*IOSR Journal of Business and Management (IOSR-JBM)*
*e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 26, Issue 1. Ser. 1 (January. 2024), PP 15-31*
*www.iosrjournals.org*

# Pathway From Cash Basis To Accrual Basis Of Accounting In Public Sector In Bangladesh: Preparedness, Challenges And Recommendations

Mohammed Kabir Hossain Cpfa
*Additional Controller General Of Accounts, Bangladesh*

***Abstract***
*Previously many governments around the world used to follow cash or nearly cash basis of accounting for their budget and accounting systems, but they are now in the process of shifting to accrual basis of accounting to identify the value of asset owned and total liabilities owed. Various issues are involved in transitioning to accrual basis of accounting such as depicting the financial position of an organization more completely and an integrated manner than a cash-based system does by recording asset, liabilities, revenue and expenditure in an integrated manner. The principal area where an accrued based system scores over a cash-based system is that the former records both cash and non-cash transactions, thereby being able to capture more complete and wholesome pictures of operations at most instants of time. Accrual system enables better internal control, better quality information for decision making, a more complete and transparent view of the financial position of the government, thereby enabling the government a more effective assessment of the performance and providing the necessary information for linking the input costs to outputs and outcomes to make government more accountable to their constituents. The paper highlights the existing system of accounting basis, preconditions for adopting accrual basis, preparedness of the government, key challenges in implementing accrual basis and pragmatic solutions to fully transforming to accrual basis of accounting in developing country like Bangladesh. It also tries to find out the initial requirements that are needed for piloting the application of IPSAS accrual basis at its earliest. The key findings from the study are the existing cash basis system, key accounting issues relating to transforming to accrual basis and key implementation issues. In addition, the research will show a roadmap containing a list of activities that are essential for shifting from cash to accrual accounting. The research mainly concentrates on the Budgetary Central Government (BCG).*

***Keyword:*** *Cash to accrual-based accounting, public sector accounting in Bangladesh*

Date of Submission: 24-12-2023 Date of Acceptance: 04-01-2024

## I. Introduction

Public Financial Management (PFM) has undergone significant changes in recent years**.** For the last couple of decades, Bangladesh government has seen numerous changes in financial, budgetary and accounting systems. Prior to the reforms, Bangladesh has been preparing cash basis of accounting and

budgeting since independence, where the public expenditure is confined to annual budget appropriations approved by the parliament. Though it is considered simple and robust in a sense that through the audit of the accounts it is ensured that expenditure is in compliance with the approved budget and fraud and other irregularities are minimal (Andy 2004), it presents lot of disparities across entities and even within same organization, hence not comparable (Zhuquan and Javed 2018). Thus, the idea of New Public Management (NPM) shared by the international bodies raised the issue of bringing changes in government accounting and reporting due to the impossibility of comparing and consolidating them in a different type of accounting and reporting systems (Bambang 2018). As a result, high quality financial reporting system has become an essential component of strong Public Financial Management (PFM) as it facilitates robust scrutiny of public expenditures by external oversight, increasing trust among stakeholders and improving policy decisions by the government (IFAC, Pathway to Accrual). Since WB, IMF, ADB and EU are the main sponsors in the financial management reforms in developing countries like Bangladesh, they strongly encourage Bangladesh government to accept accrual basis of accounting. Often, the financial aid granted by those development partners is dependent on the improvement of accounting systems and adopting accrual accounting. In addition, expansion in economic activities, combined with limited resources and increased public scrutiny has motivated the Bangladesh government to migrate to accrual- based accounting.

Thus, IPSAS has become de facto international benchmarks for evaluating government accounting practices worldwide. The developing countries have started implementing IPSAS to enhance the credibility of financial information, public trust and attracting foreign investments (SAFA, 2006: 2) The main aims of the reform are to promote more transparent information, increase the effectiveness of the decision making, strengthening expenditure control and the external accountability (Nasi and Steccolini, 2008), which allows for enhanced monitoring of government debt and liabilities for their true economic implications (IFAC Policy Position, 2012). Hughes (2013) emphasizes that in developing countries like Bangladesh, the adoption of IPSAS is crucial as it will improve the capacity of the government to provide its citizens, media, legislative bodies and other stakeholders with understandable, relevant, reliable, and comparable financial statements, improving quality of financial accountability and governance as harmonised accounting policy is an important step in strengthening the budget execution process and improving quality of financial reporting.

The government of Bangladesh, with the assistance of world bank introduced a program to improve financial reporting system to comply with international standards by leveraging advanced technology with the ultimate aim of conforming to international best practices. The migration from cash basis to accrual accounting in Bangladesh requires extensive work for the government. It is anticipated that developing countries with insufficient infrastructure will experience difficulties implementing in the same way as highly skilled counterparts like Australia and New Zealand (Geoffrey 2010). The study describes the challenges of adopting IPSAS in Bangladesh including the existing accounting system, the immediate requirements for transforming to accruals as well as key recommendations. The study can be regarded as the first attempt in Bangladesh to explore the ways of adopting IPSAS accruals, accounting changes needed for recognition of asset and liabilities, comparison with current cash basis financial statements and solutions.

The main purpose of this note is to assist technical advisors with the provision of advice to developing countries on the design, planning, and implementation of an accrual-based accounting regime. The guidelines address a number of issues associated with the implementation of accrual- based accounting, and are intended to provide broad guidance as well as practical suggestions based on the experiences of other entities and jurisdictions on the preconditions necessary for the successful transition to accrual accounting, the appropriate sequencing of the reform steps, and the milestones that could serve as yardsticks for the measurement of progress.

**Structure of the paper:**

This article unfolds in a structured sequence, commencing with the introduction that establishes the context for our exploration. Following this, the literature review critically surveys existing scholarship on accounting systems. The research problem and research questions are then precisely formulated to guide our investigation. Subsequently, the research methodology section delineates the approach and tools employed. The significance of our research is underscored, detailing implications in the next segment. Preconditions and the landscape of existing accounting systems are scrutinized, leading to an examination of challenges faced by organizations. Recommendations are then presented to address these challenges, followed by a discussion on the limitations of the research. The article culminates in a conclusion that synthesizes key findings and outlines avenues for future exploration.

