Azadi Ka Amrit Mahotsav

सत्यमेव जयते

G20 भारत 2023 INDIA

47th Civil Accounts Day

1st March, 2023

Controller General of Accounts

Ministry of Finance, Department of Expenditure

Government of India


46th CIVIL ACCOUNTS DAY, 2022
प्रधानमंत्री श्री नरेन्द्र मोदी के द्वारा श्री थावरचद गेहलोत, केन्द्रीय सामाजिक न्याय और अधिकारिता मंत्री
की उपस्थिति में 07 दिसम्बर, 2017 को डॉ. बी. आर. अम्बेडकर की प्रतिमा का अनावरण
Ambedkar by Shri Narendra Modi, Prime Minister in the presence of
Minister of Social Justice and Empowerment on 07th December, 2017
Shri Thaawarchand

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List of Abbreviations

ADC	Autonomous District Council
ARPIT	Accounting & Reconciliation Portal of Indirect Taxes
CAB	Central Autonomous Body
CBG	Central Bank Governor
CNA	Cental Nodal Agency
DST	Department of Science & Technology
FIST	Fund for improvement of Science & Technology Infrastructure
GFS	Government Finance Statistics
GPs	Gram Panchayats
GPDP	Gram Panchayat Development Plan
ICAO	Indian Civil Accounts Organization
iFMS	Integrated Fertilizer Management System
INGAF	Institute of Government Accounts and Finance
NHA	National Health Authority
PAO	Pay & Accounts Officer
PRAKALP	Pratyaksh Kar Lekhankan Pranali
SDDS	Special Data Dissemination Standard
SNA	State Nodal Agency
TMS	Transaction Management System
TSA	Treasury Single Account

CASH MANAGEMENT IN ADVANCED ECONOMIES AND REFORM PLAN FOR GOVERNMENT OF INDIA

- Subodh Mathur

PART-I

Introduction

Cash Management is usually not given priority in financial reform processes in a country even though it has a major impact on macroeconomic performance. Due to the COVID-19 pandemic, many countries introduced lockdowns and economies faced contraction. This led to decrease in governments' revenues and increase in cash outflows because of fiscal stimulus packages and pandemic related health expenditures. COVID-19 crisis has brought back the focus on managing the government's cash in the most effective way.

This Working Paper will focus on the best practices available and their relevance to Indian conditions. This Paper will not deal with many issues that could otherwise concern other Low Income Developing Countries (LIDCs). Focus is also on the Indian Central Government framework rather than for the country's provincial governments, where similar practices, however, could be adopted.

Defining Cash Management

One of the simplest definition of cash management given by Storkey[3] . *He states that it is having the right amount of money in the right place and time to meet the government's obligations in the most cost-effective way. While Williams defines it as the strategy and associated processes for managing cost-effectively the government's short-term cash flows and cash balances, both within government, and between government and other sectors.*

The key is to have an active cash management rather than tackle-as-you-go practice.

Why Cash Management is necessary

Effective cash management contributes to the smooth implementation of the operational targets of fiscal policy, the public debt management strategy, and monetary policy. Following are recognized as the key objectives of active cash management:

i. To ensure that adequate cash is available to pay for expenditures when they are due.

ii. To borrow only when needed and to minimize government borrowing costs.

iii. To maximize returns on idle cash, i.e., to avoid the accumulation of unremunerated or low yielding government deposits in the central bank or in commercial banks.

iv. To manage risks, by investing temporary surpluses productively, against adequate collateral.

Realistic budgeting (estimates of revenue and

[1]Working Paper presented to the Controller General of Accounts, Ministry of Finance, Government of India for their internal use.

[2]Henceforth, in this paper, the term Government would refer to the Central Government of India rather than Provincial Governments, unless specifically mentioned otherwise.

[3]Storkey, Ian, 2003, Government Cash and Treasury Management Reform, Asian Development Bank, Governance Brief.

[4]Williams, M. (2004) "Government Cash Management: Good and Bad Practice".

expenditures are very close to the final year actuals) is a prerequisite for an effective cash management, which is usually the case in advanced economies. Cash Management is also a prerequisite for implementation of effective Commitment Controls (not discussed in this paper).

What Cash Management is not

Modern cash management is not concerned with controlling expenditure authorizations so that the timing of cash disbursements matches the timing of cash receipts. Nevertheless, the spending ministries, should be responsible for notifying central cash managers of their cash plans, particularly the precise timing of large-value disbursements (For example, in France, the local governments are required to provide advance notice, by 4 p.m. of the previous day, of large-value transactions—exceeding Euro 1 billion. In the United States, the U.S. Treasury requires disbursements or collections exceeding \$500 (or \$50) million to be notified 5 (or 2) business days in advance).

Advanced countries do not rely on these expenditure controls as a cash management tool, since such controls can be disruptive for spending ministries, add to procurement costs, and impose burdens on private sector suppliers.

Cash management is also to be distinguished from cash rationing—enforced by cuts in budget allocations (for example, in some Anglophone African countries, under "cash budgeting systems" release the authority to incur expenditure only when adequate cash is available. In some Francophone countries, "cash management" is often viewed as limiting expenditure commitments to below that approved in the annual budget law, consistent with cash expected to be available).

In both regions, the trimming of spending authorizations concerns "nonpriority" spending.

Although it may occasionally be necessary for the Ministry of Finance (MoF) to delay or cancel budget authority—especially if budget revenue projections are too optimistic—such procedures are not an intrinsic component of modern cash management.

Nonetheless, in all countries, it is important that budget managers/controllers know the timing and size of cash needs that result from approved spending commitments, and communicate these to the MoF's cash management unit.

PART-II

Key features of Cash Management

All the advanced OECD economies have nine key features for active cash management. These features can be classified further into fundamental and desirable features as presented in the following Box:

Fundamental features

i. Centralization of government cash balances and establishment of a TSA structure

ii. Clear understanding on the coverage of the cash planning framework

iii. Ability of make accurate projections of short-term cash inflows and outflows

iv. An adequate transaction processing and accounting framework

v. Timely information sharing between the central treasury, revenue-collecting agencies, spending ministries, and/or treasury branch offices

vi. Appropriate institutional arrangements and responsibilities

Desirable features

vii. Utilization of modern banking, payment, and settlement systems

viii. Cash balance management and use of short-term financial market instruments

ix. Integration of debt and cash management

As may be observed from above, many such features and practices are already adopted by monetary, financial and banking systems in India. However, some critical ones are missing. We would be discussing these features in some detail with relevance to Indian context.

I. Ensure comprehensive TSA

Centralization of government cash balances and establishment of a TSA structure. Government in India had largely followed the TSA structure where the government's cash is held in the Central Bank for all the line ministries and departments. Commercial Banks are the intermediaries for collection of revenue and making disbursements and their accounts are required to be swept daily into the Central Bank's TSA account. In Sweden, such sweeping arrangements are conducted thrice a day. In some countries such as France, Germany, and the United States, the disbursements are directly done from the TSA held by the central bank. In India, the scope of TSA for Central Government is being further expanded to include parastatal organisations like Autonomous Bodies wherein their cash has now become part of the government's TSA barring some low value or urgent payments. Effectiveness of cash management is further enhanced if the delays

[5]Reserve Bank of India

[6]Except for one line ministry which directly operates through the Central Bank

in remittance of the revenues collected by banks to the TSA and delays in disbursements from commercial banks are minimized.

II. Comprehensive scope of cash planning

Clear understanding on the coverage of the cash planning framework. Coverage of the cash planning and management should not only cover the budgetary government but also extra-budgetary funds. Many OECD countries have extra-budgetary funds for social security and pensions which are also included in the cash planning. In the Indian context, many extra-budgetary funds are held outside the budgetary *"Consolidated Fund"* into the *"Public Account"*. However, the cash balances of the latter funds are also held in the TSA at the Central Bank. Some cash of the Government is held in "Public Deposit" accounts in the commercial banks which remain outside the TSA.

III. Effective cash forecasting

Ability of make accurate projections of short-term cash inflows and outflows. Perhaps this is the most important key feature of Cash Management and we will elaborate it in detail. For effective cash management, the treasury needs to develop accurate and timely short-term estimates of cash inflows and outflows. Some of the key steps are outlined below:

The starting point is an annual cash plan, prepared in advance of the fiscal year, based on the budget estimates (and extra-budgetary funds). Historical data of revenues, expenditures, the borrowing plans, flows to/from extra-budgetary funds along with anticipated flows for the next fiscal year form the baseline estimates.

Once the annual plan is established, it becomes the basis for rolling three-month projections, and within that projection, an operational cash management plan for the month ahead. *The three-month projections and monthly plans are revised each month on a rolling basis.*

The cash plans are prepared based on combination of both on Top-Down and Bottom-Up approaches. The *Top-Down cash flow forecasts* are based on: budget revenue estimates, budget appropriations, TSA, changes in policy and regulations, and contingencies. While the *Bottom-Up* cash flow forecasts are based on: inputs from spending agencies, revenue agencies, extra-budgetary funds, public debt plans, calls for guarantee fees, and inputs from sub-national governments.

The operational cash management plan for the month ahead includes at least a weekly or ideally a daily forecast of cash outflows and inflows. This cash management plan is prepared and updated at least every week. Active cash management must have a daily cash management forecast and plan.

The cash flow forecasting uses time series econometric models, moving averages, growth rates, or schedules, as appropriate, to the item being forecasted.

The cash management unit needs to assign a few staff to update the technical forecasts. The team of officials is usually quite small (perhaps 3–5 people full-time). It is also appropriate to assign 1-2 persons within this team for reviewing the forecasts with actual cash reported, to improve the forecasting process.

[7]In France, the Cash and Debt Management Agency - Agence France Trésor (AFT) is perhaps the most extreme example which manages not only the central government's cash balances, but also those of all local governments and a number of other public entities.

South Africa has one of the most extensive cash forecasting system. They prepare a three year annual cash forecasts based on their Medium-Term Framework, which then is broken down to daily forecasts and even twice daily forecasts, as summarised in the Box below:

Long term forecast	***Three year forecast***		
	Year 1	*Year 2*	*Year 3*
	Three year monthly forecast		
	Year 1	*Year 2*	*Year 3*
	Months 1 2 3 4........12	*Months 1 2 3 4........12*	*Months 1 2 3 4........12*
	Current year rolling monthly forecast		
	Year 1		
	Months 1 2 3 4........12	*Rolling into Year 2*	
Short term forecast	***90 day daily forecasts***		
	Days 1 - 90		
	Current day firm forecasts		
	11:00 hrs	*15:00 hrs*	

As an example of Bottom-Up approach, in 2011, Turkey introduced a web-based portal to collect data from sector ministries and other spending agencies to submit their expenditure plans, and expected revenue collections every month with a daily breakdown.

To incentivize improved cash forecasting, in United Kingdom, the spending ministries with a poor forecasting record have penalties deducted from their following year's expenditure provision, which are recycled to ministries with better forecasting records. The penalties are based on the extra market cost that the cash managers face in having to borrow or lend at short notice as a result of forecasting errors.

Assessment of cash flow forecasting and cash management. A World Bank tool for debt management assessment has been implemented in more than 80 developing countries. Summarised details, relevant for cash management, are given in the Box below.

The Debt Management Performance Assessment (DeMPA) is the World Bank's diagnostic tool for assessing performance using a comprehensive set of indicators for full range of government debt management functions.

The DeMPA is modelled on the Public Expenditure and Financial Accountability (PEFA) framework and assesses country's debt management practices under five pillars with 15 Debt Performance Indicators (DPIs).

Evaluation under DPI 11 - Cash Flow Forecasting and Cash Balance Management - assigns a score from A to D. The score of C is expected to be the minimum standard for a country. A score of D indicates that country is not meeting even the minimum practices. DPI 11 measures both cash forecasting and cash balance management practices.

DPI 11 requires rolling monthly forecasts extending to three months ahead; cash plan must be shared with debt managers; positive cash balances are maintained using market instruments (not overdraft from Central Bank) and cash balance earns market rate, for getting Score C.

Cash forecasts have weekly breakdowns for month ahead; forecasts are updated monthly; and a liquidity buffer is maintained for getting score B.

Cash forecasts have daily estimates month ahead; weekly breakdown for three months ahead; and cash balance target have been achieved for 90% of days in previous year for getting Score A(which is the highest).

IV. Enabling IT system

An adequate transaction processing and accounting framework. In advanced countries, high-quality, timely, and comprehensive data on government cash transactions are usually readily available in the government's accounting system, which is fully computerized. In order to make short-term projections, cash managers need to have adequate historical and current data for projecting all inflows and outflows from the TSA (revenue remittances, payments for expenditures, debt transactions, etc.). Indian Government has a comprehensive FMIS system called the Public Financial Management System (PFMS) which has extensive and real time data on disbursements and a daily or near-real time data on the revenue collections. PFMS also has few years of historical accounting for analysis.

V. Seamless Information sharing

Timely information sharing between the central treasury, revenue-collecting agencies, spending ministries, treasury branch offices and the central bank. For short-term cash projections, relevant players need to contribute to the provision of necessary data to the cash managers. Information sharing networks should be set up, and there should be clear understanding of the responsibilities of each government entity for different aspects of cash management.

VI. Coordinated Institutional Arrangements

Appropriate institutional arrangements and responsibilities. Advanced Economies have a dedicated Cash Management Unit (the Cash Managers) either as a distinct unit within the Treasury or as a combined unit of debt and cash management or as a separate entity for these purposes. Cash managers need to collaborate with those responsible for debt management, especially when cash management and debt management are conducted in separate units within the MoF. Since active cash managers' focus in advanced countries is very short term (to maximize returns on idle cash balances and minimize borrowing costs on a daily basis), there is a need to collaborate with government debt managers whose outlook is somewhat more long term *(that government borrowing plans be orderly as per the pre-announced regular schedules of government borrowing, consistent with annual debt management plan)*, and with the monetary authorities in the central bank.

In Australia, spending agencies are not only responsible for spending authorization and internal control, but also for internal cash management. Although financial transactions are made from agencies' bank accounts, all end-of-day balances are swept into the TSA at the Reserve Bank of Australia. In effect, there is a two-tier cash management system: one at the level of spending agencies, and a consolidated cash management system at the federal level.

VII. Contemporary Banking Framework

Utilization of modern banking, payment, and settlement systems. In modern banking systems, commercial banks are networked electronically with their own branches, and where the interbank settlement system is well established via real time gross settlement (RTGS) systems and integrated with the central bank's payment and settlement system. Advanced economy treasuries avail themselves to such tools and use electronic revenue transmission and payment methods. Indian banking and settlement system is advanced and meets the requirement of modern cash management. Government also utilizes electronic receipts and payments through its IFMIS system and TSA.

VIII. Cash Balance Management

Cash balance management and use of short-term financial market instruments. Cash balance management is the second most important aspect of cash management after cash forecasting. Ensuring the availability of required resources to finance the budget expenditures is the common objective of debt and cash management. The main difference resides in shorter and longer time horizons targeted by cash and debt managers respectively.

Cash balance management comprises of two main activities:

1. Maintaining a minimum cash balance – "buffer".
2. Financing shortfalls in cash and investment of surplus cash.

Buffers ensure that an amount of cash is available to meet unexpected changes in cash flows (lower revenues or higher expenditure compared to the forecast) so that the cash manager can still be able to fulfil projected payment obligations at due date. Liquidity buffers also mean increasing the cost-of-carry of keeping these resources, hence there is a trade-off between the cost and the risks that are meant to be mitigated by the cash cushion. (For example, end-day balances in France, the United Kingdom, and the United States are 100 million Euro, 200 million pounds approximately, as it varies from week to week, and US$5-7 billion respectively). (Sweden sweeps the bank accounts of its 240 or so spending agencies three times per day. With such intense daily cash management, Sweden is able to maintain a zero end-day balance in its TSA at Sweden's Central Bank).(Australia does not have an explicit daily operating target).

Another aspect of modern cash balance management is the Government is remunerated by the Central Bank at market rates, or other rates as per the mutual agreement of the

Government and the Central Bank, for the cash balances held by it. This practice is useful to the government in two ways – the Government obtains a regular stream of revenues from the Central Bank, and secondly it distinguishes operational costs of holding cash from other profits of the Central Bank, a portion of which it receives infrequently as dividend.

In advanced countries, when there are temporary cash shortages or surplus, the government's cash manager, borrows or lends from/to the financial markets. *In EU countries as also in USA and UK, treasuries often borrow/lend in* ***repo markets***. **Commercial papers** - money market instruments - are also issued by European DMOs including Austria, Belgium, Denmark, Ireland, Italy, Netherlands, Sweden, both in EUR and USD, as a way to diversify the investor base to manage their cash position, for maturities up to one year. **T-bills** are also issued/repurchased by cash managers where offered amounts are defined according to immediate cash needs and tenors determined by the length of the expected cash shortages/surpluses.

