Finally, MTEF figures are not really a guide for budgetary estimations. There are differences in budgetary figures and the MTEF projections for most of the financial years. A longer experience with MTEF is required to make decisive comments about its performance.

MTEF has a promise and the challenge is to implement a methodologically rigorous MTEF plan which has a clear bearing on the budgetary exercise. In this context, to curb the control of political influence on budgetary variables, it is important that the process of budget making becomes transparent and the institutional structure for expenditure management is based on a longer-term framework.■

## References

1. Albert Van Zyl (2003), "Country Case Study 5: Operationalising the MTEF as a Tool for Poverty Reduction: South Africa, Overseas Development Institute Centre for Aid and Public Expenditure, Africa Policy Department of the Department for International Development (DFID), UK.
2. Alesina A (1987), "Macroeconomic Policy in a Two-Party System as a Repeated Game", *The Quarterly Journal of Economics*, Vol. 102, No. 3, pp. 651-678.
3. Alesina A and Sachs J (1988), "Political Parties and the Business Cycle in the United States, 1948-1984", *Journal of Money, Credit and Banking*, Vol. 20, No. 1, pp. 63-82.
4. Chaudhuri K and Dasgupta S (2005), "The Political Determinants of Central Governments' Economic Policies in India: An Empirical Investigation", *Journal of International Development*, Vol. 17, No. 7, pp. 957-978.
5. Cukierman A and Meltzer A H (1986), "A Positive Theory of Discretionary Policy, the Cost of a Democratic Government, and the Benefits of a Constitution", *Economic Inquiry*, Vol. 24, No. 3, pp. 367-388.
6. GoI (Government of India) (2004), "Implementation of the Fiscal Responsibility and Budget Management Act, 2003", Ministry of Finance, New Delhi.
7. GoI (Government of India) (2009), "Strengthening Financial Management Systems, Second Administrative Reform Commission", Government of India, New Delhi.
8. GoI (Government of India) (2011), "Report of the High Level Expert Committee on Efficient Management of Public Expenditure", Government of India, Planning Commission, New Delhi.
9. GoI (Government of India) (2013), "Medium-Term Expenditure Framework Statement Laid Before Parliament as Required Under the Fiscal Responsibility and Budget Management Act, 2003", Ministry of Finance, New Delhi.
10. GoI (Government of India) (2015), "Medium-Term Expenditure Framework Statement Laid Before Parliament as Required Under the Fiscal Responsibility and Budget Management Act, 2003", Ministry of Finance, New Delhi.
11. Government of Rajasthan (2012), 12<sup>th</sup> Plan Working Group Report (2012-17), Water Resource Department, Government of Rajasthan.



12. Heller et al. (2006), "Making Fiscal Space Happen: Managing Fiscal Policy in a World of Scaled-Up Aid", Working Paper 06/270, International Monetary Fund, Washington DC.
13. Hibbs D A (1977), "Political Parties and Macroeconomic Policy", *American Political Science Review*, Vol. 71, No. 4, pp. 1467-1487.
14. Houerou and Taliercio (2002), "Medium Term Expenditure Frameworks: From Concept to Practice, Preliminary Lessons from Africa", Africa Region Working Paper Series No. 28, the World Bank.
15. Hove M and Wynne A (2010), "The Expenditure of Medium-Term Expenditure Framework and Integrated Financial Management Information System Reforms in Sub-Saharan Africa-What is the Balance Sheet?", *The African Capacity Building Foundation*, Occasional Paper No. 9, Zimbabwe.
16. International Monetary Fund (2007), "Manual on Fiscal Transparency", Fiscal Affairs Department, IMF, Washington DC.
17. Jena P R (2010), "Indian Public Expenditure and Financial Accountability: Public Financial Management Performance Assessment Report", National Institute of Public Finance and Policy, New Delhi.
18. Kalecki M (1943), "Political Aspects of Full Employment", *The Political Quarterly*, Vol. 14, No. 4, pp. 322-330.
19. Karnik A V (1990), "Elections and Government Expenditures: The Indian Evidence", *Journal of Quantitative Economics*, Vol. 6, No. 1, pp. 203-212.
20. Kasek Leszek and Webber David (2009), "Performance-Based Budgeting and Medium-Term Expenditure Frameworks in Emerging Europe", The World Bank, Washington DC.
21. Khemani S (2007), "Party Politics and Fiscal Discipline in a Federation Evidence from the States of India", *Comparative Political Studies*, Vol. 40, No. 6, pp. 691-712.
22. Kiringai Jane and West Geoffrey (2002), "Budget Reforms and the Medium-Term Expenditure Framework in Kenya", Kenya Institute for Public Policy Research and Analysis, Working Paper (No. 7).
23. Levy Brian (2007), *Governance Reform : Bridging Monitoring and Action*, World Bank, Washington DC.
24. Nordhaus W D (1975), "The Political Business Cycle", *The Review of Economics Studies*, Vol. 42, No. 2, pp. 169-190.
25. OECD (2001), *Governance*, (Edited) by Richard Allen and Daniel Tommasi, Managing Public Expenditure a Reference Book for Transition Countries, France.
26. Peacock A T and Wiseman J (1961), *The Growth of Public Expenditure in the United Kingdom*, Princeton University Press, Princeton, NJ.

27. Rogoff K S (1987), "Equilibrium Political Budget Cycles", NBER Working Paper, No. 2428.
28. Rogoff K S and Sibert A (1988), "Elections and Macroeconomic Policy Cycles", *The Review of Economic Studies*, Vol. 55, No. 1, pp. 1-16.
29. Sen K and Vaidya R R (1996), "Political Budget Cycles in India", *Economic and Political Weekly*, Vol. 31, No. 30, pp. 2023-2027.
30. Surender G, George C K and Pattnaik G S (2009), "Medium-Term Expenditure Framework for Health in Andhra Pradesh 2008-09 to 2012-13", The Institute of Health Systems, Hyderabad.
31. The World Bank (1998), *Public Expenditure Management Handbook*, Washington DC.
32. The World Bank (2013), "Beyond the Annual Budget Global Experience with Medium-Term Expenditure Frameworks", Washington DC.
33. UNESCO (2009), "Education Financial Planning in Asia: Implementing Medium-Term Expenditure Framework", United Nations Educational, Scientific and Cultural Organisation, Thailand.
34. Wagner A (1883), "Three Extracts on Public Finance, Translated and Reprinted", in R A Musgrave and A T Peacock (Eds.), *Classics in the Theory of Public Finance*, Macmillan, 1958, London.
35. World Bank (2000), "Public Expenditure Review", Volumes 2, World Bank, Washington DC.

Reference # 09J-2018-01-02-01

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.