## II. Literature review

Since independence, Bangladesh has been following accounting system uniquely designed by the British for the Indian sub-continent which is based on Account code volume I to IV. Global harmonization in accounting system prompts the government to introduce reforms in the government accounting systems. A series of PFM reforms were undertaken since the 1990s onwards, which undoubtedly improved PFM system in Bangladesh, but nonetheless fell short of expectations. Governance, external PFM elements (including legislation, standards, transparency and scrutiny) and internal PFM elements (including strategy and planning, budget execution and performance monitoring are the fundamental to strong PFM (IFAC, Pathway to Accrual). The application of accrual information is crucial to the successful integration of these three areas. For successful migration to accrual accounting, all these elements are to be considered in the strategy and plan (IFAC, Pathway to Accrual). Christiaens et al. (2013) indicates that the cornerstone of reforming financial information system is the introduction of accrual at the expense of traditional cash basis system. Though Public sector all around the world basically follows either cash or accrual accounting, the cash basis accounting was considered more appropriate because of its compliance with rules and regulations (Bunea et.al 2009). The main difference between cash and accrual accounting lies in recognition of the timing of transactions. In accrual accounting method, revenues are recognized when income is earned, and expenses are recognized when liabilities are incurred or resources consumed, whereas in cash basis accounting revenues and expenses are recognised when cash is received/paid (Bunea et.al 2009). Bangladesh follows cash basis accounting for its financial reporting system. The current cash basis doesn't provide much information for decision makers because only cash transactions are reported. Non cash transactions are ignored although they contribute to the economy to give directions to government now and into the future to address long term sustainability and are of future generations. The main disadvantage of cash basis accounting is that it doesn't recognize asset, debtors and liabilities. The hidden debts of government are not reported and a realistic view of government financial position is not reflected. The reforms implemented by the government of Bangladesh with the assistance of world bank through SPFMS can be taken as an opportunity to move to accrual accounting. The question of why accrual accounting is more appropriate, we can take some real examples: a political party has declared pay rise of government employees if elected. After winning the election, the government realized that the pay hike would increase the budget deficit to a financially unsustainable level. So, the government instead of rising pay, increased pension entitlements. As the increase in pension benefit doesn't have immediate cash impact, the budget deficit calculated under cash basis of accounting remains unaffected, the additional pension liabilities remain hidden from public scrutiny. Under accrual accounting, the increased pension cost would be reflected in the year in which the costs are incurred, in spite of no cash will be paid in near future. Another example can be a purchase of a vehicle, the price will be paid in three annual instalments. The cash budget will reflect only one -third of the total cost in the first-year budget. As a result, the full cost of the vehicle is not transparent and the budget deficit will not reflect the cost of the purchasing decision. In contrast, the full liability of the vehicles will be reflected in the accrual accounts. Besides, accrual accounting provides information about on current asset, liabilities and on financial position of the government which is essential in managing cash position and financial requirements. Under accrual accounting, management of resources is more useful than cash basis because through income statement performance can be measured more reliably when full cost of a service for a certain period is taken into account. Accrual based information on revenues is essential for impact of taxation and other revenues on the government fiscal position. Information on revenues helps to assess whether current revenues are sufficient to cover the cost of current services (IFAC, Pathway to Accrual). It also gives non- cash information such as revaluations, consumption of asset through depreciation and pension liabilities. Thus, Yusof& Jaafar (2018) persists that it brings more transparency since more financial information are included when recorded. Despite accrual basis outweighs cash basis in terms of benefits, it is very difficult to make transition to accrual accounting in an isolated way as often, the transition is taken as a micro part of a large reform program. But experience suggests that initiative to migrate to accrual accounting and reporting without a larger part of a reform program results in utter failure because it is seen as just another accounting exercise (IFAC, Pathway to Accrual). So, a wider reform program is needed either from the domestic side or pressure from international organizations. According to Hepworth (2011), switching from cash to accrual is time consuming and costly and there is no research evidence that switch would automatically produce benefits. It is difficult to do cost benefit analysis at the beginning of application as the benefits are essentially qualitative. The full benefit analysis can be possible once the new method works for a number of years since transition from one accounting method to another is a long-term project as experience shows that it may take 8 to 10 years to change the accounting system and implement it fully. In most cases, it is too soon to identify the benefits from better resource management for improved service delivery such as enhancing efficiency (Andy 2004). Among the countries which have migrated to accrual accounting fully, UK, Australia, New Zealand, USA, Italy to name a few mentionable. Experience from these countries show, the implementation has contributed to improved governance, better control over assets, increased confidence of stakeholders and availability of all information for decision making. While some countries have moved to accrual accounting and budgeting, there are some countries which follow accrual accounting but budgeting is done on cash basis (India-Journey to Government Accrual Accounting,2020). However, implementing accrual accounting is not without challenge. Lack of information on asset and liabilities across public entities in Bangladesh, appropriate accounting policies, information technology support, restructuring of the organizations, through execution plan are still making challenge for successful implementation of accrual accounting. An integral and essential part of these arrangements can be the adoption of IPSAS accrual accounting. The basic aim of IPSAS is to improve the quality of public sector GPFR, ensure greater transparency and accountability, promote the assessment of resource allocation decisions, conform to global best practices and sustainability reporting (Miraj 2018) as well as enhanced monitoring of government debt and liabilities for true economic implications. Many south Asian countries have or are planning to implement IPSAS, but the majority have taken IPSAS as a move to implement IPSAS accrual. However, the efforts are directed at adapting rather than adopting IPSAS in all material respects (Alshujairi, M.H 2014). Chan (2006) suggests two strategies for promoting government accounting reform in developing nations; in countries where political will exists only fund and technical supports are needed, but countries where there is lack of political will and financial ability, external financial assistance and technical support are necessary but insufficient because domestic political will is a key in accounting reform where external support can be a bonus. Besides, reform involves changing policies and procedures of government accounting. Most countries have their own set of rules for government accounting systems. As a result, IPSASB (2009) mentions that adopting IPSAS will not be an easy task, rather will be halted by many challenges

. The research in accrual accounting is still limited and there remains enough scope for further work. In spite of increasing appeal for accrual accounting and its implications for public sector, there has been comparatively little study of its application for the wider society. The studies conducted by practitioners and academicians about the feasibility of applying accrual accounting in developing countries are mostly dominated by advantages and disadvantages of applying accrual accounting in the public sector. Compared to the magnitude of reform undertaken by the developing nations, there has been little sustainable research about the procedures needed to be followed for successful implementation of accrual accounting in the public sector, what necessary changes are needed, what types of support are required, the factors responsible for successful implementation, what the problems are for implementation. Often the research doesn't provide any clear implementation framework. The paper aims to address this problem. This is the first type of research conducted from Bangladesh's perspective.

**Research problem**

The government of Bangladesh has been implementing PFM Action Plan 2018-2023 to implement PFM Reform Strategy 2016-2021 with the assistance of World Bank through Strengthening Public Financial Management System (SPFMS) Program. The component 8 of the action plan is the improvement of financial reporting system. As such, the president of the government of the peoples' republic of Bangladesh has approved new format for Finance Accounts from the fiscal year 2018-19. The new format has followed the IPSAS cash basis accounting format to comply with international standards with the ultimate aim to introduce IPSAS accrual accounting in the public sector. However, no de facto action or attempt has been taken yet to fully transform to accrual basis of accounting in Bangladesh. In Bangladesh, minimal work has been done on public sector accounting. Most studies conducted are on private sector accounting despite the importance of public sector accounting and its need for further research. Given the context above, the research aims to analyse current accounting system in Bangladesh with international system, assist in identifying issues and create better understanding on the scale of activities involved in shifting to accrual accounting in Bangladesh.

**Research questions:**

◊ What are the preconditions to move to accrual accounting in public sector in Bangladesh?
◊ What is the preparednesses/existing accounting systems of Bangladesh government to move to accounting system?
◊ What are the challenges to move to accrual accounting in public sector in Bangladesh?
◊ What are the solutions/recommendations to move to accrual accounting system by the government of Bangladesh?

## III. Research methodology

The research has been conducted through the application of literature review design using secondary information from previous studies. Literature review provides comprehensive insights about the topic under evaluation and different views made by authors make it easier to answer question under investigation as obtained results seem to be more accurate than individual studies which are prone to bias (Zhuquan and Javed 2018). The study is thus presented by reviewing documents, books, papers, journals, lectures, own experience of the writer who works in core position of the government accounting sector of Bangladesh and other sources such as studies conducted by IMF, World Bank, IPSAS study 14 related to application of accrual accounting in the government sector of Bangladesh. The literature search was conducted systematically using academic databases such as Google Scholar. Keywords related to the research topic were employed to identify relevant studies. The initial search yielded a broad pool of articles, which were then sorted based on relevance to the research objectives and the inclusion/exclusion criteria established for the study. Sorting was based on relevance, publication date, and methodological rigor, with a focus on recent and seminal works. Relevant papers were selected through a two-step process. Initially, titles and abstracts were screened to exclude irrelevant studies. Subsequently, the full text of potential articles was thoroughly examined to determine their suitability for inclusion. To track selected papers, a reference management system: EndNote was utilized. The primary platforms utilized for the literature review included renowned academic databases such as Google Scholar. Additionally, institutional repositories and relevant journals, websites of different organizations such as IFAC, IPSAS, Ministry of Finance, office of the Auditor General, Controller General of Accounts in the field were explored to ensure a comprehensive coverage of available literature. A combination of manual searches through journals and citation tracking complemented the electronic search to guarantee a comprehensive collection of relevant literature. To ensure the inclusion of all important papers, an exhaustive search strategy was implemented, encompassing multiple databases and supplementary sources. Additionally, citation tracking was employed to identify seminal papers and related studies that might not have been captured through initial searches. While prioritizing peer-reviewed publications for their scholarly rigor, grey literature, conference papers, and reports from reputable organizations were also considered. The inclusion of diverse sources aimed to capture a comprehensive spectrum of perspectives and insights related to the research topic. The keywords used in the literature search were carefully chosen to align with the research objectives. Common search terms included public financial management system in developing nations, accounting system in the public sector in different countries, way to move from cash to accrual in public sector particularly in developing countries, benefits and drawbacks of cash and accrual accounting, accounting reform strategies in various countries, action plan for moving to accrual accounting, challenges to move to accrual system, prior conditions for moving to accrual system in developing nations etc. The inclusion criteria encompassed relevance to the research topic, publication within a specified timeframe, and a focus on public sector accounting reforms: from cash to accrual accounting. The exclusion criteria were applied to filter out studies that did not meet these predefined criteria.