Governments have also been expanding their sources of short-term funding/investment using Intra-government borrowing/lending through pooling government resources beyond the central government in the TSA. *For example in France – TSA held at Banque de France, is composed of approximately 5,000 government accounts including local, regional governments and government-funded institutions, as well as the European Union. The main objective of this centralization is to provide an additional funding source to the government and reduce the size of the funding operations in the markets. In South Africa – TSA is held at fully-owned subsidiary (Corporation for Public Deposits – CPD) of South African Reserve Bank which has the task of investing excess of cash pooled from the national government, provincial governments, and state-owned corporations (SOCs). National government uses these funds for debt and, mostly, cash management. Provincial governments can also borrow from this pool of funds to finance short-term cash imbalances, under predefined limits.*

In India the money market is developed and is fully utilized by the Central Bank for its monetary operations and cash management purposes.

IX. Integrated Cash & Debt management

Integration of debt and cash management. From a cash manager's perspective, the pre-announced borrowing plans may result in borrowing too much, or too little, thereby thwarting the effectiveness of daily cash management. With active cash management, the MoF needs to share, on a daily basis, its updated projections of government cash needs. It is useful for the Central Bank to compare these projections with its own projections of bank liquidity. These apparent conflicts can be resolved by close coordination and exchange of information and intentions between government cash managers, debt managers, and the Central Bank. Advanced countries also frequently place large amounts of surplus liquidity in the market, through reverse repo operations or placing term deposits with commercial banks. Movements of government funds from the central bank to the financial markets (or vice versa) affect bank liquidity and hence market interest rates. Government cash managers, therefore, need to collaborate with the central bank, especially concerning any unanticipated movements of government funds. *In the United States, for example, there is a daily conference call between the U.S. Treasury and the Federal Reserve Bank, where proposed movements of federal funds are indicated.*

Having discussed the essential modern cash management features and practices, we now come to look at the practice as followed in India.

PART-III

Cash Management practices in India

Budget Office of MoF, had issued guidelines for cash management system based on "modified exchequer control-based expenditure management system". Key features of these guidelines are:

- Line Ministries would prepare Monthly and Quarterly Expenditure Plans (MEPs/QEPs) based on the approved budget. These plans would form the basis of cash forecasting and preparation of indicative calendar of borrowings.
- QEP amounts, which are the sum of the three MEPs, form the expenditure ceilings for the line ministries for the quarter (ceilings can be relaxed with prior approval of MoF).
- Last Quarter QEP and last month MEP of each financial year limited to 33% and 15% of budget appropriations.
- Large expenditures of about USD 250 million to be released between 21st and 25th of last month of each quarter to coincide with large tax receipts.
- Other significant expenditures between about USD 25 to USD 250 million to be released between 21st and 25th of each month to coincide with tax receipts.
- Prior approval of budget office required for single large payment of more than USD 625 million.
- Month/ quarter wise non-tax receipt plans to be communicated to Budget Office.
- Large non-tax receipts to be received in H1 of the financial year.

The Cash Management guidelines of Budget Office have been subsequently modified in the year 2020 and later to manage COVID 19 related contraction in resources and re-prioritization of health related expenditures. Further modifications to these guidelines were released in May 2022 to liberalize some expenditure ceilings and also to incorporate revised guidelines for fund releases to provincial governments and entities implementing central government programs. In November 2022, further liberalization of prior approval of MoF relaxed for large disbursements over USD 60 million for capital projects.

Public Debt Management Cell (PDMC) has been set up in MoF, Government of India, as an interim arrangement before setting up an independent and statutory debt management agency - Public Debt Management Agency (PDMA). PDMC is responsible for, among others, planning borrowings of the Government, including market borrowings and monitoring cash balances of the Government, improving cash forecasting and promoting efficient cash management practices.

PDMC also publishes a Public Debt Management Quarterly Report which mentions summary of cash balance operations for the quarter, although the distinction between cash and debt

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[8]Budget Division, Ministry of Finance, Government of India F.No 15(39)-B(R)/2016 dated 21 August 2017

[9]Rs 20,000 million

[10]Rs 2000 to 20,000 million

[11]Rs 50,000 million

[12]Single Nodal Account and Central Nodal Account procedures are not discussed in this paper

[13]More than Rs 5,000 million

management operations remain blurred. As per the PDMC report for quarter ending September 2022 [14], the temporary cash flow mismatches, in case of deficit in the cash account of the Central Government, are largely managed through a combination of issuance of Treasury Bills for fixed tenors of 91, 182 and 364 days, Cash Management T-Bills and access to the Ways and Means Advances facility from RBI. Surplus cash balances in Government cash account are lent in market (through RBI) or may be used to buy-back of securities from the market. Further, the Reserve Bank conducts purchase/ sale of G-Secs under its Open Market Operations, whenever required, based on its assessment of prevailing and evolving liquidity conditions.

While cash management at Central Bank with interaction with PDMC is fully operational based on cash balances at the Bank, borrowing calendar, and prior information about large payments, the active cash forecasting remains a challenge for the government. The main tool for cash forecasting remains the MEPs which remain static throughout the year and are in the nature of expenditure control as mentioned in Part I of this paper. This is despite the fact of having an efficient and real time IFMIS (PFMS) which is implemented in all line ministries other than the three [15] which have their own FMIS (not fully integrated with the Government's main IFMIS). The PFMS system, managed by the Treasury, if fully leveraged, can be the focal tool for cash forecasting. The PFMS can provide prior information days or even weeks in advance of cash disbursements as it captures the work orders placed through the government's e-procurement system [16], receipts through tax IT systems, authorization of payments, bills submitted for payment and the payments themselves. The entire payroll is also processed through the PFMS system as also disbursements to sub-national governments, parastatal entities, and direct cash transfers. It is also integrated with non-tax revenue system to have real time information on such receipts. PFMS also captures payment and receipt information from the separate FMIS systems of the three line ministries which are not part of the main system. Thus the Treasury Office as well as the sub-Treasuries located in line ministries [17] can form the backbone of the cash forecasting system.

The other challenge is inadequate systems and procedures of detailed bank reconciliation between the cash balances as per General Ledger (GL) of the Government and bank statements from the Central Bank. This is due to absence of coding of payment units in the Central Bank data and no information available to Treasury about daily amounts of cash which are swept-into / reimbursed-from by commercial banks to/ from the Central Bank. Another challenge is the absence of cash plans for non-budgetary funds including from the Public Account.

[14] https://dea.gov.in/sites/default/files/Quarterly%20Report%20on%20Public%20Debt%20Management%20for%20the%20Quarter%20July-Sep%202022.pdf

[15] Ministries of Defence, Railways and Telecommunications.

[16] Government e-Marketplace (GeM)

[17] The sub-offices of the Controller General of Accounts called the Offices of Chief Controller of Accounts

PART-IV

Reform plan for cash management

Of the nine features required for modern cash management, only two features of active cash forecasting and institutional arrangements and responsibilities are essentially missing from the Indian context. Government would benefit to adopt full features of modern cash management as it would help in fine tuning the borrowing/ buy back operations and reduce the cost of cash management at the Central Bank. Following steps are recommended for implementing an effective and modern cash management.

Steps	Activity
Step I	Setup a Working Group to devise a modern cash management system taking into account the required features. The Working Group to consist of representatives of Budget Office, PDMC, Treasury, Central Bank, ministries not covered by the central IFMIS, some commercial banks dealing with government transactions, some line ministries, and tax offices. The working group to identify the existing gaps and prepare a policy document covering all aspects of the nine must-have features.
Step II	Obtain approval of Secretary MoF and Finance Minister of the policy
Step III	Strengthen cash management unit at PDMC to have an active focus on cash management rather than only on debt management and rename it as Public Debt and Cash Management Cell (PDCMC). Relieve the Budget Office of cash management functions (Other than collating original cash plans along with the annual/revised annual budgets)
Step IV	Set-up Cash Forecasting Unit- CFU (about 5 personnel) at the Treasury (Controller General of Accounts office) to leverage the information available in IFMIS (PFMS). Set up sub- cash forecasting units (about 2 personnel) at the sub-Treasury Offices in the line ministries.
Step V	Line Ministries to prepare and submit Yearly+Quarterly+Monthly Cash Plans (YCP+QCP+MCP)- to also include non-tax receipts + extra-budgetary funds (MCPs to be derived from QCPs and not vice-versa). Sub-National governments and parastatal entities receiving Government grants/funds to also prepare YCP/ QCP/MCPs. These should be updated each month for the following month on rolling basis and to be shared with CFU. Remove hard ceilings on quarterly disbursements based on current QEPs. Instead provide incentives and disincentives to line ministries for meeting the desired pace of expenditure.
Step VI	Treasury and Sub-Treasury Offices to prepare rolling Weekly Cash Forecasting Plans based on the MCPs and share with PDCMC (in year 1 of adoption of the new procedures). Progressively (over the next financial year) Treasury and sub-treasuries to prepare Daily Cash Forecasts for the next day.
Step VII	As cash forecasting schedule is brought down to weekly / daily basis, need for timing the disbursements

with receipts from taxes/other receipts to be reviewed and ultimately removed. Retain provisions relating to prior approval/ information of "large"/ "very large" disbursements.

Step VIII Enhance bank reconciliation system between the Treasury and the Central Bank to have a one-to-one correlation between payment units' GL and the Central Bank statements.

Step IX Treasury to start monitoring daily sweeping/ reimbursements by commercial banks, both of the timing and the amounts, and reconcile with the GL and Central Bank statements.

Step X MoF may consider intra-government borrowing system between the central and provincial governments and between the provincial governments themselves to reduce market related borrowings

With the adoption of a phased cash management implementation plan the Government could achieve a major reform in Public Financial Management. Once successfully implemented, the model could be shared with the provincial governments for adoption. This could bring about synergies in cash management both at central and provisional governments as well as bring stability in the financial markets.

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Views expressed in the article are personal to the Author.

QUANTIFYING SAVING ON INTEREST COSTS DUE TO IMPLEMENTATION OF TSA SYSTEM IN CENTRAL AUTONOMOUS BODIES (CABS)

- Sanjeev Shrivastava and Narender Singh

Abstract

Two Central Autonomous Bodies (CABs) viz. IIT Delhi and ICMR were brought within the purview of the TSA system through a pilot project launched in FY 2017-18 by Government of India. Subsequently, in 2020-21 several more CABs were brought within the ambit of the TSA system in a staggered manner. By FY 2021-22 almost all CABs receiving large amount of Grants in Aid were brought within the fold of the TSA System. One of the primary objectives of changing the system of funding the CABs was to cut down the interest cost borne by the Government of India. This was to be accomplished by Just-in-time release of funds from Government Account at RBI thereby bringing about a reduction in the need to borrow funds by floating Government of India securities. This paper is an attempt to quantify the interest saved by the Government of India in the FY 2021-22 due to implementation of TSA in CABs.

Introduction

In an IMF Working Paper by Pattanayak, S., & Fainboim, I. a Treasury Single Account (TSA) is defined as a *unified structure of government bank accounts that gives a consolidated view of government cash resources. Based on the principle of unity of cash and the unity of treasury, a TSA is a bank account or a set of linked accounts through which the government transacts all its receipts and payments. The principle of unity follows from the fungibility of all cash irrespective of its end use. While it is necessary to distinguish individual cash transactions for control and reporting purposes, this purpose is achieved through the accounting system and not by holding/depositing cash in transaction-specific bank accounts. This enables the treasury to delink management of cash from control at a transaction level.*

To put it succinctly, the primary objective of a TSA System is to ensure effective aggregate control over government cash balances. The consolidation of cash resources through a TSA arrangement facilitates government cash management by minimising borrowing costs. In the absence of a TSA, idle balances are maintained in several bank accounts. A government lacking effective control over its cash resources can pay for its institutional deficiencies in multiple ways. Firstly, idle cash balances in bank accounts often fail to earn market-related remuneration. Secondly, the government, being unaware of these resources, incurs unnecessary borrowing costs on raising funds to cover a perceived cash shortage. Thirdly, idle government cash balances in the commercial banking sector are not idle for the banks themselves, and can be used to extend credit by the banks. Draining this extra liquidity through open market operations also imposes costs on the central bank.

The Expenditure Management Commission (EMC) vide para 125 of its September 2015 Report has recommended that in order to minimize the cost of Government borrowing and to enhance efficiency in fund flows it is imperative to bring CABs gradually under TSA System. Now that all major Central Autonomous Bodies (CABs) have been brought into the TSA system; it is important to gauge how effectively the primary reason for this changeover i.e. reduced borrowing costs has been met.

Erstwhile Mechanism of Fund Disbursal to Autonomous Bodies

Government of India provides funds to various CABs in the form for Grants in Aid (GIA). A substantial portion of the receipts of these CABs come in the form of GIA from the Government of India. The GIA can be for salary of the CAB staff, their capital expenditure or any other general purpose. Generally the funds were being disbursed on a monthly basis by the funding Department/Ministry depending on requirement of funds at CABs.

In the erstwhile fund flow mechanism to CABs, the Programme Division initiated the process by disbursing funds from Government account to the bank account maintained by the CAB through the Pay and Accounts Office of the Department/ Ministry. The CAB in turn transferred funds to various other sub-ABs under its administrative and financial control to implement the Government program. The Government, therefore, effectively prefunded the CABs involved in implementing a program. To prefund these CABs; the Government (since its expenditures exceeded its receipts) usually borrowed money from the market before this money was ultimately used by the CAB and various sub-CABs. The fund lying unutilised in the bank accounts of the CABs represented the float of money in the system which was not being used at that particular moment but the Government was paying the borrowing cost for the same. By bringing CABs under the TSA, the float of money in the system would be minimised resulting in savings of corresponding borrowing cost.

Treasury Single Account Mechanism for CABs

The Reserve Bank of India (RBI) is the banker to the Government of India. All accounts related to various Departments/Ministries of the Government of India are maintained with the RBI, thereby establishing a TSA system.

The Public Financial Management System (PFMS) of the office of Controller General of Accounts (CGA) brought all CABs receiving GIA from the Central Government on the online payment system. The CABs are using PFMS not just to receive funds from the Central Government but also to make payments to their vendors including employees, suppliers, Direct Cash Transfer beneficiaries, students etc. through this system.

The TSA system for the CABs and 2nd level sub-CABs if any; required the CABs/ sub-CABs to open accounts with the RBI. The Programme Division handling a program sanctions funds and the PAO passes the bill by sanctioning an assignment of a particular amount to the RBI account of the CAB. It is important to mention here that no actual movement of funds takes place. The CAB can make use of this assignment at its level to pay its vendors or it can transfer the fund assignment limit to its sub-CABs. When the CAB or the linked sub-CABs make a payment, the money is drawn from the RBI account of the Department/Ministry. Thus, funds are required only at the time of their ultimate use. The problem of float of money in the system is taken care of and this in turn results in savings on borrowing cost for the Government of India.

Methodology to Estimate Savings on Borrowing Cost by bringing CABs in the TSA System

To estimate the borrowing cost we need to estimate the float of money in the system. The TSA system for CABs is being implemented on the PFMS which provides an instant picture of funds (Assignment limits) for an Autonomous Body. The unused assignment limit at various levels of CABs would correspond to the float of money under erstwhile funding mechanism on a particular day.

When an assignment of funds is made to a CAB the accounting entry is as under:

- Dr. Expenditure head of the particular Ministry
- Cr. MH 8454 Funds under TSA System
- When a CAB makes a payment from the assignment limit given to it, the accounting entries are:
- (-) Cr. 8454 Funds under TSA System
- Cr. 8675 Reserve Bank Deposits

To know the amount of unused assignment limit on a day we made use of accounts data maintained in the e-Lekha system of the CGA. The accounting Major Head (MH) 8454 – 'FUNDS UNDER TREASURY SINGLE ACCOUNT SYSTEM' provides the amount of unused assignment limits for CABs under the TSA. The end of the day figure for MH 8454 for all 365 days of the Financial Year 2021-22 was obtained. We added amount for all 365 days to get the amount of outstanding assignment limit in unit of Re-Days. By multiplying outstanding assignment limit in Re-Days with borrowing cost of Government for a day we get corresponding amount of interest cost that Government would have had to incur in the erstwhile system of funding.

The outstanding assignment for all ABs under the TSA for FY 2021-22 for entire year was 33,01,519 Crore Re-Days **(Annexure)**. The average borrowing cost was 7% annual rate of interest as taken from RBI sale of Government bonds for the FY 2021-22. So, interest amount for outstanding float of money would have been 3301519*0.07*(1/365) = Rs. 633 Crore. Thus, had these ABs been prefunded as in erstwhile system of fund disbursal, the Government would have had to pay about Rs. 633 Crore as interest payment.

What, however, has to be kept in mind is that in the erstwhile system, the CABs were keeping their unused funds in savings bank accounts and thus would have earned interest on outstanding unused funds. The CABs are supposed to return this interest earned back to Consolidated Fund of India. The average savings rate of interest provided by various commercial banks for the FY 2021 -22 was between 2.5% to 3% annual. If we were to take the upper limit of 3%, the CABs would have earned and remitted about Rs. 271 Crore to the Consolidated Fund of India. **Thus, the net interest cost saving to the Government of India is Rs. 362 Crores for the FY 2012-22.**

The above methodology does not take into account the reality that a commercial bank does not credit interest on daily outstanding balance in savings account of the entity at the end of the day. This is done on a monthly/quarterly basis based on the average balance in the account on a particular day. Further, it is presumed that there is no time lag between CABs earning interest on utilized fund and remitting the same to the CFI. The estimated saving to the Government, thus would be more than Rs. 362 crores.

An important assumption that we have made in estimating the above interest cost saving to the Government of India under TSA is that the frequency and timing of fund disbursal to ABs under TSA has remained unchanged from what it was in the erstwhile fund disbursal mechanism.

Conclusion

Two CABs were on boarded the TSA system in FY 2017-18 as a pilot. It was further extended to 18 more CABs from FY 2020-21 and 40 more CABs from FY 2021-22. The above estimated savings of borrowing cost of Rs. 362 Crores corresponds to CABs that were on the system for FY 2021-22. From FY 2022-23, Central Sector Schemes having budget outlay of Rs. 500 Crore and more were also on boarded on the TSA system. This would give a quantum jump to savings on borrowing cost from FY 2022-23. Further, Department of Expenditure has mandated that all CABs receiving more than Rs 100 Cr annually be brought on the TSA system from April 1, 2023. Also, a few Centrally Sponsored Schemes would also be moved on a pilot basis from the FY 2022-23 on the TSA System thereby boosting the saving on borrowing cost to the Government.

Finally, the budget outlay for CABs, Central Sector Schemes and Centrally Sponsored Schemes increases year on year. The saving on borrowing cost due to introduction of TSA will also go on increasing and will result in recurring savings for the Government of India.

Annexure

Date	Major Head	Transaction	Outstanding
01-04-2021	8454	₹ 21,02,64,93,260	₹ 21,02,64,93,260
02-04-2021	8454	-₹ 1,01,41,70,798	₹ 20,01,23,22,462
03-04-2021	8454	₹ 0	₹ 20,01,23,22,462
04-04-2021	8454	₹ 0	₹ 20,01,23,22,462
05-04-2021	8454	₹ 0	₹ 20,01,23,22,462
06-04-2021	8454	₹ 5,19,33,00,000	₹ 25,20,56,22,462
07-04-2021	8454	₹ 9,98,50,00,000	₹ 35,19,06,22,462
08-04-2021	8454	-₹ 3,78,50,912	₹ 35,15,27,71,550
09-04-2021	8454	-₹ 7,79,47,759	₹ 35,07,48,23,791
10-04-2021	8454	₹ 5,03,52,00,000	₹ 40,11,00,23,791
11-04-2021	8454	₹ 0	₹ 40,11,00,23,791
12-04-2021	8454	-₹ 43,92,87,117	₹ 39,67,07,36,674
13-04-2021	8454	-₹ 35,42,53,782	₹ 39,31,64,82,892
Data from 14-04-2021 to 20-03-2022 curtailed due to brevity.			
….	…..	…..	….
21-03-2022	8454	-₹ 36,61,70,24,669	₹ 1,25,45,36,32,971
22-03-2022	8454	₹ 3,24,32,18,804	₹ 1,28,69,68,51,775
23-03-2022	8454	-₹ 4,18,24,61,327	₹ 1,24,51,43,90,448
24-03-2022	8454	-₹ 1,69,35,81,349	₹ 1,22,82,08,09,099
25-03-2022	8454	-₹ 9,29,09,51,226	₹ 1,13,52,98,57,873
26-03-2022	8454	₹ 7,81,59,64,996	₹ 1,21,34,58,22,869
27-03-2022	8454	₹ 3,79,39,49,000	₹ 1,25,13,97,71,869
28-03-2022	8454	-₹ 18,08,61,38,429	₹ 1,07,05,36,33,440
29-03-2022	8454	-₹ 29,65,80,78,240	₹ 77,39,55,55,200
30-03-2022	8454	-₹ 17,64,61,81,864	₹ 59,74,93,73,335
31-03-2022	8454	-₹ 59,74,93,73,327	₹ 9
Total Re Days outstanding as balance			**₹ 3,30,15,19,56,78,765**

Note:

Re-Days- Amount of measuremement for the amount of outstanding rupee balance under the accounting classification 8454 across GOI at the end of the year.

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G 20 DATA GAP INITIATIVE

-Nalin Srivastava

Introduction

Disclosure of financial and accounting data is fundamental to assessment of economic and financial stability of a country. The financial data is becoming important in the context of dynamic and changing economic scenario and uncertainties associated with fiscal risks. The comparability of financial data is fundamental to economic decision making by various stakeholders. The presentation of data in different countries may vary depending upon the historical, legal and financial framework in the country.

The sovereign governments bring out their financial statements in public domain that may have far reaching implications. The size and scale of economic activity of the sovereign governments is so vast that it makes them more susceptible to errors in financial reporting. The economic and business environment within a country and its international stature is significantly dependent upon its financial reports. This is particularly significant in the light of globalization of business activities. Thus, the importance of reliability of financial statements of Sovereign Government cannot be overemphasized.

In 2009 the G-20 Finance Ministers (FM) and CBG (Central Bank Governor) endorsed the Data Gap Initiative to address gap in data revealed by global financial crisis. The first phase of DGI was successfully concluded and the second phase of the initiative was endorsed by the G-20 FMCBG in Sept.2015. Total 20 recommendations were adopted for the second phase of DGI out of which recommendation 15 and 16 Related to General Govt. Operation- **The recommendation 15 pertains to three major issues related to financial operations of the Government; namely**

- To disseminate quarterly general financial data consistent with GFS 2014.
- Adoption of Accrual Accounting by the G-20 economies is encouraged.
- The IMF to monitor the regular reporting and dissemination of timely, comparable and high-quality govt. finance data.
- These recommendations aimed at a consistent and uniform reporting format of the Government financial data for comparability across the countries.

Govt. Finance Statistics Manual 2014 (GFSM 2014) Reporting Framework:

The GFS framework is designed to provide statistics that enable policymakers and analysts to study developments in the financial operations and financial position of government. GFS also allows an assessment of the liquidity and sustainability of the finances of the general government sector or the public sector in a consistent and systematic manner. The GFS framework can be used to analyze the operations of a specific level of government, transactions between levels of government and the public sector. The GFS framework produces summary information on the overall performance and financial position of the general government or public sector through the use of balancing items, such as the net operating balance, net lending/net borrowing, and the change in net worth. These balancing items are defined and measured within the integrated and comprehensive GFS reporting framework.

The GFS framework records economic flows on an accrual basis, which means that flows are recorded at the time economic value is created, transformed, exchanged, transferred, or extinguished. However, the framework also encompasses the traditional cash-based reporting.

Implementation of GFSM Framework:

- The full implementation of the GFS framework is a long-term endeavor. The amount of time and resources required will depend on the needs and circumstances of each country.
- Initially, many countries may only be able to compile GFS for the budgetary central government, and only for cash-based transactions.
- Eventually, every country should compile GFS for the whole general government and public sector (and their subsectors) for all flows and stocks, on both cash and accrual recording bases, with sub annual and annual periodicity. Countries are encouraged to develop migration paths towards adopting the GFS framework.
- It is important to highlight that many of the initial steps towards embracing the latest GFS framework, such as the adoption of its classification and presentation system, can be done quickly and at low cost.
- Introducing these first steps can greatly benefit a country by facilitating the identification of institutional or data gaps in its current fiscal statistics.
- There is a direct relationship between the summary presentations of transactions under the *GFSM 2014* and the older *GFSM framework*.

Data Disclosure by Controller General of Accounts and compliance to Special Data Dissemination Standards:

The present disclosure of financial data by O/o Controller General of Accounts is largely compliant to international standards. The O/o Controller General of Accounts brings out financial data compliant to Special Data Dissemination Standard (SDDS) issued by International Monetary Fund. The IMF requires that these data should be available at regular intervals in public domain. The data is being published on CGA's website on a monthly basis. The annual accounts data for the Government of India is available in Finance Accounts and Accounts at a Glance published on CGA's website.

Implementation of G20 Data Gap Initiative:

O/o Controller General of Accounts has started bringing out financial data pertaining to Central Government operations or what is known as "Budgetary Central Government" in GFSM format. The compilation of this data is being done on a quarterly basis. The exercise required mapping of heads of accounts (as per List of Major and Minor Heads (LMMH)) with respect to the structure prescribed in GFS format. The categories in the Revenue sector have been mapped with the respective Receipt Major Heads of LMMH i.e., from Major Heads 0005 to 1606 and Major Head 4000 for Capital Receipts. The categories of expenditure are broadly defined on an economic pattern, mapping on expenditure side has been done with regards to Object Heads.

A concordance table was worked out to map all the receipt Major heads and expenditure Object Heads to bring out data in GFSM format. The data is being prepared on a quarterly basis and is sent to Department of Economic Affairs, Ministry of Finance which is the nodal ministry for compilation of GFS data. At the end of the financial year, the annual data is also being compiled in GFS format and sent to Finance Ministry. The exercise of compilation of GFS data has been started from the financial year 2019-20.

While preparing data in GFS format, an entry has been included for acquisition of financial assets on expenditure side. The same has been mapped to the Object Heads 54 and 55 pertaining to Investments and Loans and incurrence of liabilities has also been mapped to the concerned Major Heads. An entry related to accounting adjustments has also been made in the format.

The compilation of GFS data has been facilitated by the integration of Non-Civil Ministries for submission of accounting data. A working group was constituted to establish the required concordance table for amalgamation of accounting data received from Non-Civil Ministries. The GFS format brings out financial data under the broad categories Revenue, Expenditure, Net Assets, Gross Operating Balance, Net Operating Balance, Net Lending/Borrowing and the Fiscal Data.

The summary of this financial data brings out the financial strength of a country and ensures comparability of the data between the countries. The compilation helps in achieving greater consistency in the financial data of different countries. The framework supports fiscal analysis and is harmonized with other macroeconomic and statistical guidelines.

Conclusion

While most enterprises in the private sector bring out their accounts on commercial principles following a double entry accounting system, there is no uniformity in the Government Accounting Systems followed by various countries. The Government Accounting Systems range from Cash Basis Accounting to full Accrual Accounting. With most of the countries lying between the two extremes and have developed their own versions of Modified Cash and Modified Accrual Systems. In this context, uniformity of financial data becomes very important for comparability. GFSM framework provides the comparability of financial data and helps the stakeholders in taking informed decisions. India's compliance to this framework is an important initiative in the area of fiscal and financial transparency and would help in improving its credibility in the international arena.

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Views expressed in the article are personal to the Author.

DIGITISATION OF RECEIPTS COLLECTION

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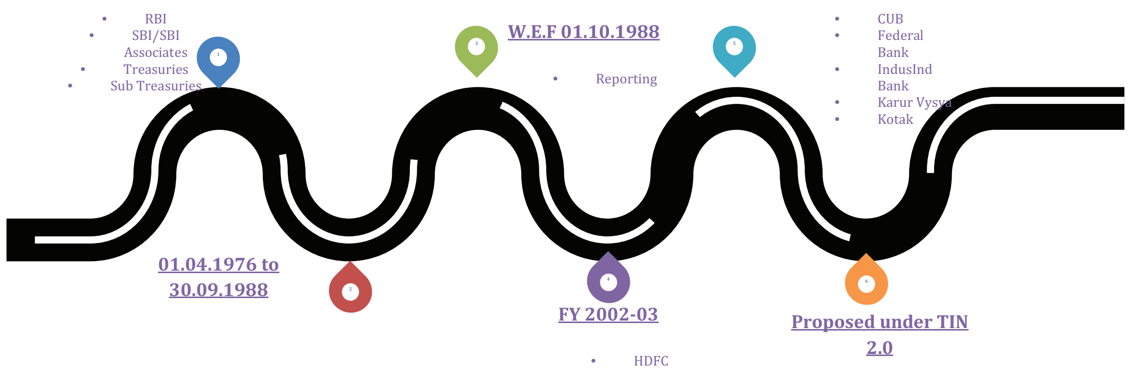
Introduction:

Modules have been developed/on-boarded in PFMS to enable accounting and reporting of the receipts of Direct taxes and Non-Taxes in digital mode. For Direct taxes a module Pratyaksh Kar Lekhankan Pranali (PRAKALP) has been developed in PFMS. Bharat kosh has been developed for Non-tax receipts in PFMS to enable remittance, accounting, and reporting of Non-tax receipts. The accounting and reporting of Indirect tax is done- through a System ARPIT developed by O/o Pr. CCA (CBIC) which is integrated with PFMS for seamless reporting of Indirect tax collection data. Thus PFMS becomes a nodal IT system for accounting and reporting of Tax and Non-tax resources through digital mode.

A brief description of these 3 initiatives is as follows:

1. PRAKALP:

In the last two decades the sphere of collection and accounting of Direct Taxes has evolved substantially aiming at maximizing the ease of tax payment and minimising manual intervention in its reporting. Earlier, only Public Sector Banks, that too maximum three in number, in metro cities were authorised to collect Direct Taxes besides the authorised branches of State Bank of India (SBI) and Reserve Bank of India (RBI). As the number of taxpayers increased, the need for increasing the number of Tax Collection Centres was felt. In 2002-2003, private sector banks were authorised for the first time to collect Direct Taxes. Moreover, the branch specific authorisation was also removed.

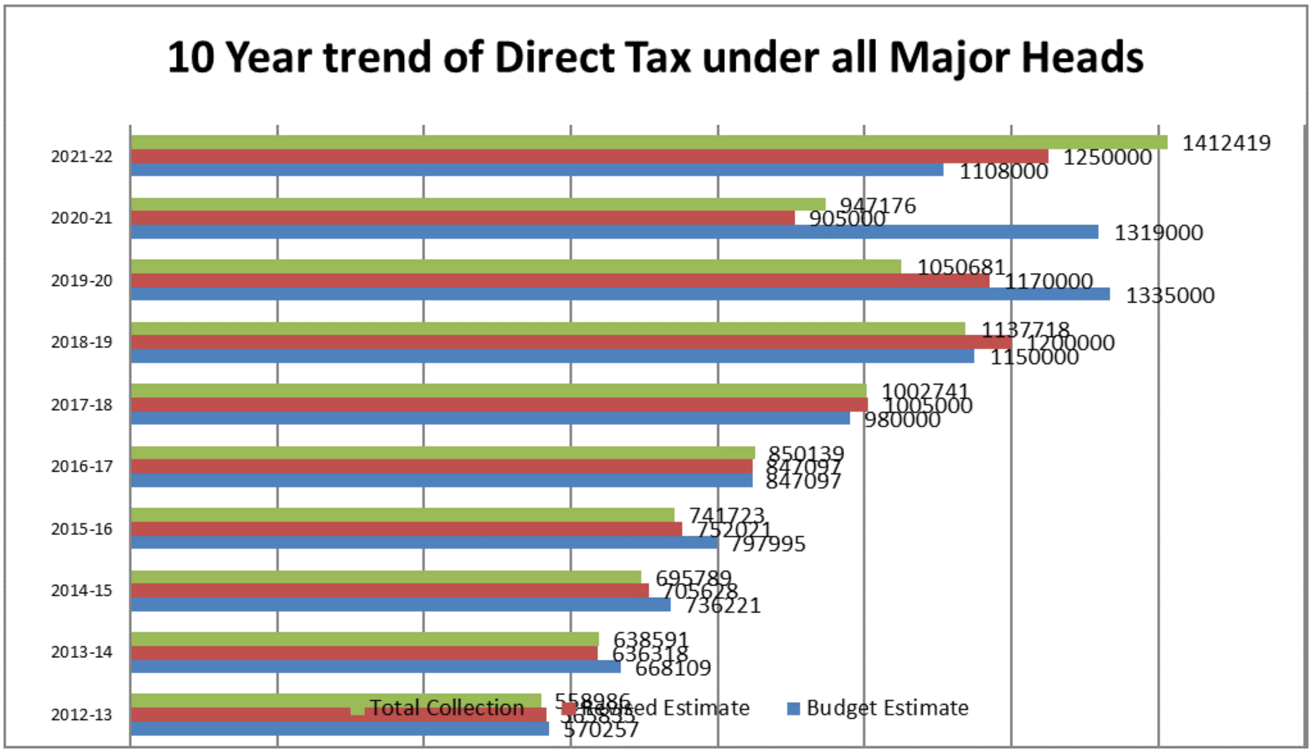


Increase in volumes of Tax Collection during the last decade:

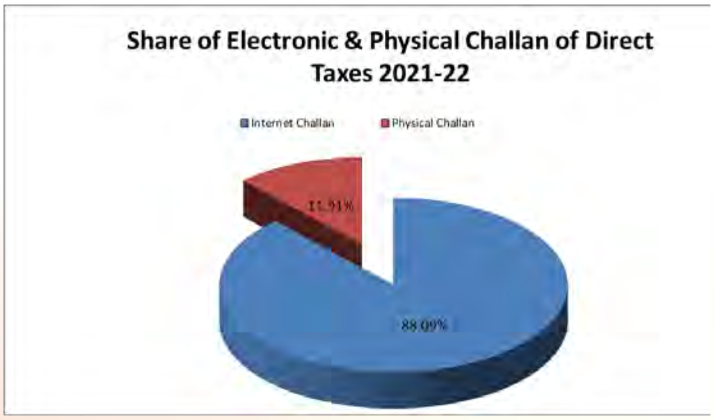
Direct tax is one of the major sources of tax revenue in Central Government. In the last ten years, it nearly trebled from Rs. 5,58,986 Crore in 2012-13 to Rs. 14,12,419 Crore in 2021-22 and increased more than ten times from that of Rs. 1,32,771 Crore in 2004. Such a steep increase in last two decades necessitated a robust IT platform to support the accounting and MIS needs. As a result, TIN 2.0- PRAKALP was conceptualized and developed to replace the previous OLTAS regime.