The literature search was primarily conducted in English, given its widespread use in academic publications and databases. However, recognizing the importance of diverse perspectives, relevant studies in Bengali were considered when available. The inclusion of non-English literature aimed to enrich the analysis and provide a more comprehensive understanding of the research topic. The literature review synthesized a total of around thirty academic papers from peer-reviewed journals, encompassing a diverse range of disciplines related to the research topic. Additionally, around ten reports, five to six policy documents from IFAC, IPSAS, Ministry of Finance and around five relevant publications from reputable sources such as IMF, World Bank were included to provide a holistic view of the subject matter. The literature review focused on studies published within the last twenty years ranging from 2004 to 2023, ensuring the inclusion of the most recent and relevant contributions to the field. The time frame was chosen to capture the latest advancements, trends, and changes in the research landscape, providing a contemporary perspective on the topic. The findings of this study bear implications for a broader application across various contexts within the public sector accounting. While the research was conducted with a specific focus on developing nations, the methodologies employed and the insights gained hold the potential for broader relevance. The recommendations may offer valuable guidance for practitioners, policymakers, and researchers in related fields. However, it is crucial to acknowledge the contextual nuances that may influence the applicability of the findings in distinct settings. Further research and validation in diverse contexts would contribute to a more comprehensive understanding of the generalizability and transferability of the results.

**Significant of the research**

Bangladesh government has targeted to achieve SMART Bangladesh (Smart Citizens, Smart Government, Smart Economy and Smart Society) by 2041. To achieve the SMART Bangladesh 2041 vision, the government has developed a long-term plan. One of the six pillars of the SMART Bangladesh 2041 vision is the good governance and public service delivery. The government needs to implement public sector accounting reforms in order to meet the increasing requirement of transparency and accountability to ensure good governance. Thus, the migration from cash basis to accrual accounting is the result of calls for greater accountability and transparency in the public sector. Hence, the research is significant in a sense that it would help to assess the ability of implementation of accrual accounting in Bangladesh. The expectation of the study is to the enrichment of government accounting literature and also to be useful for further studies. The findings of the study may provide insights for legislators, policy makers, professionals, public servants for shifting to accrual accounting.

## IV. Study findings and analysis

**Preconditions:**

Public sector accountants are used to cash basis accounting. Therefore, when moving to accrual accounting, which is a new method, several preconditions are required to achieve the accomplishment in accrual accounting introduction to the public sector and to minimize the probability of major constraints that may occur. Of them, it is essential to develop an appropriate accrual application strategy whether it will be implemented phase by phase or big bang way, extensive consultation among all the stakeholders, political commitment of all stakeholders, communication strategy of the objective of the reform, the availability of qualified accountants and adequate accounting information system and technology, appropriate training program for human resources, development of accounting standards harmonizing national requirements, become involved in the application of those standards, monitoring of their implementation, support SAI to improve understanding among auditors about new accrual accounting system, the understanding that the changes in accounting basis not only changes about the accounting method but also cultural reform to what extent information produced is used, organizations need to prepare culturally to accept the benefits that the changes will bring about and cost of implementation in the wider sense, realistic time frame, recognition that accrual accounting is the part of whole reform process. In addition, development of charts of accounts incorporating accrual elements, confirming opening balance sheets by identifying and valuing all assets and liabilities as well as conducting audit on opening balance sheets are crucial. The external auditors need to assess compliance with IPSAS in line with the transition timetable and appropriateness of the accounting policies adopted as well as review progress against milestones.

Appointment of one change management expert needs to be appointed who will work as consultant in cash to accrual accounting migration. Instead of flying from abroad, when necessary, needs to reside in the country for at least two years whose role will be to mange and oversee operations. Tailor made training courses can be designed to teach a number of officers how to implement the accrual accounting migration. After completion of the course, the participants would graduate with certificate qualification. The participants would train later to others in their departments. Taking a pilot project initially and expend it depending upon the success of the pilot project can be considered. Although no firm deadline will be declared, it may be taken for two years, with expansion to other departments occurring over a three-to-five-year period. To implement generally accepted accounting standards, the government can take guidance from other countries. Utilizing the existing iBAS++ software is an opportunity which has been developed by the Bangladeshi developers incorporating the financial management culture of our country. The employees enthusiastically need to embrace the change that accrual accounting will bring and they need to undertake willingly on the job training when the reforms reach their branch.

Support and understanding of the system by the government auditors are essential to successfully implement accrual accounting. An accrual-based accounting is not only complex but also requires a range of new judgements for example, asset values and lives, matching issues, prudence, materiality and going concerns. So, the responsibilities and expectations of the auditors will increase and change considerably. The external auditors need to be involved in the process from the very beginning. Auditors need to have through understanding of accounting principles and how these principles can be maintained under the pressure of day-to-day administrative decisions. This may require development of accounting professional to the staff of government auditor, rather than depending on traditional internal training of auditors. Comprehensive management training for understanding basic financial concepts about accrual accounting and have through knowledge about how accrual is different from cash basis of accounting, how the introduction of accrual system will improve better financial and budgetary control, how full use of accrual system can be used when information becomes available is important. From the beginning, there should be willingness that transformation will take time, even stretching from more than one parliament and may be beyond the control of more than one political party. So, the reform needs widespread support across the political spectrum. The transition will need significant additional resource costs not only in terms of money but also in terms of specialist IT skills. Customisation in the accounting policies and standards is necessary as different countries possess different socio-economic and political environments. IPSASB advocates three aspects that are crucial for implementing accrual accounting, which are accounting policies and standards, software and technology and human resources. Reviewing the existing accounting policies and development of accounting policies manual identifying the transactions and balances for which accounting policies will be required. Reformulation of accounting policies suitable for Bangladesh in respect of valuing asset and liabilities is important. Strategic accounting policy may include format of the FS, decision about whether to apply historical cost model or current value model for subsequent measurement, if historical model applied, any asset for which historical model may need to be applied. At the same time, it has to be ensured that financial information provided from the new accounting system fulfils the information needed by the whole government. In addition, accounting policy regarding recognition of tax revenue, valuation of military asset, infrastructural asset, infrastructural asset and heritage asset need to be considered. The development of uniform chart of accounts is crucial for accrual accounting though chart of accounts defines method related and not content related standard of accounting, still a key requirement for meaningful comparisons of accounting data from various administrative departments.

There can be many stimuli (driving forces) for changes in accounting method such as financial problem, financial scandals, corruption and fraud, globalisation, economic crisis and change agent. But, the decision of the government remains crucial and starting point because there may be strong stimulus (driving force) for the accounting changes but the government is reluctant to make accounting changes. According to Chan 2006(IR), two strategies need to be taken for accounting reform in developing countries where the political will exists, only funding and technical support needed, but where the government lacks political will and funding, external financial and technical support are necessary but insufficient though conditions with external finance may be added incentives. So, support from the leaders in the public sector, both political and within the bureaucracy, is a key factor in the successful implementation of accrual accounting. Series of lectures, seminars, workshops need to be organized for OCAG, OCGA, CGDF, Railway, ministries and other key stakeholders to sensitize on the adoption of IPSAS and challenges. Setting of deadlines for adoption of accrual accounting need to be fixed after consultation with all relevant stakeholders. A new chart of accounts in the form of manuals need to be introduced providing a detailed coding structure and various elements of charts of accounts replacing the existing chart of accounts of government's receipts and disbursements. Asset accounting is an important issue to keep record of assets owned covering entire life from issuance of purchase order to its retirement. This will help financial managers for allocation of resources.

Moving to accrual system doesn't recommend abandonment of cash basis accounting, rather cash management is an essential part of accrual-based accounting. Modern accrual-based accounting has all functionalities to support cash basis accounting and reporting. The key question that needs to be addressed will be what level of cash receipts, payment and cash holding is necessary. For high level cash management purpose, cash information at macro level may be enough, but if the government wants to track and evaluate entities, programs, functions, products, or cost elements on a detailed cash transaction basis, this is still achievable and can be complex.