In addition to increasing the number of tax collection points, the system of accounting, reconciliation and reporting of collected tax has also evolved considerably since 2004; the year in which reporting Direct Tax collection went digital for the first time in the name of OLTAS (Online Tax Accounting System)

Rs. in Crores



Since the introduction of e-payment for direct tax collection in 2005, the generation of physical challans has reduced drastically. In F.Y. 2021-22, less than 12 % of total direct tax have been collected through physical mode. Further, the cost of collection through electronic mode is much lesser than the physical mode.



PRAKALP is an initiative of Pr. Chief Controller of Accounts, CBDT with the support of PFMS team of O/o CGA in tandem with TIN 2.0, a project of Income Tax Department under IEC 2.0 (Integrated e-filing and CPC 2.0).

TIN 2.0 aims to make entire process digital and paperless including the challan, scroll, put through, etc. Consequently, the accounting and reconciliation of direct taxes has also moved to a completely electronic platform. While TIN 2.0 system handles the tax payment and tax payers' database management, PRAKALP carries out reporting of direct taxes on the Public Financial Management (PFMS) platform.

Key Features:

PRAKALP has subsumed CFMS-RAMS system to cope up with the challenges posed in collection, accounting and reconciliation of Direct Taxes under TIN 2.0 regime. The key features of PRAKALP are as follows:

- Reconciliation of data received from three different sources; TIN 2.0, Agency Banks and RBI.

- Real-time consumption, accounting and reconciliation of CRN and CIN data received from TIN 2.0, Authorized Banks & RBI.
- Automated generation of Memorandum of Error (MoE) with banks for unreconciled data.
- Automated receipt of data from Authorized Banks & RBI for both direct tax receipts and refunds.
- Automated calculation of penal interest for delayed remittance of tax collected by banks.
- Facility for remittance of penal interest through Bharatkosh.
- Generation of MIS, reconciliation, and exception reports.
- Accounting data synced with PFMS on a real-time basis.
- Dashboard depicting the real-time Major Head-wise collection of direct taxes across all ZAOs.

Efficiency gains in tax collection:

- **Ease of Tax payment:**
  Under TIN 2.0-PRAKALP arrangement new modes of payments are introduced on one hand, and the branch specific authorisation of agency banks is removed, on the other. It will definitely increase the ease of tax compliance for the tax payers.
- **Reporting of Government Cash Balance:**
  PRAKALP is envisaged to be a reliable source for reporting of Government Cash Balance on real time basis. As a stakeholder of an integrated system, PRAKALP will ensure minimum data loss for accounting organisation.

- **Minimisation of Manual Intervention:**
  PRAKALP is envisaged with all the other stakeholders through automated interfaces. Hence, no manual intervention is required in accounting, reporting and reconciliation on the part of Principal Accounts Office or Zonal Accounts Offices. It will ensure minimisation of human error.
- **Easy Accessibility for All Stakeholders:**
  Unlike RAMS which is a client based software; PRAKALP is a web-based module under PFMS enabling all the stakeholders of this module to directly access data by the click of button from any part of the world.
- **Tool for Cash Management:**
  PRAKALP will have detailed data from all three sources. Further, development and introduction of Artificial Intelligence (AI) would facilitate calculative prediction on receipt accounting which would subsequently be used as a fruitful tool for cash management.
- **Better Co-ordination amongst the stakeholders at ground level:**
  Under PRAKALP environment one-to-one ZAO-Bank mapping has been conceptualised. It is assumed that it will result in better co-ordination at the ground level as one ZAO of this organisation will have to interact with a single agency bank at a time.
- **Accurate Calculation of Penal Interest and Ease of its settlement:**
  PRAKALP will receive credit notification (CIN- wise settlement report) from RBI on real time basis. Hence, it would be much easier to locate delayed remittance of challan and levy penal interest on the same. Moreover, the bank will be facilitated to pay the Penal Interest by direct login to Bharatkosh.
- **Minimisation of Cost of Collection:**
  Under TIN 2.0-PRAKALP arrangement the, cost of Direct Tax collection will be reduced in a couple of ways; first the turnover commission for physical challan which is more than three times that of e-challan will be reduced and secondly as manual intervention at banks' counter has been removed completely, the loss of government exchequer due to splitting of challans will be minimised.

Conclusion:

Emergence of new technologies opens up new horizons to any sector. Accounting is not an exception. PRAKALP aims to achieve new heights of excellence in accounting and reconciliation. The development of advanced module for routing Refund Advices through PRAKALP is under consideration. Further big data analytics and introduction of Artificial Intelligence (AI) in future may be used as an effective tool for cash management of Government of India.

However, with great possibilities come great responsibilities. Hence, special care needs to be taken to deal with various teething troubles like connectivity issues, lack of adequate knowledge to the front end user level.

2. ACCOUNTING & RECONCILIATION PORTAL OF INDIRECT TAXES (ARPIT)

The Accounting & Reconciliation Portal of Indirect Taxes (ARPIT) developed, administered and managed by the office of Pr. CCA, CBIC is a real time accounting and reconciliation system. ARPIT, operational w.e.f. 01.07.2017, aims at providing real time accounting and end to end reconciliation of all indirect taxes of Government of India namely, Goods and Services Tax (including various components such as CGST, IGST, UTGST others), Union Customs, Union Excise Duty and Residual Service Tax. The IT team of ARPIT works under the technical supervision of NIC. ARPIT has an inbuilt mechanism of end to end reconciliation among the various stakeholders viz. GSTN, ICEGATE, RBI & PFMS.

<u>Integration with GSTN, ICEGATE, e-kuber (RBI) and PFMS</u>

Apart from integration with PFMS for pushing the accounted data, ARPIT is integrated with the systems of Indirect taxes and RBI to enable accounting and reporting of Indirect taxes in a seamless digital mode.

ARPIT is integrated with GSTN through APIs for the daily CPIN/CIN data along with the EOD (End of the Day) data. The ARPIT Portal is functioning well to meet its objectives of challan-based accounting of GST and reconciliation with GST network on one hand and RBI on the other. The efficiency of ARPIT can be gauged from the fact that the accounts of GST are 99.9% reconciled with GSTN and RBI.

ARPIT is integrated with ICEGATE for accounting of Central Excise, Service Tax (through ACES); Customs Duty, IGST & Cess (through SEZ online collection and ECCS NEFT/RTGS collections). ICEGATE provides the challan data to ARPIT on real time basis through APIs. The digitally signed payment transaction data received from RBI (NEFT/RTGS) transaction is also shared by ICEGATE. The first level accounting is done based on the Challan data and payment data.

ARPIT is integrated with RBI through SFTP for all payments made through GSTN portal and ICEGATE portal. MoE (Memorandum of Error) Module – a unique error correction mechanism developed for GST collection.

Features:

Important features of ARPIT may be ummarised as below:

a) Automated 24 hours' reconciliation.
b) Seamless near real-time accounting.
c) Real-time integration with GST and ICEGATE
d) Publically accessible dashboards.
e) 450+ GB per year data management.

Way forward:

a. Consuming the APIs related to IGST Settlement through electronic mode
b. Introduction of NET BANKING in ICEGATE [CEP] payment gateway (under process)
c. Electronic Cash Ledger in Customs ECL (under process)
d. API integration with ICEGATE for data exchange to be carried out for accounting of scrips issued to the exporters under the various schemes with the check on budget allocations.
e. Integration is required with RBI to get the Put through data (Remittance of Collections made by Banks to RBI for payment made through physical mode) to reconcile and monitor data and also any delay in remittances by the banks.
f. Updated classifications codes mapped with functional accounts codes.
g. Updated details of Banks (through BSR Codes) with location attributes (local/outstation/Hill Areas).
h. Fetch the expenditure data from PFMS
i. Integration with all the authorized banks to have a tripartite reconciliation of the collections through both GSTN and ICEGATE portals.

3. Bharat kosh: Nodal IT module for collection of Non-tax receipts

Bharatkosh, formerly known as the **Non-Tax Receipt Portal**, was launched in **February 2016** to provide a one-stop solution for the collection and accounting of non-tax receipts for all Ministries and Departments. It is a 24x7 online web-based system that enables citizens, corporates, or any entity to make online payments to the Government through modes like credit cards, debit cards, internet banking, UPI, NEFT, and RTGS for availing services. Additionally, it also facilitates donations to Swachh Bharatkosh, National Disaster Relief Fund as a payment gateway and is integrated with several independent portals for the collection and accounting of receipts.

Coverage:

The module has collected receipts worth Rs. 8,76,23.49 crores since its inception through **423 PAOs and over 85 integrated websites with over 200 mapped purposes**. Prior to the launch of the module, several Ministries and Departments had come up with their own systems to facilitate the receipts and their associated workflow for respective Ministries in absence of a unified platform. To overcome this limitation, a new method of integration was designed wherein all such existing portals of various government offices could exist in parallel and only route their payments to be facilitated through Bharatkosh while receiving a reverse feed on the success or failure of the payment. Some of the major integrations include VAAHAN, DGFT, and Supreme Court to name a few. The module was instrumental in processing payment for license applications of all COVID-19 drugs being manufactured in India by all pharma companies through its integration with the Central Drugs Standard Control Organization which provide licenses to drug manufacturers for producing drugs in India.

Statistics:

2022 has been a significant year for Bharatkosh with the successful collection and accounting of 5G spectrum auction charges worth Rs 18,94,62,303/- through its LOBA integration with the SARAS portal under the Ministry of Telecommunication. The module backed GoI's initiative of "ease of doing business" through its integration with the National Single Window System, an initiative of the Department for Promotion of Industry and Internal Trade under the Ministry of Commerce and Industry, and MCA-21 under the Ministry of Corporate Affairs as a payment gateway. Bharatkosh is currently handling over 5 lakh transactions every month at ease with a concurrency of 20,000 users.

Support and Help desk:

Bharatkosh has a dedicated team to ensure a seamless experience for payment to the citizens. To make the portal more robust initiatives such as periodic load testing, augmentation of existing hardware resources, and enhancement of concurrent users are undertaken on a regular basis. Several parallel initiatives are underway to make the portal more user-friendly while ensuring a secure channel for use of financial instruments by the citizens. The privacy of transactional data and cyber security is ensured by making the latest cyber certifications mandatory for payment gateways operation on Bhartkosh. The robust infrastructure of the Public Financial Management System at the back-end of Bhartkosh ensures timely delivery of government goods and services to citizens in lieu of the payment made by them.

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USING PFMS DATA TO DEMOCRATIZE R&D RESOURCES

- Akhilesh Jha

Introduction

Public investment in science & technology is very critical in every economy. It is more critical that public investment in science & technology is evenly distributed, and the entire ecosystem is inclusive in all senses. There are many programs and schemes, designed in the scientific departments to seek and nurture scientific ideas; create and support infrastructure for innovation and then deploy the technology for public welfare and national priorities. There is an unwritten sequential pattern in the design of these programs which is very critical in the success or failure of one another. It is therefore very critical that the implementation and progress of such programs and schemes are monitored on regular basis. The most useful and reliable source to understand the pattern and attributes of resource allocation and their utilization is PFMS data.

PFMS transactions capture critical data points which can be analysed for many critical inferences for all the stakeholders, including the policymakers.

Department of Science & Technology of Government of India has demonstrated it very well as how PFMS data can be used to analyse the aspects of decision processes and by adding some other relevant attributes it can also become a tool of mid-course corrections in planning and execution- both.

Use of PFMS data in INSPIRE-MANAK

The most popular and deeply penetrated program of Department of Science & Technology is **INSPIRE-MANAK. INSPIRE AWARDS – MANAK (Million Minds Augmenting National Aspiration and Knowledge)** component of the scheme aims to motivate students in the age group 10-15 years and studying in classes 6-10 with the primary objective of building up a critical human resource pool for strengthening and expanding the science and the technology ecosystem in the country and promoting innovation. Under the scheme, 10 lakh ideas are targeted from 5 lakh schools across the country every year. The scheme has garnered wide accolades internationally. Many of the students nurtured under the scheme have made significant contributions in STEM, both in India as well as abroad.

To do an analysis of the MANAK beneficiaries PFMS data was used along with the additional attributes of data available with the Programme Division. A model was prepared with the relevant fields for analysis and more data fields were added from UDISE+ dashboard as probable corelating variables. The data was analyzed and visualized based on several parameters such as gender, class and student category at a State/ UT and district level. IFSC code, extracted from the PFMS report helped us mapping the data on India's map.

In 2019 when, for the first time, the PFMS data for the MANAK program beneficiaries was analyzed, there were many shortcomings noticed in the spread of the program. The first and foremost was that one particular district received more awards than the twenty States/UTs put together. There was a disturbing mismatch between the size of population and the awards given. There was an alarming gender disparity in the list of beneficiaries. The analysis continued and the outcomes were share with the Programme Division through a Dashboard and the suitable communications were sent to the State Governments. The results of this exercise were very encouraging. One of the most noticeable outcomes was that girls, who were lagging boys by more than 16% in the year 2019-20, left boys behind by 3% in 2021-22. Another highlight of persistent monitoring of the program through the dashboard was that students from 108 aspirational districts, out of 112, got the awards. A focused approach on aspirational districts ensured better performance by states like Rajasthan, Odisha, Chhattisgarh, and Bihar. Only 100 districts have received 53.06% of the awards.

The analysis of MANAK program based on PFMS data has helped us immensely in making it evenly spread, but there are still some critical issues which are to be addressed. For example, there are some states where girls' participation in the program is half than the numbers of boys. There are 68 districts which have not participated in this program. Data also suggests that more than 60% districts have received awards below national average. 53.06% of the total awards go to only 100 districts of our country. These are the new inferences that have been drawn and have been shared with the Programme Division to address them suitably.

Use of PFMS data in FIST

Let us take another program- **FIST (Fund for Improvement of S&T Infrastructure)** of the Department of Science & Technology which was analysed with the support of PFMS data and which has helped the department take a mid-course correction. This program is intended to provide basic infrastructure and enabling facilities for promoting R&D activities in new and emerging areas and attracting fresh talents in universities and other educational institutions. It is considered as complimentary support for enabling Departments/Centers/Schools/Colleges to pursue research activities more effectively and efficiently. Data of the Programme Division along with the PFMS data suggested that total 870 Universities/Institutions were supported for 3020 FIST projects worth Rs. 2989.84 crore. The analysis showed that one institute- IISc, Bangalore received 60 projects worth Rs. 178.73 crore, whereas there are thousands of other universities which have not received even one FIST project which is very critical for the S&T infrastructure. It also showed disparity among states. For example, Universities in Tamil Nadu and Karnataka have received FIST projects worth approximately Rs. 400 crores and Rs. 300 crores respectively, whereas, universities of Bihar received only Rs. 12.08 crore during the same period.

This analysis was taken very seriously by the Programme Division and the Department, and a special call was given in 2022 for the States lagged behind in the FIST program till now. This special call has helped many states receive FIST projects to create or augment the S&T infrastructure in their University/Colleges.

Use of Dashboards and Data Analysis

Data analysis of these two schemes are examples of what PFMS data can do in policy formulation and mid-course correction in policy implementation.

The outcomes of data analysis are shared through Dashboards and summary posters which are placed at different sites in the office premises of DST and in the rooms of the senior officials of DST for dissemination and necessary actions.