It is often argued that alignment of accrual accounting and budgeting need to be closely aligned to make a clear and transparent comparison about the government's planned and actual outcomes. Besides, some might argue that without moving to accrual budgeting, shifting to accrual accounting would provide little benefit and gives rise to incongruity between ex ante and ex post information. Experiences from different countries shows that introduction of accrual accounting can be introduced without accrual budgeting. Countries like USA and France have introduced accrual accounting but have not introduced accrual budgeting yet, whereas countries like UK, Australia have introduced accrual accounting first and subsequently adopted accrual budgeting. If accrual accounting is introduced without accrual budgeting, to minimize the timing differences, there need to maintain capacity to generate cash-based reports in the interim.

The COA needs to incorporate budget classification. That means, in addition to all accounts specified in the budget classification, the COA will include other accounts required for accounting and reporting purposes. For example, a COA will have accounts for asset and liabilities which is not normally included in cash-based budget classification. Besides, COA will require to include information about particular revenues and expenses at a more detailed level than required for the budget classification. If the government decides to move to accrual accounting and budgeting simultaneously, the COA and budget classification should be unified, at the appropriate level of aggregation. However, if the government decides to move to accrual accounting without moving to accrual budgeting, there will be significant differences between the two-classification system, the COA in these circumstances need to generate both cash and accrual-based reports. A sound accounting system capable of generating reliable cash-based data is an essential basis for moving to accrual accounting. It includes adequate budget classification, COA or double entry-based ledger system, adequate fiscal reporting and existence of large unexplained differences between revenue and expenditures. If the country lacks such reliable cash-based information, should first concentrate on improving existing systems.

The identification and valuation of assets and liabilities systematically from the date accrual accounting is accepted is essential since the opening balance needs to be supported by adequate information and explanation. At the same time, a gap analysis between current system of financial reporting and the desired accrual basis of reporting needs to be carried out. Furthermore, capacity gap analysis regarding whether the existing system will be able to cope with the change and what resources are available and required to develop the capacity may be considered.

**Existing accounting systems:**

Bangladesh inherited an accounting system modelled according to the needs of the colonial administration in the Indian sub-continent. The accounting system evolved over time to cater to the needs of the country. Until 2017-18 fiscal year, the compilation of annual accounting system was manual as well as time consuming. The transition to accrual accounting is a mammoth task for most government as it requires careful planning and management. Transition can be smoother and faster when the country has a clear mandate to introduce accrual accounting. The constitution of Bangladesh vested the mandate to Comptroller and Auditor General of Bangladesh through article 131 “The public accounts of the Republic shall be kept in such form and in such manner as the Auditor General may, with the approval of the President, prescribe”. With the mandate, a major reform took place from fiscal year 2018-19. The government of Bangladesh has decided to shift from historical system to international standards. The CAG has introduced new format with the approval of the president for annual finance accounts which is IPSAS cash compliant. Before introduction of IPSAS cash basis of accounting, a gap analysis was conducted with the assistance of world bank to identify the difference between IPSAS requirement and country practices. After minimizing the gap, from 2018-19 fiscal year, Bangladesh government has introduced IPSAS cash basis accounting for the Budgetary Central Government (BCG). Political commitment can be an important issue for the transition. The government wants to materialize SMART Bangladesh by 2041. It encompasses a number of goals including good governance. Transparency and accountability are fundamental components of good governance. Since accrual basis accounting provides more accurate picture of government’s financial position and performance over a specific period, it contributes to more transparency and accountability. Because of the political commitment of the government to ensure good governance, the government has introduced IPSAS cash which is not an end in itself, rather taken as a transition period for moving to accrual accounting. Adequate and skilled human and financial resources are vital for implementing accrual basis of accounting. The government has been preparing its human resources for IPSAS accrual. With the financial assistance of development partners, some of the officers have already achieved full public sector accounting qualification from the Chartered Institute of Public Finance and Accountancy (CIPFA), UK. Many have completed up to advanced diploma, diploma and certificate level of becoming full CPFA (Chartered Public Finance Accountant). With the assistance of EU project, around 100 officers from audit and accounts department are pursuing different level courses for becoming professional accountant. In addition, with the assistance from SPFMS, more than one hundred employees have passed IPSAS certificate course who are now waiting for completing diploma. All of the training opportunities are provided in piecemeal. But there is no separate Management Training Unit (MTU) which Srilanka has by which training on technical aspects of accounting including IPSAS provided (Rajib.et.al 2019). A clear project management structure seems mandatory for successful transition to accrual accounting. In this regard, a separate component (component 8) of SPFMS program has been dedicated to improving financial reporting of the central government. Under this component, format of IPSAS cash basis of accounting has already been developed. At the same time, update of manuals, accounts codes, standards are in the pipeline. Two senior consultants are working on this. To move to accrual basis of accounting, adequate technological capacity and information system can play a leading role. Introduction of ibas++ (Integrated Budget and Accounting System) is a milestone achievement for the government of Bangladesh for capturing all the transactions of the BCG through the system. From 2018-19, the annual finance accounts have been being generated through the system. The system incorporates almost whole cycle of PFM including budget preparation, execution as well as payment & accounting.

The development of new chart of accounts is a key step for adopting accrual accounting and occupies central place since it determines the classification of transaction and balances recorded in the general ledger and therefore, determines the scope and content of financial reports that will be available from the central system which can ultimately assist in the efficient generation of financial information for a variety of purposes. The newly COA introduced by the government of Bangladesh from fiscal year 2018-19 incorporates all the ingredients for moving to accrual accounting. For example, COA have accounts for asset and liabilities which is normally not included in cash basis system. The COA and budget classification have been integrated and unified so that the government can move to accrual accounting and accrual budgeting simultaneously. If the government decides to adopt accrual accounting while continuing cash budgeting, there will be significant differences between the two classification systems. In this regard, the present COA has the capacity to generate both cash and accrual-based reports. In order to meet diverse requirement, the COAs have been designed as a combination of segments where each segment corresponds to a particular information element. The COAs have separate segments for organizational, operational, fund, economic, mode of finance and geographical location. Separate segments can be utilized to capture data about cost centres, programs, projects, output and outcomes. Transactions can be recorded and reports can be generated using an appropriate combination of segment codes. Thus, the existing well-designed COA can facilitate the capture, classification, analysis and reporting a large quantity of data.

The existing financial statement contains five statements:
(i) Statement – 1: Cash Receipts and Payments
(ii) Statement – 2: Comparison of Budget and Actual Amount
(iii) Statement – 3: Comprehensive Receipts and Disbursements under Public Accounts
(iv) Statement – 4: Summary of Financing Activities
(v) Statement – 5: Summary of Balances

First two statements are prepared in accordance with the standard of IPSAS Cash. The third statement is prepared in compliance with the provisions of the Constitution and other legal requirements. The fourth statement provides information on financing activities. Finally, the fifth statement shows all financial assets and liabilities which are required by Article 94 of the Account Code (Volume – 4). The statements contain a number of notes detailing the statements including accounting policies and principles. The present statement contains only financial asset and non- financial assets are not reflected in those statements.

The second part of IPSAS cash basis financial reporting encourages some additional disclosures which can be taken as initial step for accrual accounting. The following additional disclosures are encouraged:
- Reservations about going concerns
- Administered transactions
- Major classes of cash flows
- Related party transactions
- Asset and liabilities
- Consolidated financial statements
- Joint ventures
- Financial reporting in hyperinflationary economies

The existing financial statement recognizes going concerns. In adopting the going concern basis for preparing the financial statements, the Controller General of Accounts has considered the government’s power to set tax rates to meet its funding requirements, as well as controls over public spending, which ensure that the government will continue to exercise its functions. In regards to asset and liability, only financial assets are recognized in the Financial Statement. Non-financial assets are recognized at cost and recorded as capital expenditures. Subsequently, these assets are recorded in a separate register. Neither depreciation is charged nor is revaluation made for these assets. The losses and deficiencies need not be recorded under separate head in the accounts, though the loss should be written off. A separate list of Property, Plant and Equipment is included in Annexure of the Financial statement.