Apart from analysing the schemes and programs, the overall monitoring of expenditure is also done by a dashboard which is developed on

PFMS reports. This dashboard is interactive, cutomisable and can travel back and forth in time for any time-series analysis. Apart from the dashboards and posters, DST has also started bringing out data stories on the programs which are a good substitute of traditional reports. DST also organizes regular lectures and interaction on interesting areas of data from all walks of life which play an important role in letting the department know what all is happening inside and outside government around data and leveraging that for the benefit of the department.

Possibilities in PFMS data are immense which can be realized as per the requirements of the line ministries. Department of Science & Technology is just an example.

The mandate and thrust of analysing the PFMS data in Department of Science & Technology was propelled by the fact that office of Chief Controller of Accounts is also entrusted with the responsibility of steering the Data & Strategy Unit which has been established in all the Departments of Government of India by NITI Aayog.

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Views expressed in the article are personal to the Author.

SVAMITVA: A LEGAL PROPERTY RIGHT IN THE HANDS OF RURAL PROPERTY OWNERS

-Ram Darash Chouhan

Introduction

SVAMITVA – Survey of Villages and Mapping with Improvised Technology in Village Areas is a Central Sector Scheme, launched by Hon'ble Prime Minister on National Panchayati Raj (MoPR) Day, 24th April 2020 with the aim of providing 'Record of Rights' to the residents of rural abadi areas and providing Property Cards by mapping land parcels using most modern drone technology. The scheme is being implemented by Ministry of Panchayati Raj with the collaborative efforts of the State Panchayati Raj Departments, State Revenue Departments and Survey of India. The scheme intends to cover all the villages (around 6.62 lakhs) in the country over a period of five years from April 2020 to March 2025.

The 'Record of Rights' would facilitate monetisation of rural residential assets for credits and other financial services. Further, this would also enable updation of property and asset register to strengthen tax collection and demand assessment process of Gram Panchayats in States where property tax is devolved to the Gram Panchayats. Further, it will mitigate the risk of various disputes rampant between rural neighbourhoods.

Apart from demarcation of individual rural property, other Gram Panchayat and community assets like village roads, ponds, canals, open spaces, school, Anganwadi, Health sub-centres, etc. would also be surveyed and GIS maps would be created. Further, these GIS maps and spatial database would also help in preparation of accurate work estimates for various works undertaken by Gram Panchayats and other Departments of State Government. These can also be used to prepare better quality Gram Panchayat Development Plan (GPDP).

Need for SVAMITVA

Survey of rural land in India for Settlement and record of rights had last been completed many decades back but, ABADI (inhabited) area of villages were not surveyed/ mapped in most States. Hence, in the absence of a legal document, the owner of the property in the rural habitations were not able to leverage their own property as a financial asset acceptable by the banks for the purpose of availing loans and other financial assistance. Further, in the absence of authentic 'Record of Rights' land dispute was a common phenomenon. Fair tax collection by Gram Panchayat was also not possible for the same reason. To address these concerns, it requires to use the **latest Drone Technology and Continuously Operating Reference Station (CORS)** technology for capturing images.

Methodology

Framework for Implementation of SVAMITVA scheme issued by Ministry of Panchayati Raj prescribes the mechanism of survey of villages and mapping with improvised technology in village areas. As per the framework; Survey of India(SOI);

the technology implementation agency; prepares the National Topographic database on all scales, leveraging emerging technologies for topographical mapping at various scales as per user requirements using Airborne-Photography, Satellite Imageries (Stereo/Mono), Airborne-LIDAR, High Resolution Satellite Imageries (HRSI), Unmanned Air Vehicles (UAV) or Drone platform with Optical/Infra-Red/LIDAR sensors. High resolution mapping at very large scales for revenue, urban and water resources requirements has been in forefront for the past 3-4 years and SOI has evolved standard operating procedures for acquiring very high-resolution aerial images and preparing very large-scale maps at 1:500 scale using Drones. The high resolution and accurate image base maps have facilitated creation of the most durable record of property holdings in these areas with no legacy revenue records. Such accurate image base maps provide a clear demarcation of land holdings in a very short span of time compared to 'on ground' physical measurement and mapping of the land parcels. Further, these maps are free from measurement errors to a very large extent, which is not the case with physical on ground measurements. Such maps provide a visual aid to the landowners as well as to the revenue officials for identifying and resolving any property dispute and are also an invaluable tool for local level planning.

Objectives

SVAMITVA has the following objectives:

i. Creation of accurate land records for rural planning and reduce property related disputes.

ii. To bring financial stability to the citizens in rural India by enabling them to use their property as a financial asset for taking loans and other financial benefits.

iii. Determination of property tax, which would accrue to the GPs directly in States where it is devolved or else, added to the State exchequer.

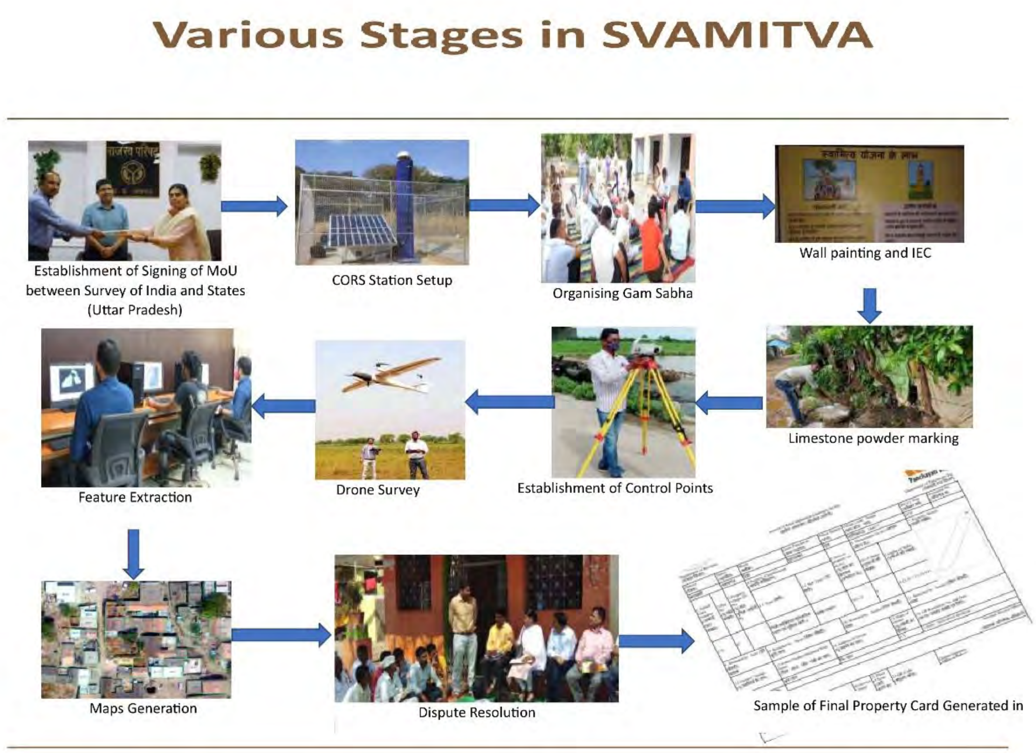
iv. Creation of survey infrastructure and GIS maps that can be leveraged by any department for their use.

v. To support in preparation of better quality Gram Panchayat Development Plan (GPDP) by making use of GIS maps.

Implementation Mechanism

There are various stakeholders whose roles and responsibilities are clearly defined in the SVAMITVA scheme guidelines. They are MoPR, SOI, State Revenue/ Panchayati Raj Departments, GPs, Property Owners, NIC-GIS and State Departments dealing with land records. MoPR does the funding and monitoring of the scheme at central level. SOI has been given the responsibility of Technology Implementation Agency which has also developed SAHYOG and SARATHI applications to automate the survey related activities. State Revenue Department inter-alia will carry out appropriate amendments to the Land Revenue Code/Act to grant due authority to the format of Property Card under SVAMITVA. Further, State Revenue Department may utilise the Data Centre Infrastructure available and funded under **Digital India Land Record Modernization Programme (DILRMP)** scheme of Department of Land Resources, Ministry of Rural Development for hosting and storing of the data created under the scheme and may also ensure the seamless integration of Bhu-Naksha related software with SVAMITVA maps. State Panchayati Raj Department will provide support to sensitise the villages about the project and its intended benefits utilizing Rastriya Gram Swaraj Abhiyan (RGSA) funds for IEC and preparing and updating the property tax register through GPs.

The State Government shall also be responsible for any future updation of rural abadi property data and conducting surveys on regular basis.



Scheme has component-wise cost norms which are establishment of CORS network (Rs. 24 lakhs per network), large scale mapping using drone (Rs. 6000 per village), IEC activities (Rs. 500 per village) and for the enhancement of spatial planning application and development of online monitoring system and setting up Programme Management Units at National and State levels.

There is a four layer monitoring and evaluation framework for timely monitoring, reporting and course correction, wherever required. These are at National, State, District and Panchayat levels which include relevant decision makers and subject matter experts. There is also a provision for third party assessment of the scheme during the implementation. The progress of the scheme is being monitored by online SVAMITVA dashboard.

Special Responsibility of States

SVAMITVA casts special responsibility on States not only to ensure better reach of the scheme benefits but also enhance the socio-economic profile of the Panchayats and making them self - sustainable and atmanirbhar. States are required to recognise and provide legal sanctity to Property Cards by amending State Revenue Codes/Acts. The procedure may be defined to determine mutation of property with due legal consultation. The mutation on occasion of voluntary (transfer, sale, gift, mortgage) or involuntary (succession) may be clearly defined. To increase the accessibility, the spatial record of property may be created and geotagged and the record of Property Card owners under SVAMITVA scheme may also be aligned with land revenue records.

Some States, like, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Uttar Pradesh and Uttarakhand have already amended their Acts/Codes. Different States have different nomenclature for the Property Cards, namely, 'Title deed' in Haryana, 'Rural Property Ownership Record (RPOR)' in Karnataka, 'Adhikar Abhilekh' in Madhya Pradesh, 'Sannad' in Maharastra, 'Gharauni' in Uttar Pradesh and 'SVAMITVA Abhilekh' in Uttarakhand.

Benefits of SVAMITVA scheme for the Areas under 6th Schedule

SVAMITVA will also benefit the State of Assam, Meghalaya, Mizoram and Tripura under 6th Schedule of the Constitution of India where Article 244 safeguards the rights of the tribal population through the formation of Autonomous District Councils (ADC). In these areas, mostly tribal population inhabits where tenure and individual rights over land is different from other part of the country. In some cases transfer by sale of individual holdings within a village can only take place within members of the same tribes. The transfer of land holding rights to non-tribal is prohibited by law in all the hill areas to prevent alienation of tribal land.

In areas having permanent ownership of land inside ADCs but Records of Rights has not been given due to various reasons, SVAMITVA scheme could help bring such fringe segment of the population into the mainstream and empower them to avail financial and other benefits. Property tax collection in ADCs like Karbi Anglong, Assam can be further augmented through better demarcation of properties.

Fund Flow under SVAMITVA

Government of India has approved SVAMITVA scheme with a total outlay of Rs 566.23 cr over a period of five years from April 2020 to March 2025. Being Central Sector Scheme (CSS), SVAMITVA scheme has to follow PFMS guidelines on CSS dated 9th March 2022 issued by Ministry of Finance. Department of Expenditure, Ministry of Finance vide its OM dated 15th June 2022 further mandated that fund under SVAMITVA to be released 25% in each quarter, to Survey of India (SoI) shall be through Letter of Authorisation (LoA) route and to other Implementing Agencies (IAs) through CNA accounts. Consequently, there are two modes of fund flow: one, fund flow through bill presented to PAO for payment to state CNA bank accounts and NICSI (Vendor) and two, fund flow through LoA to Survey of India. Rs 316.84 cr. has been released till 10.02.2023.

Achievements of the Scheme

SVAMITVA scheme has achieved following milestones till 27.01.2023:

- Drone survey has been completed in 2.22 lakh villages across the country which is 59.6% of the total targeted 3.72 Lakh villages to be covered under the SVAMITVA Scheme.
- 1.08 Crore property cards have been generated for 67,500 villages.
- Drone flying has been completed in all inhabited villages of Haryana, Uttarakhand, Lakshadweep, A&N island, Delhi, Goa, Puducherry and Dadra Nagar Haveli, Daman & Diu
- Scheme is saturated in Haryana, Uttarakhand, and Puducherry.
- Bihar has denied to sign MoU as the state already has a State Programme under which

Records of Rights are generated. State of Meghalaya, Nagaland and West Bengal are undecided so far.

Conclusion

To have a legal right of their inhabited (abadi) areas including house built in it was a long pending issue for villagers. First scientific survey was conducted for revenue villages by British Raj leaving the abadi areas. Even after 73 years of Independence, no Government took serious steps to conduct the proper survey of abadi areas and provided the 'title of land' to villagers causing various civil and criminal disputes between them. There are also challenges in the way of SVAMITVA implementation. States need to amend their concerned Rules/Acts/Codes to align the Scheme with their land revenue records and keep on updating them beyond Scheme period. Property owners should be made aware about their rights and benefits of Property Cards to avail credits from the banks. The poor people, however, need to be protected from the complexities of the banking system to avoid their falling into debt trap because some of them may have only abadi land holding rendering them landless and homeless. States also need to recognise the rights of historically marginalised groups such as Scheduled Castes/ Scheduled Tribes and single women which includes unmarried women, widows, divorcees etc. In Maharastra, if a resident in the abadi area had enjoyed undisturbed possession of land since 2011, he will be recognised as a 'rightful owner'. This practice could be adopted by other States as well. SVAMITVA grants Property Cards based on 'possession' and not only on 'inheritance', this is a time to recognise women's right as a gender responsive and empowerment. If SVAMITVA is implemented earnestly, we may expect villagers to become Svami of his abadi land. GPs would lead towards Atmanirbharta which would in-turn enable them to function as units of self-government and empower the rural beneficiary leading to social justice.

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Views expressed in the article are personal to the Author.

PAPERLESS MEDICAL CLAIM PROCESSING IN THE CGHS PAYMENT PROCESS

- Dr. Kavitha Gotru, Chinmay Patil,
-B. Gopala Krishnakanth Raju

Introduction: -

Central Government Health Scheme (CGHS) provides cashless healthcare services to 15 lakh (approx.) retired central government employees. Once medical services are provided to these pensioners, Health Care Organizations (HCOs) claim the amount from CGHS which after thorough scrutiny submit the claims to PAO through CGHS DDOs. For this purpose, UTI-TSL was assisting CGHS as claim processing & settlement agency.

Although the present payment arrangement is largely able to cater to the requirements of the payments, there are certain bottlenecks due to the requirement of physical submission of bills and resultant delays in transit, especially for outstation DDOs. Given the voluminous nature of claims, printing and sending bypost/courier to the PAOs, the process has become very cumbersome.

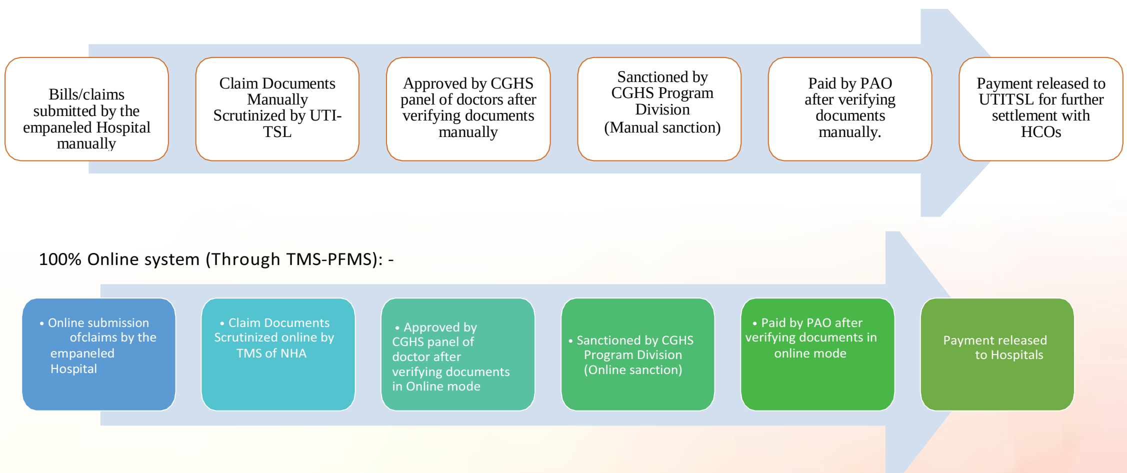
Further, during the Covid pandemic, an imminent need was felt for an electronic, contactless, transparent system for seamless processing and settlement of pensioners' Medical reimbursement claims in a time bound manner.

Considering the dire need to establish the efficient and transparent payment system, the process flow for the Medical Claims of the CGHS pensioners was revamped to reduce redundancy and to bring efficiency. The process flow was digitized end-to-end, making it near 100% online and paperless. This initiative was an outcome of thecollaboration between CGHS, NHA (Transaction Management System-TMS) O/o CCA-MoHFW, PFMS.

Implementation of Paperless Medical claim processing in M/o Health & familyWelfare:-

Under this system, all pensioners' medical claims are raised online by the CGHS empaneled hospitals on NHA-IT Platform viz Transaction Management System (TMS). The claims are processed at various levels in TMS and sanctioned by CGHS Authorities. Payments are released by PAOs directly to the hospitals in PFMS. TMS is integrated with PFMS along the lines of GeM Model to facilitate this process flow.

Manual system Vs Online paperless system



The extensive piloting of the new system was initiated in August, 2021 wherein all the stakeholders were trained to perform their roles and responsibilities with reference to efficient medical claim settlements. More than 20 training sessions were organised to cover Pan India presence of CGHS dispensaries. Further, all the HCOswere trained to use online bill claim module (Transaction Management system of NHA) for bill submission. User friendly manuals were prepared by NHA in consultation with Principal Accounts Office. A total 54 Sanctioning Authorities, 29 DDOs and 7 PAOs are onboarded to TMS-PFMS platform. In order to eliminate discretion and bring in transparency, the submission of medical claims to sanctioning authorities was automated and randomised, irrespective of the region/ Division.

Implementation Framework, Preparation for Rollout, and background workrequired for the system building:

The conceptual framework, the process flow and the payment guidelines were drafted keeping in view the Receipt & Payment Rules, Civil Account Manual(CAM) and successive guidelines by O/o CGA, D/o Expenditure. SoPs for the stakeholders were drawn accordingly.

Implementation Framework	Standard Operating Procedures
Conceptualised the process flow for submission & settlement of claims inelectronic mode on TMS & PFMS	Reconciliation of mismatch Hospital name & bank details in
Integration of TMS and PFMS approved on the lines of GeM model	Standardisation of reasons returning claims in PFMS for
Issued the Payment & Precheck guidelines for stakeholders	Reconciliation of Hospital-wise payment details in PFMS & claimwise amount in TMS
Preparatory work and pre-requisites for making the system paperless	Re-processing failed transactions
Designed user friendly manuals for Training & Capacity Building	MIS reports for monitoring pendency in PFMS

This exercise helped in aligning the processes in the new system with the laid downprocedures by the O/o CGA and D/o Expenditure. This also ensured due diligence at each step after extensive piloting for almost a year (i.e August 2021-August 2022). The system was made paperless with effect from 1st September 2022.

Salient Features of Paperless Medical claim system for Healthcare Organisations:-

Efficiency: - The new system is aimed to make the medical bill processing and payment system more efficient, responsive and Just in time. It will ensure timely medical claim settlement for HCO and indirectly improves cashless facilities for 15 lakhs pensioners & their families. It will also encourage more HCOs to joinCGHS empanelment.

Transparency and System Security: - The system is now more transparent andoffers end-to-end visibility as payments are released to the HCOs directly. The Claim settlement system is neutral to the HCOs and the claim value and have First-in-First-Out (FIFO) embedded in the system. Further, the claim passing process is now being monitored end-to-end on a real-time basis. Claim records are available in online format. The TMS system is periodically audited by the Cert-in empaneled security auditors. These steps have made the system 100% transparent and secure.

Digital Footprint: - All medical claims are now captured digitally and can be accessed and verified by all privileged users. In the future, it can be seamlessly integrated with Ayushman Bharat Digital Health ID(ABHA) to build the health profile of the individual. Further, the records will be maintained as per the requirement of the Civil Accounts Manual, Receipts & Payment Rules and O/0 CGA, D/o Expenditure Guidelines on archival & retention of records.

Faceless claim assessment and Processing: - 100% paperless, faceless and online medical claims eliminated the requirement of physical submission of bills. During the previous UTI-TSL system, claims used to take an average of 60 to 90 days for payment from the date of submission by the HCOs. Now, the empirical evidence showed that the bill processing is taking approximately 10-15 days. This is a substantial improvement in the claim processing time required for payment of medical claims under CGHS.

Environment Friendly System: - As the movement of physical bill is no longer required, environmental impact of printing of huge bunch of documentsof medical claims and other supporting documents which are in tonnes per year can easily be reduced. Further, the postage and courier efforts from the Hospitals, CGHS centres to DDOs and PAOs will be reduced as there is no physical movement of documents. Furthermore, the storage requirement for retaining the past claims will come down drastically. As a result, there is a significant reduction in per claim/ bill processing costs.

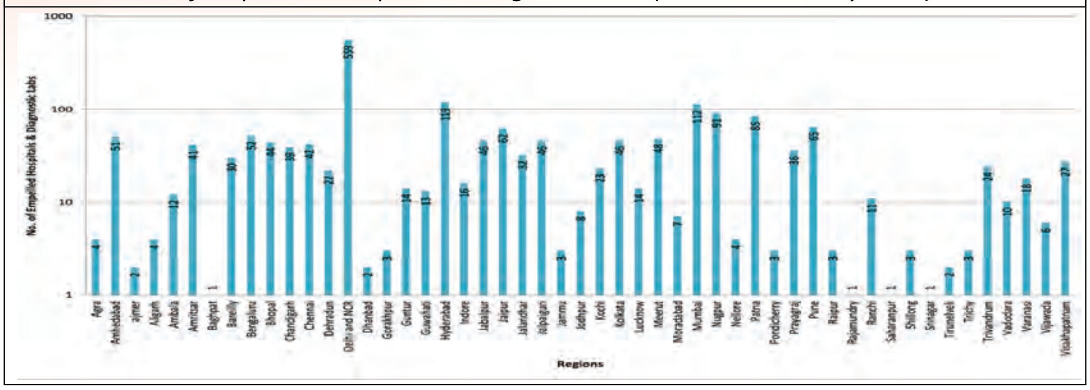
Assured cashless medical services with Pan India presence:-Implementation of an online medical claim submissions facility enabled the Hospitals (more than 1900 empaneled hospitals across India) to provide cashless facilities to all CGHS Pensioners. There are seven PAOs involved in the CGHS payment system and as of Feb 14, 2023, as many as **44.87 lakh Medical Claims**has been processed within this financial year which amounts to Rs **2,725 Crores approximately**. Bunching of medical claims has also been enabled making it convenient to manage small value claims.

The Momentum:

- The movement of medical claims through online mode and passing the medical claims on FIFO mode proved the effectiveness of the system. As every movement of claim is captured in digital format, the higher management is now well equipped with holistic picture of the claim settlement status. Effective coordination between all the stakeholders ensures timely submission of claims and Nil pendency.
- In early rollout days, CGHS PAOs cleared claims in a range of 0.5 lakh to 2 lakh on an average on weekly basis. The scale of the HCOs onboarded on CGHS online paperless billing platform is gigantic spread across the geographies. The paperless movement of claims has added efficiency and transparency in the claim processing across

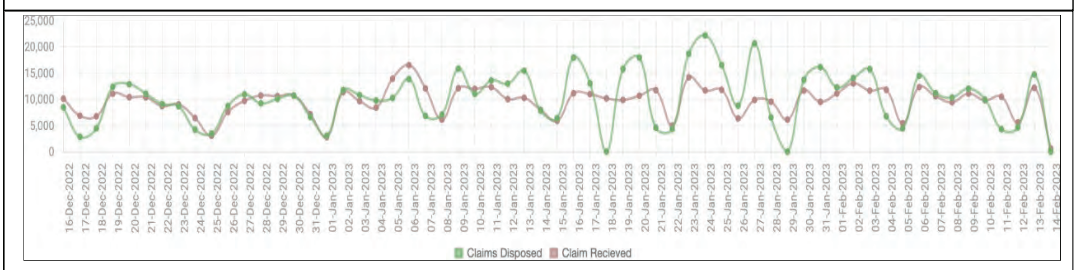
all regions.Further, as a result of effective communications among the stakeholders andcontinuous monitoring the rate of disposal of claims at each level has improved.

PAN India list of Empaneled Hospitals & Diagnostic Labs (As on 31st January 2023)

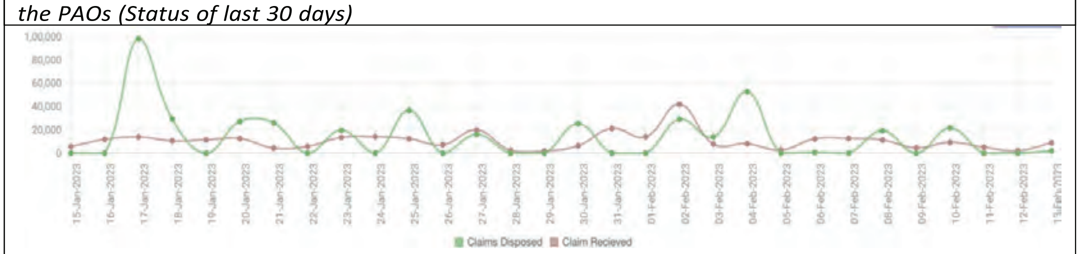


- Further, as a result of effective communications among the stakeholders and continuous monitoring the rate of disposal of claims at each level has improved.

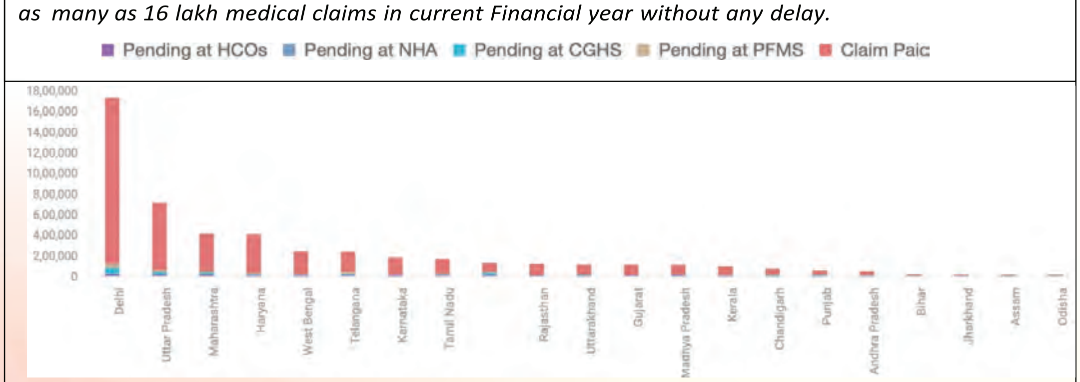
Efficient Medical Claim Assessment: - Per day Medical claims received by CGHS from the HCOs against the claims forwarded to PAO for payment (Status of last 60 days)



Efficient & time bound medical claim payment processing: - Per day Sanctions for Medical claims received from the CGHS Sanctioning Authorities to PAOs against the claims paid successfully by the PAOs (Status of last 30 days)



Overall claim pendency has reduced substantially at each level with only Delhi region disposing off as many as 16 lakh medical claims in current Financial year without any delay.



Replicability and Scalability of the system:

This system has potential for replication in many areas wherein the program department got a robust IT application and can be integrated with PFMS seamlessly. This concept makes more sense where the supporting documents with the bill are bulky and physical as well as online movement is cumbersome. In such situation, with necessary due diligence for archival and retention of the claim documents, the supporting documents can remain at source with privileged access granted to stakeholders. The Central Armed Police Forces (CAPF) Medical claims settlement system under M/o Home Affairs has adopted similar process flow to integrate with TMS of NHA. Further, Departments like DAVP, Works bills of CPWD, NHAI which receive huge volume of supporting documents can consider adopting similar practices for better efficiency in claim settlement.

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Views expressed in the article are personal to the Author.

FERTILIZER SUBSIDY- DEVELOPMENTS AND INITIATIVES

- Padam Singh Patil

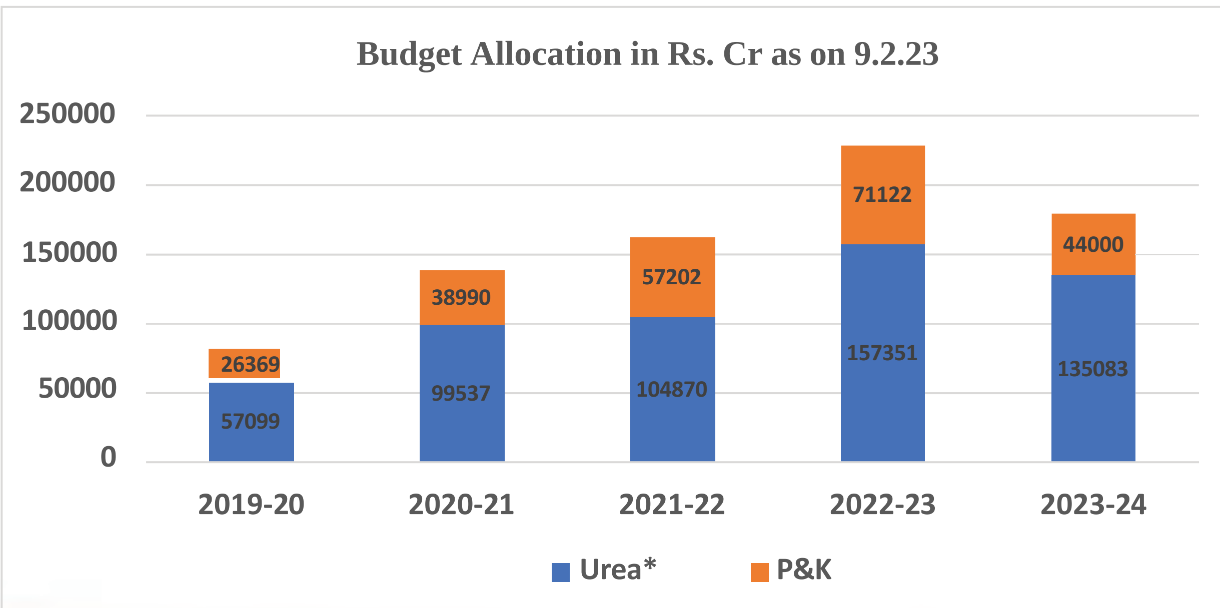
The Government of India provides subsidies to the fertilizer industry in order to make fertilizers more affordable for farmers and to encourage balanced use of fertilizers for increasing agricultural productivity.

The main objective of Department of Fertilizers is to ensure adequate and timely availability of fertilizers at affordable prices for maximizing agricultural production in the country. The main functions of the Department include planning, promotion and development of the fertilizers industry, planning and monitoring of production, import and distribution of fertilizers and management of financial assistance by way of subsidy/concession for indigenous and imported fertilizers.

A. Fertilizer Subsidy

The subsidy program was introduced in the 1960s and has been revised several times over the years. Currently, the government provides subsidies on import and production of Urea and P&K fertilizers covered under Urea Subsidy Scheme and Nutrient Based Subsidy scheme respectively.

In addition to product subsidies, the Government also provides subsidies for the distribution of fertilizers to farmers. This is done through a network of private dealers/ retailers, cooperative societies, farmer organizations, and state-owned agencies.



B.Initiatives

In recent years, the Government has been making efforts to reform the fertilizer subsidy program and make it more sustainable and efficient. This includes efforts to reduce leakages and improve the targeting of subsidies intended beneficiaries.

i. One such landmark initiative was **'DBT in Fertilizers'**. In the Union budget 2016-17, Government of India announced to bring fertilizer subsidy under the Direct

Benefit Transfer (DBT) System to improve transparency and promote balance nutrient usage in agriculture sector. Department of Fertilizers launched DBT in Fertilizers on a pilot basis in 16 select districts during 2016-17. On the basis of positive feedback, Pan India Roll out of DBT was carried out during 2017-18 in phased manner in a short span of one and a half year.