Property, Plant and Equipment along with inventories (Note 1.11) are maintained under 'Stores Accounts' (Article 61 of Account Code Vol – 3). Article 23 of the Account Code (Vol – 3) deals with purchase/acquisition and issues of stores. The rest of the additional disclosures is absent in the current financial statement. In addition, the following information is not available in the existing finance accounts, though these are not required for the existing cash basis of accounting: the classification of asset and liabilities as current and non-current, receivables, inventories, classification of property, plant and equipment by asset class such as land, building, plant and machinery, payables to suppliers, contractors and other vendors, refunds payables ( taxes and others), employee benefits including pension liabilities, gratuity and leave encashment. In terms of income and expenses, information related to fees, penalties and fine is currently captured as non-tax revenue. However, the components of fees, penalties and fine are unknown. Income accrued but not realized related to exchange and non-exchange transactions and expenditure incurred during the year but not paid are also lacking in the finance accounts. Certain information related to accrual accounting has been accommodated in the statement such as capital, public debt, loan etc. Classification of the fund provides information about expenditure, public debt, loans and advances, deposits, advances and remittances which to a great extent meet the asset and liability information for accrual accounting.

**Challenges**

The movement from cash basis to accrual accounting is far easier said than done. Example from developed countries like Australia and New Zealand which have highly skilled and relatively well-paid public service proves that the transition has been quite difficult and there are many challenges to be overcome (Geoffrey 2010). The developing countries with capacity constraints may face a number of challenges. In many developing countries, the capacity among the accounting staff is not sufficient to fully implement IPSAS, the data collection procedures are not adequately identified to collect the necessary data or the software is not sophisticated enough to handle various financial transactions (Hughes 2013). One of the major challenges in shifting to accrual accounting is that there is no agreed comprehensive set of accounting standards for the public sector. Formation of appropriate accounting policies that are relevant to the local accounting standards that suit the national circumstances will remain a vital issue. Accounting policies affect the subsequent requirements of information systems, training and communication strategies. For example, entities which have not previously used accrual accounting may have written off property, plant and equipment and intangible assets when the assets were acquired. In such cases, the entity will need to be concerned with establishing reliable cost figures for initial recognition of those assets in accordance with relevant IPSAS. There can be challenges if there are no records of the initial purchase, construction or development or receipt of the assets. If an entity decides to subsequently revalue certain classes of property, plant and equipment or intangible asset to fair value, it will also need to develop procedures for obtaining fair values on a regular basis and ensure that the accounting information system is designed to accept revaluations.

The obstacles of implementing accrual accounting have clearly been noticed after accrual basis accounting implementation in OECD countries such as Australia and Canada ((Khan & Meyes, 2009). IPSAS standards are based on IFRS/IAS standards which are international standards used for private sector. Because of differences between public and private sector, drafting and issuing public accounting standards are not the same (Trang, 2012, 65). This can be an unfavourable factor for government in applying IPSAS. Though IPSAS covers a number of standards but a number of issues yet to be considered such as accounting for taxation or social policy obligations for education, health and state pensions. A series of accounting issues need to be agreed before accrual accounting is introduced. Approaches to recognition and measurement of property, plant and equipment is another challenge to be dealt with. What type of asset to value, the valuation methodology whether it will be historical cost, current cost or replacement cost and if an asset needs to be revalued, how often it will be revalued, frequency of valuation of transactions for inclusion in accrual accounts need to be addressed.

The issue relating to some of the key items are vital in moving to accrual accounting. Whether land should be valued, if yes, at what rate, how to classify land for investment purposes and otherwise. Authors such as Mautz (1988) argue that some assets like infrastructure and heritage assets should not be recognized as asset for accounting purposes as they do not contribute revenues to the entity, rather cause heavy outflows of resources for their maintenance. Rowles (1992) indicates that if existing of an asset for accounting purpose is determined by the cash flow it can generate, then most of the assets in the public sector not only infrastructure and heritage cannot be regarded as being assets. If all assets are not recognized, financial statements do not show all the resources that are left for future generations. Not to capitalize infrastructures means that all costs and benefits are received in the year of acquisition. Now the question is if infrastructure asset be capitalised, how they should be valued. Should there be a different treatment for the land (e.g under roads), from the structure on that land? Natural resources such as mineral reserves and forests could be a potential challenge whether to be included in the accounts and if included, on what basis they are to be valued. Many governments control a major portion of environmental resources in their countries. In most cases, these assets were acquired at little or no cost. In some cases, they are purchased like other asset. For instance, the federal government of the United States have purchased parts of its territory, and the government of Balearic Island in Spain have purchased environmental areas of great value for the community (Josep L 2004)

Heritage assets are also important asset owned by the government. Not only the heritage assets already owned but also new acquisitions are also important. Recognition and measurement of those two types of assets are also one of the major challenges. Whether the acquisitions of those assets will be capitalized or showed as expense will be a major issue to be solved. Should heritage assets be valued and if in principle not, should a distinction be drawn for those that are used for operational purposes. If to be valued then at what value- what should be the capitalised value of National Museum of Bangladesh? Most governments use historical cost as measurement basis. In that case, only acquired assets are recognised in the financial statement. So, what will happen to assets that are not acquired? Besides, failure in collecting data for opening balances may cause incorrect amount of opening balance in the time for the transitional period. Regarding depreciation, how to make decisions about asset lives. Should asset be a matter of asset user or a common specific life should be decided? Should adjustment be made to depreciation schedules to reflect lack of maintenance or investment to prolong asset life? How these should be reflected? It is more rational to recognize depreciation expense over the periods in which infrastructure is used because all users over its useful life receive the benefits of the use of the asset.

Most of the program's expenditure has long lasting benefits. Would the cost of these programs be deferred over period of time? How should civil service pension liabilities be treated and should there be a difference depending upon how the pension scheme is financed? For example, should they be treated as deferred liability or charged to the department's expenses in the year in which they arise based on accrual cost or actuarial cost? The employees are transferred and may not serve a department for the entire life. How to treat values of pension liability? Similarly, decision needs to be taken for liabilities in the nature of gratuity, leave encashment etc. When tax revenues should be recognized (on assessment) and what basis of measurement should be applied. How tax concessions should be treated whether as a reduction of income or as an expense. What about tax assessed and protested by assessee? Should provision for bad and doubtful receivable be created?

For transition to accrual accounting, government needs to assess the increased scale and complexities involved in the identification and measurement of accrual transactions and balances. The question will arise whether the benefits of detailed accounting and reporting processes be undertaken centrally by Ministry of Finance or be devolved to line ministries and agencies. If the responsibility is to be devolved, should line ministries develop their own system or they will have online access to the system developed by MOF. If it is maintained centrally, there might be risk that MOF will not receive the reports timely, thus delaying in consolidation of accounts. If it is maintained by line ministries in their own separate system, the MOF needs to maintain specialist consolidation application to automatically collect and consolidate the repots of the line ministries.

The changes of the role of public sector auditor after introducing accrual accounting will also be challenging since the external auditors' opinion will shift from budgetary and legal compliance to on whether the accounts represent true and fair view of the financial position of the organization. This is a move from an objective view whether the budget has been complied with to a subjective opinion on the validity of the accounts. Given its complexity, it requires greater professional judgment by both preparers and the auditors of government accounts. The accrual accounting principles leave too much unfettered discretion to governments which the external auditors may be unable to prevent occurring and for which parliamentary process provides an inadequate check (Bunea, et.al 2009). At the same time, the financial statement may be less readily understood if the users do not have solid understanding on asset, liability, income and expenditure than those prepared under cash basis.

The movement from cash to accrual in the public sector involves a very high cost of implementation (Wynne 2008). The cost relates to identifying and valuing existing assets, developing accounting policies, rewriting accounting manuals incorporating IPSAS terminology, establishing accounting systems, developing necessary skills and providing financial information training for preparers and users which will constitute a substantive amount of government outlay when preparing for accrual accounting. The survey conducted by Muhammad on adoption of IPSAS by Iraqi government where 85% respondents attribute big implementation cost of IPSAS is a major challenge. The balance between costs and benefits of introducing accrual accounting in the public sector is still a subject of debates among practitioners and academicians (Adriana & Alexandra, 2014). According to Biraud, G. (2010), the implementation of the accounting standards are time and money consuming.