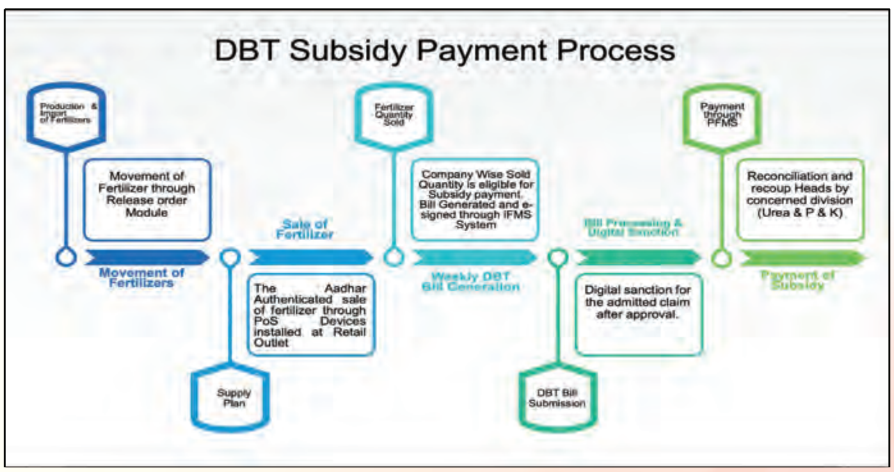
Under the DBT in fertilizers system, 100% subsidy on various fertilizer grades is released to the fertilizer companies on the basis of actual sales made by the retailers to the beneficiaries through Point of Sales (PoS) devices installed at each retail shop. The beneficiaries are identified through Aadhaar authentication only (KCC and Voter ID in Assam and J&K).

ii. DBT in Fertilizers is implemented through **Integrated Fertilizer Management System (iFMS)**. iFMS is a complex, IT driven initiative which has enabled the department to monitor the availability of fertilizers across the country on a real time basis to capture Aadhaar based (in the absence of Aadhaar, EPIC or KCC based) sales transactions to beneficiaries at retail point and create the database of beneficiaries/ buyers.

i. Main Modules of Fertilizer DBT System

- **PoS software Module** captures all the transactions online namely, registration of retailers, receipt/acknowledgement of stock, sale of fertilizer to buyers using Aadhaar based Bio-metric authentication.
- **Release Order module** tracks the real-time movement of fertilizers along with Plant/ Port-Rakepoint-District-Wholesaler- Retailer chain.
- **Subsidy Claim Generation and Processing (Bill Tracking Module)**: The entire process ensured transparency of all transactions, real-time movement/ availability of fertilizers, no manual book-keeping and sale of fertilizers at the actual, subsidized price with the generation of a receipt at retail point.
- **Subsidy payment & Bill Tracking module:** Subsidy Claims are submitted online in iFMS by the companies using eSign facility. These claims are processed and paid electronically on weekly basis. Integration of iFMS was done with PFMS to enable this complete end-to-end electronic payment. This is a path breaking initiative of Department of Fertilizers and first such feat in Govt. of India.

iFMS is an e-hub for a wide range of stakeholders viz., 173 Fertilizer manufacturing companies, 23000 wholesalers, around 3 lakh retailers and 14 crore beneficiaries in addition to State Agriculture Departments, D/o fertilizers etc.



Company:-CIL-Kota				Plant-CIL-Kota			From Date : 2022-04-08					ro Date 2022-04-15		
View DBT Bill Details														
S. N.	State	District	Product	Golive Opening Stock	Opening Stock Of District	Receipt in District	in District vailability	Sale	Sale Adjusted Against Go Live Ppening Stock	Eligible Qty	Subsidy	Amount	Closing Stock Of District	Remaining Go Live Opening Stock
1	2	3	4	5	6	7	8(6+7)	9	10	11(9-		13(11'12)	14(8-9)	15(5-10)
				Qty in MT	Qty in MT	Qty in MT	Qty in MT	Qty in MT	Qty in MT	Qty in MT	In Rs.	In Rs.	Qty in MT	Qty in MT
6	Bihar	J:!m	SSP-Powdered	.000	70.950	.ooc	70.950	2.600	.000		7513.00	19533.80	68.350	.000
5	Chhattisgarh	Here	SSP-Powdered	.000	334.350	233.35C	567.700		.000	2.600	7513.00	61982.25	559.450	.000
	Madhya Pradesh	J:!m	SSP-Powdered	6537.200	2068.361	535.00C	2603.361	8.250	.000	8.250	7513.00	121334.95	2587. 211	.000
3	Rajasthan	Here	SSP-Powdered	4411.900	4891.9701023	.ooc	5914.970	47.750	.000	16.150	7513.00	358745.75	5867.220	.000
2	Uttar Pradesh	Here	SSP-Powdered	427.550	2055.193	.ooc	2055.193	55.200	.000	47.750	7513.00	414717.60	2420.828	.000
1	West Bengal	Here	SSP-Powdered	.ODO	2612.591		2612.591	191.763	.000	55.200	7513.00	1440715.42	1999.993	.000
	Total			**11376.650**	**12033.415**	**11791.350**	**13824.765**	**321.713**	**.ODO**	**191.763**	**321.7q**	**417029.77**	**13503.052**	**.ODO**

Company:-CIL-Kota

Retailer Name	Opening Balance	Recelots	Sale	Closing Balance
IAAYUSH TRADERS(967254)	2.15C	.ODO	.ODO	2.15(
NANDI TRADERS(870797) hana Khad Bhandar(401761)	3.00C 1:0SC	.ODO --:000	.ODO -.000	3.00(1---:o&
Bala Jee Khad Bhandar(429676)	1.60C	.ODO	.000	1.60(
BATS KISAN CENTREl5843901	.40(	.ODO	.000	.40(
bhawani medical hall(595485)	.30(	.ODO	.ODO	.30(
Bhola Agro Tech(540948)	1.35C	.ODO	.ODO	1.35(
BINOD KUMAR(785916)	2.60C	.ODO	.000	2.60(
CHAUDHARY KHAD BEEJ BHANDAR(648649)	1.05C	.ODO	.000	1.05(
Darbari Singh(437482)	AOC	.ODO	.ODO	.40(
Gaurishankar Khad Beej Bhandar(435890) GOVIND KRISHI KENDRA(863856)	:§(: .35C	.ODO .ODO	.0_(l(l_ ,§(: .100	 .25(
Gupta Khad BeeJ Bhandar(403782)	2.50C	.ODO	.000	2.50(
Harl Om Khad Beel Bhandar(532748)	1.00C	.ODO	.000	1.00(
Hariyali Traders(402031)	.95C	.ODO	.ODO	.95(
Jai Mata Di Enterprises(404838)	3.75(	.ODO	.ODO	3.75(

Retailer Name	Opening Balance	Recelots	Sale	Closing Balance
Jal Mata DI Krlshl Kendra(496999)	1.10(	.ODO	.000	1.10(
Uay Klshore Prasad(455555)	.60C	.ODO	.000	.60(
Kisan Agro(1268447)	3.80C	.ODO	1.400	2.40(
kisan kendra(858958) Kisan Traders(283040)	.05C ,55(	.ODO -.ODO	.ODO .100	.05(--A5(
Krlshak Seva Kendra(418160)	1.80(	.ODO	.000	1.80(
Krlshl Seva Kendra(403407)	1.70C	.ODO	.000	1.70(
KRISHNA TRADERS(642712)	1.45C	.ODO	.ODO	1.45(
Kumar Traders(308998)	.20C	.ODO	.200	,00(
LAXMI KHAD BEEJ BHANDAR(912487)	3.75(	.ODO	.000	3.75(
Maa Traders/2832551	2.60(	.ODO	.000	2.60(
Maa Vaishnav K Ssss Ltd(257417)	3.70C	.ODO	.ODO	3.70(

Retailer sale Detail

Retaile r:	- Kisan Agro(1268447)	IFromDate 2022-04-08	[fo Date 2022-04-15		
S.No.	I Buyer	Invoice Number	Invoice Date	Product Name	Sale Qty Qty in MT
j	Arjun Thakur	1268447220410080225348	10-Apr-2022	SSP-Powdered	.25
2	Bachiya Devi	1268447220410163004640	10-Apr-2022	SSP-Powdered	.25
3	Paro Devi	1268447220411081047474	11-Apr-2022	SSP-Powdered	.25
4	Krishana Prasad	1268447220413163058266	13-Apr-2022	SSP-Powdered	.25
5	Chando Yadav	1268447220415082827595	15-Apr-2022	SSP-Powdered	.25
6	Urmila Devi	1268447220415103156117	15-Apr-2022	SSP-Powdered	.15
	Total				**1.40**

ii. Over the years, several upgrades have been made in the system. New modules have been developed and incorporated in iFMS to make it better and efficient.

- **Mixture Manufacturer and Planter Registration** Module has been developed in iFMS, and being implemented across India.
- **Reasonability of Cost Data** module to check reasonability of all fertilizer plants on monthly basis is developed and successfully implemented.
- **Online Freight module**
- Significant changes in Urvarak Dashboard made to enable International and Domestic MRP comparison for raw materials as well as finished goods.
- Following important MIS reports have been recently created in iFMS:
- Raw Material (RM) Import Consignment Details Reports.
- Finished Good (FG) Import Consignment Details.
- Import Consignment, Custom Clearance & Receipt at Plant.
- Comprehensive Report on Last Mile Sale.

- DoF has recently developed **"Aadhaar Based Complaint Monitoring System"** which is under functional testing.

C. **<u>Fertilizer Innovation:</u>** DoF recently created a new division, Fertilizer Innovation Division to handle and work upon new and upcoming technologies in fertilizer sector. Under this, various initiatives have already been taken and implemented successfully. Some of these are:

i. All the fertilizer retail shops in the country are being converted into **Pradhan Mantri Kisan Samriddhi Kendras (PMKSKs)**. These PMKSKs act as a one stop shop. They will cater to a wide variety of needs of the farmers in the country like provision of agri-inputs like fertilizers, seeds & pesticides; testing facilities for soil, seeds, and fertilizers; generating awareness among farmers regarding market

prices of agri-inputs; provide information regarding various government schemes and ensure regular capacity building of retailers at block/district level outlets. On 17th October, 2022, as a first step, 600 fully developed PMKSK centers at district level were inaugurated by **Hon'ble Prime Minister of India** in a grand event at Pusa, New Delhi. Till now more than 11000 shops have been converted in the Model PMKSKs.

ii. **PMPRANAM:** Under the new scheme PMPRANAM, it is proposed that 50% of the fertilizer subsidy saved by a State/UT in a particular financial year by way of reduction in consumption of chemical fertilizers (Urea, DAP, NPK, MOP) compared to previous 3 years' average, will be passed on to that State/UT as Grant. This scheme has been announced in the 2023 budget speech of FM.

iii. **Pradhanmantri Bhartiya Janurvarak Pariyojana (One Nation One fertilizer):** Under PMBJP ONOF, Department of Fertilizers has introduced Single Brand "BHARAT" for all subsidized Fertilizers and Logo. The objective of the scheme is to increase the availability basket of fertilizers; take care of dilemma among farmers in choosing from plethora of brands available in the markets, to reduce the crisscross movement and further ensure timely supply of fertilizers.

iv. **Nano Urea:** The Government of India has recently notified the specifications of Nano nitrogen under Fertilizer Control Order, 1985. Nano Fertilizers hold great promise for application in plant nourishment because of the size-dependent qualities, high surface-volume ratio and unique optical properties. Nano fertilizer releases plant nutrients in a controlled manner contributing to higher nutrient use efficiency.

The Commercial production of Nano Urea commenced on 1st August, 2021 from IFFCO, Kalol plant. Department of Fertilizers has issued guidelines for development of entrepreneurs for drone spraying of liquid fertilizers.

v. **Fertilizer Flying Squad (FFS):** Department is in receipt of lot of references indicating diversion, black marketing, hoarding and supply of sub-standard quality of subsidized fertilizers by various private entities in the field.

To address this issue, Department of Fertilizers has constituted a special team of dedicated officers, "Fertilizer Flying Squad", for regular surprise inspections of fertilizer and related units involved in diversion, black marketing, hoarding and supply of sub-standard quality of fertilizers.

Till date

- FFS has conducted 13 inspections on 249 fertilizer / related units in 13 States. 147 Mixture units and 102 urea using units.
- Recommended for deauthorization of around 80 mixture manufacturers
- 28 FIRs/ complaints registered for diversion of urea. Many show cause notices issued for mismatch in procurement, production & sales data.
- Seized 66276 bags of suspected urea from Gujarat, Kerala, Haryana, Rajasthan, Karnataka (excl. GSTN seizure). Of which 26199 bags have been disposed of as per FCO guidelines.
- Of the 250 samples tested, 48 have been tested sub-standard and 32 found with neem oil content. Reports of some of the samples still awaited.
- Legal and administrative proceedings initiated by States for further action

Some more innovative ideas, schemes are in the pipeline that will save fertilizer subsidy as well as bring in balanced use of fertilizers and increase agricultural productivity.

Padam Singh Patil (ICAS 2011), Director (FS), Department of Fertilizers

Views expressed in the article are personal to the Author.

COOPERATION IN HYDRO-ELECTRIC PROJECTS IN BHUTAN

- Dr. Ajay S Singh

1.. Introduction

High ranges of Himalayas and steep gradient of glacial rivers of Bhutan make it ideal for hydroelectric project. The basis of energy generation in hydroelectric power plants is the conversion of potential energy of water stored at a height into electrical energy. This happens by first having the water fall to convert the potential energy into kinetic, so that the turbine can capture and convert that energy into mechanical energy. The mechanical energy generated is finally converted into electrical energy by a generator.

Cooperation in the hydropower sector was envisaged to benefit both India and Bhutan. Both Governments came together and agreements for co-operations were signed after development of stand-alone projects in Chukha, Kiruchhu and Tala Hydropower projects to generate 10000 MW was planned to be developed till 2020. The model followed for generating power was primarily based on the successful model of Tala hydroelectric Project which is called IG Model (Inter Government Model). As per this model, an authority is to be created for each project and Authority would execute the project based on agreement and protocol to be signed separately for each project. Accordingly, Punatsangchhu-I Hydroelectric Project Authority (PHPA-I), Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) and Mangdechhu Hydroelectric Project Authority (MHPA) were started between 2008-2011."Chhu" in local dialect is river and these projects are run of the river projects on the respective rivers. DPRs were prepared for these projects and a few more. In PHPA-I and PHPA-II, WAPCOS, a Government of India PSU was appointed as engineering design

consultant whereas in MHPA, NHPC was given the consultancy assignment.

Both, PHPA-I and PHPA-II plansof capacity 1200MW and 1,020 MW respectively are built on one of the the prominent rivers of Bhutan namely, Punatsangchhu, which is known as Sankosh River in India, and it eventually draws into the mighty river Brahmaputra. They are both currently under construction. Powerhouse of PHPA-I and other infrastructure is almost complete but dam is currently not built due to geotechnical and other problems, while dam of PHPA–II is almost ready but power-house is currently under construction, after some setbacks, and is expected to be partly operational by the year 2024.

Inside of power house of PHPA-I

As per the agreements, entire cost of the project is to be provided by GoI as loan and grant. In PHPA-I grant amount is 40% whereas balance 60% is given at loan attracting interest of 10% with liberal repayment tenure. In PHPA-II and MHPA grant is 30%. This model is based on the cost-plus model where cost of the project is entirely funded by GoI and selling price of the power is determined as per the broad framework of Central Electricity Regulatory Commission (CERC) for selling price. Delay, if any in execution of the project, adds to cost. Similarly variations in design and material also add to cost to the project. Interests amount during construction is added to the cost of the project for calculation of tariff and repayment of loan purposes. If the project is executed intime then cost of the project is likely to be less and selling price of power will also be less. However, if there is delay or there are technical challenges adding to the cost of the project then the project cost would go up and so will the selling price.

Three mega-projects were started in Bhutan under bi-lateral.arrangement. Project at MHPA could be completed and commissioned by 2019. It is generating power and almost entire power is sold to India by the project. Selling price has been negotiated to Rs.4.12 per unit (on cost plus basis) which is purchased by PTC, a PSU of GoI at the fixed rate for peak as well as non-peak demands. Difference in revenue due to committed price is paid to PTC by Ministry of External Affairs, GoI. Other projects of Bhutan sell their surplus power to India and as per the agreement between the countries, surplus power is determined by RGoB which carries different rates for different projects. Thus exported power is sold at different rates which is about Rs.2.50 per unit for old projects like Tala, Kiruchhu and Chukha.

2. Evolution of Hydroelectric Sector in Bhutan

Initially Bhutan was fully dependent on India for capital, machinery and manpower. As it went on commissioning the projects, it developed internal capacities, first by educating and training manpower in the technical disciplines. With young students getting trained and educated in Indian premier institutions, under technical co-operation, a pool of resource has been created whereby all completed projects are successfully managed by the Bhutanese. Now almost entire executive level is manned by Bhutanese and only a handful of Indians work at senior levels. Since Bhutan has planned really well, almost entire labor force handling blue collared jobs are imported from India whereas Bhutanese focus on white collared or supervisory jobs.

Bhutan is getting liberal capital support from India and untied grants in other sectors for development, which has contributed immensely in capacity and infrastructure development in Bhutan. Apart from the support extended by GoI in development of infrastructure, hydroelectric projects have also taken up road projects, hospitals and schools in and around the project area.

Many other social benefit projects and area development have been taken up by the projects, which has changed the demography of Bhutan. Bhutan still relies on machinery, capital and big contractors from India or other countries, it does not get encouraged to venture into many areas due to its resource constraints including population of just around 7 lacs.