Experience from developing countries which have taken initiatives to pursue accrual accounting cannot be successful till today because of the inadequacy in the readiness of accounting information system applications such as equipment, software customization and systems familiarization (Yusof & Jaafar, 2018). The integration of current accounting system with the new accounting system may be difficult due to insufficient capacity and availability of subsystems and functionalities required. In addition, reliability of data provided by various entities, completeness and timeliness of the information, and inconsistencies in recognizing and recording the financial transactions are some of the major challenges in the adoption of the accrual system (Wang, Z., & Miraj, J. 2018). The use of common language to bring uniformity across cultures and governments in the public sector is challenging. Some terminologies used in IPSAS may not apply to the country due to some uniqueness in its financial operations.

In the public sector, budget is seen as a key document, as it determines the allocation of resources in different sectors and expenditure programs, determines fiscal policy, distributes taxation burden and provides the legal authority for expenditure. If budget remains cash basis and accounts are maintained in accrual basis, it may make the financial management and expenditure control more difficult because of the systematic adjustments that have to be made as well as need to maintain the capacity to generate suitable cash-based reports in the interim. Accrual basis budget needs to show full resource rather than just the cash which implies planned government activities. Thus, annual financial statement will contain accrual-based budgeted revenues and expenses, budgeted cash receipts and payments and the estimated impact of the planned activities on government asset and liabilities. Since Bangladesh prepares budget on multi forward -year basis, it requires the construction of rolling, continuous budgeted financial statements across the forward years. In line with this, government may need to decide to introduce accrual -based appropriations to align spending authorization with budgets and accruals.

The lack of qualified accountants, lack of staff motivation, lack of conviction and opposition to changes in the public sector create challenges in implementing accrual system. International experience suggests that the lack of adequate technical resources can be a major impediment to successful implementation of accrual accounting. The accounting staff are not adequately trained to adapt to the process in each of the phases. Most of the public sector and government agencies lack the necessary personnel to adequately carry out the changes in IPSAS as opposed to financial reporting framework currently existing in the public sector. Since officers come from multi-disciplinary backgrounds, they possess limited knowledge about accrual accounting which poses a major challenge in implementation. The lack of accounting expertise in government led to additional expenses, particularly the need to out- source major accrual preparatory work (Jacobs, 2000, p.iii). The successful transition cannot be possible without appropriately trained personnel. Training on the benefits of accrual accounting, general awareness of the reform and expected benefits is crucial. It is almost impossible to overestimate the amount of training required. Staff turnover will occur during implementation. In addition, needs assessment for identifying discrepancies between existing capacities and the capacities desired, identifying training needs on the types of skills, knowledge and behaviour (referred to collectively as competencies) could be potential challenge. People need to be convinced of the benefits or they will not see the purpose of the reforms. Development of effective training strategy and delivery of appropriate training are essential for transitional risk management. The development of training strategies and the implementation of training programs should therefore be identified as key challenge for successful transition. Though the government has been providing training, these employees are still unwilling to participate. Not all government systems and administrative machinery will support IPSAS because it involves an effort and may move them from the familiar to unfamiliar.

## V. Recommendations:

Inclusion of moving from cash to accrual accounting needs to be included in PFM action plan with one of its components being accrual accounting and financial reporting. Experience from other countries who have successfully migrated to accrual accounting suggests that implementation timetables and sequencing of reforms vary. The United Kingdom initially implemented accrual accounting and reporting on a pilot basis, followed by a move to accrual accounting and budgeting. Developed countries with good access to resources target 3 to 5 years for full implementation, whereas developing countries like Bangladesh with resource constraints may target an overall timeframe of 10 years for full implementation.

There are many different ways in which accrual- based financial information can be reported. How financial information is presented can determine the extent to which accrual accounting is developed (Alshujairi, M.H. 2014). The stages of implementation for Bangladesh can be initiated in the following sequence. Bangladesh has been preparing IPSAS cash basis complying with the mandatory part 1 of the IPSAS cash basis standard from fiscal year 2018-19. Though part 2 of IPSAS cash basis standard is non-mandatory, to move to accrual accounting, the initial task should be to start migrating to the part 2 disclosures as time and capacity permits by preparing cash flow statement in the format prescribed by IPSAS part 2, disclosing the value of all financial assets in the notes to the statement of cash receipts and payment which include all receivables generated as a result of exchange transactions and non-exchanged transactions, as well as all other financial assets including financial instruments. As regards to liability, disclosing the value of all liabilities in the notes to the statement of cash receipts and payments including borrowings identified in IPSAS 5, as well as other financial liabilities identified in IPSAS 13(financial leases), 15 (financial instruments), and 19 (provisions) might be started within a reasonable time frame. For non-financial assets, disclosing the value of all non-financial assets in the notes to the statement of cash receipts and payments can be started from a definite time frame. The disclosure might be set in the following priority order and be started gradually. The first disclosure which can be prepared should be inventories (IPSAS 12), followed by investments (IPSASs 7, 8 and 16), finance leases (IPSAS 13) and Property, Plant and Equipment

(IPSAS 17). When sufficient parts of part 2 options have been met, implementing all other options (IPSASs 1,3,4,6, 10,11, 14 and 20) may be helpful for starting accrual system.

An alternative approach to implementing accrual accounting involves categorizing it into various levels of accrual, spanning from a mild form to a moderate and then a strong form. With the mild level, only the current financial resources and the current liabilities are recognized and measured accurately. For the next level, long-term financial resources and liabilities could be added. With the strong level, all long-term assets, and contingent liabilities can be recognized and reported. This gradual symmetrical approach is preferable for developing countries like Bangladesh. Gradualism considers cost factors, the necessity to gather expertise, ensure political backing, and develop both systems and human resource capabilities (Alshujairi, M.H. 2014).

Once decision is made for moving to accrual, the model financial statement will consist of three parts:
Part 1- Main financial statements
Part 2- Schedules for main financial statements
Part 3- Statement of Comparison of Actual and Budgeted amount

**Part 1- Main Financial Statements:**
The following shall constitute the accrual FS:
1. Statement of Financial Position
2. Statement of Financial Performance
3. Statement of changes in Net Assets / Equity
4. Cash Flow Statement
5. Notes on Accounts, comprising a summary of significant accounting policies and other explanatory notes

**Statement of Financial Position:**

Statement of Financial Position exhibits the balance of assets and liabilities as on a particular date. The Statement of Financial Position includes the following:

**Assets**
1. Cash and Cash Equivalents
2. Investments
3. Receivables from exchange and non- exchange transactions
4. Other Financial Assets including Loans andAdvances
5. Inventories
6. Property, Plant and Equipment
7. CapitalWorkinProgress
8. IntangibleAssets

**Liabilities**

9. Payables
10. Debt and Borrowing
11. Employee Benefits
12. Equity

**Statement of Financial Performance:**

The statement of financial performance presents the revenue and expenses for an accounting period and the excess of revenue over expenses (or vice-versa) for that period. The statement of financial performance should include the following:
1. Revenue from exchange transactions
2. Revenue from non–exchange transactions
3. Expenditure – by function and by natural head of expenditure
4. Finance Costs
5. Surplus/Deficit
6. Appropriations to Earmarked Funds

**Statement of Changes in Net Assets / Equity:** The Statement of Changes in Net Assets/ Equity represents the changes in net assets/equity between two reporting dates and reflects the increase or decrease in its net assets/ equity during the period. This statement should be prepared based on the following:
- Opening balance with Government Account- Consolidated Fund
- Add - surplus/ deficit during the period as per the Statement of financial Performance
- Adjustment for increase/ decrease in assets and liabilities

- Closing balance with Government Account - Consolidated Fund

**Cash Flow Statement:** Cash Flow Statement provides cash flows during the period classified by operating, investing and financing activities.

**Cash flows from operating activities** are primarily derived from the principal cash- generating activities. This includes cash receipts from taxes, from service fees, cash payments to suppliers/contractors, grants in aid received or given.

**Cash flows from investing activities** are derived from the acquisition and disposal of long-term assets and other investments not included in cash equivalents. This includes cash payments to acquire or construct property, cash advances and loans made, etc.

**Cash flow from financing activities** represents the changes in the size and composition of the contributed capital and borrowings.

**Part 2: Schedules to Main Financial Statements**

These schedules provide Major Head level information in respect of the items appearing in the Main Financial Statements. Each schedule has been referred to the corresponding line item of the Main Financial Statements, wherever applicable.

**Part 3: Statement of Comparison of Actual and Budgeted amount for Government**

This part provides the comparison of the actual with the budgeted information and confirms to the existing appropriation accounts and IPSAS 24. The statement provides details of original budget, supplementary budget, budget surrendered/withdrawn, budget re-appropriated to arrive at the final budget for comparison. If the budget is prepared on cash basis and the accounting shall be presented on accrual accounting, some adjustments would need to be made to the actual amounts to facilitate comparison.

Accrual budgeting can be introduced at the same time with the introduction of accrual accounting and reporting. However, the cash basis can still be done in parallel to the accrual in the parallel approach to reducing the risk of failure (Athukorala and Reid, 2003). In some cases, the implementation of accrual budgeting occurs at least one to two periods after the introduction of accrual accounting. This delay is sometimes required for providing assurance to those responsible for budget authorization that the new financial systems can provide reliable information.

Presentation of Financial Statements requires the disclosure of significant accounting policies in the notes to the financial statements. IPSAS 1 also gives examples of accounting policies that an entity might consider presenting. The summarized accounting policies presented in an entity's financial statements focus on significant accounting policies. However, for internal purposes an entity is likely to have a much more detailed description of its accounting policies. In the case of revenue items, the more detailed policies may describe the classification of each type of revenue, the point at which that revenue item is to be recognized, the method of calculating amounts receivable, and the way in which impairment of the receivable is assessed. The United Kingdom *Government Financial Reporting Manual* (HM Treasury, 2009) is an example of the detailed accounting policies used by an entity. The initial accounting policies developed by an entity should also include an explanation of the valuation methods used to obtain opening balances for certain assets and liabilities, details of any transitional provisions applied, and the impact on those transitional provisions on the financial information.

The implementation of a full accrual accounting system requires a comprehensive registration of assets and a sound cost measurement system. In order to prepare an implementation plan for the recognition of assets, an entity needs to have some idea of the scope of the tasks involved and the likely amount of resources that these tasks will take. The amount of work required to recognize assets depends on the extent to which an entity already has information available on those assets. General steps in the recognition of assets suggested by IPSASB study 14 include:

1. Documenting all types of assets held by the entity (the compilation of asset registers is discussed later in this Chapter);
2. Assessing the accuracy and completeness of existing information;
3. Determining the categories of assets that will be used in the chart of accounts and the financial statements;
4. Establishing accounting policies for each category in accordance with relevant IPSASs;
5. Determining accurate opening balances for each category (identification, application of definition of asset, and measurement); and
6. Establishing systems to support the ongoing requirements of accrual accounting.

**For each asset, an effective asset register needs to contain the following details (where applicable):**

(a) Name of asset;
(b) Physical description;
(c) Serial number;

(d) Date of acquisition (purchase, creation, donation, forfeiture);
(e) Location;
(f) Person/position responsible for custody and maintenance of asset;
(g) Due date for replacement;
(h) Expected useful life;
(i) Original life;
(j) Expired life;
(k) Remaining life;
(l) Date asset life last reviewed;
(m) Date of last impairment test and any evidence of impairment;
(n) Historic cost or valuation (initially if known and subsequently as valuations are completed);
(o) Depreciation method and rate (once determined);
(p) Book value; and
(q) Date of disposal.

**Possible sources of data for asset registers include:**
(a) Existing asset lists and systems (details of vehicles and computer equipment are often available);
(b) Insurance lists;
(c) Lists of properties where the entity pays property taxes, electricity, water, or other utilities; and
(d) Information on land and buildings held by government entities responsible for cleaning or maintenance.

**Integration of Asset Registers with the General Ledger**

Asset registers may be separate systems or they may be integrated with the general ledger and other systems. If they are separate, then information from the asset register needs to be periodically transferred (using a manual or computerized interface) into the general ledger for the preparation of the financial statements. If the asset register is integrated with the general ledger, then the opening and closing balance information can automatically flow through into the general ledger, and automatic journal entries for depreciation can be created.

**Recognition of Property, Plant and Equipment:** The identification of opening balances for property, plant and equipment is merely the first step in the process of preparing accrual-based financial statements. Other steps are to:

- Identify closing balances;
- Identify all movements during the period;
- Calculate depreciation;
- Identify audit issues and the development of plans to resolve these issues;
- Develop and test interfaces between the asset register and general ledger; and
- Identify and collect other asset information required to be disclosed in the financial statements.

**Measurement of Assets:** The major classes of assets can be measured in the following ways suggested by IPSASB study 14:

| Asset Category | Initial measurement | | Subsequent measurement |
|---|---|---|---|
| | **First time adoption** | **Subsequent period** | |
| PPE | Deemed cost-actual cost where historical records are available or estimated fair value *(applied retrospectively apart from impairment of non-cash generating assets)* | Cost or Fair value if acquired in a non-exchange transaction | Cost less accumulated depreciation or impairment losses or fair value at the date of revaluation less subsequent accumulated depreciation and impairment losses |
| Investment property | Deemed cost-actual cost where historical records are available or estimated fair value *(applied retrospectively apart from impairment of non-cash generating assets)* | Cost or Fair value if acquired in a non-exchange transaction | Cost less accumulated depreciation or impairment losses or fair value |
| Inventories | Deemed cost-actual cost where historical records are available or estimated fair value (net realizable value/current replacement cost) *(applied retrospectively* | Cost or Fair value if acquired in a non-exchange transaction | Lower of cost or net realizable value/ current replacement cost |

| | | | |
|---|---|---|---|
| Intangible assets | Deemed cost-actual cost where historical records are available or estimated fair value *(applied retrospectively apart from impairment of non-cash generating assets)* | Cost or Fair value if acquired in a non-exchange transaction | Cost less accumulated amortization or impairment losses or fair value at the date of revaluation less subsequent accumulated amortization and impairment losses |
| Biological assets | Fair value less costs to sell If fair value cannot be measured reliably, cost (applied prospectively) | Fair value less costs to sell If fair value cannot be measured reliably, cost | Fair value less costs to sell If cost is used for initial recognition, and the fair value is still not reliable measurable, measure at cost less any accumulated depreciation and impairment losses |
| Agricultural produce | Fair value less costs to sell, at the point of harvest (applied prospectively) | Fair value less costs to sell, at the point of harvest | Generally accounted for as inventory-refer to IPSAS 12 |

Moving to accrual accounting needs technical skills (accounting, IT skills) for which extensive training is essential. Training can be provided to existing staff through:

- Seminars and workshops provided by professional accounting bodies;
- Formal courses offered by academic and other training institutions (such training may be available as part of a formal study leave program);
- Courses developed and offered by government training facilities (these courses may also be made available to individual entities who wish to customize the materials); and
- Internal seminars, workshops, and conferences by individual entities.

**Possible training topics include:**

- Overview of reforms;
- General awareness of the reforms and anticipated benefits;
- General principles of accrual accounting;
- Code of ethics/code of conduct;
- Corporate governance;
- Accrual accounting;
- Government accounting standards and policies;
- Preparation of financial statements;
- Meeting internal and external audit requirements;
- Chart of accounts;
- Accounting for assets
- Management of assets, liabilities, revenue and expenses;
- Internal controls under the new system;
- Systems training; and
- Project management

As regards materials, centrally developed material can be provided to individual entities so that minimum customization is required. Central entity may also choose to provide details to trainers for various aspects of training. However, individual entities are often responsible for their own training needs and deciding how to meet those needs. Each entity would normally be responsible for determining the extent of its involvement in such training and selecting the participants. Paying attention to development and delivery of continuous training and capacity building activities throughout the whole duration of the reform including the preparation phase is crucial for successful implementation.

**Limitation of the research:**

The research is limited on literature review method, professional experience and secondary data sources, without questionnaire survey or any interview and conceptual in nature. Since this is the first type of research in Bangladesh, further research may use other research methods, such as interview, questions, group discussion etc. the study could contribute to enriching literature in government accounting field and also to be useful for further studies. The recommendation portion emphasizes on asset as measurement and recognition of assets are the most challenging task for transforming into accrual accounting.