With the commissioning of 720 MW MHPA in August 2019, Bhutan earned more than Rs. 3000 Crores during COVID-19 times through export of electricity to India. It was one economic powerhouse, which saved economy of Bhutan during tough times and Bhutan could manage to close its borders for almost two years with almost negligible movement of Indians for trade and tourists from anywhere and survive.

Bhutan is a negative carbon footprint country. With these hydroelectric projects, it is further contributing to increase its carbon credit. With culmination of carbon trading arrangements, economy of Bhutan would be immensely benefitted.

3. Challenges and Way Forward

Hydropower project have been developed or being taken up on the strength of DPR prepared by Indian agencies. It takes too much time to finalize the project execution methodology and actual execution takes further more time. Many of the factors conceived in DPR undergo change and there are significant variations noticed while the project is executed. DPR costs often go under revision by 2.5 to 3 times. In the case of PHPA-II, there were geological surprises which have delayed the project and cost has also gone up. The geological challenges could not be seen during the DPR which could have been done with more detailing. PHPA-I is more alarming as the location of the dam as per the initial DPR was changed midway causing huge loss time and cost overruns. Then to make things scarier the changed location of dam has been found to be facing geotechnical challenges. In this case, it clearly emerged that

DPR, needs more detailing and project approval to be done quickly.

Once the project is approved and Authority is created in IG model projects, tender of major packages is done by the project authority as per the tender documents prepared on the strength of the old DPR. This leads to huge variations in quantity and even change in design or methodology of execution. At the time of the tender process, there is a need to review the DPR based on some more detailing to make the execution better.

Variations are too rampant and analyzed rates are the only option to arrive at the cost of varied items. These rates are invariably very high as rates in Bhutan are ordinarily high for individual inputs going to such big contracts. Contractors generally bid offering competitive prices whereas analyzed rates are based on prevalent rates in Bhutan which are high as in all hilly areas. Contractual provisions pertaining to variations should be revisited for the future projects to not allow variations on the market analyzed rates. Rather it may be linked to the Bill of Quantity (BoQ) rates only.

There are not many suppliers or contractors in Bhutan and with restrictions in imports and movement of manpower and material, project ends up paying more to intermediaries without any value addition. There are many entry and exit barriers causing hindrance in the development of hydropower sector. There are provisions of the equal opportunity to the contractors and employees from India in all bi-lateral projects, however it is diluted with time.

Entire project is funded by GoI. IG model is based on cost plus, means, more project cost would bring more money and in the end more tariff worked out on the basis of cost-plus method. A new financial model needs to be decided whereby loading of unproductive activities to the project shall not be allowed and cost allocation of land acquisition and cost of manpower shall be shared between project funds from GoI and some funding to be obtained from Royal Govt. of Bhutan.

Cost of the project is the sole factor to decide the selling price of the electricity to be purchased by India. With the example of MHPA, it is clear that the selling price based on excessive project cost and worked out for uniform supply is not sustainable. This price is invariably not viable during non-peak time. It is suggested that to bring in discipline in the project and right kind of risk allocation, funding of project needs be shared. There is a need to select contractors and management in a professional manner. It is about time that the model of funding and management needs to be reviewed to make it more cost effective and beneficial to both countries with proper sharing of risks.

Dr. Ajay S Singh, (ICAS 1994) on Deputation to Royal Govt. of Bhutan as Director Finance, Punatsangchhu-I Hydroelectric Project Authority (PHPA-I)

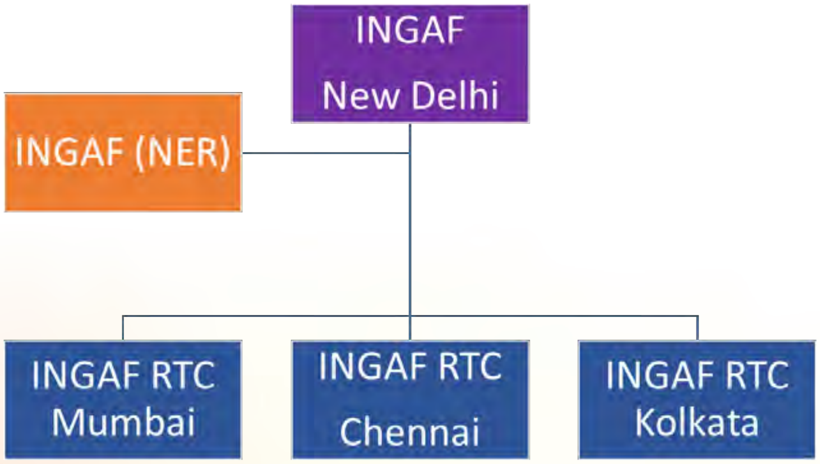
This article covers only the major hydroelectric projects funded by GoI in Bhutan. Views expressed by the author are personal.

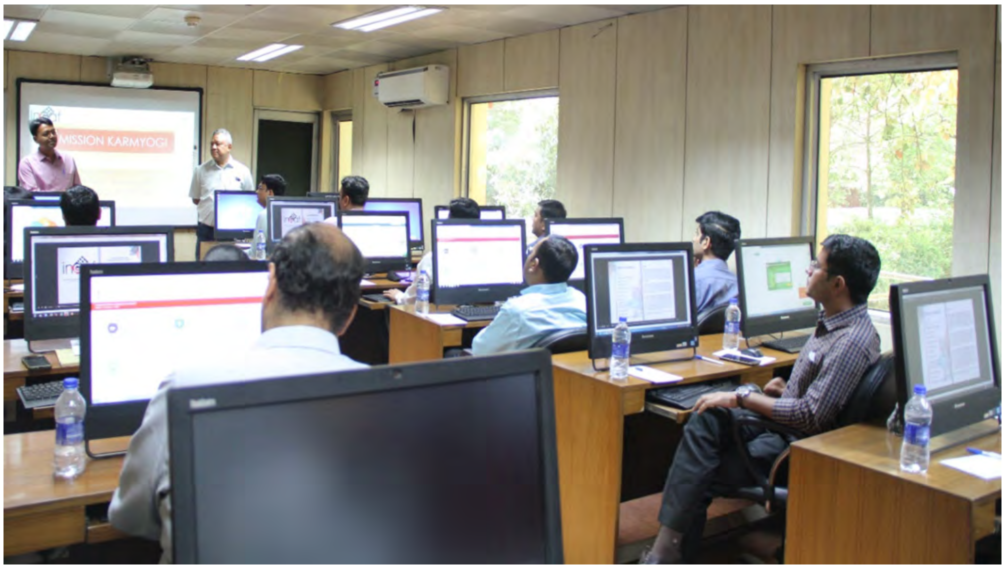
TRAINING AND CAPACITY BUILDING INITIATIVES OF INGAF

- Md. Shahid Kamal Ansari

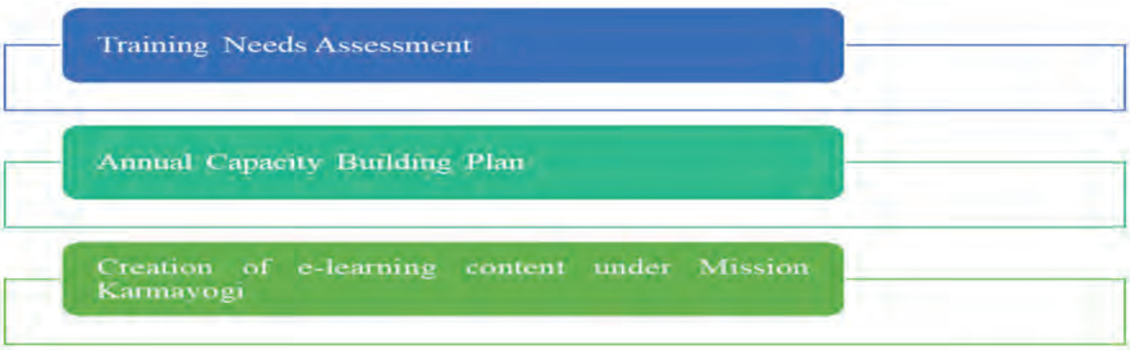
> *Live as if you were to die tomorrow. Learn as if you were to live forever.*
>
> **—Mahatma Gandhi**

1.0 Introduction: Institute of Government Accounts & Finance (INGAF) is the training arm of the O/o Controller General of Accounts (CGA), Department of Expenditure, Ministry of Finance. The institute is responsible for providing training and capacity building to Indian Civil Accounts Service (Gr. A) and officials of the Central Civil Accounts Service (Gr. A, B and C). The Institute conducts Induction Training for newly recruited officers and staff at different levels. This involves providing detailed training on various aspects of Government Accounts, Public Financial Management, Budgeting, Internal Audit and Office procedures among others. The Institute also conducts Mid-Career Training for Indian Civil Accounts Service (ICAS) Officers, Sr. Accounts Officers and Assistant Accounts Officers in addition to various in-service short-term training programs. There are three Regional Training Centres based at Kolkata, Chennai, Mumbai and one INGAF (NER) Aizawl.




MISSION KARMYOGI

2.0 New Initiatives: As part of training and capacity building initiatives, INGAF has taken strides in the form of a three pronged strategy which is as follows:



(A) Training Needs Assessment: This exercise involves understanding the training needs of the officials working in the Departmentalised Accounts offices spread across the length and breadth of the country.

Training Needs Assessment meeting cum workshop

INGAF has started conducting workshops-cum-brainstorming sessions with senior officers of the organisation to take inputs on short-term and long-term training needs for the officials of the organisation.

INGAF is also taking feedback from the field offices via a questionnaire based survey. All these details are being compiled to prepare a detailed report.

(B) Annual Capacity Building Plan: Capacity Building Commission (CBC) working under the Prime Minister's office is helping all the Ministries/Departments in preparing their annual capacity building plans. INGAF being one of the CTIs under Department of Expenditure, is actively involved in chalking out the plan for officials under the umbrella of Civil Accounts Organisation. To devise the plan for the next year, INGAF has already started the exercise of Training Needs Assessment (TNA) and mapping the roles of the officials with various competencies as per the Framework of Roles and Competencies (FRAC) given by CBC.

(C) Creation of e-Learning Content under Mission Karmayogi: Technology is a great facilitator and a big aid in doing things at a large scale. In order to help officials learn, without the need of having to come for a scheduled physical training program; INGAF has created e-learning courses on Fundamental Rules and Supplementary Rules (I to V). These courses have been developed under Mission Karmayogi (which is envisioned as one of the largest Capacity Building Initiatives in Government Organizations) in collaboration with Capacity Building Commission (CBC). A total of five courses on FRSR i.e. FRSR-I (General Rules), FRSR-II (TA Rules), FRSR-III (Leave Rules), FRSR-IV (DA, DR and Ex Gratia to CPF Beneficiaries) and FRSR- V (HRA and City Compensatory Allowance) have been developed by INGAF which have been made available on iGOT portal of the DoP&T. The course on FR-SR-III (Leave Rules) was launched on 7th June, 2022 by Hon'ble Finance Minister during Azadi Ka Amrit Mahotsav.

These courses are self-paced online courses which can be taken as per the convenience of the officials whenever they have time to enrich themselves with learning. These courses will enable officials to peruse anytime-anyplace-any device learning at their own convenience. It will also provide officials with access to instant guidance with the click of a mouse to efficiently perform their duties. INGAF strives to create many more such e-learning self-paced courses in the Phase-II of the Mission Karmayogi initiatives. This includes preparation of five courses on the subjects related to (i)- Fundamentals of Government Accounting, (ii)- Government Budgeting, and (iii)- Overview of PFMS; which has already started and will be launched on i-GOT platform in due course.

3.0 Trainings conducted during the year:

(A) Training Programs for ICAO Cadre: INGAF provides Induction, Mid-Career and In-Service Training to Indian Civil Accounts Service (Gr. A) Officers, Central Civil Accounts Service (Gr. B) officers and other officials of the Departmentalized Accounting

Organization of different Ministries/ Departments. During the year, INGAF has conducted various training programs on Government Accounting, PFMS Modules, Fundamental Rules & Supplementary Rules, and Office Procedures etc. for officials of Indian Civil Accounts Organization. INGAF has also conducted e-Bill Training for PAOs and DDOs of Ministries/Departments and helped in the nationwide rollout and implementation of e-Bills in a fast and effective manner.

(B) Training of ICAS Probationers: This year, INGAF has created a revised training structure for Indian Civil Accounts Service (ICAS) Probationers with revised syllabus taking into account the needs of 21st century. ICAS Probationers undergo 24 months (about Two Years) training viz. Foundation Course (FC) for about 03 Months, Professional Training Course (PTC)/Semester 1 for 06 Months at Arun Jaitley National Institute of Financial Management (AJNIFM), and Departmental Training Course (DTC) at INGAF for the remaining 15 months. On successful completion of the course/training, officers on probation will be awarded Post Graduate Diploma in Public Financial Management from Jawaharlal Nehru University (JNU). At present, the ICAS (Probationers) of 2021 batch are undergoing their DTC at INGAF. During this training the Probationers have been attached on short-term basis with partner CTIs and Institutions of Eminence such as (i)- Indian Institute of Corporate Affairs (IICA) Manesar with objective to foster their knowledge on 'Provisions of the Companies Act, Competition Law and Market Regulation' (ii)- National Academy of Direct Taxes Nagpur for better understanding of 'Basic principles of Tax Laws, Policy and Administration' and (iii)- National Institute of Public Finance and Policy (NIPFP), New Delhi on Emerging Issues and challenges in Public Finance and Policy.

Semester	Subjects/Field Work	Credits	Total Credits
Semester I	At AJNIFM Ten Papers of 3 credits each & Two non-credit Papers Attachments of 6 credits	30 06	36
Semester II	At Respective Academies Ten Courses for respective Organized Services of 3 credits each.	30	30
Semester III	Departmental Courses	9	17
	Seminar and Workshops	4	
	Field Attachments	4	
Semester IV	Seminar and Workshops	4	25
	Field Attachments	4	
	Dissertation	8	
Total Credits			**108**

(C) International Training Programs: INGAF conducts International training programs on 'Public Expenditure Management', 'Public Financial Management' and Change & Leadership Development under Indian Technical and Economic Cooperation (ITEC) program of Ministry of External Affairs and through customized bilateral / multi-lateral programs for different countries. ITEC is the flagship program of the Government of India's capacity building efforts for the past many years. In the year 2022-23, INGAF has successfully conducted another 3 week International Training Program on 'Government Accounting & Financial Management (GA&FM)' under ITEC umbrella from 16th January to 3rd February, 2023; which was attended by 26 participants belonging to 12 different countries.

ITEC Traning program on 'Government Accounting & Financial Management (GA&FM)'

(D) Workshops conducted during the year: INGAF conducted a workshop for the Indian Civil Accounts Service officers on the theme of 'Fraud Detection and Prevention' on 1st November, 2022. In the workshop, domain experts from Google India, Ernst and Young and ICICI Bank presented aspects of fraud detection and prevention from the point of view of Technology, Payments and Systems. A special session was on Cyber Security by a renowned cyber-security expert.








(E) Sponsored Training Programmes for Government Organisations: INGAF provides sponsored customized programs on various aspects of Financial Management, Internal Audit, PFMS, Programmes on Bhavishya, e-Lekha, e-Payment and Basics of Computer applications (Ms-Office, Ms-Excel), and other IT linked programs like e-Revision, NPS, Office Procedures, and other Administrative and Establishments matters to State Governments, Union Territories and Autonomous Bodies of Ministries/ Departments etc. The Institute also organizes outreach programs on Public Expenditure Management, recent organizational initiatives such as e-Bills, TSA, SNA, CNA etc. for skill up-gradation based on request by concerned Ministries/Departments and UTs. During this year, INGAF has conducted such programs for Union Territory of Ladakh, Government of NCT of Delhi, and other organisations like Assam Rifles, Banaras Hindu University (BHU), National Investigation Agency (NIA), and Central Board of Secondary Education (CBSE) among others.

4.0 Way Forward for INGAF: INGAF will continue to carry out the training programs for Indian Civil Accounts Organization in various domain, functional and behavioural areas at all levels. It will chart a new path in training and capacity building by designing new training programs, bringing innovations in pedagogy and through partnerships with other Central Training Institutes and Institutions of Eminence. The Institute has been a great enabler in improving the productivity of the officials of the organisation and elevating the standard of the public service. INGAF will further curate more number of digital learning courses in Phase-II of the Mission Karamayogi initiatives. It will emerge as a Centre of Excellence in Public Financial Management by conducting new research, taking up assessments and submitting reports of these assessments to Government for decision making.

Md. Shahid Kamal Ansari, (ICAS 2014), Deputy Director, INGAF

Views expressed in the article are personal to the Author.

THIS DAY LAST YEAR

Controller General of Accounts

Ministry of Finance, Department of Expenditure

Government of India