## VI. Conclusion

The transition from cash basis accounting to accrual basis accounting for the Bangladesh government represents a significant and necessary step towards achieving greater transparency, accountability, and efficiency in financial management. This journey has been outlined in this research, addressing the preconditions, existing accounting system, challenges, and potential solutions that must be considered. The objective of the research is to provide necessary lessons before transition to accrual accounting, particularly at the budgetary central government level. The preconditions for this transition encompass a range of factors, including the development of a robust legal and regulatory framework, the establishment of skilled human resources, and the deployment of modern information technology systems. These prerequisites set the stage for a successful shift in accounting practices. The analysis of the existing cash basis accounting system revealed its limitations, particularly in terms of providing an accurate and comprehensive view of the government's financial position and performance. Cash basis accounting falls short in capturing long-term commitments, assets, and liabilities, which are critical for sound fiscal decision-making. Challenges associated with transitioning to accrual accounting were discussed in detail, ranging from technical complexities to the need for cultural and institutional changes. These challenges include the valuation of assets, the treatment of non-cash transactions, and the adoption of international accounting standards. Furthermore, addressing resistance to change and ensuring the necessary capacity-building are vital components of a successful transition. It can also be anticipated that it may take many years for the full migration from cash to accrual accounting to be complete and there are aspects to be considered to ensure smooth transition.

However, this journal has also highlighted several pragmatic solutions to overcome these challenges. Collaborating with international experts and organizations, developing comprehensive training programs, and setting clear timelines for implementation are key strategies. Additionally, leveraging technology and automation can streamline processes and enhance the accuracy of accrual accounting. Since accrual accounting provides wide scope for the exercise of judgement and requires technical knowledge, a disciplined approach and an audit system capable of monitoring how judgment is exercised need to be ensured.

The benefits of transitioning to accrual basis accounting cannot be overstated. It will enhance financial reporting, facilitate better budgeting and resource allocation, improve decision-making, and strengthen accountability. This transformation aligns with global best practices and fosters trust among stakeholders, including citizens, investors, and international partners.

In summary, the shift from cash basis to accrual basis accounting is not merely a technical change but a fundamental reform that will reshape the financial landscape of Bangladesh's government. While the road ahead may be challenging, with determination, proper planning, and a commitment to transparency, Bangladesh has the potential to create a more robust and accountable financial management system that will drive sustainable development and prosperity for its citizens.It is imperative that all stakeholders, including government officials, financial experts, and civil society, collaborate closely to ensure a smooth and successful transition. With concerted efforts and a shared vision, Bangladesh can usher in a new era of financial governance that will benefit the nation for years to come.

## References


[1]. Adriana And Alexandra (2006), ―Cash Versus Accrual Accounting In Public Sector‖, Social Science Research Network, Http://Papers/Ssrm/Com

[2]. Alshujairi, M.H. (2014). Government Accounting System Reform And The Adoption Of Ipsas In Iraq. Research Journal Of Finance And Accounting, 5, 1-20.

[3]. Athukorala, S., L. And Reid, B. (2003). Accrual Budgeting And Accounting In Government And Its Relevance For Developing Member Countries. Asian Development Bank, Regional And Sustainable Development Department Governance And Regional Cooperation Division. Manila.

[4]. Biraud, G. (2010). Preparedness Of United Nations System Organizations For The International Public Sector Accounting Standards (Ipsas). Geneva: Joint Inspection Unit.

[5]. Bunea-Bontaş, Cristina & Petre, Mihaela. (2009). Arguments For Introducing Accrual Based Accounting In The Public Sector. University Library Of Munich, Germany, Mpra Paper. 10.2139/Ssrn.1491663.

[6]. Chan, J. L. (2006). Ipsas And Government Accounting Reform In Developing Countries. In Evelyne Lande & J.-C. Scheid (Eds.), Accounting Reform In The Public Sector: Mimicry, Fad Or Necessity (Pp. 31-41): Comparative International Government Accountingresearch.

[7]. Christiaens, Johan, Vanhee, Christophe, Rossi, Francesca Manes And Aversano, Natalia (2013). The Effect Of Ipsas On Reforming Governmental Financial Reporting: An International Comparison, Working Paper, University Of Gent, April.

[8]. Hepworth N. (2011),‖ Introductory Accrual Accounting In The Public Sector: Some Introductory Remarks‖, U.K., Chattered Institute Of Public Finance And Accountancy (Cipfa)

[9]. Huge, Jesse (2013). A Compilation And Certification Program For Developing Countries, International Journal Of Governmental Financial Management - Vol. Xiii, No 1, Pp.1-14.

[10]. Ifac (2012), ―Public Sector Financial Management Transparency And Accountability: The Use Of International Public Sector Accounting Standards‖ (Ifac Policy Position 4), New York, International Federation Of Accountants

[11]. Ifac (International Federation Of Accountants) Pathways To Accruals, Ifac Website, Accessed 18 September 2023. Https://Www.Ifac.Org/_Flysystem/Azure-Private/Pathways/Pathways-Accrual-Guidance.Pdf

[12]. India-Journey To Government Accrual Accounting, Research Study On Piloting Accrual Accounting In The State Of Andhra Pradesh,2020, Government Accounting Standards Advisory Board (Gasab) Secretariat Comptroller And Auditor General Of India.

[13]. Ipsasb (2009). Ipsasb Communication And Liaison Activities, (December 2009 Agenda Paper), Rome, Italy.

[14]. Ipsasb (2011). Transition To Accrual Basis Of Accounting: Guidance For The Public Sector Entities, Third Edition.

[15]. Josep, L.(2004), 'The Meaning Of Intergenerational Equity In Governmental Financial Management', Public Fund Digest, Vol. 4 No 1

[16]. Khan, A. & Mayes, S. (2009, September). Transition To Accrual Accounting. International Monetary Fund. Retrieved From Https://Www.Imf.Org/External/Pubs/Ft/Tnm/2009/Tnm0902.Pdf

[17]. Mautz, R. K. (1988), 'Monuments, Mistakes And Opportunities,' Accounting Horizons, Vol. 2 No 2, Pp. 123-128.

[18]. Miraj, Javed. (2018). Analysis Of Accounting Reforms In The Public Sector Of Pakistan And Adoption Of Cash Basis Ipsas. Universal Journal Of Accounting And Finance. 6. 10.13189/Ujaf.2018.060203.

[19]. Nasi, G. And Steccolini, I. (2008). Implementation Of Accounting Reforms. Public Management Review, 10:2, Pp 175-196

[20]. Pamungkas, Bambang. (2018). Accrual-Based Accounting Implementation In Indonesian's Local Governments Compared To Other Countries' Experiences. Man In India. 98.

[21]. Rajib, S.U., Adhikari, P., Hoque, M. And Akter, M. (2019), "Institutionalisation Of The Cash Basis International Public Sector Accounting Standard In The Central Government Of Bangladesh: An Example Of Delay And Resistance", Journal Of Accounting In Emerging Economies, Vol. 9 No. 1, Pp. 28-50. Https://Doi.Org/10.1108/Jaee-10-2017-0096

[22]. Rowles, T. (1992), Discussion Paper No. 17: Financial Reporting Of Infrastructure And Heritage Assets By Public Sector Entities. Aarf, Caulfield, Victoria.

[23]. Safa (South Asian Federation Of Accountants) (2006). A Study On Accrual Based Accounting For Governments And Public Sectors Entities In Saarc Countries, September

[24]. Tickell, Geoffrey. (2010). Cash To Accrual Accounting: One Nation's Dilemma. International Business & Economics Research Journal (Iber). 9. 10.19030/Iber.V9i11.32

[25]. Trang, Le Thi Nha (2012). Application Of Ipsas Standards To The Vietnamese Government Accounting And Financial Statements, Master's Thesis In Public Finance Management, University Of Tampere, Hanoi

[26]. Wang, Z., & Miraj, J. (2018). Adoption Of International Public Sector Accounting Standards In Public Sector Of Developing Economies-Analysis Of Five South Asian Countries. Research In World Economy, 9(2), 44-51.

[27]. Wynne, A. (2008). Accrual Accounting For The Public Sector – A Fad That Had Its Day? International Journal On Governmental Financial Management, 17 (2), 118 - 121.

[28]. Wynne, Andy. (2004). Is The Move To Accrual Base Accounting A Real Priority For Public Sector Accounting? Public Fund Digest. 6.

[29]. Yusof, N.S., & Jaafar, H.B. (2018). The Implementation Of Accrual-Based Accounting In Malaysian Public Sector: Opportunities And Challenges. International Business Education Journal.